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JAKIR HOSSAIN B. ED. COLLEGE
P. O. –Miapur, P.O-Ghorsala, Dist. – Murshidabad,
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From the Desk of Editor-in-Chief

The undersigned takes pleasure in bringing out the 11th issue of 'JOURNAL OF EDUCATION AND DEVELOPMENT'.

This issue contains articles on various aspects of different subjects of the changing world. To keep the length of the issue within reasonable bounds, it has been necessary to be very selective in the incorporation of articles. Some of the articles still remain in the queue to get appropriate place in the next issue of the journal. The editor acknowledges his debit and gratitude to all members of the editorial board and to all contributors.

Suggestions for further improving the journal are earnestly solicited and will be cordially received.

Kalyani, West Bengal
30th December, 2021

Editor-in-Chief
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EDUCATION AND DEVELOPMENT

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The purpose of the journal is to foster inter-cultural communication among educators, teachers, academicians, administrators, researchers. nationwide coverage transactional collaborative effort in research and development and to promote critical understanding of educational problems in a global perspective.

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HEALTH AND HYGIENE AWARENESS AMONG THE SCHEDULED CASTE SLUM INHABITANTS

Dr. Kanti Prava Pati

Asst. Professor in Education (B.Ed. Wing)
S.C.S. (Auto) College, Puri, Odisha

ABSTRACT

The later Part of 20th century was an important time during which the slums grew up rapidly. Two reasons were important for such rapid growth of slums. The first reason was due to rapid development in the field of science and technology, modernization touched rural and tribal people and they migrate to township areas. The second reason was development in the communication facilities made the rural and tribal people easy for their migration to township areas for jobs. After migration these people lived in the periphery areas of the towns forming slums, mostly in the Govt. lands. Majority of these people were not conscious about their Health and Hygiene when they started living in the slums. The present article speaks about the Health and Hygiene Awareness of such migrated scheduled caste slum Inhabitants of Bhubaneswar Municipality Corporation Area after they live a period of time in the slum.

INTRODUCTION:

The growth of slums first started in U.K. in the later part of the 18th century during Industrial revolution. The industry workers migrate from different areas and worked in the industries. They had no other alternative except to construct houses near by the industries and live with their families in heterogeneous groups. These workers were poorly paid by the factory owners. As a result they were unable to construct hygienic houses for their families and forced to live in a clumsy and unhygienic atmosphere.

In India the growth of slums may be traced to British period when the East India Company established industries in different parts of India for business purpose during later part of 17th Century. In Odisha the East India Company established two cotton factories, one in Harishpur (Present Jagatsinghpur) in the year 1633 and Second one was in Balasore in the year 1642. The workers of these two factories from different areas formed slums in the nearby places of the industries constructing houses for their stay. Now in each town and semi towns, slums are found in and around the towns. The inhabitants of these slums are heterogeneous with respect to caste, creed, religion etc.

as they come from different places to towns in search of Jobs. They live in the slum areas mostly in an unhygienic atmosphere.

The Capital of Odisha shifted from Cuttack to Bhubaneswar in the year, 1948. At that time Bhubaneswar was almost covered by the forest except Lingaraj Temple area. After functioning of the Govt. Offices, the poor workers and small business men settled in the periphery areas forming slums. Now hundreds of slums have been grown up in and around Bhubaneswar Municipality Corporation area and the inhabitants live there mostly in an unhygienic or Semi hygienic atmosphere. Since majority of the inhabitants were illiterate and semi-literate they were not taking proper care of their health due to ignorance of health care. Now due to different developmental and awareness programmes like 'Sarba Sikshya Abhijan', 'Health Awareness Programme', 'Adult Literacy Programme', Women Empowerment through different programmes, much improvement have been made in the way of their living pattern. The present study has been designed and conducted to know the Health and Hygiene Awareness among the Scheduled Caste live in different slum areas of the Bhubaneswar City and suggest measures in the light of the findings to take proper care of their health.

OBJECTIVES OF THE STUDY:

The present study has been conducted with the following objectives:-

- (i) To display the Health and Hygiene Awareness of men, women and total scheduled caste slum inhabitants of Bhubaneswar City.
- (ii) To compare the Health and Hygiene awareness of Men, Women and Total Scheduled Caste slum inhabitants of Bhubaneswar City.
- (iii) To suggest measures in the light of the findings.

TOOLS USED:

A pre-prepared questionnaire with three different answers for each question (one correct answer and other two incorrect answers) was given to each respondent. The respondents were asked to give a tick(✓) mark on their choice answer for each question. In a few cases (where the respondents could not read and understand the questionnaire clearly) the researcher used the same questionnaire as an interview schedule and collected responses by asking questions in the questionnaire and telling three choice answers for each question.

SAMPLE:

In the present study 50 men and 50 women scheduled caste slum inhabitants were randomly selected from different 5(five) large slum areas of the Bhubaneswar Municipality Corporation.

DE-LIMITATION OF THE STUDY:

The present study was de-limited to,

- (i) Slum areas within Bhubaneswar Municipality Corporation area.
- (ii) It was further de-limited to 50(fifty) Men and 50(fifty) women scheduled castes randomly selected from 05 (five) different large slum areas.
- (iii) In the present study out of 10(ten) questions asked to the respondents in the Health and Hygiene areas, the responses to first 03 (three) questions have been analyzed and interpreted.

ANALYSIS AND INTERPRETATION :

A person's longevity mostly depends on his health condition. More over working capacity and mental power also depends on the health condition of the person. So one should take utmost care of his/her health for long survival and proper working during the survival period. The analysis of the responses to first 3 (three) question asked to scheduled caste slum inhabitants gives a clear picture about their Health and Hygiene Awareness.

Before analyzing and interpreting the responses (of the Scheduled Caste Slum inhabitants of Bhubaneswar Municipality Corporation area) it is essential to know the stability of the percentages of responses to a particular question.

Stability of percentage for sample size 50 and sample size 100.

The stability of the percentage of the slum inhabitants responses to a particular item(Question) were found out by using formula given by Garrett (1979), p-197.

$$\sigma \% = \sqrt{\frac{PQ}{N}} = \sqrt{\frac{68 \times 32}{50}} \% = 6.60\%$$

(S.E. of 68%)

The 0.99 confidence interval for the population percentage is 68.00% \pm 2.58 x 6.60% or from 50.98% to 85.02%. So in the present study the lower limit of the total responses of 68.00% and above in 0.99 confidence level will not be less than 50.00%.

Similarly,

$$\sigma \% = \sqrt{\frac{64 \times 36}{50}} \% = 6.79\%$$

(S.E. of 64%)

The 0.95 confidence interval for the population percentage is 64.00% \pm 1.96 x 6.79% or from 50.69% to 77.31%. Hence in the present study the lower limit of the responses 64.00% to 67.00% in 0.95 confidence level will not be less than 50.00%.

Similarly for sample size 100 the stable percentage of responses in 0.99 confidence level is 63% and above and in 0.95 confidence level is between 60% to 62%.

Q1. Why one should take bath every day?

One should take bath every day. This habit keeps a person's body clean and free from different diseases. For the above question, out of the three choice answers, 'Body would be cleaned and free from diseases' is the best correct answer. The Table-1 speaks about the responses of the men, women and total scheduled castes as to why one should take bath every day.

Table –I
Reasons for Taking Regular Bath

Sl. No.	Choice Answers	S.C. Men	S.C. Women	Total S.C. Sample
1.	Mind will remain fresh	-	-	-
2.	Body would be cleaned and free from diseases	46/92	43/86	89/89
3.	For worshipping God.	4/8	7/14	11/11
	Total-	50/100	50/100	100/100

(The figures in the Numerators indicate total numbers and that of the Denominators indicate the corresponding percentages)

The table -1 clearly says that, a highly stable percentages, 46(92%) of men, 43(86%) of women and 89(89%) of the total scheduled caste slum inhabitants were aware of the correct reason for taking bath every day (i.e.) to keep body clean and way from diseases. The table also speaks that only 4(8%) of men, 7 (14%) of women and 11(11%) of the total scheduled caste slum inhabitants responded that, they take bath every day to 'worship God'. The responses to question No-1 'Mind will remain fresh' was nil for the men, women and total scheduled caste respondents. This indicates that, majority scheduled caste slum inhabitants of Bhubaneswar Municipality Corporation area were quite aware of the positive effect of regular bath and only 11(11%) Scheduled Caste slum inhabitants were ignorant about reasons for regular bath. Further from the analysis it is clear that, the percentage of responses to correct answer is more in case of men than women.

Q2. Which source of water we should drink?

Drinking water should be clean and free from germs, otherwise it will create different diseases in the mouth, throat, stomach and other parts of the body. For the above question out of the three choice answers, 'Tube-well water' is the best correct answer. The table-2 says about the responses of the Scheduled Caste Slum inhabitants about their awareness of sources of drinking water.

Table –2
Sources of Drinking Water

Sl. No.	Choice Answers	S.C. Men	S.C. Women	Total S.C. Sample
1.	Tube – well water	44/88	42/84	86/86
2.	Open – well water	6/12	8/16	7/14
3.	Tank / Pond water	-	-	-
Total-		50/100	50/100	100/100

(The figures in the numerators indicate the total numbers and that of the Denominators indicate the corresponding percentage)

Table -2 speaks that, a highly stable percentages, 44 (88%) of men, 42 (84%) of women and 86(86%) of the total scheduled caste slum inhabitants of Bhubaneswar Municipality Corporation were aware of the right sources of drinking water(i.e.) tube-well water. The responses to the second choice answer indicates that, only 6(12%) of men, 8(16%) of women and 7(14%) of the total scheduled caste slum inhabitants were in favour of open-well drinking water and there was nil responses to the third choice answer by all the respondents. This clearly indicates that, the majority scheduled cast slum inhabitants were quite aware of the correct source of drinking water. Still 7(14%) percentage of scheduled caste slum in habitants were not aware of about the correct source of drinking water. Further from the analysis it is clear that, the percentages of responses to correct answer is more in case of men than women.

Q3. Why one should cut finger nail regularly?

The germs are very minute and can easily remain in the corner of the finger nails and go to the stomach while one takes food. So one should cut finger nails regularly and keep the fingers clean. For the above question 'else germs will remain in the corner of the nails and will go to stomach with food' is the best correct answer. The table-3 speaks about the responses of the scheduled caste slum inhabitants about the reason for cutting finger nail regularly.

Table-3
Reason for Cutting Fingers Nail Regularly

Sl. No.	Choice Answer	S.C. Men	S.C. Women	Total S.C. Sample
1.	Else the germs will remain in the corner of the nails and will go to stomach with food .	43/86	40/80	83/83
2.	Else finger will look bad	7/14	9/18	16/16
3.	Else it will be difficult to work	-	1/2	1/1
	Total-	50/100	50/100	100/100

(The figures in the Numerators indicate total numbers and that of the Denominators indicate the corresponding percentages)

The table-3 says that, a highly stable percentages, 43(86%) of men, 40(80%) of women and 83(83%) of the total scheduled caste slum inhabitants said that, 'one should cut nails else the germs will remain in the corner of the nails and go to stomach with food' and create different diseases. This clearly shows that, majority scheduled caste slum inhabitants of Bhubaneswar Municipality Corporation area were quite aware of the bad effect of keeping nail in the finger. The table also speaks that, the percentage of responses to correct answer is more in case of men than women. Further only 7(14%) of men, 9(18%) of women and 16(16%) of the total scheduled cast responded to the incorrect answer (i.e.) "Else finger will look bad" and only 1(2%) of scheduled caste women responded to the 3rd choice incorrect answer (i.e.) 'Else it will difficult to work'. These responses to incorrect answers were very less. This clearly shows that, majority scheduled caste slum inhabitants of Bhubaneswar Municipality Corporation area were very much aware of, as to why one should cut finger nail regularly.

MAJOR FINDINGS AND RECOMMENDATIONS :

The analysis of the responses to first 03(three) questions asked to the scheduled caste slum inhabitants of Bhubaneswar City, in the area of Health and Hygiene clearly indicates that, a highly stable percentage of scheduled caste slum inhabitants of both the sexes were quite conscious of their Health and Hygiene. This might be due to spread of literacy among the slum inhabitants through. 'Adult Education Programme', 'Sarba Sikshya Abhijan', awareness programmes conducted by Non-Govt. and other organizations and close contact with educated persons in their field of works etc.

Since a few scheduled caste slum inhabitants were still not aware of their health and hygiene, steps may be taken by different agencies, conducting different programmes like meetings, health camps, door to door campaign etc. to aware scheduled caste slum inhabitants about health and hygiene.

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Author: Dr. Kanti Prava Pati (kantipravapati@gmail.com)

EDUCATIONAL QUALITY AND SUSTAINABLE DEVELOPMENT OF STUDENTS LEARNING AND TEACHING THROUGH SKILLS DEVELOPMENT IN INDIA

Dr. Qaisur Rahman

University Department of Education, Vinoba Bhave University,
Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

Educational learning is foremost of all human activities which are always the principal means of creating productive personalities and sustainable societies. While advancing through the threshold of the new millennium we confront formidable challenges of adapting ourselves to the expanding demands of the society. Education must move towards less content and more towards learning about how to think critically and solve problems how to be creative and multi-disciplinary and how to innovate adapt and absorb new material in novel and changing fields. Pedagogy must evolve to make education more experiential holistic and integrated inquiry driven discovery oriented of learner centred in discussion based flexible and of course enjoyable. It is based on the principle that education must develop not only cognitive capacities both the foundational capacities of literacy and numeracy and higher order cognitive capacities such as critical thinking and problem solving but also social ethical and emotional capacities and dispositions. Education is a light that shows the mankind the right direction to surge. The purpose of education is not just making a student literate but adds rationale thinking knowledge ability and self-sufficiency. Education is the development of all those capacities in the individual which will enable him to control his environment and fulfill his responsibilities. New innovation has brought a drastic change in the educational scenario. These innovations can be utilized in higher education to mould the personality of the students. Creativity can be developed and innovation benefits both students and teachers. In order to help students grow in knowledge skill and value attitudes and awareness relevant to environment teacher is expected to be not only transfer of information and knowledge but also manage to teaching and learning situations. Development and learning occurs as children interact with people and

objects in the environment. This involves creating the healthy setting and providing space materials and opportunities to help children learn through play whether at home or elsewhere it involves parents as well as to encourage nurture to stimulate with their children. Children learn and develop better if they are actively involved in the learning process. It is important for them to have opportunities to construct their own knowledge through exploration interaction with materials and imitation of role models.

Key words: Educational Quality, Sustainable Development, Students Learning, Teaching, Skill Development.

INTRODUCTION

Teaching is a profession requiring specialization in terms of knowledge and skills. The person involve in this process should possess all round development in terms of cognitive affective and psychomotor domains. There exists a wide gap between theory and the knowledge and skills of teaching required in the actual class room curriculum transaction. The teacher should have a skill of constructivism as it is the present hour of talk he has to bridge the class room knowledge to real life situations by constructing the knowledge of the student. For this reason a routine bound teacher cannot act in accordance with the emerging needs unless he is trained and frequently orient and update knowledge base on the prevailing needs and situations. One of the most important requirements to promote and strengthen education is the training of teachers who are the key resources in the reform redirection and renewal of education. For the development of the standards and quality of education ideal teachers with passion for teaching and well-being of society are necessary and for this there is a need of appropriate teachers' training. The effective teacher education curriculum calls for systematic task analysis of teachers at various levels and inclusion of relevant contents keeping in mind the various needs of multi lingual multi-cultural and multi religious communities in India which alone can infuse confidence among the prospective teachers to negotiate the school curriculum in class room. The present education programme is to meet the challenges of diverse Indian socio-cultural contexts and the paradigm shift envisaged in the NCF (2005). Professionalism needs to be installed in each and every phase of teacher preparation starting from conceptualization to evaluation and appraisal to prepare professionals and improve the quality of education. The development of the standard and quality of education is closely interconnected with the education. A teacher should prepare himself for this special prophetic task before accepting the noble responsibility of teaching. The teachers' training institute plays vital role and helps a lot to do this phenomenal task. Globalization is an important phenomenon that has affected the entire world in the contemporary era. As the underlying structural dynamics it drives the

various socio-cultural economic and political processes around the world and brings in new concepts values perspectives and information to the society. The increased communication contributes toward a world which is much more interactive the one in which communication and transactions can emerge between people even when meet. It brings education to the front lines and in the prevailing discourse is expected to be the major tool for incorporation into the knowledge society and the technological economy. Educational access with quality is very much part of the globalization discourse where quality is defined as an educational content that enables students to obtain the knowledge they require for the construction of an equitable social and economic world. Adopting a holistic approach to the problems this enables the ability of learners to access assess adopt and apply knowledge to think independently and exercise appropriate judgment and to collaborate with others to make sense of new situations. Breaking the boundaries of space and time it uses advanced information and communications technologies new systems of knowledge in teaching and learning that aid both the teacher as well as the student. This encourages explorations experimentation to push the frontiers of the potential of information technologies and communications for more effective learning. It also creates and supports policy makers and practitioners for the purpose of rethinking education and supports mechanisms for the exchange of ideas and experiences. Globalization is an important phenomenon that has affected the entire world in the contemporary era. There is an increased on preparing global citizens who are ready to face the highly competitive world. While the basic aims of education is to enable children to develop their potentials define and pursue a meaningful purpose has put an extra pressure on the education system to create winners who are ready in the race for the survival of the fittest. It explores their resources physical infrastructure assets and various facilities that are intrinsic in order to provide quality education to the children. It reveal across the two categories of school education with respect to diverse variables such as strength of teachers and pupils available infrastructure and its maintenance and co-curricular activities. The relation between teaching instruction and children's learning arises whenever models of the teaching learning process are discussed or whenever problems of learning occur. Despite massive research efforts we still know little about how differences in learning activities are related to students learning. The primacy of teachers and teaching as the primary subjects of research has contributed to a rather limited understanding of what goes on in schools and in class rooms. Few studies of teachers and teaching have examined the extent to which differences in teacher effectiveness are related to differences in teacher's subject matter knowledge and there is still a tendency to discuss issues of teaching and learning in general terms separated from the content that has been taught. It argues for the need to bridge studies of teaching and learning with studies of the subject involved to establish the conversation between

didactics and class room studies. An analytical design and frame work able to bridge the teaching learning gap needs to be developed. Emerging technologies in video audio documentation provide one chain of investigations for bridging how different thematic patterns are linked to instructional activities and interaction formats in class rooms. The didactic triangle as a relation between teachers and learners subject matter and instructional methods points to a long tradition within educational research. Despite the long history of the didactic triad teaching learning and content there is a need for an analytical and methodological frame work that integrates the three elements in the triangle and explores the relationship between them. The aim is to reconceptualise the relationship between teaching learning and subject matter through a review of research traditions in this field where each of the three elements has its relative strength during different periods. Didactic frame work and research design able to bridge the teaching learning gap with institutional and disciplinary boundaries and fragmentation policy initiatives and power relations the different stake holders. Recent developments within the didactics subject specific and class room studies combined with emergences in technologies able to document teaching learning processes at micro and meso level provide for opportunities to study how different thematic patterns are linked to instructional activities and interaction formats in class rooms. Funding structures in research together with policy initiatives such as the creation of networks across research community's disciplines, and national contexts support this ambition even further.

EDUCATIONAL QUALITY AND NEW EDUCATION POLICY

India has always laid great importance to education. From the time of independence the expansion and advancement of education has been a priority of India's development agenda. Several commissions and policies have been moulded from time to time to take initiatives steps to increase accessibility to education encourage further participation and improve educational quality. One of the prominent policies on education is the National Policy on Education which was framed in (1986) and modified in (1992). The policy conceived a democratic system of education which implies that up to a given level and all students irrespective of caste creed location or sex have access to education of a comparative quality (NPE, 1986). Since its formulation the National Policy on Education has focused on refining the quality of education at all stages inculcating moral and social values scientific and technological advancement and to link education with people's life. Developing a sense of common among people promoting national progress and fortifying national integrity have been the corner stones of the national policy on education. Rapid developments have occurred in the political social and economic areas at national and global level since the articulation. In view of the dynamic nature of the needs and requirements of the society the elements of education and the education policies need to evolve continuously. In light of changing national development goals and

societal needs the aims objectives content and process of education need to be revived by utilizing the available resources ensuring that the benefits of change reach to each strata of the society. The new national policy on education which envisages the revival of the present education system would prove to be a torch bearer in this direction. Since independence India has witnessed tremendous growth and expansion of education at all levels which owes to the dynamic needs of its people as well as the demands of rapid globalization. However several disparities still exist in the field of education which hinders the overall progress. Major initiatives are being taken to promote inclusiveness at all levels of education and improve educational quality. The formulation of the new national policy on education is one of the most promising initiatives taken by the present government to improve the status of education in the country. The present scenario throws light on certain issues and concerns related to education and it puts forth certain recommendations which need to be considered while devising the new national policy on education. Although the present government aims to enhance the quality of education and eliminate disparities and has put forward its plan of action through its documents and manuals not much has been stated with regard to education of minorities and girl education.

ROLE OF EDUCATION ON SUSTAINABLE DEVELOPMENT OF STUDENTS

Although educational attainment has been consistently related to cognition in adulthood the mechanisms are still unclear. Early education and other social learning experiences may provide the skills knowledge and interest to pursue intellectual challenges across the life course. Therefore cognition in adulthood might reflect continued engagement with cognitively environment. Using baseline data from multiple mediation models were applied to examine the combined and unique contributions of intellectual social physical creative and passive life style activities on the relationship between education and cognition. Separate models were tested for each cognitive outcome such as reading ability processing speed memory. With the exception of memory tasks findings suggest that education cognition relations are partially explained by frequent participation in intellectual activities. Education may cultivate the knowledge skills and ability necessary for continued participation in intellectually demanding activities of reading taking courses well into later adulthood. According to the engagement hypothesis individuals who continuously place significant demands on their intellectual resources i.e., through multiple and complex decisions well defined problem solving may maintain or even enhance cognitive potential. Therefore compared to other forms of life style activity greater participation in intellectually demanding activities may be especially beneficial for cognitive function. It was found that individuals who are frequently participated in novel information processing were less likely to show cognitive declines over time. Moreover activities low in cognitive demand may be more prevalent among

those with lower educational attainment. The study examines whether educational attainment and late life activities contribute independently to cognitive performance or if education cognition relations can be at least partly explained by participation in activities in adulthood. Education will be associated with cognition such that individuals with higher levels of educational attainment will demonstrate better performance on cognitive measures. The older adults with higher levels of educational attainment will report being more active especially in intellectually demanding activities. The intellectual activities will influence cognition such that participation in intellectually demanding activities as compared to other forms of activity will be related to better cognitive performance that independent of education.

SKILLS DEVELOPMENT BY VOCATIONAL TRAINING IN INDIA

India has gradually evolved as a fast developing modern economy due to the abundance of qualified capable motivated and flexible human capital. However there is a need to further develop and empower the human capital to ensure that country is standing in global competitiveness. The term skills development is used to describe a wider array of institutions and activities influencing employment. When referring to the preparation of youth and adults for employment a subtle shift in understanding occurs. The discussion begins to shift from talking education to skills and attention extends to informal learning on the job structured apprenticeships and other enterprise based training along with government and non-governmental training programs besides technical and vocational education. Skills development is a much broader concept more diverse hence more difficult to monitor. Despite the utmost important and attention given to education and training there is still a shortage of skilled man power in India to address the mounting needs and demands of the economy. In the current scenario the government is dedicatedly striving to initiate and achieve formal and informal skill development of the working population via education vocational education or skill training and other upcoming learning methods. Educational research and innovations contribution is the field of youth and adult education on skills development in India. It is in line with the skills acquired in formal education to prepare youth and adults for the world of work. It also highlights livelihood programs run by government under trails. The objective is to look in to the current policies supporting skills development programme. Identification of gaps between government and private programs that need to be filled is duly intended during the study. The lessons learned from past policy interventions how higher education institutes can contribute in successful skill development of the country which is the flagship programme of the government. Hence education should focus on the prominence of teaching student to think and the priority of education system should be to teach children the style of the learning and thinking.

ENVIRONMENTAL EDUCATION AT SECONDARY SCHOOL CURRICULUM

Education is the most powerful weapon we can use to change the world. The benefits of education permeate all walks of life right from the moment of birth. If we are to eradicate poverty and hunger improves health protect our planet and build more inclusive resilient and peaceful societies then every individual must be empowered with access to quality lifelong learning with special attention to opportunities for girls and women. The evidence is unequivocal education saves lives and transforms lives it is the bedrock of sustainability. The role of education for achieving SDGs has been identified by the UN open working group which confirms that education is not only an end in itself but also a means to achieving a broad global development agenda. As the post goal setting process continues education has increasingly been discussed as not only a development goal in its own right but also a key way of reaching other development goals and for good reason a country that provides free access to quality education for all its citizens is far more likely to reduce poverty promote economic growth lower child and maternal mortality and achieve social inclusion. Education can build change that is sustainable change because it is owned by the learner and reaches hearts and minds. Education is held to be central to sustainable development. Indeed education and sustainable development are intimately linked but the distinction between education as we know it and education for sustainable development (ESD) is puzzling for many. The ESD is a vision of education that seeks to balance human and economic well-being with cultural traditions and respect for the earth's natural resources. Sustainable development goals (SDGs) are the global priorities that have to be achieved within the next 15 years from. In this context the place of (ESD) has become more important. The environmental education (EE) is used as a tool for ESD at school level in India. The implementation of EE in the formal school curriculum has been structured by two national policy documents the national curriculum framework (2005). At secondary school level infusion model has been adopted for imparting EE. Furthermore it makes recommendations for making EE more effective. It is hoped that the suggestions mentioned will bring about desirable changes.

EMERGING TECHNOLOGIES THROUGH SOCIAL EXPERIENCES

Emerging technologies are those technologies which are likely to have a large impact on teaching learning or creative inquiry on learners or those technologies which are on the rise. The blogs and e-books which are part of it have been shown to be useful to education. Specifically these are seen as particularly useful because of their relative low cost and ease of use. That mobility expands learning across space and time and opens many opportunities for learning that is neither sequential nor consistent that emerging technologies represent a new paradigm that at first grows on the edge in relative obscurity and often seems to be of no threat or even of little value to users of the sustaining technology. This continues to say that emerging technologies in education can

be used in innovative ways to address issues of inequity and social exclusion. Digital technology empower learners to innovative instructors are also finding ways to harness this media to increase motivation of learners through relevant activities. Findings from the data suggest that teacher trainees have access to collaborative tools social media Internet and mobile devices. The studies suggest that technology has a significant effect on student outcomes when compared with traditional instruction. Over the years it has made advances to strategize for the integration of information communication technology (ICT) across its curriculum. The quantitative data was analyzed using simple means and standard deviation. Findings showed that teacher trainees have received technical support to use the online learning management system. The main study showed that number of teacher trainees access technology for academic and non-academic activities. The use of the social media is popular among teacher trainees however using it to support learning is still a challenge. The numbers of teacher trainees' lack confidence in using technology tools because of their low technology skills. The lessons drawn from the opportunities and challenges faced by students in the utilization of technology tools could be used to formulate ideas in the deployment of ICT tools and facilities. It is expected that this will provide useful information to provoke a revolution in technology use in education learning and research.

TRENDS OF LEARNING AND TEACHING PROCESS

The relation between teaching instruction and children's learning arises whenever models of the teaching learning process are discussed or whenever problems of learning occur. Despite massive research efforts we still know little about how differences in learning activities are related to students learning. The primacy of teachers and teaching as the primary subjects of research has contributed to a rather limited understanding of what goes on in schools and class rooms. Few studies of teachers and teaching have examined the extent to which differences in teacher effectiveness are related to differences in teacher's subject matter knowledge and there is still a tendency to discuss issues of teaching and learning in general terms separated from the content that has been taught. It argues for the need to bridge studies of teaching and learning with studies of the subject involved to establish a conversation between didactics and class room studies. An analytical design and framework able to bridge the teaching learning gap needs to be developed. Emerging technologies in video audio documentation provide one chain of investigations for bridging how different thematic patterns are linked to instructional activities and interaction formats in classrooms. The didactic triangle as a relation between teachers and learners subject matter and instructional methods points to a long tradition within educational research. Despite the long history of the didactic triad teaching learning and content there is a need for an analytical and methodological framework that integrates the three elements in the triangle

and explores the relationship between them. The aim is to reconceptualise the relationship between teaching learning and subject matter through a review of research traditions in this field where each of the three elements has its relative strength during different periods.

DEVELOPMENT OF LIFE SKILLS IN TEACHER EDUCATION PROGRAMMES

Life skills are the abilities that help to promote psycho social competence and general well-being of individuals. To enhance the efficiency of prospective pre-service teachers and to convert them into individuals with high potential teacher education programme should be reformed giving due importance to life skill education. Imparting life skills can empower prospective teachers to take positive action promotes healthy and positive social relationships. It also entails being able to establish productive interpersonal relationships. The teacher education curriculum should encompass life skill education to impart diversity of skills among prospective teachers there by to build an open and flexible mind not only to adapt to diverse class room situations but also to develop life skills of their students in real teaching situations. Life skill education as a full-fledged subject is necessary to enhance the efficiency and well-being of prospective teachers. Teachers being the facilitators of learning process in classrooms are responsible for overall development of the students. Effective teaching in this century requires more than a basic understanding of educational theory and class room management. One of the prime duties of the teachers apart from teaching the subject matter is to develop positive attitude among the students and enable them to think critically make adjustments in adverse conditions and to generate good decision makers. Teachers can also help the students to relate the learned matter to the real life situation. Life skills are the abilities that help to promote general well-being and psycho social competence of an individual. Life skills are abilities for adaptive behavior that enable individuals to deal effectively with the demands and challenges of everyday life. Training for life skills promotes mental health and general well-being of teachers which is vital as the teachers often work in diverse situations. It helps to improve the academic performance by enabling to translate acquired knowledge attitudes and values into actual abilities and there by facilitate to behave in healthy ways. Qualities like critical thinking effective communication decision making and problem solving are imperative for quality teaching and that can be obtained through life skill education. It helps to build confidence and self-esteem among the pre-service teachers. Many a time teachers face job stress in the work place and quite often struggle with their emotions which affect their teaching. In order to cope with stress and emotions a prior training in life skills will be boon for the teachers to carry on the teaching work efficiently. It helps the teachers to tackle adolescents who are in a transition phase and quite often are found struggling due to inappropriate home and school environments and also assist teachers to impart the

acquired knowledge of life skills to the students in a better way by employing different teaching methods.

IMPROVEMENT OF EDUCATION THROUGH RESEARCH

Quality of human resource and man power is largely dependent on the unfolding of human personality and increased opportunities for transformation of their interest's attitude and values. Today the system of education needs to respond not only to national socio-economic political needs but we also anticipate the system which could fulfill the larger goals of human empowerment in the wake of globalization and knowledge explosion. Recognizing this potential of education empowerment through teacher education has a crucial role to play which is conceived as an integral part of any system of education. In the emerging Indian society knowledge creation exchange net-working and maximum utilization have become most vital for advancement of the nation. Knowledge and information sharing serve as a major resource of creating values. Research is something which is concerned with analytical examination of facts and exploring new dimensions of knowledge. Research is an effort to promote qualitative improvement of already known. Teaching and research are two inseparable components. Quality is a complex issue and can be interpreted in many ways. The term quality is comprehensive and it includes standards and as well as the process of teaching and learning the activities of institutions and the congruence between the goals of programme and the competencies of its graduates. In the context of teacher education quality can be viewed as the ability to meet the goals for which efforts are made. The process of quality development in education works on the principles of values instruction guidance utilization is to state it in different manner and the issue of quality in teacher education is multidimensional. The thrust areas can be listed as curriculum human resources teacher staff administration material resources and work atmosphere. Every institution should have culture and strategies to be developed to strengthen the research capacity. Research and intellectual creation are necessary to develop a critical innovative approach. It can increase the quality of future generation. An increasing investment in research and development use of information technology and better communication would result in skill and efficiency enhancement and would serve as a foundation for the knowledge society. Time and again we have proved that Indians have immense potential to innovate. Due to the development in the national education there is growing need to seek more information exchange and share information and promote co-operation across boundaries on the issue of addressing common issues e.g. diversity human rights of the children and women. These areas would promote collaborative working and search for solutions with increased symbiotic relationship. This conveys that how teacher can sustain the quality in teacher education in various teacher training institutions.

PROBLEMS AND CHALLENGES IN EDUCATION

Man is a social being he is an integral part of society. The human is product of society where as society also depends upon its individuals for its development. Aims and objectives of any society can achieved through the proper educations. For such an educational system we require efficient teachers. It is well known saying that teacher is a national builder. Teacher spreads knowledge decides time schedule organize subject matter and evaluate the outcomes of learning helps pupil to overcome their difficulties by guiding them. Teacher sets the standards builds up desirable attitudes and approves or disapproves student's behaviour. Whatever policies may be laid down these have to be interpreted and implemented by teachers. All the above said facts express the need of teacher education. To be able to discharge such a high responsibility it is very necessary that the teacher must become conscious of his role towards society. Teacher education means programme of education researcher training of human resources equipping them to teach at pre-primary primary secondary stages of school education non-formal and correspondence education through distance mode. Teacher education means all the formal and non-formal activities and experiences that help to qualify a person to assume responsibilities of a member of the educational profession or to discharge his responsibilities more effectively. Education is a dynamic process. Teacher performance is the most crucial input in the field of education. The education gives a new shape to the individual and the nation as well. Education plays major role in bringing social change economic and political development of any society. Education helps people to learn right actions at right time. Such an education requires efficient teachers. It is a well-known saying that teacher is the nation builder. The teacher is the central figure in the formal teaching learning process. The future of students depends upon the teachers. The place and importance of teacher in society can never be under estimated. The quality of teacher education programme needs to be up graded. Teacher education has not come up to the requisite standards. Teachers are not able to think critically and solve the issue related to teaching methods content organization. Teacher education programme needs the comprehensive reform and restructuring curriculum of teacher-education and needs to be revised according to changing needs of society. Centre and states governments should join the hands to bring the quality and improvement in the teacher education and then bright future of teacher education is possible.

INNOVATIVE IDEAS AND PRACTICES IN EDUCATION

The growth of a nation depends upon the quality of education system which in turn depends on teachers and for this purpose teaching is being considered as the honorable of all professions. The teacher occupies a crucial place in the educational system as well as in the society. But teaching is not a motorized process. It is a sophisticated demanding and a very stimulating one. Though teaching is being

considered as a science and skill basically it is a transcendent art as the teacher who intuitively designs the emergent mind of the child. Like an artist the teacher is also responsible for influencing or reshaping the behavior of the young ones in a socially desired way. Thus the teacher needs to be in contact with the child so that he could shape the mind in creative way. Team teaching or co-operative learning process is a team work where members support and rely on each other to complete an agreed upon goal. Reflection on one's own work is a key component of being a professional teacher. Teachers must observe their beliefs expectations and prejudices regarding teaching and learning and determine how these beliefs influence class room practice. Reflection is an ordinary process that assists the development of future action from the review of past and current behavior. The superiority of any educational process mainly depends upon the excellence of teaching process and teacher. Model of teaching and teaching strategies have similar functions. Teacher generates educational environment by using these two means. The feedback process is an essential function of the learning process. Educational strategies only determine the strategies. These are not related to teaching feedback. In teaching models feedback process is one of the most important activities. It is necessary and essential element in every teaching model. In teaching models feedback system is called as support system. Therefore it can be said that the models of teaching are relatively more extensive than teaching strategies.

DEVELOPMENT OF COMMUNICATION SKILLS FOR ACADEMIC SUCCESS

Communication skills can be defined as the transmission of a message that involves the shared understanding between the contexts in which the communication takes place. In addition teacher communication skills are important as teacher in delivery of education to students. These involve listening and speaking as well as reading and writing. For effective teaching a teacher need to be highly skilled in all these areas. Teacher with good communication always make the things easier. Effective communication skills are really important for teacher in transmitting of education class room management and interaction with students in the class. Teacher has to teach the students having different thinking approaches. To teach in accordance with the ability and capability of the students a teacher need to adopt such skills of communication which motivate the students toward their learning process. Good communication skills of teacher are the basic need of academics success of students and professional success of life. Teacher communicates more instructions orally in class room to students. Teacher with poor communication skills may cause failure of students to learn and promote their academics. Student need to understand the right and wrong while it totally depend upon the communication skills of teachers which he adopt in class room. Good communications minimize the potential of feeling during the process of teaching. For learning the learner must be attentive toward their teacher during the lecture. It is

recommended that teacher communicate in a clear manner. Communication is a dynamic process which needs mind and courage to face the other and convey his message in an effective way. Communication process is successful when we deliver the message in a clear and understandable way. Effective communication needs to convey and accept his message in all kinds of situations and circumstances. Good communication is considered a strong tool for effectiveness in the teaching profession. Therefore it is necessary for a teacher to adopt good communication skills while teaching to the students.

CONCLUSION

Educational training has a strong relationship with teachers and students. First, the quantity and quality of existing education and training in a country that helps to determine the extent to which a country is likely to be involved. Equal education and training is clearly a part of the equation when understanding the dynamics of brain drain, brain gain, and brain circulation. Thus education and training levels are important factors in both the employment through skill development within the country or industry, focusing on the case of the broader debate on the relationship between an educationist and teacher. It also considers the issue of corporate social responsibility as it results in education and training interventions. The decisions made by these opportunities regarding corporate social responsibility in education and training are shaped in part by their desire to be seen to be good citizens of the country and hence social responsibility to exist in relationship with each other. The department of education has sought to transform public further and higher education institutions through various processes.

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BLENDED LEARNING AS A MECHANISM FOR PROMOTING STUDENTS' LEARNING SKILLS AND SUSTAINING EDUCATION SYSTEM

Dr. Arun Kumar Mandal

Assistant Professor in Education, Union Christian Training College,
Berhampur, Murshidabad, W.B, India
Email- akm175@rediffmail.com

ABSTRACT

A blended learning activity is designed as a flexible learning process and teaching experiences that may engage assessment, teacher / student communication, student activities, teaching activities and students resources taking into account of sustaining education system. Blended learning activities attempt to engage more learning time, additional instructional resources and course elements that motivate interactions among learners. In this backdrop, the present study has attempted to focus thematically on blended learning as a mechanism for promoting students' learning skills and sustaining education system. The present paper represents that blended learning for learners attempt to enhance learning skills, more access to information, learning outcomes and opportunities with sustainability of education system largely.

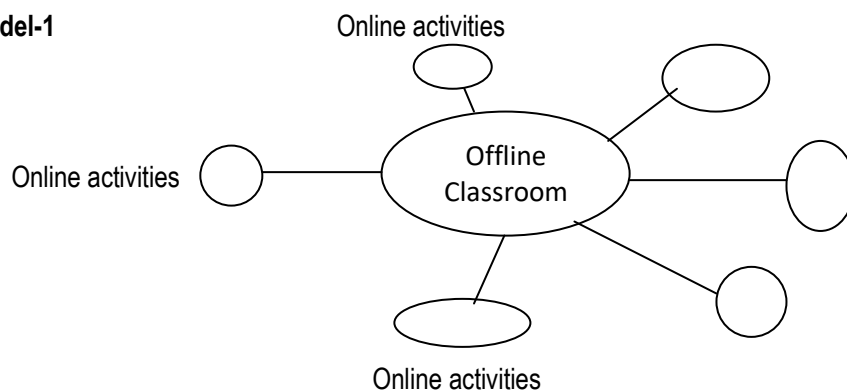
Introduction:

The blended learning may be defined as the use of traditional classroom teaching methods together with the use of online learning for the same students studying the same contents in the same course (Garrison & Vaughan, 2008). Teachers play a pivotal role for blending learning. Teachers having subject-matter expertise and basic technology skills taking into consideration of new pedagogies that communicates actively with technology such as constructivism and collaboration. A blend of classroom and web-based teaching and learning offers access to the widest range of learning models and methods for developing students skills and expertise as learners (Cleveland-Innes et al., 2017). Many findings on blended learning find an increase in learners' ability to learn collaborate, think creativity, study independently and make their own learning experiences to meet their individual needs. The advantages of blended learning for students include increased learning skills, higher access to information, more satisfaction and learning outcomes creating opportunities both to learn with others and to teach others. Innovative educators have for many years been creating new delivery methods in education by combining elements of in-person teaching with technology-enabled learning to bring people together

virtually. Since the late 1990s, when simple learning management systems began to emerge, blended learning has grown very quickly. While computers became part of everyday for most in the early 2000s, education was slower to integrate computer technology. Teachers are still a key part of blended learning and teachers who have subject-matter expertise and basic technology skills, along with the new pedagogies that go with technology such as constructivism and collaboration. Blending learning expertise render both (Cleveland & Wilton, 2018). In this backdrop, the present study has attempted to focus thematically on blended learning as a mechanism for promoting students' learning skills and sustaining education system. The study has been conducted on the basis of blended learning models available from various research journals.

Models of Blended Learning (Cleveland & Wilton, 2018):

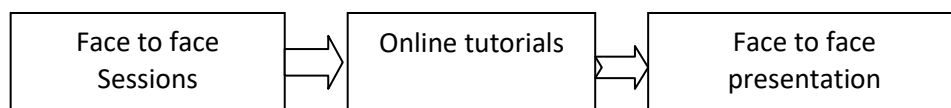
Model-1



Model -1: Blended Presentation and Interaction.

Model-1 focuses on the blended presentation and interaction taking into consideration of classroom engagement as its prime component with supportive system as outside and online practices, e.g. flipped classroom or flipped curriculum approach, podcasts or other online resources personally or group learning following these resources.

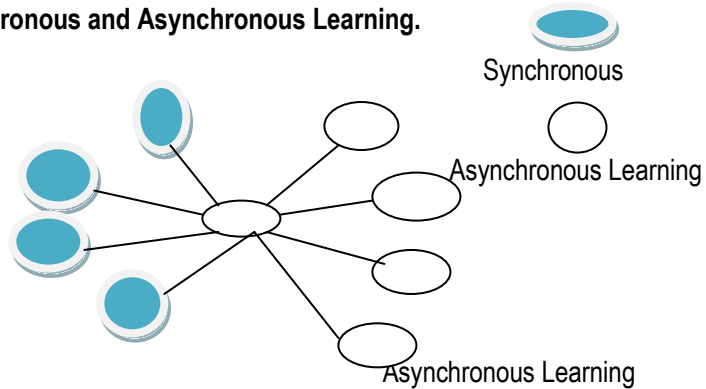
Model-2: Blended Block Model.



Model-2 exposes to blended block model or a programme flow model attempting to a sequence of activities or blocks are framed to integrate both face -to-face learning and online teaching-learning taking into account of both pedagogical goals and practical constraints e.g. a block of intensive face -to-face sessions, blocks of online study and collaboration of online tutorials.

Model-3: Both Synchronous and Asynchronous Learning.

Learning



Synchronous Learning

Model-3 is carried out on the basis of fully online process taking into account of both integration of synchronous learning e.g. online tutorial and asynchronous activities e.g. discussion forums. This model follows three situations i.e integrating (i) instructional modalities, (ii) instruction methods and (iii) online and faces –to-face instruction.

Figure-1: A Schematic Approach for Three Models of Blended Learning (Source: Hannon & Macken, 2014)

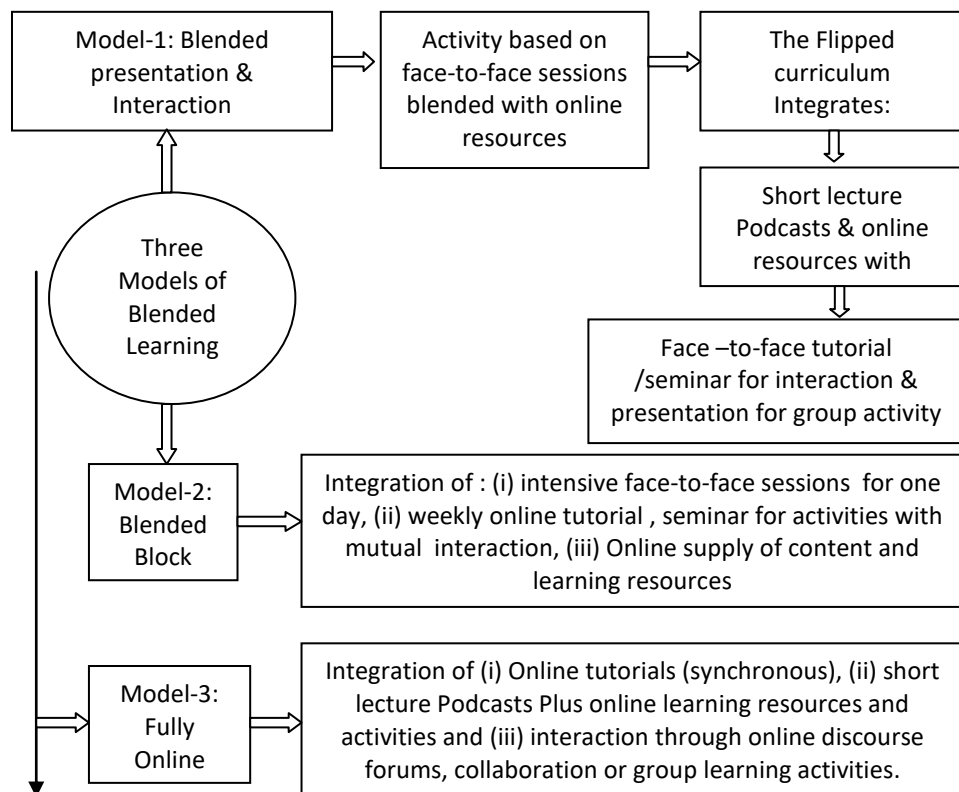
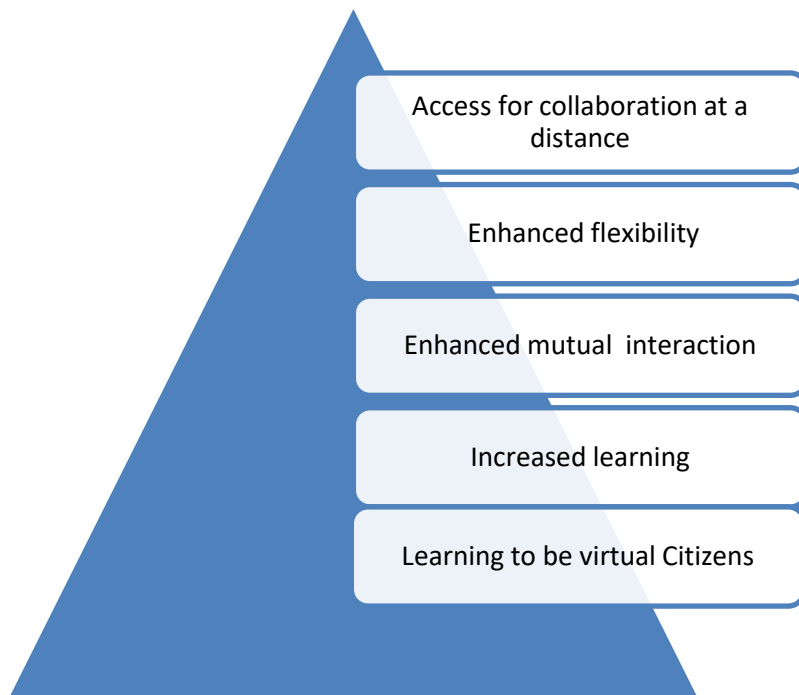


Figure-2: Advantages of Blended Learning- Recent research focuses the following prime benefits of blended learning (Cleveland & Wilton, 2018).



- **Access for collaboration at a distance-** Individual learners attempt to work collaboration virtually in intellectual efforts as a learning practice.
- **Enhanced flexibility-**Technology enabled learning permits for students' learning anytime and anywhere without the obstacles of time and location taking into consideration of the possible support of personal involvement.
- **Enhanced mutual interaction-** Blended learning endeavours to make opportunity for more mutual interactivity between learners and teachers.
- **Increased learning-** Blended learning attempts to use various leaning activities which may in turn lead to more students' engagement and higher performance with reflective level of level of learning as well as deeper learning.
- **Learning to be virtual citizens-**Students prepare themselves as a socially and academically in an online community of inquiry through essential digital learning skills in continuous and lifelong process.

Figure-3: Athabasca University and the Commonwealth of Learning (Cleveland-Innes et al., 2017) identified some challenges and recommendations in recent research on teacher perspectives

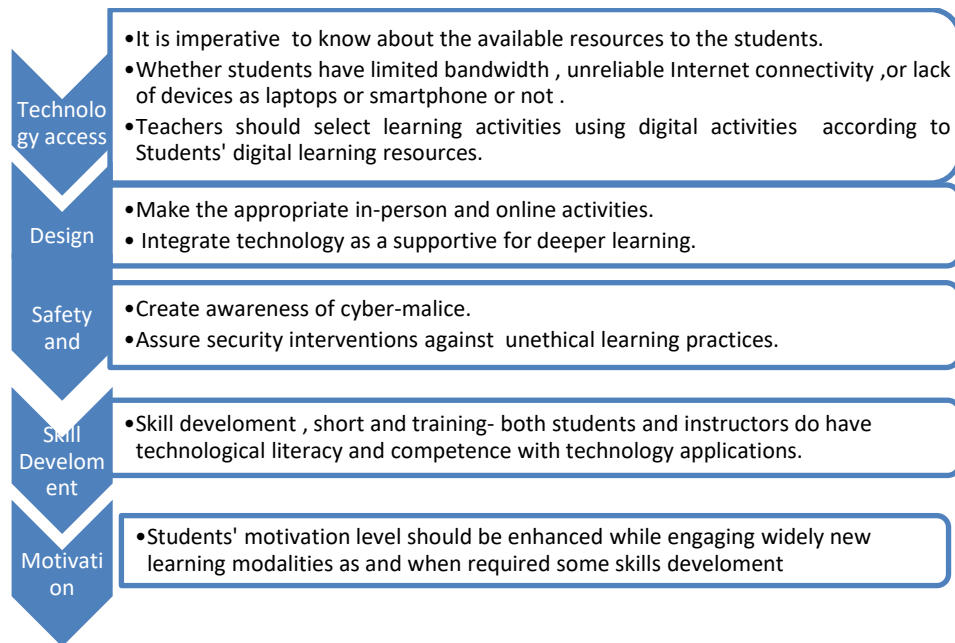
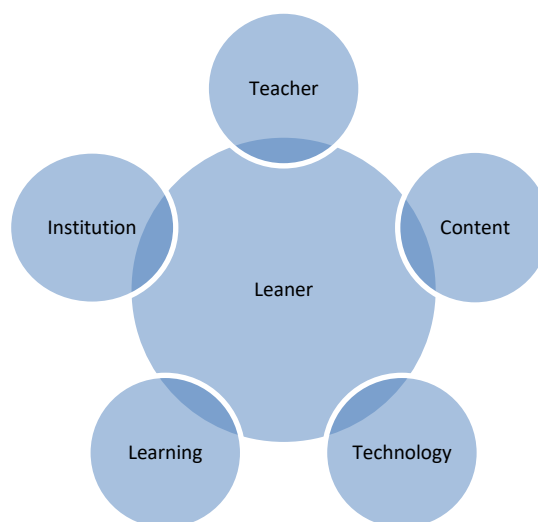


Figure-4: The Complex Adaptive Blended Learning System (CABLS).



The CABLS framework in figure-4 is constructed “to facilitate a deeper, more precision understanding of the dynamic and adaptive nature of blended learning” (Wang et al., 2015). It consists of six elements like (i) the learner, (ii) the teacher, (iii) the technology, (iv) the content, (v) the learning supporting system and (vi) the institution in the system, all with their own subsystems.

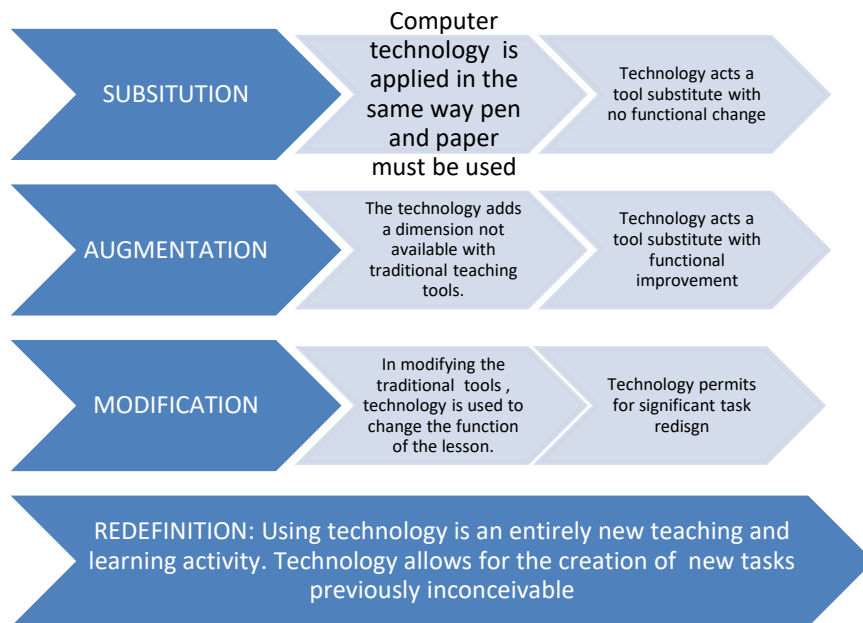
- (i) **Learners:** The role of learners changes, or adapts, as learners are involved in for first time or in new ways with the elements in the system giving emphasis on the support and training of lifelong learners , a characteristic identified as important in 21st century society.
- (ii) **Teachers:** The teachers act newly in blended learning environment evolving with learners and adapting pedagogies properly by preparing learners to engage productively in 21st – century societies. The teachers guide the learners as facilitators, mentors, advisors and moderators.
- (iii) **Content:** Content is connected by the subject matter and material elements in order to engage learners for attaining knowledge, skills and attitudes about the subject. The content or subject matter is transacted properly through collaborative learning, individualised learning, interactive learning, problem based learning and deeper learning. The interactive, dynamic, media-rich materials available online make opportunities for teachers and learners to annex content pre-during-post course experience. The selection and use of content is largely influenced by the potentiality between the learner, the teacher, the technology, the learning support and the institution.
- (iv) **Technology:** Technology refers to the diverse collection of processes and knowledge that people use to extend human abilities and satisfy human wants and needs. Technology is the use of knowledge to turn resources into goods and services that society needs and wants. Technology for learning necessitates new roles for the learners and teachers and new means for assessing and working with content. In this theoretical framework, technology has to be observed as part of the system of blended learning that covers all elements (like offline, online, synchronous and asynchronous).
- (v) **Learner Support:** In this framework learner support focuses on the development necessitated to be a competent blended learner and ongoing support required when system faces complexity. Learning support implies as academic support focusing on helping learners to promote effective learning strategies such as time management and collaborative skills and technical support aiming at to help learners improve their knowledge of the technological tools and the fluency with which they use the tools to finish specific learning tasks (Wang et al., 2015, p.390).
- (vi) **Institution:** In general classroom based learning claims proper airy buildings, desks, lighting and other belongings of brick and mortar institutions. Blended learning requires technological infrastructure and digital supervisor. Institutional support plays a pivotal role for successful blended learning.

Seven Blended Learning Structure in Education (O' Connell, 2016).

O' Connell(2016) Put forward the following seven sample configuration of blended learning activities taken from higher education but can be framed to fit for any teaching and learning situation.

- **Blended face-to- face class/ Face-to- face driver model:** The blended face-to face model is based in the classroom, although a significant amount of classroom time has been replaced by online activities. This model attempts to permit students and teachers to experience high-value instructional time.
- **Blended online class:** It is conceived as the “online driver model” and inverse of the blended face-to-face class. The class is mostly carried out by online in spite of having in-person activities e.g. lectures or labs.
- **The flipped Classroom:** The flipped classroom is opposite to the traditional class structure of hearing to a lecture in class and finishing homework activities at home. Students in flipped classroom follow a short lecture video online and finish activities attending in the classroom such as group work, projects or other exercise. The flipped classroom can be observed as a sub-model of the blended face-to- face or blended online class.
- **The rotational model:** In this model, students in a course rotate between various modalities, one of which is online learning. Various sub-models consist of station rotation, lab rotation and individual rotation.
- **The Self-blend model:** The Self-blended model is conceived as a programme level model where learners using this model are enrolled in a school but used to attend online course in addition to their traditional face-to-face courses.
- **The Blended MOOC:** The MOOC was used as a blended learning method in an introductory course replacing part of the hours of face- to- face classes, allowing an increase of the number of students per teacher keeping discipline more attractive to the students.
- **Flexible mode courses:** Flexible Mode courses are those that offer multiple delivery modes so that students can select which model best meets their unique needs.

The SAMR Model – Blended Learning as Technology Enabled Learning (Brubaker, 2013). The SAMR model considering as fit for K-12 is an approach for the effective implementation of new technology.



Conclusion:

Blending learning is a term used to the practice of rendering instruction and learning experience through some combination of both face to face and technology mediated learning.

It can enhance access and flexibility for learners, increase level of active learning and attain better students' learning outcomes (OLs) and sustaining education system. Teachers have been blending or integrating different types of learning activities and resources in classroom, laboratory, practicum, studio contexts for a long time. Blended learning places more emphasis on individuals to learn independently taking into account of their own progress. It focuses on (i) face- to-face and online learning activities and formats, (ii) traditional time-tabled classes with different modes, such weekend, intensive, external, quarter, (iii) well established technologies such as lecture capture, and/ or with social media and emerging technologies, (iv) simulations, group activities, site-based learning, practical. At present, computers, tablets and smartphones have been available to the majority of the world's population, and technology-enabled learning has been connected with widely and accessible. Educational institutions and teachers are enhancing continuously web-based learning transacting methods and students get opportunities for supporting their learning. Creating an effective blended learning environment means making appropriate choices and overcoming the challenges that come with the use of technology. Some examples of digital tools that can be used to support learning and teaching in a blended environment as (i) Blogs, (ii) Application of the SAMR model and CABLS model, (iii) Discussion boards, (iv) Live Internet Streaming, (v)

Web/ video conferencing, (vi) Mind mapping, (vii) Screen Capture/ recording, (viii) Open education resources, (ix) Flipped classroom. As of July 2020, it is measured that over 60 crore Energized Textbooks (ETBs) are printed this year in India by 35 states and Union Territories , with more than 30 crore content plays and 200 crore page hits already on DIKSHA (Indian Report-Digital Education, 2020).

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TEACHING ENGLISH AS A SECOND LANGUAGE TO UNDER-GRADUATE LEVEL TRIBAL STUDENTS OF ODISHA: A STUDY

Dr. Radharani Nayak

Lecturer in English

Government College Autonomous, Bhawanipatna, Kalahandi, Odisha, India

Email: radharani.eng@gmail.com

rnyak@kalahandiuniversity.ac.in

&

Prof. Sanjaya Kumar Satapathy

Vice Chancellor, Kalahandi University, Odisha, India

Email: vc@kalahandiuniversity.ac.in

ABSTRACT

English language is the lingua-franca of today's globalized world. It empowers class, status, growth and position in the society. Despite varied socio cultural and linguistic problems, it is obligatory to teach the rural folk, who contribute 70% of the total population of India. Tribal constitute around one tenth of total population of India. The socio-cultural and economic development of our country largely depends on the prosperity and wellbeing of tribal community. The lack of mastery over the English language is proved as the most retarding factor for their educational attainment as well as their employability in the modern privatized and globalized world. The tribal people are far away from availing ample opportunity in comparison to their urban counterparts. Moreover, there is a yawning gap between the spoken language and written language in a tribal area and what to speak of English. This paper focuses on the socio-cultural, psychological and linguistic challenges of the tribal learners and also explores the essential remedies and prospects of teaching English to tribal ESL learners at the undergraduate level in the state of Odisha.

Keywords: ESL (English as a Second Language), Tribal Learners, Undergraduate Level, Socio-cultural factors, Linguistic Challenges, English Language Teaching.

1. Introduction

India is a multi-cultural and multi-lingual land where 22 recognized languages along with many dialects are in vogue. Odisha is a replica of Indian language settings with multiple languages set up and has English as a second language. English has its unique importance in today's world. The role of English is very much important and

multifaceted in Indian context, as medium of instruction, as official language, language of mass-media etc. ESL is taught as a subject (compulsory) at primary, secondary and degree levels. It is one of the major languages used for communication. Of all the languages in the world today English appears to be the most fascinating and challenging language. It is interesting to note how ESL learning is promoted homogenously in the heterogeneous setting of India. The very fascination comes from its need, its association to power, status, personality and global phenomenon and the challenging aspect is promulgated by the very act of teaching and learning it. However, in both the cases interest plays a key role. It has been found that despite adopting many methods and approaches, implementing numerous strategies and putting to force so many policies till date, English language proficiency of the learners is not achieved. Learners of rural and tribal areas are still far away from writing a correct sentence in English, introducing themselves and sharing their experiences with others in English. Now the question is why this happens? Who is to be held responsible for such fate?

There are certain disturbing questions which lurk in our minds as teachers of English. We are amidst a cultural revolution. A paradigm change is taking place in all spheres of life. Are the current practices of teaching English in Odisha and other states of India being adequate enough to meet the needs, challenges and demands of our students? Are we enabling our students to use English in concrete situations in life? Are they really becoming proficient in the use of English Language? Are we designing the course materials in such a way that they are consonant with the pursuit studies of the students? All these questions compel me as a teacher-cum-researcher of English language and literature to do some serious rethinking about repositioning English Language Teaching in Indian education system especially in terms of tribal students.

Culture plays an important role in the language acquisition of tribal students. It has been seen that the sociocultural ethos of any region is always inter-related. Ochs and Schieffelin are of the view that "language and culture are from the start inseparably connected". According to Joseph, Jayakar and Tejaswini, the cultural lineage of an individual depicts the social background majorly and vice-versa. They also opine that "the past socio-cultural environment plays a decisive role in determining the learning capabilities of a potential learner in the target language at the undergraduate level. (p.19, 2013)." Samovar, Porter & Jain also said that "culture and communication are inseparable because culture not only dictates who talks to whom, about what and how the communication proceeds, it also helps to determine how people encode messages, the meaning they have for messages, and the conditions and circumstances under which various messages may not be sent, noticed or interpreted.... Culture is the foundation of communication" (24). On a general level, culture is referred as "the ways of a people" (Lado). Therefore, it is quite evident that in order to acquire and develop proficiency in

second language, the learner should be exposed to the culture of the target language to make him visualize and improvise the context so that he might be in a position to understand and demonstrate it in real-life situations successfully.

This paper attempts to analyze existing socio-cultural, economic and linguistic milieu of tribal regions and their overall effect on English language learning and teaching. It further deals with the psychology and attitude of the learners and teachers belonging to such regions and explores the possibilities.

2. Research Objectives

The objectives of the present research study are

- to identify and analyze the problems and challenges faced by tribal learners in learning English as a second language.
- to suggest possible practical measures to solve the problems of tribal learners in learning their target language.

3. Methodology

In this study, the researchers employed a questionnaire as survey technique to obtain data. The items in the questionnaire were designed meticulously in order to collect information, and to investigate perceptions of L2 learners at U.G. level in a particular region of Odisha. Items in questionnaire were close ended in format, which provided mostly quantitative information. Added to that there were two open-ended questions to seek the opinions of students related to the teaching and learning of English which were analyzed qualitatively to obtain the result.

4. Data Analysis and Findings

For the purpose of the present study, a structured questionnaire was administered to 194 tribal students. The questions were framed meticulously based on twelve parameters to identify the obstacles in the acquisition of the language skills.

- Peer Pressure:** This particular question was asked to find out the extent of peer pressure on learning English as a second language. 72% of the students feel that they cannot communicate in English with their friends either inside the class or outside the class. They also feel that they cannot even communicate with the teachers in English at the presence of their friends. The rest 28% students feel that they do not have such problems. So, it is evident that friends play an important role in the learning of language skills.
- Regional Medium background:** 86.5% students felt that their lack of communicative competence in English language is due to studying in a state-run school where the medium of instruction is Odia. They were also of the opinion that their mother tongue which is a dialect of Odia language having no script of its own, was

- influencing the English language acquisition for which they were not able to pronounce certain words in English correctly. Most of the time they compare themselves with their English medium counterparts.
- iii. Educational background of the family: As the participants of the present study belonged to the different strata of tribal society, the research thought it to be pertinent to find out whether the educational background of the family has a role to play in the English language acquisition of the tribal students. To her surprise she found out that 78.3 % of the students marked the option 'yes' because most of the students are first generation learners especially first-generation English learners. They have nobody in the family who would help and guide them in the direction of English language learning.
 - iv. Gender Influence: Since most of the participants belong to the co-educational institutions, the researcher made an attempt to know whether gender plays any role in the second language acquisition process. 95.6% felt that gender has no role to play in the said process.
 - v. Influence of caste: 72% of the students felt that caste has a major role to play in the acquisition of English language. As all the participants belonged to the tribal communities, they felt that they are deprived from the opportunities available to their mainstream counterparts. They also feel that being 'Adivasis' they have different types of socio-economic and linguistic variations which influence their English language learning.
 - vi. Exposure to English language: About 86% of the students expressed that they do not have any kind of exposure to English language outside the classroom.
 - vii. English language Skills: The researcher in the questionnaire asked if the participants have already heard or known about the four types of English language skills for communication. Surprisingly, 91% of the participants have marked the "No" option. This shows that even after studying English for more than ten years the students have not been introduced to the four skills of English language.
 - viii. Bi-lingual methods of teaching: 51% participants responded that using bi-lingual methods of teaching English, which means using the Odia language to explain the meaning will help them understand the concept easily whereas 49% of the respondents said that though they can understand the concept easily, they cannot reproduce the same thing in English if the bi-lingual method is used every time.
 - ix. Importance of Grammar: 100% of the respondents feel that grammar is very essential in the process of acquiring communication skills in English.

- x. Time allotted for English class: 88% of the participants responded that the time allotted for the English class at the Undergraduate level is not sufficient enough to develop the communicative skills of students.
- xi. Practical Application of English language Skills: 92% of the participants responded saying that whatever is taught in the English classroom is examination oriented and has no practical utility in the real-life situation.
- xii. Remedial classes for slow Learners: 78% of the participants responded that remedial classes are necessary for the slow learners as they cannot cope up with the pace of the fast learners in the classroom. They should be given special attention by the teachers.

Challenges faced by the Tribal Learners as per the findings

The approach to English language teaching is multi-dimensional. Teaching English as a second language to the tribal students seems no less than a herculean task. It is the most difficult thing to learn by the tribal students who belong to the economically deprived backward families. The difficulty can be attributed to the significant contrast between the learner's mother tongue and English language. Tribal students have their own dialects for communication which makes it difficult for the learners to grasp the target language easily.

Most of the tribals are first generation learners especially first-generation English learners. First generation learners are the ones who have access to formal education for the first time and their parents lack formal education. Due to lack of parental guidance, they generally lack orientation, preparedness to realize the importance of education, self-confidence, sense of inclusion with the curriculum and the cultural activities at schools and colleges. Unlike their non-tribal counterparts who get prior exposure to the language and its structure beforehand, the tribal students directly start learning the language without any prior knowledge of the structure of the language. The learners are introduced to the English texts without having basic knowledge of sounds and symbols. Again, their economic and financial background leaves a meager scope to get themselves admitted in any educational institutions. All these factors result in poor academic performance in English.

The lack of proficiency in English language is identified as a major obstacle to the education of Schedule Tribe learners. The inappropriate syllabus and teaching method of English develops a negative attitude in learners towards learning. To sum up, the major problems of the tribal learners of Odisha in learning the English language includes, the fear and inhibition to use the language, their Odia medium background, English being taught as a subject rather than a language, poor teaching-learning method of English, students' lack of grammatical knowledge, poor pronunciation, lack of self-

confidence, lack of exposure to the English language, peer pressure, no skill-oriented education are some of the factors to stop their education because English language is a criteria rather than an option at higher level. It is clear that tribal learners are not motivated well. They have adjustment problems with the school and college curriculum and teaching of English language. Though the Government can provide grants and scholarships for the betterment of learners, the responsibility of their educational development is ultimately in the hands of teachers.

Suggestions and Feedback by students to improve their English Communicative Skills

The researcher had asked two open-ended questions at the end of the questionnaire to get a qualitative interpretation of the data. Those were asked to get suggestions and feedback from the students as to how to teach them the communicative English, in other words, in which way the students will have the scope of learning English better. The following tips were suggested by the students' respondents which were mostly meant for the teachers.

- All the teachers, students and officials should communicate in English while taking classes or in the college.
- The teacher should interact with the students about their problems in English language.
- They should take remedial and doubt clearing classes for slow learners.
- They should give students topics in English and doing extempore speeches, Essay topics and debate topics.
- Having drama competition and dividing the students into groups to play the one act play of Shakespeare or other great English writers.
- Taking special grammar classes.
- Watching English motivational movies and talking with students about the movies.
- Making English more playful than forceful weapons.
- Focusing more on word power and grammar
- Taking interactive classes, being more friendly with students discussing about great historical society and civilization.
- The teachers shouldn't dominant the students. They should rather be humble and gentle.
- Having questions and answers seminar with students.
- Teaching English in a funny way so that students will remember the rules of grammar and participate in English classes.

- Teacher should take doubt clearing classes.
- Teachers should make students comfortable while teaching a foreign language.
- They should create an environment where students will feel free to talk in English.
- They should give high attention to the students solve his/her problem in English.
- They should arouse more interest among students so that they will be more interested to study in English.
- Make student comfortable to speak in English. Help to recover the grammatical mistakes and tense while he/she is speaking or answering.
- They should motivate students to speak loudly in English by telling him/her don't be shy don't be nervous give him strength to speak.
- practical class (spoken English class) must be taken in both schools and colleges to improve our English-speaking skill.
- Teacher should focus more on the student who are very low in English. This can be a way to solve this problem.
- I need extra classes in English. Practice the 4 core skills i.e., Listening, Speaking, Reading and Writing.

Conclusion

It is rightly said that in order to teach John English, you must know John, you must know English and you must know how to teach John English. The English teacher, before teaching language should become a part and parcel of the tribal folk, understand their problems and cultural habits, their economic and linguistic background, their ideas and thoughts along with their necessities. He provides a conducive environment for the tribal students to learn and use English as a medium of expressing their knowledge, feelings and emotions. Thus, the language teachers succeed in eliminating the fear of ignorance from the learners. Different pedagogical methods (teacher – centered, learner – cent red and learning-centered) can be deployed to teach English effectively irrespective of differences in socio- cultural and lingual background of the tribal mass. It is understood that there is an inherent relationship between language and culture, which motivates the teacher to follow the golden rule of language teaching “thou shall not teach language without also teaching the culture of the language”. Therefore, while teaching L2, it is essential for the language teacher to understand the learner's innate linguistic competence, cultural background and emotional intellect. A text in context is the need of the hour which helps the learners feel at home while learning the target language skills.

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IMPACT OF SOCIO ECONOMIC STATUS IN PERSONALITY DEVELOPMENT CREATIVITY TOWARDS LEARNING AND THINKING STYLE OF SECONDARY LEVEL STUDENTS

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University,
Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

Early education and other social learning experiences may provide the skills knowledge and interest to pursue intellectual challenges across the life course. Using base line data from multiple mediation models were applied to examine the combined and unique contributions of intellectual social physical creative and passive life style activities on the relationship between education and cognition. Education is a sub system of society. Education and society both are inter-related or inter-dependent because both mutually influence each other i.e. complimentary. Without education how we can build an ideal society and without society we can organize education system systematically that means both are needed to understand. Education helps individuals to learn how to live how to behave how to organize everything in their lives so it is an agent which brings change in society or we can say in one line education is a social change agent. Human society is a set of connections of human relations interactions and inters dependences. Social system refers to the orderly collection of parts or components of society particularly human interactions. Every individual in the practice of interaction influences each other. Their inter relationship and interaction presume an exact model which is termed as social system. The concept is nevertheless restricted to inter personal interaction alone it also refers to the scrutiny of group's institutions societies and inter-societal bodies. The social theory which delights the social relations groups societies as a set of inter related part which focuses to uphold some frontier or harmony of the parts is based absolutely on the theory of social system. The superiority of any educational process mainly depends upon the excellence of teaching process and teacher. Though teaching is considered as a science and a skill basically it is a transcendent art. It is the teacher who intuitively designs the emergent plastic mind of the child entrusted to him. Thus

teaching is not a motorized process. Rather it is a sophisticated rigorous and a very challenging one. With good leadership and correct teaching methodologies the teacher's efficacy can be enhanced. Challenges in Indian educational system have no permanent answers because of the variable nature and continuous demands of human society. The teachers in the modern era specifically 21st century will have to transact with a world different from past in respect of pedagogical and technological advancement. In recent years psychological factors have become vital factors in literacy education. Moreover in learning process and teaching curriculum understanding the role of these factors could be beneficial for the students. It illustrates the significant effect of psychological factors in the students and also showed the potentials for future researches in psychological factors.

Key words: Socio Economic Status, Personality Development, Creativity, Learning, Thinking Style, Students.

INTRODUCTION

With the exception of memory tasks suggests that education and cognition relations are partially explained by frequent participation in intellectual activities. Education may cultivate the knowledge skills and ability necessary for continued participation in intellectually demanding like teaching process. According to the individuals who continuously play significant role on their intellectual resources through multiple and complex decisions well defined problem solving may maintain or even have cognitive potential. Moreover activities in cognitive demand may be more prevalent among those with educational attainment. Education will be associated with such that individuals with higher levels of educational attainment will demonstrate better performance on cognitive measures. The intellectual activities will influence cognition such that participation in intellectually demanding activities as compared to other forms of activity will be related to better performance and independent of education. The social system refers to any kind of social grouping from a group of two friends to a large complex society. It is extensively used in sociology because it makes us to think of the way in which social units fit together into a whole and the basic similarities among all forms of social interaction. Each one is a social element in which people follow a particular set of goals depending upon one another in various ways and sharing a sense of common character as a group. Education is the capacity to feel pleasure and pain at the right moment. It develops in the body and in the soul of the students and the beauty and all the perfection of which he is capable. Education is a life-long process and man becomes human through education. Education makes a man at a perfect person for the society. In the wider sense education is life and life is education. Education is the mean to

achieve the goal. Education is a process of promoting the harmonious development of a person capable of exercising such responsibilities in the society as his powers allow and directed towards the merger of the individual self with her universal self as the final end. During the studies a student passes through various stages of education i.e. primary middle secondary and higher. Secondary education is the backbone of entire educational system. Education after primary stage and prior to the university level is regarded as secondary education. The present system of education which originated in pre-independence era has been a conservative one. The relative study in current educational systems in other advanced countries reveals that broadly speaking there are only three division of education namely the primary secondary and higher education. The scope of each of these divisions differs in other countries. Generally the primary stage lasts up to class 8th and higher education starts after class 12th. In this way the three or four years of education between classes 9th and 12th is called secondary education. The origin of secondary education in India can be traced to the efforts of Christian Missionaries. They established private institutions in Bengal during the 18th and beginning of 19th century with the main purpose of spreading English education and European culture and Christian faith amongst the natives. Historically secondary education in India made a dent with Charter Act of (1813) putting the responsibility of education on East India company which was ruling over some parts of India. Macaulay's Minute of (1835) laid down the great objective of British government ought to be the promotion of European literature and science amongst the natives in India and that all the funds appropriated for the purpose of education would be best employed English education alone. Supported by the resolution the government set up English schools (1835-1854) with the obvious aim of creating a class of people and Indian in blood but English in culture. The wood's dispatch (1854) gave it further impetus relegating the mother into the background and making English the medium of instruction with secondary education. The recommendation of Hunter commission (1882) helped in the growth of secondary schools with academic curriculum by (1902). The number of secondary or high schools and intermediate colleges increased tremendously as the result of the Calcutta university commission of (1917). By (1935) the grant in aid system started and technical schools grew up and the idea of diversification developed. It was for the first time that the Sargeant report (1944) recommended that secondary education should not be considered a preliminary stage to university education but a stage complete in itself the schools should be organized on technical and academic basis language may be the medium of instruction salary of the teacher to be increased girls education be encouraged and high school entry be made selective. In the post-independence era the Central Advisory Board of Education in their 14th meeting in (1848) recommended the appointment of Secondary Education Commission to look into its problems. Tarachand

Committee (1948-49) discovered that our secondary education remains the weakest link in our educational machinery and needs urgent reform. Secondary education is sure to be affected by the expansion of primary education. Accordingly the number of students in secondary classes had gone up and the main objective of secondary education at present is to make available more facilities in high and higher schools. The number of students in secondary classes is 15 times more than what was in the beginning of the century. But with the fulfillment of the objective of compulsory primary education the number of students in secondary classes will increase so much that the present institutions will not be able to admit majority of these students.

OBJECTIVES OF THE STUDY

1. Objectives related to socio economic status of learning style of secondary level students.
2. To see the relationship between learning thinking style and creativity of secondary level students.
3. To see the significance of difference between learning thinking style of secondary level students.
4. To see the relationship between socio economic status and creativity of secondary level students.

HYPOTHESES OF THE STUDY

- H.1. Hypotheses related to socio economic status of learning style of secondary level students.
- H.2. There is no significant difference between learning thinking style and creativity secondary level students.
- H.3. There is no significant difference between learning thinking style of secondary level students.
- H.4. There exist no significant relationship between socio economic status and creativity of level students.

DELIMITATIONS OF THE STUDY

Keeping in the view the time available and limited sources the present study has been delimited to the following aspects:

1. The present study has been restricted to 300 students of Hazaribag.
2. The study is delimited to 150 urban and 150 rural schools of Hazaribag.
3. The study is delimited to 150 boys and 150 girls.
4. The present study has been confined to socio economic status of learning thinking style and creativity of secondary level students.

PERSONALITY

According to J.F. Deshiell Aman's personality is the total picture of the organized behaviour especially as it can be characterized by his fellow men in a consistent way. Personality is the sum of the activities that can be discovered by actual observations over a long enough period of time to give reliable information. In the present study personality is taken as independent variable which includes components like activity enthusiastic non-enthusiastic assertive submissive trusting emotional stability and groups of personality traits.

LEARNING THINKING STYLE

Learning brings changes in our behaviour in reference to the factors responsible for such changes. Learning is a process of bringing relatively enduring or permanent changes in behaviour through experience and training. Thinking style is often implicit and hidden in which symbols like images ideas and concepts are ordinarily employed. Thinking has a definite end or purpose and it is initiated to solve difficulty and problem that ends in its solution.

CREATIVITY

Creativity is the capacity of a person to produce compositions products and ideas which are essentially new or novel and previously unknown to the producer. Creativity is a multi dimensional verbal and non-verbal attribute of differentially distributed among people and includes chiefly the factors of seeing problems fluency flexibility originality inquisitiveness and persistence.

SOCIO ECONOMIC STATUS

In essence the universe is a sort of giant machine says Coleman which functions according to certain built in principles. If we had complete information about the machine we could understand and predict its functioning in every detail. It is a ranking of an individual by the society he lives in and in terms of his material belongings and cultural possessions along with the degree of respect power and influence he wields. In the present study socio economic factors is taken as an independent variable which includes components like above and below group of socio economic status. Socio economic status (SES) and health are intimately connected. Generally speaking people with higher SES enjoy better health and lead longer lives. Consider three possibilities one is that there is no causal connection between health and SES. Perhaps both SES and health reflect genetic factors. For example good genes might lead both to good health and to high social standing. Second poor health might lead to socio economic drift that is loss of social standing. Third SES might affect biological functions that in turn, influence health. People with high SES tend to maintain intellectual functioning more adequately than people with low SES. High SES is also connected with above average income and levels

of education a history of stimulating occupational pursuit's maintenance of intact families and better health. The influence of social class on personality test response and found that the high social status men were significantly less neurotics more self-sufficient and more dominant than low social status men. The term socio economic status means any group of persons coming closer to each other on the continuous of occupation income education and culture defines it as the position that on individual or family occupies with reference to the prevailing average standard of cultural possessions effective income material possessions and participation in group activity of the community. One's social and financial level as indicated by measures such as income level of education and occupational status. Socio economic status is defined in part in terms of education. That is people who attain low levels of education are also likely to have low SES. People with lower SES are also less likely to exercise and more likely to be obese both of which again, are linked to poor health outcomes.

NATURE OF SOCIO ECONOMIC STATUS

A family's socio economic status is based on family income parental education level parental occupation and social status in the community such as contacts within the community group associations and the community's perception of the family. Families with high socio economic status often have more success in preparing their young children for school because they have access to a wide range of resources to promote and support young children's development. They have easy access to information regarding their children's health as well as social emotional and cognitive development. In addition families with high socio economic status often seek out information to help them better to prepare their young children for school. It discusses the impact of socio economic status on children's readiness for school. The segregating nature of social class ethnicity and race may well reduce the variety of enriching experiences thought to be pre-requisite for creating readiness to learn among children. Social class ethnicity and race entail a set of contextual givens that dictate neighborhood housing and access to resources that affect enrichment or deprivation as well as the acquisition of specific value systems. It describes the relationship of family socio economic status to children's readiness for school. Across all groups parents face major challenges when it comes to providing optimal care and education for their children. For families in poverty these challenges can be formidable. Sometimes when basic necessities are lacking parents must place top priority on housing food clothing and health care. Even in families with above average incomes parents often lack the time and energy to invest fully in their children's preparation for school and they sometimes face a limited array of options for high quality child care both before their children start school and during the early school years. Families with low socio economic status often lack the financial social and educational supports that characterize families with high socio economic status. Poor

families also may have inadequate or limited access to community resources that promote and support children's development and school readiness. Parents may have inadequate skills for such activities as teaching with their children and they may lack information about childhood immunizations and nutrition. Having inadequate resources and limited access to available resources can negatively affect families' decisions regarding their young children's development and learning. As a result children from families with low status are at greater risk of entering in school prepared than their peers from families with medium and high economic status. In developed countries socio economic status has been identified as one of the most important demographic and social determinants of older adult health. With population aging occurring rapidly in much of the state understand the factors that distinguish between those in better and worse health becomes important.

PERSONALITY DEVELOPMENT OF STUDENTS

The word personality often is used to describe a person's physical appearance form of speech or manner or amount of it or grammar he possessed. To some people personality is that something with which an individual is born which is unaffected by environmental influences and which permits all the actions other regard an individual's personality as the person himself and they are the two terms personality and person interchangeable. Personality of an individual plays very important role in adjustment of a person in required environment. Each of us has unique personality and if all people were exactly alike there would be no need of talking about personality. The individual and society both reach upon each other. An individual can learn very little by himself. The learning situation is also effected by the personality and behaviour of teacher for the student's response to what is being taught is determined largely by the response of the teacher. It is the responsibility of the teacher to make major and desirable changes in the society through the students by leading them in a proper channel for the well-being and prosperity of the nation. The teacher is expected to be a related balanced personality of perfectly sound in body and mind. He must be a man of moral character. The teacher must have a competency for developing the feeling of democratic values among students. The teacher should be capable of recognizing the potentialities of the students and must have a genuine love for children. Good activities help the teacher in developing the balanced personality. The personality of a teacher plays an important role in shaping the behaviour of the students. Teacher can develop different qualities and values in student's emotional behaviour while dedicated and intellectually active teacher is a source of attraction for the child. All these differences in personality traits of a teacher may be due to heredity and environment.

Personality is the sum of activities that can be discovered by actual observations over a long enough period of time to give reliable information.

According to Bergers

Personality is the integration of all traits which determine 'role and the status of the person in the society.

According to J. F., Deshiell Aman's

Personality is the total picture of her organized behaviour especially as it can be characterized by her fellow men in a consistent way."

According to J. B., Watson

Our personality is thus the result of what we start with and what we have lived through. It is the reaction mass as a whole.

According to R. B., Cattell

Personality is that which permits a predication of what a person will do in a given situation.

According to G. W., All port

Personality is the dynamic organization with in the individual of those psycho physical systems that determine her unique adjustment to her environment.

PSYCHO DYNAMIC THEORY

Perhaps the most influential proponent of psycho dynamic theory was Sigmund Freud (1933). Two distinguishing characteristics of the psycho dynamic approach to personality have been its emphasis upon in depth examination of the whole person and its emphasis upon unconscious motives. In Freud's view the id ego and superego form the tripartite structure of personality. The id represents the unconscious instinctual core of personality in a sense the id is the pleasure seeking mechanism. In ego represents the conscious logical reality oriented aspect of the personality. The super ego represents the conscience of the individual it is the internalized moral standards of society impressed upon the person by parental control and the process of socialization. Aggression in human beings represents a potential example of this approach.

COGNITIVE AND SOCIAL LEARNING THEORY

From the viewpoint of social learning theory behavior is not simply a function of unconscious motives as in psycho analytic theory or underlying pre disposition. Rather human behavior is a function of social learning and the strength of the situation. An individual behaves according to how he has learned to behave as this is consistent with environmental constraints. If the environmental situation is prominent the effect of personality traits or unconscious motives upon behavior should be minimal. Two of the primary mechanisms through which individuals learn are modeling and social reinforcement. Modeling or imitative behavior refers to the phenomenon of learning through observation. Social reinforcement is based upon the notion that rewarded

behaviors are likely to be repeated. It is defined as social reinforcement as verbal and nonverbal communication passing between two individuals that can increase the strength of response.

HUMANISTIC THEORY

At the centre of the humanistic theory of personality is the concept of self-actualization. The human being possesses an innate drive or tendency to enhance itself to realize the capacities and to act to become a better and more self-fulfilled person. It is not necessarily the experience that shapes the individual but also the individual's perception of that experience. Self-actualization is an ongoing process of seeking congruence between one's experiences and one's self-concept.

LEARNING THINKING STYLE

The style of literature contains different labels such as learning cognitive and thinking styles. These styles although different but have one thing in common they are individuals' preferred way of processing information and using abilities that they have the styles are not abilities. The research in difference in the way of thinking of individuals resulted in the formation of theories of thinking ones. Thinking style is our preferred way of thinking and managing our activities and defines thinking style as a personality attribute to utilization of abilities. Schools and other institutions value certain ways of thinking more than some others. It is necessary that schools take into account student's style and consider the chances between the way of teaching a subject and the way the student thinks. Since science is a body of knowledge way of investigation and way of thinking the process aspect of science mainly concentrates on the way of thinking. The awareness of style of thinking is useful in perceiving the students. We should teach students how to think instead of teaching what to think argued that styles contribute to achievement beyond what can be expected by student's intelligence.

CONCEPT OF LEARNING THINKING STYLE

Learning and thinking is an incredibly complex process and the most difficult concept in psychology to define or explain. In strict psychological discussion it is well to keep the learning and thinking for an activity which consists essentially of a connected flow of ideas which are directed towards some end or purpose. The first class maintains that thinking is a process of internal representation of external events belonging to the past present or future and may even concern a thing or an event which is not being actually observed and experienced by the thinker. The second category of definitions describes learning thinking in terms of problem solving behaviour. The lines along which individuals think must therefore always be inferred from the way they behave. Internal representation or mental explanation of the thing or events are internal behaviour should be made an essential aspect of the thinking process used in the problem solving

behaviour. Therefore a workable definition of learning thinking must combine internal behaviour and the product of thinking and the aims or purposes of thinking. Learning thinking may thus be defined as a pattern of behaviour in which we make use of internal representations symbols signs of things and events for the solution of some specific purposeful problem.

NATURE OF LEARNING THINKING STYLE

Learning thinking is essentially a cognitive activity. It is always directed towards achieving some purpose. It is described as a problem solving behaviour from the beginning till end. There is some problem around which the whole process of thinking resolves. But every problem solving behaviour is not thinking. It is related only to the inner cognitive behaviour. In learning and thinking there is mental exploration rather than motor exploration. One has to suspend one's overt or motor activities while engaging in thinking through some kind of mental exploration or the other. It is a symbolic activity and mental solution of the problem is carried out through some signs symbols and images. This can shift instantaneously over a span of time and space.

THEORIES OF LEARNING THINKING STYLE

Various theoretical views have been put forward by different psychologists from time to time to explain the nature mechanism and development of thinking. Let us now examine some of the more influential theoretical approaches.

BEHAVIOURISTIC LEARNING THEORY

According to this theory thinking behaviour is learned or acquired in much the same way as other modes of behaviour interest's attitudes knowledge and skills. There is an association between the movement of one's tongue or vocal cords with one's thoughts. As an S-R mechanism the response is an outcome of one's thinking is the product of the associated stimuli. The stimulus thus generates the process of thinking. The same stimuli generate the same type of thought and the organism thus becomes conditioned.

GESTALT AND HOLISTIC THEORY

This theory emphasized the importance of the organization of the perceptual field in the process of thinking leading to problem solving behaviour. According to thinking behaviour is always purposeful and goal oriented. While thinking one gets to look at the whole field or context in which the thinking is occurring. With this wider perception one is set for the re organization and restructuring of the perceived field for an optimal solution of the problem in hand. The acts of such restructuring or re organization of the perceptual field belong to the process and product of thinking.

INFORMATION PROCESSING THEORY

According to this theory thinking is connected with the information one receives from the environment through one's senses and the nature and the thought process depends on how it is utilized by the individual from the time he perceives it until the time of processes it at various depth levels in solving the problem. This theory identifies a series of steps in the way to process the information. The stages of this processing may be registering information retrieving material related to this information from memory and using both kinds of knowledge purposefully.

CREATIVITY

Creativity is the capacity of a person to produce compositions, products or ideas which are essentially new or novel and previously unknown to the producer. Thus creativity is the capacity or ability of an individual to create discover or produce a new idea or object including the re-arrangements or reshaping of what is already known to him. The term creativity cannot be used synonymously with gifted ones. Creativity in all shapes and all forms is the highest expression of giftedness that may or may not be found in a particular gifted child. It is universally acknowledged fact that the progress of any nation depends mainly on the utilization of potential of its intellectually gifted and creatively talented individuals to the maximum. The gifted are considered to be a valuable human resource which can enhance the standard of living and promised better life for the country. Now a-days most of countries in the world are concentrating their efforts on maximizing the potential of their gifted and talented in order to meet the special needs of gifted individual on one hand to enhance the national competitiveness in the world on the other hand a large amount of research is available on creativity and creative individual. Still researchers remain engaged in exploring new dimensions in the concerned fields. Investigations related to stylistic variations among creative students have recently drawn the attention of researchers. Creative students were significantly better in abstract thinking emotional stability independence self-sufficiency self-concept and intelligence and were more relaxed controlled. Psychologically speaking personality is all that a person is it is the totality of one's behaviour towards oneself and others as well. It includes everything about the person his physical emotional social mental and spiritual makeup. It is all that a person has about himself. The term personality signifies something deeper than mere appearance or outwards behaviour. How should it be given a proper meaning or definition is a difficult problem. Actually its subjective nature does not allow reaching a clear cut well agreed definition. That is why it has been defined by so many psychologists in so many ways according to their own points of views. As personality is the sum of the activities that can be discovered by actual observations over a longer period of time to give reliable information. In this manner it gives emphasis upon the

behaviour of an individual and says that personality is nothing but the useful effect that one makes upon the person coming into his close contact.

CONCEPT OF CREATIVITY

The cultural scientific and the social progress of any country depends on the extent of the development of creativity among its citizens. Creative men and women are born in different social economic and political circumstances. In the history of the world there had been several philosophers poet's writers and painters who were turned out of their school classes condemned as backward students but who created great works in their later life. Hence in modern times the progressive nations try to develop activity in their new generations. The concept of activity therefore occupies a very important place in educational psychology. Psychologists have presented various definitions to explain the meaning of creativity. The definitions of creativity scattered in literature one thing was common in these definitions and that was the uniqueness of creativity though all the scientists do not consider uniqueness to be the necessary characteristic of activity. These definitions also reveal that there had been not one single criterion to define creativity. The researchers have looked to creativity from different aspects. In the process the individual efforts and results of creativity have different definitions have laid emphasis on one or the other aspect. Every researcher has studied creative behaviour from his own particular standpoint. The different experiments conducted in this field have thrown light upon the nature of creativity. The following definitions of creativity will help in the understanding of its meaning. According to Guilford Creativity sometimes refers to creativity potential sometimes to creative production and sometimes to creative productivity. Here creative potential means the personal disposition of the individual in which there are some more or less permanent qualities which help him in creative thinking. Creative thinking leads to new ideas. Creative production does not mean production of concrete things. It means the processes of productive thinking. Creative productivity means productivity according to socially confirmed forms of words thoughts and phrases. This definition of creativity establishes creative thinking as its primary characteristics emphasizing this element in creativity. Creativity is the ability to produce work that is both novel original unexpected and appropriate. To create means to make or bring into existence something new. Creativity is a topic of wide scope that is important at both the individual and society levels. When one think of creative activity perhaps the work of highly talented or creative geniuses comes to mind the creations of great sculptures composers painters writers scientists, mathematicians inventors at one extreme are gifted people such as those whose work may change the course of civilization or character of an art at the other extreme is the vast majority of people who follow the customs of their culture faith fully rarely acting in an original manner. Creativity defined it as a process of becoming sensitive to problems deficiencies gaps in knowledge missing elements harmonies

making guesses or formulating hypotheses about the deficiencies testing and re-testing them and finally communicating the results. It is a characteristic of thought and of problem solving generally considered to include originality novelty and appropriateness. It has defined creativity as a process involving three stages hypotheses formulation hypotheses testing and communication of results. In hypotheses formulation creative person tries to formulate a new response to a problem. They have to explore paths that have not been explored before and think in new ways. They must have certain skills and a background in the relevant field on which they base their ideas. Creative individuals sometimes experience a sudden brilliant illumination but more often their new ideas come about through a slow intuitive understanding field of endeavor. Their background allows them to be constructively creative. At the second stage a creative person applies the criterion of appropriateness of an artist takes brush in hand and transposes visualizations on the canvas. The person can move towards the third stage the communication of results. Communicating the ideas is sometimes relatively straight forward for uncovering of canvas by an artist.

NATURE OF CREATIVITY

Nature of creativity can be derived from its meaning. Different theories have explained the nature of creativity differently. According to Psycho analytic theory the creative person satisfies ambitions and desires through creative processes. According to associative theory the creative person forms new associations or recognizes old ones. The creativity involves change and choice by creative thinking involves of central point change of meaning and a novel organization. It involves insight which is the cause of sudden emergence of new ideas. Existentialists have presented a theory similar to the Gestalt theory. According to them creativity involves perception of new objects and struggle for understanding. A creative act is a process doing specifically a process inter-relating the person and his world. The persona lists defined creativity in terms of inter-personal relationship. In the words of creativity is an emergence in action of novel relation and product growing out of the uniqueness of the individual on the one hand the materials events people or circumstances of his life on the other. The Trait theory considers particular trait as characteristic of creativity. For example according to Guilford the most important traits of creativity are consciousness of the problem continuity of thinking words association of expression flexibility thinking accommodation originality and re-definition.

Creativity is complex in nature. It is something that comes across every day. One hears of creative people admires creative objects of art or reads creative books. Yet despite our ability to recognize creativity manifesting itself there is considerable confusion about what is creativity it is suggested that creative thinking involved breaking down and restructuring our knowledge about a phenomenon in order to gain new insights into its nature that we could be creative by gaining an insight into our own understanding of a

subject. Creativity occurs when we organize our thoughts in a way that leads readily into a different angle of understanding of the situation. Creative thinking is an important feature of decision making. It is the phenomenon of awakening new thoughts rearranging old learning and examining assumption to formulate new theories and paradigm or creative awareness. It is the process of revealing selecting swapping around and blending one's stock of facts ideas and skills.

BEHAVIOURISM THEORY

The idea of operant conditioning which suggests the idea of positive and negative reinforcement through reward and punishment influences behaviours over time is the key to the idea of behaviourism. Combining this idea with unconscious memories the explanation for creativity is B.F. Skinner viewed the creative act as a cognitive behaviour pattern that first starts with access of arbitrary unconscious maternal and synthesizing them in response of a stimulus such as a problem. Operant conditioning occurs when a successful solution alleviates tension as a reward. Additional operant conditioning such as praise from others may reinforce the creative behaviours even more

COGNITIVE THEORY

Many of these theories are supported by humanists who view humans as conscious and self-directed beings. Creativity in their view is essential to the growth of the individual. Maslow suggested three categories Primary creativity secondary creativity and integrated creativity. The first category identifies with Freud's theory describing creativity that flows from the primary processes and urges. Analysis discipline and hard work are the products of secondary creativity formulated by higher thought processes. In the final category the primary and the secondary fuses and results in great works of originality. In (1964) Arthur Koestler coined the term 'Bisociation' as the source of creativity. She believed that by being able to think on more than one plane simultaneously joining unrelated or even conflicting information in a new way to create new ideas. Not surprisingly many creative people show a strong interest in order of contradiction and imbalance. They consider asymmetry and chaos a challenge.

GESTALT THEORY OF CREATIVITY

The supporters of this theory hold the view that creativity involves restructuration of patterns or Gestalts that suffer from structural deficiency. A creative thinker senses the gaps of missing elements in the existing knowledge very quickly. This sensitivity towards gaps and missing elements give a push to the creativity

KRIS' THEORY OF PRIMARY PROCESS COGNITION

Kris proposed that creative individuals are better able to alternate between primary process and secondary process modes of thought than are uncreative people. According to Kris creative inspiration involves a regression to primary process of state of

consciousness it is because primary process cognition is associative it facilitates the discovery of new combinations of mental elements. On the other hand creative elaboration involves a return to secondary process state because uncreative people are more or less stuck at one point on the primary process than secondary process continues and they are unable to think of creative ideas.

DISCUSSION

During the last few decades there has been a radical change in every field on account of scientific inventions and technological advancement. To meet the challenges and requirements of this fast developing society young people need to grow in the ability to think rationally and to express their thoughts clearly. Independent thinking careful analysis and objective assessment contribute to the success in any field. Thinking is related to the learning because knowledge of a person affects ones thinking pattern. Thinking is one of the most important aspects of one's cognitive behaviour. It is universally acknowledged fact that the progress of any nation depends mainly on the utilization of potential of its intellectually gifted and creatively talented individuals to the maximum. This study will be a deliberate attempt to the learning and thinking style in relation to the socio psychological factors of personality and socio-economic status of secondary level students. There is a great deal of interest and enthusiasm among teachers with regard to thinking skills and creativity. Many teachers and schools are developing innovative approaches and introducing programmes to help pupils to improve their abilities to think reason and solve problems. Our ideas about thinking and about different kinds of thinking come largely from two fields of enquiry philosophy and psychology. Part of the activity of philosophy is learning how to support and justify the claims that we make. It is associated with giving reasons weighing up pros and cons constructing arguments solving problems and making decisions. It relies on reasoning and logic and is deliberate and purposeful. The process is often referred to as critical thinking. Part of the activity of psychology is to investigate the ways in which we generate and develop ideas and to consider the factors that might influence this process such as the depth of our knowledge and the impact of emotions and stress. It reflects a process that involves forming or making something new and can include just new things over rather than deliberately trying to solve a problem. It relies on imagination intuition and divergent thinking. It is often referred to as creative thinking or creativity. Creative thinking almost involves critical thinking in selecting from alternatives and evaluating outcomes and solutions. Similarly creative thinking makes an important contribution to critical thinking in generating reasons and in the imaginative exploration other than one's own. Problem solving and decision making will usually involve elements of both creative and critical thinking. The problem solving and decision-making involve generating ideas and alternatives and making judgments about what are the most promising or best of these to

pursue and test out. Attempts have been made to relate cognitive style to creativity. Majority of studies revealed that highly creative students do have distinctive cognitive style. As regards learning and thinking style and creativity in relation to socio psychological factors no study could be traced. In view of the above the present study is designed to find out relationship in learning thinking style and creativity among secondary level students.

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HIGHER EDUCATION AND QUALITY ENHANCEMENT OF TEACHERS ROLE IN INDIA: ISSUES AND CHALLENGES

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University,
Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

The higher education in India plays an important role in technological advancement and realization of extraordinary potential and this is helpful in the economic development of nation like India. An increase in the higher education enrollment in India is beneficial for the overall country on one hand to the country's advancement on the other there is personal development in term of better communication critical thinking skills sense of accomplishment for the individual. The higher education enrollment in India has registered an increase in the past though it is not satisfactory. Higher education is that stage of education that plays a key role in making the relationship between education and society stronger. In the national development it is one of the essential means. Higher education institutions should function with the true spirit of proliferating knowledge changing society and bringing peace and harmony in the country. Therefore higher education in the country should be quality based enhancing the pursuits of truth through knowledge and opening the new ways of development and humanism. Such quality of higher education institutions will ignite the minds of younger generation and will help in building a healthy nation. For quality education various constituents work together. Teacher school administration government students and various educational managements together play a vital role in quality enhancement of higher education. Providing quality education is the only solution to the current problems emerging in this dynamic society and it's the teacher who play main role in providing the quality education to students. Higher education system plays an important role for the country's over-all development which includes industrial social and economic ones. Indian higher education system is third largest in the world. The role of Indian higher educational institutes such as colleges and universities in the present time is to provide quality based education in the field of education research to empower youth for self-sustainability. This paper includes the key challenges that is currently facing in higher education and also includes some initiatives taken by the government to meet those challenges. The aims are to discuss the role of teacher in improving the quality of education in higher system of education.

Key Words: Higher Education, Quality Enhancement, Teachers Role, Issues.

INTRODUCTION

India has the third higher education system after United States of America and China. In India the higher education is governed by the apex body called as the University Grants Commission (U.G.C.) which frames the rules and regulation co-ordinates between the centre and the states and also advises the government from time to time. The gross enrollment ratio (GER) or the higher enrollment ratio in India is calculated between the age group 18 years to 23 years for the students who join college or Universities after the higher secondary school. India is facing serious problem of higher education enrollment. A large number of institutions suffer from quality and lack of funds for operation (Deka, 2000). Higher education in India faces problems ranging from income and gender disparities in enrollment to poor quality of faculty and teaching. The higher education system lacks a large number of problems which when are overcome it will increase the GER. Higher education means different things to different people. If we talk about higher education in terms of level it means to gain higher educational qualification by the teaching learning process in the higher educational institutes such as colleges and universities. Moreover higher education imparts knowledge that develops the student's ability and also gives him a wider perspective of the world around. Higher education becomes input to the growth and development of industry and also seen as an opportunity to participate in the development process of the individual through a flexible education mode (Barnett, 1992). India has the third largest higher education system in the world in terms of size and its diversity and largest in the world in terms of number of educational institutions and after independence Indian higher education attains a massive growth in education (Agarwal, 2006). Education plays a key role in improving the quality of life by enhancing social and economic productivity. Education helps in the process of empowerment and redistribution of resources in a proper manner. Higher Education is considered as an extensive social funding for the promotion of social concord cultural development monetary growth equity and justice. In Indian higher education can cope with itself to the global demanding situations through preserving the right balance between the need and demand and channelizing teaching and research studies (Ajit and Jayanta 2009). The qualities of education in higher education therefore depend upon the good parameters and stake holders are the student's school teachers and infrastructure. As stated by National Policy of Education (1986) teacher plays a very important role in society no one can raise above the level of the teacher. Every change in the school should start from the teacher. Teacher's role is closely associated with the quality of education in institutions. Teacher's role has a great significance in improving the quality in higher education (Hirsch, 2001). Teachers play a multi-dimensional role in inculcating varied number of subjects in heterogeneous class of students. Teacher has to motivate and inspire students by showing interest in their subjects. Teacher are the main

ingredients in maintain and enhancing the quality in higher education (Qaisur and Tanwir 2021). The severely fragmented higher educational system and less emphasis in the development of cognitive skills and learning process in rigid separation of disciplines with early specialization and streaming of students into narrow areas of study. The limited access particularly in socio economically disadvantaged areas with few HEIs that teach in local languages with limited teacher and institutional autonomy and inadequate mechanisms for merit-based career management and progression of faculty and institutional leaders. The lesser emphasis on research in most universities and colleges and lack of competitive peer-reviewed research funding across disciplines sub optimal governance and leadership of HEIs which is in effective regulatory system and large affiliating universities resulting in low standards of undergraduate education (Rahman and Yunus 2020). Education policy is one aspect of state administration that must be carried out within the frame work of good governance in order to achieve the goal of quality education.

PROBLEMS FACED BY HIGHER EDUCATION IN INDIA

In order to educate young people the challenges is to scale up our educational efforts. In India there are large numbers of educational institute but they all are mostly in urban areas which cater the needs of urban population. As large populations are in rural areas where there is one or none colleges thus it is a problem to educate the rural and sub-rural population. Secondly the syllabus taught in most of the colleges and universities are such which is not yet innovated. The syllabus drafted at the time of formation of university is the same thus there is need in innovation. In the 21 century there is need of quality and research education. The Indian system of higher education lacks quality and emphasizes on quantity education (Yogesh and Ruchika 2007). Our educational system should adopt the bench marking technique for improving instruction models and administrative procedure in university colleges and institute to move forward. Another problem is the high educational cost in India which is a serious problem which decreases the higher education enrollment. Professional Courses require huge fees which is a heavy amount by an average India. The higher education system lacks with faculty problems there is shortage of faculty members and also there is inability of the state educational system to attract and retain well qualified teacher. Most of the higher educational institutes are owned by the private sectors. There is also need of accreditation till date large numbers of college and private universities are accredited by NAAC.

ROLE OF TEACHERS IN QUALITY ENHANCEMENT

Quality is a multi-layered and a complex term (Briggs, 2001) has defined quality in terms of an outcome a property or a process. Quality teaching has been also defined in

terms numerous characters. However (Harvey and Green 1993) recognize four meanings of quality that can assist us in understanding what quality teaching may be. To begin with quality as excellence the customary conception of quality is the predominant one in numerous first class advanced educational organizations. Second quality can be characterized as value for a quality institution in this view is one that fulfills the demands of social accountability. Third quality might be viewed as fitness for reason the intention being readiness of an institution to fulfill the objectives. The last definition recorded includes transforming as a quality (Qaisur and Tanwir 2020). Quality Teaching will be encouraging that changes student's perceptions and the manner in which they approach applying their insight to genuine issues.

Concept of Knowledge: Teachers play a central role in generating knowledge of practice by making their classrooms and schools place for inquiry connecting their work in schools to larger issues and taking a critical point of view on the theory and research in the field. The teachers' relationship to knowledge is not quite the same as the past conceptions is that they become researchers theorists activists and school pioneers who produce learning for the profession and they additionally they turn to be critical users of research. It is clear that a changing or emerging view of what counts as knowledge for teaching influences the way teacher learning opportunities are conceived.

Commitment to Profession: For improving the quality of higher education a committed and dedicated teacher plays a crucial role. According to (Stephenson, 2001) committed teachers know what to teach how to teach and how to improve they have passion for four things learning fields students and teaching. However (Yair, 2007) conducted a study of memories of educational experiences among adults with a sample of questionnaire. Respondents emphasized the extraordinary professors' personal traits in all cases and the instructional strategies. Committed teachers are passionate about their subject matter toward their duties as teacher and most significantly toward their students.

Development of Skill: The teacher is critical to school improvement is evident in the report released in (1996) by the National Commission on Teaching and America's future what matters most teaching for America's future. The report reveals what teachers know and can do make the decisive difference in children learning. The commission presented five key recommendations to elevate standard of student and teacher re-invent teacher preparation and professional development recruitment of teachers to upgrade teacher knowledge and skill and maximize student and teacher success by reorganizing schools. In current period of liberalization and globalization there is a great need to develop skills among students with high caliber. For preparing students with competencies teacher should be skillful and creative. However in his study mentioned that it is possible to develop required skills by various means such as establishment of collaborations with industries social organizations networking with the neighborhood agencies bodies and

fostering a closer relationship between the world of skilled work and the world of competent-learning it is possible to develop required skills.

Collaboration and Collective Approach: Research studies have stressed on collaboration between teachers and students. Members of the school community are positively supported to amend practice when they are not isolated or in competition with each other. Many articles and research reports stress on the value of collaborative teams and professional learning communities. The idea is that teacher's relationships with other adults in the school can have profound consequences for both the teachers themselves and for their students. On a related issue there is also an increased call for school people to develop collaborative relationships with parents and other community members and many reform evaluation plans look for evidence of this effort. When noted that virtually all contemporary school reformers call for increased opportunities for teacher collaboration. However the tradition of teacher isolation is so entrenched in schools that fostering a collaborative environment represents the significant challenge.

Source of Motivation: Teacher must acts as a motivational force and should be able to create such environment in the class in which careful and rational thinking of students can be encouraged. Teacher should whole heartedly welcome the thoughts and decisions of the students on difficult problems. It is the responsibility of the teacher to provide such environment in which student can learn effectively according to his needs and desires.

Value Education: It is the responsibility of the teacher to inculcate values among the students. Students must imbibe appropriate values for quality development of higher education system. Values bring joy satisfaction and peace in life. But due to rapid increase in technologies there is a tremendous decrease in the quality of value education. Teacher should impart education that will enhance the quality of education by producing wise and capable students.

Influence of Abilities: From various research studies it has been found that able teacher has a tremendous influence on the students. Teacher with high caliber produces able students. Organization of subject matter properly and planning of the course are important to student learning (Kallisson, 1986). Students learning experiences can be enhanced by well-structured presentations lecture outline headings subheading and syllabi. Self-expression sometimes referred to as enthusiasm but also making the use of eye contact by covering all the students in the class making appropriate physical movement and change in tone when important material is presented also has great impact on student learning. All these factors lead to the positive development in students' academic behaviours such as attendance to following lectures amount of home work completed and academic achievement. Expressiveness of teacher's calibre and abilities

also increases motivation that directly leads to better learning. Therefore teacher must update his knowledge continuously and should be aware of latest development in their subject.

Need of Research: Research in education is one of the most important factors that enhance the quality of higher education system. Teaching and research are important means to the quality delivery of higher education. The relationship between teaching and research is primary in defining the typical nature of the university as an institution (Stephenson, 2001) found that passion for teaching is one of the characteristics of extraordinary teachers. However (Yair, 2007) in his research mentioned that the memories and experiences of extraordinary teachers often explain how these teachers were passionate about teaching. This passion may arise through research. Research in education also improves the quality of teaching. It makes teachers aware about the latest findings so for improving the quality of higher education system research as an instrument must be strengthened.

Designing the Curriculum: The teachers play vital role in designing the curriculum and therefore improving the quality in higher education the teachers must design according to the needs of the students and in view the demands in employment sector among the society.

Use of ICT: For making teaching learning process effective teachers make use of ICT. Use of ICT in teaching learning process improves the quality of teaching. Teachers should continuously update their knowledge about various teaching technologies for improving the quality of teaching and for production of efficient highly satisfied employable students.

Academic Development: Teacher performs the primary role and acts as a catalyst for all round development of the students so academic development of teachers is important and necessary for the success of higher education system. Teachers play a significant role not only in improving the quality of higher education but also maintaining it to the professional competency of teachers has to be of such a high level so as to impart quality knowledge to the students. This would call the continuous upgrading of the professional development of the teachers which is key guarantee of quality education. Academic development of teachers depends on many factors such as quality of research participation in seminars both at National and International level.

Professional Ethics: Professional ethics of teachers is an important issue for maintain and enhancing the quality in higher education. Teacher's attitudes towards students must be empathic positive and appropriate and focused. Teachers should have concern towards the safety of the students

Student Centered Approach: Research points out that quality teaching necessarily incorporate student centred approach its aim is most and for all students learning. Thus attention should be given not simply to the teacher's pedagogical skills but also to the learning environment that must address the students' personal needs. The students should know why they are working and should be able to relate to other students and to receive help if needed. Adequate support to staff and students in financial support social and academic ones counselling services also improves learning outcomes. Learning communities includes groups of students and teachers who learn collaboratively and build knowledge through intellectual interaction are judged to enhance student learning by increasing students' and teachers' satisfaction.

ISSUES AND CHALLENGES

In general education at the lower primary level deals with children from 6-10 years of age to edify the foundation in young minds teachers should have the required qualification. They must handle the young minds with care and concern. Students at the primary level view their teachers as role model and are never skeptical of whatever teacher utters in the class room. They are good at observing things they admire their teachers and they try to impress teachers in different ways. As far as teaching is concerned teachers face a few challenges in teaching the primary level students. They are under a stress to complete the portions within the stipulated time and as a result teachers could not spend more time interacting with students which is necessary to ensure that the learners have understood the concepts taught and acquired the language skills. Majority of the teacher's time is spent on evaluating records and tests papers. Teachers of various subjects have the responsibility to develop interest among learners but not an aversion towards the language. Students treat languages as a scoring subject and hence they fail to practice it as a skill which deters an enthusiastic teacher. Issues like high dropout rates irregular attendance and large class rooms demand immediate attention. Due to less number of qualified teachers some schools employ untrained teachers and that result in students' lack of understanding of concepts.

POLICY AND VISION FOR HIGHER EDUCATION

The purpose of the education system is to develop good human beings capable of rational thought and action possessing compassion and empathy courage and resilience scientific temper and creative imagination with sound ethical moorings and values. It aims at producing engaged productive and contributing citizens for building an equitable inclusive and plural society as envisaged by our constitution. A good education institution is one in which every student feels welcomed and cared for where a safe and stimulating learning environment exists in a wide range of learning experiences are offered and where good physical infrastructure and appropriate resources conducive to

learning are available to all students. Attaining these qualities must be the goal of every educational institution. However at the same time there must also be seamless integration and co-ordination across institutions and across all stages of education. The National Education Policy envisions an education system rooted in Indian ethos that contributes directly to transforming India that is Bharat sustainably into an equitable and vibrant knowledge society by providing high quality education to all and thereby making India a global knowledge super power. The policy envisages that the curriculum and pedagogy of our institutions must develop among the students a deep sense of respect towards the fundamental duties and constitutional values bonding with one's country and a conscious awareness of one's roles and responsibilities in a changing world. The vision of the policy is to instill among the learners a deep rooted pride in being Indian not only in thought but also in spirit intellect and deeds as well as to develop knowledge skills values and dispositions that support responsible commitment to human rights sustainable development and living global well-being thereby reflecting a truly global citizen.

DISCUSSION

Education is important for the progress and development of the society. Good and quality teacher ensures the quality improvement of education system. Participation of quality teachers makes education meaningful valuable and contributes to the enhancement of higher education system in the country as a whole. Research aims to increasingly address the impact of quality teaching initiatives. Using the assumption that quality teaching leads students to learn better (Marton and Saljo 1976) found that students approaches to learning i.e. the deep approach of learning that focuses on understanding the course material and the surface approach that stresses on memorizing the material itself. However (Barrie *et al.*, 2005) in his study mentioned that students with the perception that good quality of teaching tend to adopt a deep approach to learning a coherent and integrated understanding of the course (Ellet *et al.*, 1997) found that Student learning is enhanced in higher education settings that address students' personal learning environment needs and in which quality teaching thrives. From the above analysis it is clear that the total higher education enrollment in under graduate level post graduate level and in research area is gradually and slowly increasing year after year but the increase is in such a limited quantity that it is not fulfilling the requirement. A large group of population is lacking higher education in India. There are various measures given below to solve this problem and to increase the higher education enrollment in India. There is a requirement to change the government policy for the higher education institutes. The government should revise the minimum eligibility criteria in government jobs which are presently at senior secondary level if it is increased to graduate level more enrollments will be there in higher education (Qaisur, and Tanwir 2021). The government as well as the private higher educational institutes should improve the process of

enrollment. It should be made easier through e-admission enrollment process. The government colleges should switch on to e-education and learning. There should be strong control of the Indian government over private higher educational institutes and colleges in term of the faculty employed by them and the quality of education provided by them. There should be strong discipline to control over the formation of unions in colleges and universities which generally damage the academic atmosphere and hinder the higher education system. Any novel initiative in the field of education would inevitably have pros and cons and is no exception. At the initial stages teacher's learners and parents might have faced challenges in successfully implementing this alternative method (Rahman and Yunus 2020). One of the major objectives is to help learners gain theoretical and practical knowledge. The language being the medium of communication it is necessary that learners attain minimum levels of proficiency in the language. To fulfill the objective this has been implemented in schools and it is a fervent hope that learning and teaching take place in a good atmosphere yielding positive learning outcomes. The problems facing higher education are coming at the sector fast and furious and from all angles. Multiple attempts to address some or all of these challenges this aims neither to be comprehensive nor to suggest solutions to these vexing challenges rather its only goal is to offer a simple framework that might help leaders simplify focus and assess the challenges in their own contexts. Ultimately we need for our rich diverse ecosystem of colleges and universities public policy makers and the organizations that support partner in their work to be positioned to defend protect and sustain higher education's extremely important role as a trusted source of knowledge education and freedom of inquiry.

SUGGESTIONS FOR IMPROVING HIGHER EDUCATION

There is a need to implement innovative and transformational approach form primary to higher education level to make Indian educational system globally more relevant and competitive. In higher educational institutes Industrial co-operation must be there for the development of curriculum organizing expert lectures internships live projects and career counseling placements. Higher educational institutes need to improve quality reputation and establish credibility through student exchange faculty exchange programs and other collaborations with high quality national and international higher educational institutes. The government must promote collaboration between Indian higher education institutes and top International institutes and also generates linkage between national research laboratories and research centers of top institutions for better quality and collaborative research. There is a need to focus on the students by providing them such courses in which they can achieve excellence and gain deeper knowledge of subject so that they will get jobs after recruitment in the companies which would reduce unnecessary rush to the higher education.

CONCLUSION

The challenges like demand supply of teacher lack of quality research problem of infrastructure are basic shortage in the higher education. The implementation frame work for twelfth plan aims to focus on improving quality of state institutions to revamp financial aid programs to inter link expansion equity and excellence. To improve the higher education system we need to improve teaching pedagogy build synergies between research and teaching facilitate alliance of higher institutions among themselves for research centers and industries. This is necessary not only to take care of economic growth but it is also essential for social cohesion and to empower the country's youth.

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**THEME OF RELATED OTHER ISSUES FOR HOME CLIMATE AND
ACHIEVEMENT OF MARGINALISED GIRL STUDENTS A COMPARATIVE
STUDY OF RURAL HIGH AND LOW EFFECTIVE ELEMENTARY SCHOOL
MARGINALIZED GIRL STUDENTS WITH RESPECT TO THEIR HOME
RELATED VARIABLES AND ACADEMIC ACHIEVEMENT**

Dr. Narendra Kumar Moharana
Prof. in Education Deptt. in TT Education, V. D. College, Jeypore, Koraput
E-mail- nkmoharana1966@gmail.com

ABSTRACT

Education helps to the border line suffered people of our country for the perspective upliftment of various marginalized sections in the society. Academic achievement is the prime progressive factors for all the category students in our contemporary society development along with performance of good educational institutions. School Identified as high and low effective on the basis of geographical location were compared in terms of home related variable and students' achievements in Assam. The present study examines the rural high and low effective elementary school marginalized girl students in the area of home related variables and academic achievement. The sample consisted of 256 Odia medium 8th class Elementary school marginalized girl students including the section of SC/ST and OBC from the two districts of Koraput and Nabarangpur in the state of Odisha on the basis of employing purposive sampling method. The tool 'family climate scale' of Dr. Beena Shah used for measuring home related variables of marginalized girl students and achievement of 8th class marginalized girl students were assessed from their obtained marks in previous 7th class Annual Exam. For this study normative survey method was employed for collecting data. The major findings of the study show that the home related variables and academic achievement of both rural high effective and rural low effective elementary schools were almost same for the marginalized section of girls and the total samples. Marginalized category girl students are neglected for enhancing their academic performance without supporting of home related variables of rural effective elementary schools in Odisha State.

Keywords: Home related variables, Academic achievement, Marginalized girl students, Effective elementary school

INTRODUCTION

The present study shows that the relationship of home related variables and marginalized girl students' achievement in rural areas of high and low effective elementary school levels in Odisha which has been an issue of concern to all in

education. Academic achievement of marginalised girl students (SC,ST and OBC categories) is the highlight concept of this research aspects for the districts of Koraput and Nabarangpur in the state of Odisha. A number of marginalized girl students (72% SC, 86%ST and ,63%OBC) are marked poor academic performance in the two districts (Koraput and Nabarangpur) in Odisha.

A home is a place where one lives permanently, especially as a member of a family or household. It is a place of residence or refuge. A home is not a mere transient shelter. Its essence lies in the personalities of the people who live in it.

Home plays a very significant role in the all-round development of a child. Parent-child interaction and parents way to deal with their children, develop certain attitudes among the children towards their home environment. A number of biological problems rise in the two districts (Koraput and Nabarangpur) are shelter ,food,cloth,financial,household materials etc found in this area that's why girl children can not show good academic records in the state of odisha.

The words home related variables are more comprehensive. They include within themselves word 'environment'. The human elements around the child is called 'environment'. It embraces the social, physical and emotional activities of the family. All these combined together constitute the home related variables'.

In this test, home related variables mean an interpersonal relationship between the parents and the child.

The home has a great influence on the students' psychological, emotional, social and economic state. In the view of Ajila&Olutola (2000), the state of the home affects the individual since the parents are the first socializing agents in an individual's life. This is because the family background and context of a child affect his reaction to life situations and his level of performance. High parental involvement leads to high achievement and low parental involvement leads to low achievement (Ahuja and Goyal 2005).

Academic achievement is defined by Crow and Crow (1969) as the extent to which a learner is profiting from instruction in a given area of learning or in other words, achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designed by test scores. The level of achieving is how far a student succeeds in a particular exam or standardized test (Reber, 1985).

Several research studies have identified other related factors of home related variables such as, Home related variables comprise as; freedom vs restrictiveness, attention vs negligence,dominance vs submission, acceptance vs rejection, trust vs distrust, indulgence vs avoidance, warmth vs coldness, expectation vs hopelessness,

partiality vs fairness and open communication vs controlled communication. Psychosocial aspects and physical facilities etc, which are being responsible for poor academic achievement of students. Hence the present study has been prepared to compare rural high effective and rural low effective elementary school students with respect to their home related variables and students' achievement in Koraput and Nabarangpur districts of Odisha state.

II. OBJECTIVES OF THE STUDY:

The following objectives of the study include:

1. To study the home related variables of rural high and rural low effective elementary school marginalized girls(SC and ST) and total sample.
2. To study the achievement of 8th class students of rural high effective and rural low effective elementary school marginalized girls.
3. To compare the home related variables and achievement of 8th class students of rural high effective and low effective elementary school marginalized girl students (SC and ST) and total sample.

III. SAMPLE:

The sample consisted of 256 Odia medium elementary school students comprising 64 students (32 SC girls and 32 ST girls) out of 128 marginalised girl students (64 SC and 64 ST girls) from each high and low effective schools of rural areas studying in class 8th of the four selected high and low effective schools in which each of two high and low effective schools from rural areas of Koraput and Nabarangpur districts in Odisha state which were selected equally using purposive sampling method.

IV. TOOLS USED:

The following tools used to collect data as:

- (A) The tools used to collect data pertaining to the independent variables:- The standardized 'Family Climate Scale' containing 90 items having three point scale marking for negative statements 0,1 & 2 for 'always', 'sometimes' and 'never', respectively whereas it is 2,1,0 for positive statements Developed by Dr. Beena Shah which was used for measuring home related variables of sampled elementary schools.
- (B) The tools used to collect data pertaining to the dependent variables:- Achievement of 8th class elementary schools marginalized girl students was assessed from their total aggregate obtained marks in previous 7th class S.A. 2 (7th class Annual Examination) in the session 2019-20 which was collected from the school result records.

V. DELIMITAION OF THE STUDY

The present study was delimited to

1. High Effective and low Effective elementary schools in rural areas of Koraput and Nabarangpur district of Odisha.
2. It was conducted only 8th class elementary school marginalized girl students.
3. It was further delimited to 128 marginalized girl students (64 sc and 64 ST) from 2 rural high effective schools and 128 marginalized girl students (64 SC and 64 ST) from 2 rural low effective schools.
4. The present paper comprises in two variables i.e, marginalized girl students' achievement and home related variables.

VI. ANALYSIS AND INTERPRETATION:

The relevant data collected were tabulated under different headings of the table for studying the significance of difference between the means of rural high vs. low effective elementary school marginalized girl students in the areas of home related climate and achievement. The following analysis and interpretation were presented here under as;

TABLE-1: Significance of Difference between the Means of Rural High Vs. Low Effective Elementary School marginalized SC girls in the area of Home Related Variables

Locality	E.E.S	N(SC)	Mean	SD	CR	Remarks
Rural	High	64	116.61	650.62	-0.11	NS
	Low	64	129.38	720.33		

The inserted result in Table -1 reflects that there is no significant difference between the means of rural high and low effective elementary school marginalized SC girls in the area of home related variables.

TABLE – 2: Significance of Difference between the Means of Rural High Vs. Low Effective Elementary School marginalized SC girls in the area of Achievement

Locality	E.E.S	N(SC)	Mean	SD	CR	Remarks
Rural	High	64	272.14	1515.83	0.28	NS
	Low	64	205.92	1147.16		

The inserted result in Table- 2 clearly reveals that there is no significant difference between the means of rural high and low effective elementary school marginalized SC girls in the area of achievement.

The Table -61 and Table- 2 proves clearly that the home related variables of both rural high and low effective elementary schools were almost same for the same for the marginalized SC girls. Their achievements were also found same.

TABLE – 3: Significance of Difference between the Means of Rural High Vs. Low Effective Elementary School marginalized ST girls in the area of Home Related Variables

Locality	E.E.S	N(ST)	Mean	SD	CR	Remarks
Rural	High	64	118.38	660.24	-0.09	NS
	Low	64	129.67	722.01		

The inserted result in Table- 3 reveals that there is no significant difference between the means of rural high and low effective elementary school marginalized ST girls in the area of home related variables.

TABLE - 4: Significance of Difference between the Means of Rural High Vs. Low Effective Elementary School marginalized ST Girls in the area of Achievement

Locality	E.E.S	N(ST)	Mean	SD	CR	Remarks
Rural	High	64	270.55	1506.47	0.26	NS
	Low	64	208.16	1159.03		

The Table- 4 reveals that there is no significant difference between the means of rural high and low effective elementary school marginalized ST girls in the area of achievement.

It is clear from the inserted results in Table- 3 and Table -4 that the home related variables of both rural high and low effective elementary schools were almost same for the marginalized ST girls. Their achievements were also found same.

TABLE -5: Significance of Difference between the Means of Rural High Vs. Low Effective Elementary School marginalized girl Students (SC+ST) in the area of Home Related Variables

Locality	E.E.S	N(SC+ST)	Mean	SD	CR	Remarks
Rural	High	128	117.49	118.95	-0.78	NS
	Low	128	129.52	129.63		

The inserted result in Table- 5 reveals that there is no significant difference between the means of rural high and low effective elementary school marginalized girl students (SC+ST) in the area of home related variables.

TABLE -6: Significance of Difference between the Means of Rural High Vs. Low Effective elementary school marginalized girl students (SC + ST) in the area of Achievement

Locality	E.E.S	N(SC+ST)	Mean	SD	CR	Remarks
Rural	High	128	271.34	274.70	2.08	P < 0.05
	Low	128	207.04	216.78		

The inserted result in Table- 6 clearly reveals that there is significant difference between the means of rural high and low effective elementary school marginalized girl students (SC+ST) in the area of achievement.

The analysed data in the Table – 65 and Table – 66 evince obviously that home related variables of both rural high and low effective elementary schools were almost equal for the marginalized girl students (SC and ST) whereas there is significant difference between the rural high effective and rural low effective elementary marginalized total girl students (SC and ST) in the area of achievement.

VII. MAJOR FINDINGS OF THE STUDY:

The findings of the study show that the home related variables and students' achievement of both rural high effective and rural low effective elementary schools were almost same for the marginalized girl students of SC, ST and the total sample.

VIII. RECOMMENDATION:

On the basis of findings of this study it may be recommended that parents of marginalized girl students (Scheduled caste and scheduled tribe) in Koraput and Nabarangpur district in the state of Odisha, India should encourage and give co-operation to their children/wards providing adequate time freedom, attention, warmth, behaviour in their children's study and learning activities at home along with arranging essential study materials that will help them to improve on their academic achievements.

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ROLE OF DEVELOPING PERCEPTION AND PROFESSIONAL ETHICS TOWARDS PERSONAL VALUES AMONG SECONDARY SCHOOL STUDENTS

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University,
Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

The teacher is a pillar of the educational system creator of the mankind and the architect of the society. Therefore, the Education Commission (1964-66) observed that the destiny of the nation is being shaped in her classrooms. National Policy on Education (1986) emphasized the status of the teacher reflects the socio-cultural ethos of the society. It is said that no people can rise above the level of its teachers. Such imperative role played by the teachers as transmitters facilitators inspirers and promoters of man's eternal pursuit for knowledge. The present study was carried out with the objectives of exploring perceptions of professional ethics and personal values of student teachers in teacher education institutions. The analysis and interpretation of the data lead to certain inferences. It was also found that student teachers of all TEIs have shown high preference for economic and values whereas both student teachers have low preference for social and aesthetic values. One of the major conclusions of the present study has been that the personal values of student-teachers have direct bearing on the professional ethics of student teachers. The present study focused on the comparison of professional ethics perceived by the student teachers. The non-probability sampling technique was used. The descriptive survey method was being adapted. The survey was conducted exclusively for the student teachers selected teacher education institutions. Sample comprising of 120 student-teachers 60 each from both types of institutions was drawn through random sampling technique. The investigator used oneself constructed tool professional ethics perception scale for student teachers for studying student teachers perception towards professional ethics. Student teachers in institution have strong positive perception towards professional ethics whereas student teachers in institution have moderate positive perception towards professional ethics. Therefore

student teachers in institution have slightly better perception than student teachers in institution towards professional ethics. There is significant difference in the professional ethics as perceived by student-teachers in institutions.

Keywords: Developing Perception, Professional Ethics, Personal Values, Students.

INTRODUCTION

Education is the foremost obligation of a mankind. It is a medium for conveying facts and feelings desire information passion understanding and gratitude to human beings. It has always been regarded as a universal remedy for mitigation of all the tribulations that inflict society. Consequently we find incessant reminders from national and international organizations commissions and concerned people for universalization of education. We have realized that it is not just quantity that will help in our development. Our success is imminently linked with the quality of education being provided to our children. Such a proposition for quality of education and schooling puts our teachers and the teaching profession in the lime light. NCF (2005) the teachers need to be seen as creators of knowledge and thinking professionals. They need to be empowered to recognize and value what children learn from their home social and cultural environment and to create opportunities for children to discover learn and develop. National Policy on Education (1986) emphasized the status of the teacher reflects the socio-cultural ethos of the society it is said that no people can rise above the level of its teachers. Such incitements are undeniably a countenance of the imperative role played by the teachers as transmitter's facilitator's inspirers and promoters of man's eternal pursuit for knowledge. The professional preparation of teachers has been recognized to be crucial for the qualitative improvement of education since the Kothari Commission (1964-66). Considering restructuring of the course to revamp the system of teacher education as suggested by Verma Commission (2013) the supreme court directed the national council of teacher education (NCTE) to make the training of teachers more effective and efficient and to prepare better teachers by making some big changes in the curriculum course by extending one year course to two academic years. The two-year course has been formulated by the NCTE and it lays prominence on practical activities like internal assessment micro-teaching skills projects internships in teaching self-learning hands on practice and other ground breaking and pioneering ways to conduct practical activities related to health hygiene and physical education. Like all important profession teaching profession should have its own professional ethics which is one of the basic requirement and characteristics. There should be a code of conduct or professional ethics which can guide the teacher's conduct and behavior in their institutions and outside. The code of professional ethics when properly enforced enhances the power prestige and status of

the teacher in particular and of the teaching profession as a whole. Professional ethics concerns the moral issues that arise because of the specialist knowledge that professionals attain and how the use of this knowledge should be governed when providing a service to the public. In pursuance of the recommendations of national policy on education the code of professional ethics for teachers was jointly developed by the NCERT and all India federation of primary and secondary school teacher's organization in which reiterates to resolve the country's teachers to uphold their professional integrity strive to enhance the dignity of the profession and to take suitable measures to curb professional misconduct. The code of professional ethics may be defined as a set of self-imposed professional ideals and principles necessary for the attainment of professional excellence and self-satisfaction.

The code highlights that a teacher is not only a purveyor of knowledge for the cognitive development of pupils but is also a democratic and socializing agent responsible for helping children to gain social supporting citizens. The NCTE further reviewed this code keeping in view the context of the relevant sections of the Right of Children to Free and Compulsory Education RTE Act also examined the Codes of Professional Ethics currently in use in some other countries. The revised Code of Professional Ethics for teachers thus provides a framework of principles to guide them in discharging their obligations towards students' parent's colleagues and community. Increased awareness of the ethical principles governing the teaching profession is essential to ensure professionalism among teachers. We are convinced that our attention in teacher education must shift considerably to the formation not only of knowledge and skills but also for the moral sensibility that underlies them. The moral nature of teaching cannot be conflated with the knowledge and skills important for teaching neither can it be neatly separated from them. The moral is always in play in classrooms in teachers' actions whether intentionally or not and the complexity of the class room environment its immediacy and ever changing activities makes demands on teachers that reveal their orientation to their work in a myriad of daily acts because of that seamless connection explicit the attention to the moral formation of pre-service teachers is crucial this support for this view point is found is better. That teacher education neglects the teaching of ethics and urged that more emphasis must be placed on moral and ethical education because teacher training programs are the initial place to acquaint new teachers with the moral dimensions of their chosen profession. Recent reports in the newspapers about immoral and unethical behaviors of the teachers have revealed that the teachers lack professional ethics. The training program that they have undergone develops it while the teacher trainees may have the desired level of teaching aptitude competency but the program training that is offered at the Teacher Training Institute (TTIs) that helps them to imbibe professional ethics. While such dimensions to a teacher's personality can't be

added by any course or module on professional ethics it is obvious that the entire Teacher Education Institute climate aids in developing the desirable professional ethics in the prospective teachers. Perhaps if corrective measures are taken at the Teacher Education Institute climate level then we can hope for quality school education which will go a long way in building a prosperous nation. The report revealed that faculty now spends less time with students. When lecturers and students interact frequently and devote themselves towards teaching excellence. Changes in academia have set great challenges to lecturer's students for one lecturer are now expected not only to perform the teaching and academic advice but doing research consultancies publications as well as doing social services. Stakeholders of education institutions value teaching as they perceive that lecturers or academicians should play the role as a shaper of minds and values. However, we reward research and scholarly teaching seems to be secondary in the eyes of management and lecturers themselves. Thus students may come to be disappointed when their mentors do not live up to expectations.

PROFESSIONAL ETHICS

Increasing societal concern about the perceived decline of moral and ethical values in contemporary life is promoting renewed interest in moral education or character education. Some argue that the current educational climate has contributed to a culture in which many do not know what a genuinely moral standard. While exploring the moral and ethical dimensions of schools claim that schooling is a moral endeavor by its very nature. It has been predicted that in the next decade the population of adolescents increase. At such point it would become essential to provide necessary guidance to them in order to enable them to undertake their services well to the country. This guidance can be aptly provided only by able teachers. Teachers who are committed to their profession and have a sense of professional ethics will ensure that they do justice to their student's society and their profession. However connected conceptually the professional ethics of teaching and moral education by exploring the function of teacher education to prepare teachers and to understand the moral and ethical complexities of their role and thus enable them to reflect ethical actions and decisions in their professional practice. Teachers' practice inevitably has a strong influence on the moral lessons students directly and indirectly acquire in the classroom. Teachers as professionals are engaged in one of the most ethically demanding jobs and the education of young people thus it is important that teachers should constantly reflect on the ethics of their activities to ensure that they exhibit the best ethical example possible in their work to those they are morally educating. If teachers are to become ethically aware then the pre-service teacher education program is the most important place for the inclusion of ethical content and commitments required in the teaching profession. Recently there has been a sudden increase in the teacher education institution in various states of India that has no doubt

lead to wealth of educational options in remote areas for all. However it has also resulted in dilution of quality infrastructure human resource along with an absence of professional ethics. As teacher educators are preparing teachers of tomorrow there is a need for them to demonstrate professional ethics to inculcate values in the society at large. This recognized that teacher education programs must develop alternative ways to enable student teachers to understand their future role and anticipate the moral and ethical significance of their practice. The teacher training has consequently become the big agenda to be addressed with immediate effect. The UGC commission has been revised to invite worthy candidates to opt for the teaching profession. Thus meaningful study in the areas of teacher education becomes inevitable as it will have back effect on improving the teacher education in our country one of the major causes of ethical deterioration in education system. But now a day's it has spread its roots in education system also. Privatization of educational institutes is another major cause for the declining ethical values in education system. Privatization of education has emerged in several forms in the recent decade in India. Government allowed opening self-financing private institutions with recognition which may be termed as commercial private education institutions.

DEVELOPING PERSONAL VALUES

It has been prophesied that in the next era the population of adolescents will cross billion. At such point it would become indispensable to deliver obligatory supervision to them in order to empower those to commence their obligations well to the country and to world. This guidance and supervision can be appropriately provided only by able teachers. Teachers, who are self-committed and motivated to their profession and have a sense of professional ethics, will safeguard that they do fairness to their student's community society colleagues and their profession. Teachers as professionals and experts are involved in one of the most ethically and morally challenging jobs and the education of young people thus it is important that teachers should continually introspect and reflect on the ethics of their actions to ensure that they display the best ethical example possible in their work to those are morally educating and preparing for life. Research finding on value pattern are diverse. They range from cases where imperceptible variances on values are seen to situations where such variances are somewhat noticeable. It is understood that everyone recognizes the values he or she wants to live with. In some form or other value is linked with each one of us. Learning and experiences are the major factors that develop the value pattern of individuals over the years. In today's time of global economy and massive importance is credited to the professional courses. Preparing individuals for life to producing human machines who are devoid of human values has been the role of educational institutions in contemporary time. In such situations it is stimulating to scrutinize the developing value pattern

especially personal values of the prospective teachers who are the purveyor of our developing society.

PROFESSIONAL COMMITMENT AMONG TEACHER

The teacher can perform his multifarious tasks and responsibilities only if he is updated professionally and personally. To train the teachers and to keep them updated is the purview of teacher education. So like various other professions teacher education has assumed special significance. Teacher educators are responsible to provide the totality of the experiences which contribute to the preparation of person for teaching profession and to help to qualify a person to assume the responsibilities as a member of the teaching profession. Teacher educators as a specialized professional group within education system create their own specific identity and have their own specific professional development needs. The educational planners consider professional commitment of teaching professionals as the most important aspect. Professional commitment of teachers is reported to have a pre-established significance in which employees establish bond of agreement related to professional behavior. It ensures that a teacher should be out rightly committed to his work to acquire necessary knowledge and skills without any effective back ground. Professional commitment of teaching personal means the feeling of dedication towards their profession. Professional commitment not only seeks all round development of children but also work for their own personal growth. Professional commitment is the willingness to engage with the teaching profession. It is typically conceived as individual's psychological bond of the organization including a sense of job involvement loyalty and belief. The professional commitment is the degree to which a person's work performance affects his self-esteem that the concept of commitment is attitudinal in nature. It reflects how much closeness an individual feels with his organization and relationships. It is defined as professional commitment as a person's belief in and acceptance of the values of his or her chosen occupation or line of work and a willingness to maintain membership in that occupation.

PROFESSIONALDEVELOPMENT OF STUDENTS

Teachers and administrators who routinely develop their own knowledge and skills model for students that learning is important and useful. Their ongoing development creates a culture of learning throughout the school and supports educators' efforts to engage students in learning. A school that organizes team based professional development and expects all teachers and administrators to consistently participate though for different purposes at different times in different ways demonstrates that it is serious about all educators performing at higher levels. As a result the entire school is more focused and effective. While some teachers are more naturally gifted than others all effective teaching is the result of study reflection practice and hard work. The teacher can

never know enough about how a student learns what impedes the student's learning and how the teacher's instruction can increase the student's learning. Professional development is the only means for teachers to gain such knowledge. Whether students are high low or average achievers they will learn more if their teachers regularly engage in high quality professional development. School leaders to improve with study reflection practice and hard work. Their learning supports not only teachers' learning but students' as well. Professional development provides ongoing opportunities for educators to continue to improve their knowledge and skills so they can help students achieve. When educators learn students learn more. The students' futures will support a cycle of continuous professional growth for educators. Everyone has a role in ensuring that educators can take part in effective professional development. Parents and citizens must demand and support intensive high quality professional development that results in better teaching improved school leadership and higher student performance. School boards must have policies that make clear that the purpose of professional development is to increase learning of both educators and their students and boards must hold educators accountable for achieving results. School system administrators must encourage and support each school in taking responsibility for professional development and must provide the time and facilitation for educators to learn what they need to know to address students' learning problems. Educators who organize and facilitate professional development must understand what student learning needs and educators are having difficulty meeting. Finally throughout their careers teachers and administrators must engage in professional learning to develop the knowledge and skills to improve student performance. When leaders know how to engage teachers support staff and students in effective learning the school becomes the center of learning for all students.

OBJECTIVES

1. To study the role of perception in professional ethics of student teachers and developing personal values in institutions.
2. To determine the significant difference in the professional ethics as perceived by student teachers in government and private institutions.
3. To compare the professional ethics as perceived by student teachers in institutions.

HYPOTHESIS

1. There is no significant difference in the role of perception in professional ethics of student teachers and developing personal values in institutions.
2. To compare the professional ethics as perceived by student teachers in institutions.
3. To compare the personal values as perceived by student-teachers in institutions.

RESEARCH METHODOLOGY

For the present study descriptive survey method was being adapted. The survey was conducted exclusively for the student teachers in selected teacher education institute. Sample comprising of 120 student teachers 60 each from both types of institutions was drawn through random sampling technique. The investigator used oneself constructed tool professional ethics perception scale for student teachers (PEPSST) for studying student teachers perception towards professional ethics. The professional ethics perception scale for student-teachers was constructed and standardized for questionnaire was used.

ANALYSIS AND INTERPRETATION OF DATA

Descriptive statistics techniques have been utilized by the investigator in this study. To compare the professional ethics as perceived by student teachers in institutions whereas student teachers of all private institutions have high value preference for economic and power values while showed lower preference for social and aesthetic values as government institutions student teachers.

DISCUSSION

The present research intends to study the perception of student teachers towards professional ethics in institutions. The result infers that the student teachers in both institutions have strong positive perception towards professional ethics. It establishes the fact that student teachers of both types of institutions have undergone the same orientation regarding their perception on professional ethics. Student teachers in both types of institutions have clear and strong positive perception towards professional ethics which include teacher's obligations towards students' parents' community society profession and colleagues. Student-teachers have undergone strong orientation regarding comprehension and its implementation when in profession. It has establishes the fact by carrying out an investigation on the existent professional ethics among different groups of student teachers and the contribution of program on professional ethics of student teachers and students under different sub groups of social climate. This concluded that program of the university has contributed and produced significant positive effect on professional ethics among student-teachers. The study establishes that the personal value pattern of student teachers in both institutions have high value preference for economic and values whereas they showed low preference for social and aesthetic values. The student teachers in all institutions do not possess very high value assumptions in any of the personal values. The findings concluded that economic and hedonistic are the most preferred personal values out of the 10 dimensions of PVQ among student teachers. But it is a matter of concern that knowledge social and health values are the three least preferred personal values among student teachers in both

types of institutions. However this also found the personal value preference of teacher trainees and the results correlated with the findings of the present study. The study deals a contrasting picture where student teachers most preferred value were aesthetic values whereas political and economic values were least preferred. The student teachers in institutions did not differ significantly with respect to social democratic knowledge and health values but they differ significantly with respect to religious aesthetic economic power and family prestige values. The study is in line with finding who found that the senior secondary school students studying in government and private schools in did not differ significantly with respect to social democratic knowledge and health values but differed significantly with respect to economic religious and aesthetic values. The student teachers in both institutions have strong positive perception towards professional ethics. Student teachers of all TEIs have high preference for economic and hedonistic values whereas both government and private student teachers have low preference for social and aesthetic values. The teacher education institutions may ensure a favorable environment for nurturance of right professional ethics among the student teachers and inculcation of right personal values among them. There should be a proper implementation and observance of code of professional ethics for teachers given by every teacher education institutions. The violation of the code of conduct and non-observance should invite disciplinary action against defaulter. Teachers should be recognized for their commitment towards their profession. They should be appreciated and given certificate of merit for following professional ethics. This will motivate others to follow them. Institutions must conduct enrichment workshops for both pre-service and in-service teachers for their professional growth and excellence. Besides such gatherings will expose the student teachers to existing practices in schools and give them a unique opportunity to imbibe the right codes of the profession. Teacher educators must cautiously select methods and activities that involve students in the process of reflection about moral ethical issues. Brain storming needs to be done to devise new and innovative modes of evaluation. Peer mediated evaluation can be thought as it would require putting in to practice the code of professional ethics. The present study assisted to draw out certain inferences and implications. Scholars have agreed to the fact that an individual's behaviour is moulded by his values. Personal values persuade people to examine their own actions and thus engagement in unethical behaviour. Individual's behaviour characteristics such as attitude evaluation judgments decisions commitment and satisfaction are determined by personal values. So activities in institutions should be encouraged to imbibe the right personal values in student teachers. Different curricular programs for teaching personal values have an impact for value inculcation in student's education so more concerted efforts in conducting the curricular programs must be done in the institutions. Teacher educators must cautiously select methods and activities that

involve students in the process of reflection about moral and ethical issues. Attempts must be taken to gain an insight into candidate's personal values and attitudes during interview in selection procedure to establish student teachers suitability for teaching. Teacher educators have acknowledged the significant role played by personal values in selection procedure and emphasis on these values might exert an influence on selection decisions. Brain storming needs to be done to devise new and innovative modes of evaluation. Peer mediated evaluation can be thought of as it would require putting in to practice the code of professional ethics.

CONCLUSION

Totally, it must be noted that professional ethics and professional ethics in education has generally a specific dignity between faculty members and students. In many universities around the world, regulations developed the codes of professional ethics. The personal values of student teachers have direct bearing on the professional ethics of student teachers. Therefore the personal values of student teachers must be duly taken care of. The small significant effort has been tried to produce the less explored field of professional ethics in teacher education. The better and frequent quality work needs to be taken up at numerous levels to study these variables. One of the major findings of the present study is that the student teachers in institutions have strong positive perception and moderate positive perception respectively towards professional ethics which infer that student teachers in government institution have slightly better perception than student teachers in private institution towards professional ethics. This also emphasize that there should be a proper implementation and observance of code of professional ethics for teachers given by (NCTE) in every teacher education institutes.

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PERSONALITY PATTERN OF INSTITUTIONALISED ORPHAN CHILDREN AND FAMILY REARED CHILDREN

Jonali Borah

Research Scholar, Dept. of Education, Gauhati University, Guwahati, Assam
&

Dr.Marami Goswami

Professor, P.G. Dept. of Education, Dr. Anita Baruah Sarmah College of Education,
Guwahati, Assam

ABSTRACT

Personality is the sum total of ways in which an individual reacts and interacts with others. A child brought up in a family may have a fully developed personality. Love, strength, honesty, confidence are build within a child who are brought up under the guidance of the family and they develop positive attitude in the child towards life. . But unfortunately parental deprivation is a great handicap for some children. These children are known as orphaned children. An orphan is a child permanently bereaved of his or parents. An orphan child does not experience the warmth of love and sympathy of parents which should have been the highest requirement for their development. Their psychological development often becomes distorted. This paper will study the differences in personality pattern of institutionalized orphan children and family reared children. The data would be analysed accordingly.

Key Words: Personality, Temperament, Institutionalized Orphan Children, Family Reared Children

Introduction

Personality is the sum total of ways in which an individual reacts and interacts with others. It includes the behavior patterns, a person shows across situations or the psychological characteristics of the person that lead to those behavior patterns.

Family plays a significant role in a child's life. A child brought up in a family may be psychologically developed. Love, strength, honesty, confidence are build within a child who are brought up under the guidance of the family and they develop positive attitude in the child towards life. It helps in the overall development of a child. Consequently, family fulfills all requirement of child's life. But unfortunately parental deprivation is a great handicap for some children. These children are known as orphaned children. An orphan is a child permanently bereaved of his or parents. Sometimes, due to parental deprivation

some children are reared in extended families, guardian homes and in parental homes and some are reared in destitute homes and in orphanages. This group of children is termed as institutionalized orphaned children. These orphans are usually traumatized due to the multiple losses.

An orphan child does not experience the warmth of love and sympathy of parents which should have been the highest requirement for their development. Their psychological development often becomes distorted. Gradually, this group of children tends to develop behavioural problem. An orphan child tends to behave indifferently and develops isolation, mal-adjustment, fear, anxiety and anger. On the other hand, a child reared in the family with extreme love and affection can easily get adjusted to any kind of situation.

Therefore, the present study is an effort to find out whether institutionalized orphan children are different from reared children in respect of personality.

Literature Review

A selective review of literature is added to this study by relating to different journals and studies conducted by different individuals to show the relevance of the study.

G, Mr.Gnanasekhar (2019) focused on “A Descriptive Study to Assess the Personality Development among the Orphan Children at Selected Orphanage Home in Puducherry.” A descriptive study with cross sectional survey approach was undertaken to assess the personality development among the orphan children in a selected orphanage home Puducherry. It also reveals that there was no significant association found with all demographic variable.

Erango, M. and Ayka, Z. (2015) conducted a study on “Psychosocial support and parents’ social life determine the self-esteem of orphan children.” Parental death affects the life of children in many ways, one of which is self-esteem problems. Providing psychosocial support and equipping orphans play a vital role in their life.

Majeed, R. and Others (2014) focused on “A Comparative Study of Personality Differences between Orphans and Non-Orphans of Lahore.” The investigator has tried to aimed at investigating the personality differences between instutionalized orphans (IO), non-institutionalized orphans (NIO) and non-orphan (NO) in adolescence. The findings of this research will promote understanding of the personality development and problems of adolescents living in orphanages and those living with single or both parents.

Significance of the Study

Love is the highest requirement not only for the development but also for the very existence of a child. A child who does not experience the warmth of love and

sympathy of parents feels that he/she is unwanted and tends to develop behavioural problems. Such a child tends to behave indifferently and develops isolation, non-adjustment, excessive crying, anger and fear. He thinks that he is an unwanted element. On the other hand, a child reared in the family gets extreme love and affection from their parents. A family reared child can adjust with any kind of situation.

Orphans have several personal, social, psychological, moral and educational problems. Society can no longer ignore the orphan's as they are society's future. Institutionalised orphan children are deprived of their condition which results in social degradation. On the other hand, family reared children do not have several problems as they are under the guidance of their parents. Orphan children are deprived of parental attachment and family care.

With this rationale in mind the present study entitled **“Personality Pattern of Institutionalized Orphan Children and Family Reared Children”** has been undertaken for investigation.

Objective of the Study

- (i) To compare the difference in personality pattern of institutionalized orphan children and family reared children.
- (ii) To study the personality pattern of institutionalized orphan children and family reared children in relation to their gender.

Hypothesis

To fulfil the objective of the study, the following hypothesis was formulated:

H₀₁: There is no significant difference in personality pattern of institutionalized orphan children and family reared children.

H₀₂: There is no significant difference in personality pattern of the institutionalized orphan children and family reared children with respect to gender.

Variables of the Study

1. **Independent Variable:** Personality Pattern
2. **Dependent Variable:** (i) Institutionalized orphan children
(ii) Family Reared children

Operational Definitions of the Key Terms Used

1. **Personality-** In this study, it refers to the characteristic patterns of thoughts, feelings and behaviours that make a person unique.
2. **Institutionalized Orphan Children-** An orphan is a child permanently bereaved of his or her parents. But in this context, it refers to children who would have lost either their mother, father or they may be abandoned. They are kept at a residential institution which is devoted to care, fostering or adoption.

3. **Family Reared Children**-It refers to those children who are reared with love, care and affection. They are supported by physical, emotional, social and intellectual development by their parents. But in the present study, it refers to the children residing with the family and studying in educational institutions.
4. **Childrens' Home**-It refers to a place where children are cared for if their parents are dead or unable to take care of them. But in the present study, it means a place where orphan children are cared for and their needs are met which could not be fulfilled by their family.

Delimitation of the Study

- The study is restricted to Kamrup (Metro), Nagaon and Goalpara Districts.
- Orphan children between the age group of 12-16 years have been selected for the study.
- For the present study, the investigator is restricted to include orphan children from the 'Childrens' Home' approved by the Directorate of Social Welfare to study about the personality. So it shall not be generalized to all the other students.
- The family reared children have been included from the same districts of Assam for the present study.

Methodology

The study is based on Descriptive Survey Method. For the present study, orphan children were selected from the registered 'Childrens' Home' in Assam under the Directorate of Social Welfare, Government of Assam. The family reared children have been selected from the same districts i.e. Kamrup (Metro), Nagaon and Goalpara by the investigator for the study. Districts have been selected as sample by using cluster sampling technique. For selecting institutionalized orphan children for the sample as respondents stratified random sampling have been used. The sample of the children (Institutionalized orphan and Family reared) have been selected on the basis of age i.e. from 12-16 years.

Tools for the Present Study

In the present study, the investigator have adopted '**Cattell's High School Personality Questionnaire**' standardised at National Psychological Corporation, Agra to gather information. The scale has **fourteen (14)** factors and it includes **142 test items**, each having 3 responses ranging from minimum to maximum. The 14 factors are: **A, B, C, D, E, F, G, H, I, J, O, Q₂, Q₃ & Q₄**. In this scale, **Factor 'A'** represents '**Reserved/Warm-hearted**', **Factor 'B'** represents '**Less Intelligent/ More Intelligent**,' **Factor 'C'** represents '**Affected By Feelings/Emotionally Stable**', **Factor 'D'** represents '**Undemonstrative/Excitable**', **Factor 'E'** represents '**Obedient/Assertive**,' **Factor 'F'**

represents '**Sober/ Enthusiastic**', **Factor 'G'** represents '**Disregards Rules/ Conscientious**', **Factor 'H'** represents '**Shy/ Adventurous**', **Factor 'I'** represents '**Tough-Minded/ Tender-Minded**', **Factor 'J'** represents '**Zestful/ Circumspect Individualism**', **Factor 'O'** represents '**Self-Assured/ Apprehensive**', **Factor 'Q₂'** represents '**Socially Group Dependent/ Self-Sufficient**', **Factor 'Q₃'** represents '**Uncontrolled/ Controlled**' and **Factor 'Q₄'** represents '**Relaxed/ Tense**.'

Data Collection Procedure

Primary data are collected from the field by the researcher herself. The investigator personally visited the selected number of Childrens' Home and collected data from Orphan children. And Secondary data are collected from different sources libraries, Directorate of Social Welfare Office, State Child protection Society, Govt. of Assam and internet.

Statistical Techniques Used

Mean, Standard Deviation and 't' test were calculated for analysis and interpretation of data.

Analysis and Interpretation of Data

To fulfil the objective, the investigator have calculated statistical measure of the personality scores among the entire sample children.

Objective 1: To compare the difference in personality pattern of institutionalized orphan children and family reared children.

Ho₁: There is no significant difference in personality pattern of institutionalised orphan children and family reared children.

Regarding the objective 1, the data of the personality score were collected with the help of the above mentioned scales. Then the personality score of institutionalized orphan children and family reared children were calculated as per the scoring procedure given in the test manual. The Mean and SD of both the groups with different dimensions were calculated separately. For studying the significant difference of mean of both the groups, 't' test is applied and it is presented in the following table.

Table 1: t-test showing Significance of Mean in Personality Pattern of Institutionalized orphan children and family reared children

AREA	Institutionalised Orphan Children(N=100)		Family Reared Children (N=100)		't' value	P Value
	Mean	SD	Mean	SD		
A	5.06	1.28	6.89	2.78	4.80	.000003
B	4.38	1.48	4.43	1.59	5.49	.0000001
C	4.16	1.57	5.64	1.88	5.03	.000001
D	5.32	1.43	5.12	1.69	3.47	.0.000638706
E	6.62	1.80	5.85	1.85	2.62	0.009474509
F	4.85	1.75	6.82	1.91	2.68	0.0079822231
G	2.59	1.30	5.67	1.47	8.20	.00000000000002
H	4.48	1.34	5.39	2.00	3.55	0.000481231
I	7.32	1.74	6.49	1.74	2.40	0.017321297
J	5.46	1.65	5.34	1.94	1.32 NS	0.188359041
O	6.30	1.89	6.89	1.71	3.40	0.000814926
Q ₂	4.37	1.50	4.28	2.03	0.65 NS	0.516445647
Q ₃	3.89	1.68	4.64	1.70	7.25	.0000000000009
Q ₄	5.57	1.40	6.75	1.60	4.76	.000003

df 198 NS- Not Significant

Interpretation: Table 1 shows there are 14 areas of personality. Out of these areas, the area 'J' and the area 'Q₂' had no significant difference. In both these areas, the obtained values of 't' were 1.32 and 0.65 respectively. In both the areas the mean sten scores and standard deviations were almost equal. The area 'J' showed average characteristics of individualism and group action and the area 'Q₂' indicated somewhat group dependency and self-sufficiency. Both the groups lie on average.

The area 'I' was the only area, which was found significant at 0.05 level of significance. The obtained value of 't' was 2.40. It is higher than the given table value 1.97 at 0.05 level of significance. Both the groups had an average sten score in this area. But the institutionalized orphan children were more inclined towards tender mindedness while the family reared children were inclined towards tough mindedness.

The remaining eleven areas had higher obtained value of 't' than the given table value 2.60 at 0.01 level of significance. The highest obtained value of 't' was 8.20 for the area 'G'. In this particular area the family reared children had stronger superego strength and were moralistic but the institutionalized orphan children were more inclined towards weaker superego strength and had little regard for rules and were expedients. The next highest obtained value of 't' was 7.25 for the area of 'Q₃'. In this area both the groups had low sten scores which indicated low self sentiment and carelessness to social rules. The

low mean of the institutionalized orphan children showed low self-sentiments in comparison to the family reared children. This difference was found significant. Next comes the area 'C' which had 5.03 obtained value of 't'. It also showed highly significant difference in the personality pattern of the family reared children and orphan children. The area represented ego strength. Both the groups were on average. But in this range family reared children had a higher mean sten score than the institutionalized orphan children. It indicated that family reared children had greater ego than the institutionalized children. Therefore, family reared children were more stable, emotionally mature and were prepared to face reality than did the other group.

Now comes the area 'Q₄', 'B' and 'A' which had the obtained value of 't' of 4.76, 5.49 and 4.80 respectively. In the area 'Q₄', the value of mean for both groups was found to be average but the institutionalized children were more tense, driven and fretful than the family reared children. The family reared children were comparatively relaxed and composed. The areas 'A' and 'B' showed that family reared children had higher mean sten score than the institutionalized orphan children. It showed that the family reared children were more warm-hearted, outgoing, easy going and brighter than the institutionalized orphan children. Deprivation makes children dull.

In the area 'D' the obtained value of 't' was 3.47. It is quite clear that the average score of the institutionalized orphan children was higher than the family reared ones. It showed that the institutionalized orphan children were more excitable, impatient, demanding and overactive than were the family reared children.

In the area 'E', the institutionalized orphan children were more inclined towards assertiveness and aggressiveness. They were more competitive stubborn than the family reared children. The family reared children were on the other hand more submissive. They were more obedient, and accommodating in comparison to the institutionalized orphan children. Here, the obtained value of 't' was 2.62 which showed significant difference at 0.01 level of significance as it is higher than the given table value of 2.60.

The area 'F' had the obtained value of 't' as 2.68 which also showed significant difference in both the groups. Both the values of mean and standard deviation were higher in case of family reared children than in the case of institutionalized orphan ones. The difference showed that normal children were more sober and serious.

The area 'H' of personality pattern also showed a highly significant difference between both the groups. Here the obtained value of 't' was 3.55 which is higher than the given table value of 2.60 at 0.01 level of significance. It showed that the institutionalized orphan children were shy, timid and treat sensitive than the family reared children.

Lastly, in the area 'O', the family reared children was more self-assured, placid, secure, complacent and serene while the institutionalized orphan children was more

apprehensive, insecure, worried and troubled. Hence, the difference in the personality pattern of both the groups was highly significant. The obtained value of 't' was 3.40 which is higher than the given table value 2.60 at 0.01 level of significance.

Thus, it is clear that the institutionalized children were significantly different from the family reared ones. Hence, the hypothesis that the personality pattern of institutionalized orphan children is different from that of the family reared children is proved.

Objective 2: To study the personality pattern of institutionalized orphan children and family reared children in relation to their gender.

Ho₂: There is no significant difference in personality pattern of the institutionalized orphan children and family reared children with respect to gender.

The data of the personality score for Objective 2 were collected with the help of the above mentioned scales. Then the personality score of institutionalised orphan and family reared (gender) were calculated as per the scoring procedure given in the test manual. The Mean and SD of both the groups were calculated separately. The Mean of institutionalized orphan boys and girls were found to be 24.92 and 27.62 and their SD were found to be 3.22 and 4.74. On the other hand the mean of the family reared boys and girls were found to be 30.43 and 34.51 and their SD were found to be 2.85 and 2.72. The Mean and SD of institutionalised orphan boys and girls and family reared boys and girls with different dimensions were also calculated separately. For studying the significant difference of mean of both the groups" test is applied and it is shown in the following table.

Table 2 (a): t- test showing Significant Difference of Mean between the personality scores of Boys and Girls of Institutionalized Orphan and Family Reared Children

Categories	Gender	Mean	SD	Df	t-test	P Value
Institutionalized Orphan Children(N=100)	Boys (N=35)	24.92	3.22	98	2.84*	0.005487
	Girls(N=65)	27.62	4.74			
Family Reared Children (N=100)	Boys (N=50)	30.43	2.85	98	2.76*	0.0069
	Girls(N=50)	34.51	2.72			

***Significant at 0.05 level of significance**

Interpretation: Table 2(a) shows that the mean and standard deviation scores of personality for institutionalized orphan boys and orphan girls and family reared boys and family reared girls. The mean of institutionalised orphan boys and orphan girls are found to be 24.92 and 27.62. The SD of institutionalized orphan boys and orphan girls are 3.22 and 4.74 respectively. On the other hand, the mean of family reared boys and family reared girls are 30.43 and 34.51. Their SD are found to be 2.85 and 2.72 respectively.

The calculated 't' value are 2.84 and 2.76 in both the groups which is higher than the critical values of 't' i.e. 1.98 and it is significant at 0.05 level of significance. Hence, the null hypothesis is rejected. Therefore, it can be said that there is a significant difference in personality pattern between the boys and girls of the institutionalized orphan children and family reared children.

Table 2(b): t test showing the Institutionalized Orphan Boys and Family Reared Boys

AREAS	Institutionalized Orphan Boys (N=35)		Family Reared Boys (N=50)		't' value	P Value
	MEAN	SD	MEAN	SD		
A	3.28	1.21	4.14	1.54	4.48	.00002
B	3.07	1.19	3.85	1.64	5.86	.000000009
C	3.22	1.14	4.68	1.81	3.18	0.002071042
D	5.62	1.13	5.43	1.48	2.19	0.031330242
E	5.94	1.56	5.69	1.66	1.07 NS	0.287721117
F	4.22	1.29	5.08	1.79	2.38	0.01960472
G	3.13	1.25	4.52	1.69	5.44	.0000007
H	3.67	1.34	4.62	1.49	3.18	0.002071042
I	6.18	1.53	5.48	1.79	2.45	0.016387287
J	5.45	1.45	5.15	1.59	0.93 NS	0.355068098
O	6.34	1.16	6.12	1.84	0.45 NS	0.653883563
Q ₂	4.13	1.28	4.66	1.82	1.34 NS	0.18390236
Q ₃	2.31	1.35	4.86	3.12	4.53	.00001
Q ₄	6.35	1.51	5.82	1.69	3.67	0.000427607

df 83 NS-Not Significant

Interpretation: Table 2(b) contains the mean and standard deviations of personality patterns of the family reared boys and institutionalized orphan boys. The 't' value is also given to show the significant differences.

This table indicates that 'Q3' is the only area in which the institutionalized orphan children had a low sten i.e.2.31. The other areas achieved a high sten score in either of the groups.

The areas 'E', 'J', 'O' and 'Q₂' were such in which the obtained value of 't' showed insignificant difference in both the groups. The obtained value of 't' in the area 'E' was 1.07. Both the groups had average scores which showed that the groups were neither too much submissive and nor dominant. In the area of 'J' both the groups were identical in nature. They were not inclined either towards group action or towards individualism. The obtained value of 't' 0.93 showed insignificant difference in personality pattern of both the groups in this particular area. The same situation was observed in the

areas 'O' and 'Q₂'. The obtained value of 't' was 0.45 and 1.34 which is much lower than the given table value 1.99 at 0.05 level of significance. These scores showed that in 'Security' and 'dependency' both the family reared and institutionalized boys were on same level. They were on the average and equal.

The obtained value of 't' 2.19 in the area 'D' was higher than the given table value 1.99 at 0.05 level of significance. Therefore, the difference in both the groups was significant. It showed that the family reared boys were more inactive and undemonstrative than the institutionalized boys. The institutionalized boys were impatient and over active.

All the remaining nine areas had significant differences in both the groups. In all these areas the obtained value of 't' was higher than 2.64, which is the given table value at 0.01 level of significance.

The area 'A' showed that the family reared boys were more warm-hearted and outgoing than the institutionalized boys. The scores of the mean and standard deviation were both higher in relation to family reared boys.

The obtained value of 't' was the highest in respect of the area 'B'. It showed that the family reared boys were brighter than institutionalized boys. Here, both the scores mean and standard deviation, were higher for the family reared. Likewise the mean score and standard deviation were higher in the area 'C' for the family reared boys. It indicated that the family reared boys had higher ego strength than the institutionalized ones. Here, the obtained value of 't' was 3.18 which is highly significant.

In the area 'F' the institutionalized boys had lower scores than the family reared boys. Here, the obtained value of 't' was 2.38, which was standard higher than the given table value and hence, it showed significant difference in both the groups. The family reared boys were more enthusiastic than the institutionalized ones.

The second highest value of 't' in the above table was 5.44 in the area 'G'. Both these values were higher in relation to the family reared group. The same situation was seen in the area 'H'. Both the values i.e. the mean and the standard deviation were higher for the group of family reared boys. The obtained value of 't' was 3.18, which showed a significant difference in the personality of both the groups. The family reared boys possessed stronger super-ego strength and were socially bold and more thick-skinned than the institutionalized boys.

In the area 'I' situation was found to be somewhat different. Here, the score of mean was higher in the case of institutionalized boys but the standard deviation was lower than the scores received by the family reared boys. Therefore, the institutionalized boys were tender-minded, sensitive and dependent and felt overprotected in comparison to the family reared boys. The obtained value 2.45 of 't' showed significant difference in both the groups.

The areas 'Q₃' and 'Q₄' had significant differences in the personality pattern of both the groups, as the obtained 't' values 4.53 and 3.67 were higher than given table value. In the area 'Q₃' the mean sten score and standard deviation were higher in the group of family reared boys than in the case of institutionalized one. 'Q₄' is the only area where mean score was higher for the institutionalized boys. It showed that the institutionalized boys had low self-esteem strength while in the case of the family reared boys it was comparatively higher. It was also true that the institutionalized boys were normal tense and fretful than the family reared boys. The family reared boys were comparatively relaxed.

The analysis of data pertaining to the standard deviation indicated that the area of 'Q₃' was spread out maximum in family reared group. Here, the value of standard deviation was 3.12, which was achieved neither by the family reared group nor by the institutionalized group in all other areas. It showed that the majority of family reared boys possessed high strength to self-esteem.

Table 2(c): t test showing the Institutionalized Orphan Girls and Family Reared Girls

AREAS	Institutionalized Orphan Girls (N=65)		Family Reared Girls (N=50)		't' value	P value
	MEAN	SD	MEAN	SD		
A	3.67	1.26	5.01	1.46	5.32	.0000005
B	3.42	1.21	4.96	1.17	6.18	.00000001
C	4.27	1.67	5.08	1.84	2.43	0.016672862
D	5.41	1.27	4.29	1.33	2.42	0.017114561
E	5.98	1.85	5.33	2.06	3.60	0.000473947
F	4.10	1.67	5.68	1.72	1.98	0.050134346
G	2.90	1.22	4.82	1.53	5.34	.0000004
H	4.18	1.32	4.29	2.08	1.98	0.050134346
I	4.73	1.82	4.90	3.27	0.35 NS	0.726990207
J	5.53	1.53	5.43	2.09	0.49 NS	0.625083898
O	6.81	2.02	5.88	2.19	2.49	0.014229439
Q ₂	5.09	2.15	4.47	1.83	2.26	0.025737633
Q ₃	3.39	1.78	4.57	2.53	3.56	0.000543733
Q ₄	5.86	1.35	4.49	2.23	3.54	0.000582161

df 113 NS-Not Significant

Interpretation: The institutionalized orphan girls and family reared girls were also compared in the above table 2 (c) to find out the specific features of their personality.

The table 2(c) shows that areas 'I' and 'J' were identical in both the groups. Here, the obtained values of 't' were 0.35 and 0.49 and this was much less than the given

table value 1.645 at 0.05 level of significance.. It showed that in linking group action and tough or tender mindedness, the institutionalized and family reared girls did not differ. Both the groups had similar characteristics of personality pattern.

In the area 'C' the scores of mean and standard deviation achieved by the institutionalized orphan girls were less than those obtained by the family reared girls. But in the area 'D' the institutionalized orphan girls scored a higher mean than the family reared girls. In both the areas, the obtained value of 't' was 2.43 and 2.42 respectively. It showed that the institutionalized orphan girls had lower ego strength but were more exitable and impatient than the family reared girls. The family reared girls were emotionally stable and deliberate.

The obtained 't' value of areas 'F', 'H' and 'Q₂' were 1.98, 1.98 and 2.26 respectively. These were higher than the given table value 1.98 at 0.05 level of significance. Hence, the differences in these areas of personality are significant. In the area 'H' the mean sten score and SD of the family reared girls were higher than those of the institutionalized orphan girls. In the area 'Q₂' the mean sten score and standard deviation were higher in the case of institutionalized orphan girls. It showed that the family reared girls were more enthusiastic, adventurous and sound followers than the institutionalized orphan girls. The institutionalized orphan girls were sober, serious, shy and self-sufficient.

Again in the area 'O' the mean sten score obtained by the institutionalised orphan girls were higher but the score of standard deviations were lower than the family reared girls. It indicated that the institutionalized orphan girls were apprehensive in comparison to family reared girls. The obtained value of 't' was 2.49 which is higher than the table value 1.98 at 0.05 level of significance.

All the remaining six areas were found significantly different at the level of 0.01 level of significance. The table value at 0.01 level of significance was 2.62.

Areas 'A' had the obtained value of 't' value at 5.32. It showed that the family reared girls were more warm-hearted, out-going, easy going than the institutionalized orphan girls. The institutionalized girls were reserved and aloof. Area 'B' had the highest obtained value of 't' value of 6.18. In this area the higher mean score was obtained by the family reared girls whereas the higher standard deviation was obtained by the institutionalized orphan girls. It indicated that family reared girls were more intelligent than institutionalized orphan girls. The institutionalized orphan girls were unable to solve abstract problems.

Again in areas 'G' and 'Q₃' the institutionalized orphan girls achieved lower values in both the mean and standard deviation in comparison to family reared girls. In both the areas the obtained 't' value was 5.34 and 3.56 respectively. It was indicative of a

weaker super ego and low self-esteem of the institutionalized orphan girls, but a stronger super ego and high strength of self-esteem for the family reared girls.

'E' and 'Q₄' were the areas where the mean sten score scores obtained by the institutionalized orphan girls were higher but the scores of standard deviations were lower than the family reared girls. It indicated that the institutionalized orphan girls were more inclined towards self-reproaching, insecure, worrying, troubled, tense driven, uneasy and fretful in comparison to family reared girls. The obtained value of 't' was 3.60 and 3.54 for both the areas.

Major Findings of the Study

- While comparing the Institutionalized orphan children and Family reared children, it was found that both the groups were similar and were on the average on the factors 'J' and 'Q₂'. It showed that they were all on the average so far as group dependency or self-sufficiency and group dependency and individualism were concerned. The institutionalized orphan children were found to be more tender-minded with weaker superego strength. They had little regard for rules compared to the family reared children. The low mean of the institutionalized orphan children in the area 'Q₃' showed low self sentiment in comparison to family reared children. The difference was also found significant in the area of factor 'C'. The group of the institutionalized orphan children had lower ego strength (i.e. instability in emotions and immaturity) than the family reared children. It showed that the institutionalized orphan children were less warm-hearted, reserved, detached, aloof and dull. They were more excitable, impatient, demanding and overactive than the family reared children. The group of the institutionalized orphan children seemed to be more inclined towards assertiveness and aggressiveness. They were more competitive and stubborn than the family reared children. Again, the institutionalised children were found more sober, serious, shy, timid, threat sensitive, worried and troubled. They were found to be most insecure than the family reared children.
- There is a significant difference in personality pattern between the boys and girls of the institutionalized orphan children and family reared children.
- The Institutionalized orphan boys had lower superego strength and were more reserved, sensitive, tender minded and dependent than the family reared boys. Both the institutionalized orphan boys and family reared boys had similar characteristics such as submissiveness, individualism, dependency etc. The group of institutionalised boys was found to be more impatient, overactive and reserved. They were more dull and weaker super ego strength. Less enthusiasm, low self sentiment and higher tension were also found in these children.

- In the case of girls it was found that the institutionalized orphan girls and family reared girls were similar in the matter of tough or tendermindedness and liking for group action. The institutionalized orphan girls were more sober, serious, shy, self-sufficient, reserved, aloof and dull in comparison to the family reared girls. They appeared to be perturbed and afraid. It was found that the institutionalized orphan girls possessed lower ego strength but were more excitable and impatient than the family reared girls. The group of institutionalized orphan girls was found more self reproaching, insecure, worrying, troubled, tense driven and fretful.
- It was found that group of institutionalized orphan children was more creative than the family reared children but the group of family reared boys was more creative than the institutionalized orphan boys.

Conclusion

Children are the future of the world. It is important that their personality needs to be fully developed so that they can build their confidence. Because these children are going to keep our world alive and flourishing.

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SIGNIFICANCE OF TAXONOMY AS DISCIPLINARY CONCEPTS OF LEARNING INSTRUCTION AND ASSESSMENT IN STUDENTS

Dr. Qaisur Rahman

University Department of Education, Vinoba Bhave University,
Hazaribag-825301, Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

Instructional process ranges from a user as solving an individually distinct problem identifying concepts or rules discovering the best strategy to solve the problem. The discovery of optimal values for several variable through applying knowledge in acquiring particular area through the use of evaluation and modeling techniques. Interaction seeks to determine what level of interactivity is possible with the user interface. The taxonomy of educational objectives is a frame work for classifying statements of what we expect or intend students to learn as a result of instruction. This paper compares and contrasts some of the most popular taxonomies used in education including Bloom's taxonomy depth of knowledge significance of learning. The brief outline taxonomy the literature deals with the use in education and the taxonomies are compared with regard to their treatment of knowledge cognition metacognition higher order thinking skills affect explicit and implied theories of learning underlying taxonomy. This will compare and contrast the taxonomies outlined above with respect to their goal or objective treatment of knowledge cognition metacognition and their underlying theories of learning or implied. The goals are concerned with identifying what level of goal setting is possible and whether the user has any freedom in setting the learning goals for a particular application. The characterization process seeks to determine if goals relate to individual tasks to complete topics overall learning objectives or can they be determined by the user. Guidance is concerned with specifying what level of application support the user receives when interacting with an application. This paper represents the first broad knowledge of taxonomies that have had significant impacts on education as learning and identification of variation in understandings of disciplinary concepts through instruction and assessment in students.

Key words: Taxonomy, Disciplinary Concepts, Learning Instruction, Assessment.

INTRODUCTION

Everyone has a learning style and our style of learning if accommodated can result in improved attitudes towards learning and an increase in productivity academic achievement and creativity. The learning style is a composite of characteristic of cognitive affective and physiological factors that serve as a relatively stable indicator of how a learner perceives interacts with and responds to the learning environment (Messick, 1976). Learning styles also refer to the ways individual processes information. Unlike individual differences in abilities which describe the peak performance styles of person's typical mode of thinking remembering and problem solving. Further styles are usually considered bipolar dimensions whereas abilities are unipolar ranging from zero to a maximum value (Qaisur and Tanwir, 2020). Having more of ability is usually considered beneficial while having a particular learning style simply denotes a tendency to behave in a certain manner. Learning style is usually described as a personality dimension which influences attitudes values and social interaction (Jensen, *et al.*, 2014). Theoretically learning styles could be used to predict what kind of instructional strategies or methods would be most effective for a given individual and learning task. It is said that optimal learning results when the instruction is exactly matched to the aptitudes of the learner (Cronbach and Snow, 1977). The requirement is to provide a range of teaching approaches was highlighted by response to UK Government reports on the impact of technology on teaching and learning. However (Jones *et al.*, 1997) state that developing a single piece of course ware which simultaneously provides guided sequential learning for one set of students and discovery based exploration and browsing for another ones as together with a range of hybrid options for those learners who may prefer a mixture of the two which is a demanding task though not an impossible one for the future and even give the flexibility of current technology to some extent for the present. The taxonomy is defined as classification into ordered categories as typically taxonomies consist of non-overlapping categories organized across one or more dimensions however in addition to categorizing concepts and information the taxonomies help to identify or reveal relationships among the taxa. Since (Shulman 2004) lists multiple uses of taxonomies in classification systems as elements to be balanced such as the four groups of vocabulary assessment frame works design as protocols for analysis in middle range theories checklists heuristics mnemonics ideologies and moral codes of all elements to be played with. Taxonomies are ubiquitous in education in their revision of Bloom's taxonomy (Anderson and Krathwohl 2001) examined 19 different taxonomies. This does not count numerous special purposes as taxonomies focusing on a single aspect of learning. However (DeBellis and Golding 2006) augmented the work of (McLeod (1992) to produce a taxonomy illustrating the growth of values. This is a bottom up hierarchical taxonomy illustrating that values grow initially from emotional responses which is collectively form

attitudes in turn result in beliefs and accumulated in result in the development of values. Another example of special purpose taxonomy in education is the metacognitive taxonomy developed by (Meijer *et al.*, 2006). In their metacognitive taxonomy each taxon includes general as well as specific strategies for text studying and for problem solving under planning general strategies includes the first level of Objective of Bloom Taxonomy (OBT) is labeled Knowledge as the taxon actually refers to the lowest level of cognition namely recognizing and remembering the information. The knowledge remembered may involve terminology facts concepts classifications and categories conventions trends principles generalizations and theories (Krathwohl, 2002). However at the Knowledge level of OBT it is possible that the information may be simply recalled without extensive level of understanding. The OBT in affective domain makes no reference to knowledge but speaks of affective stimuli and the development of values the acquisition of which could be construed as acquisition of knowledge. This made a large step forward in clarifying the role of knowledge in learning by identifying domains of knowledge which are acted upon by cognitive processes. The knowledge domains are hierarchical factual knowledge conceptual knowledge procedural knowledge and metacognitive knowledge (Brabrand and Dahl, 2009). The included knowledge is considered as the basic knowledge of that students require of terminology as well as specific details and elements. Conceptual knowledge includes classifications and categories principles and generalizations theories models and structures. Procedural knowledge includes subject specific skills algorithms techniques, and methods criteria for determining when to use appropriate procedures (Holmes, 2012). Metacognitive knowledge includes strategic knowledge as well as knowledge about cognitive tasks appropriate contextual and conditional knowledge as self-knowledge for students by (Qaisur and Tanwir, 2020). The knowledge domains are considered passive objects acted upon by the cognitive processes. In the taxonomy knowledge is the structure of a learner's responses. However (Biggs and Collis 1982) intentionally identified the quality of learning not by acquisition of particular knowledge but rather by how that knowledge was structured in response to an assessment query. The second and third levels discuss how knowledge is used at second level as single set of details at third level several sets of unrelated details is focused on the use of knowledge rather than the form of knowledge takes place. The knowledge as first level is a fact term concept principle routine procedures or details. Second level comprises basic application of skills or concepts in which students use information and conceptual knowledge organize and display data and interpret and use simple graphs (Lucas and Mladenovic, 2009). It focus is on complexity of thinking rather than on the knowledge elements themselves. It identifies the taxon as foundational knowledge but similar to OBT this taxon actually refers to cognitive processes of understanding and remembering knowledge consisting of information and ideas

(Faragher and Huijser, 2014). While all categories are equivalent (Fink 2013) makes it clear that at the base of most other kinds of learning is the need for student to know something. Therefore it perceives foundational knowledge as an antecedent of the other taxa although it claims that the taxa interact with one another so that growth in one taxon reciprocally increases the other taxa including foundational knowledge. The knowledge and understanding category is about cognition with the focus on understanding and the ability to demonstrate that understanding by restating in one's own words ideas and concepts developed by others. Later (Shulman 2004) does specify what knowledge involves but there is an implication that the knowledge goes beyond facts and procedures to include concepts ideas and relationships. OBT produced a separate taxonomy of affect with resulting minimal impact in education. While it may be useful to cognition and affect for taxonomic purposes in actual learning situations and the affective and cognitive domains are inextricably intermingled. Initially affective factors determine whether a student will engage with a learning task (Marzano and Kendall, 2007). Subsequently during the learning task affective factors determine whether the learner continues to engage with the task will persevere with the task will confront and difficulties. They will enjoy and find interest in the learning and reflect on the learning to question assumptions to consider alternatives and to engage in what if questions to address is similar situations and engage in near and far transfer of learning. Thus affective factors are the drivers of learning and helps in cognition during that learning process (Boulton-Lewis, 1995).

GOALS AND OBJECTIVES

OBT's original goal was to classify assessment items based on cognitive demand (Bloom *et al.*, 1956). OBT quickly became used for a variety of other purposes including identifying course objectives as aligning course with instruction and assessment and identifying HOTS. Since (Bloom *et al.*, 1964) provide broader goals for the OBT the domain including classifying assessment items and learning objectives as well as facilitating research and thinking for the affective domain. It indicates that the OBT the domain was a starting point and that they expected significant modifications and revisions of the taxonomy.

TAXONOMY FOR LEARNING INSTRUCTION AND ASSESSMENT

However (Anderson and Krathwohl, 2001) implies a much broader objective. It state that the revision was undertaken both to reflect and incorporate new knowledge about learning since OBT's publication in (1956) as well as to support the educational community's move to standards based curriculum accountability and authentic assessment. Interestingly the focus has been on the changes to gerunds and the switching of the categories to evaluate and synthesize now creation. Relatively less focus has been on the creation of the two dimensional matrix in which cognitive processes act

on knowledge domains whether achieved their stated objectives regarding learning teaching, and assessing remains an open question. The taxonomy was created to identify quality of learning in a non-subjective way (Biggs and Collis, 1982) by placing the emphasis on the structure of a student's response rather than strictly on the content. It state that the focus on the teaching rather than the learning domain in that student responses to assessment reflect how well teaching has occurred and the depth to which student learning has progressed based on that teaching as reflected in the progressive structural complexity of the responses. However (Hess's 2004, 2005a; Hess *et al.*, 2009) discussion of cognitive rigor with respect to identifies distinctions between one category of OBT may reflect all four categories of depending on the complexity of the response expected. Webb (1997) indicated that the development was at least in part due to dissatisfaction with the specificity of assessment questions and their relationship to state standards the latter which might in fact expect deeper student responses whereas assessment that appeared to address a state standard could be satisfied with relatively low-level student responses. Since (Fink 2013) developed FTSL in response to dissatisfaction with both the quality of university teaches and a perceived paucity of instructional strategies that engage students in their own learning. It perceived that many higher education courses required only surface learning of content with little regard for what he called significant learning experiences. He stated lack of diverse learning experiences in which most university instructors featured lecture or discussion as their primary instructional strategies (Apul and Philpott, 2011). It claimed that these strategies reinforced the focus on surface learning at the expense of critical thinking and deep learning. It was an attempt to provide alternatives to this surface level approach to learning and to identify areas such as citizenship lifelong learning metacognition and affective dimensions that frequently were not addressed. It created STOL as a tool for thought but also to recognize the primacy of engagement and motivation in learning. This was presented less as a structure for application and more as a set of elements to be played with and to stimulate scholarly thought (Shulman 2004). In spite of this original goal it has been applied in a number of subject areas and may have achieved goal of stimulating thought among instructors in higher education (Krueger *et al.*, 2011). It was designed to be a useful tool for educators with five stated goals seeking to design and classify educational objectives design assessments and to make state standards more useful to educators and facilitate curriculum design to serve as a basis for a thinking skills curriculum. Its structure resembles in that there are a set of processes acting on knowledge domains. However two major differences are of the affective or self-domain and the treatment of metacognition as an important active stage in the learning process (Airasian and Miranda, 2002). The treatment of engagement and motivation reflects the

recognition of the important role that affects and plays in learning as well as affective dimensions being learning goals in their own right.

COGNITION

For all the taxonomies examined cognition plays a dominant role. Some taxonomies deal exclusively with cognition. The cognitive domain is seen as hierarchical bottom-up and sometimes cumulative. For other taxonomies cognition plays an important though not dominant role. It devotes three of six taxa to cognitive dimensions foundational knowledge application integration. Similarly in three of six taxa involve cognition Knowledge Understanding Performance Action Judgment and Design. For (Marzano and Kendall, 2008) four of six taxa are related to cognition although the places for higher value on affect and metacognition. In the earlier times of taxonomic development e.g., OBT cognition was seen as the exclusive domain to be taught and examined as more was learned about how students learn and recognition was given to other dimensions such as character development ethics, and affective concepts taxonomies began to include some or all of these dimensions and higher education began to address and assess these concepts (Goulet and Owen smith, 2005; Adams, 2015).

METACOGNITION

However (Flavell, 1979) is credited with coining the term metacognition frequently described as thinking about thinking. It is not surprising therefore that metacognition does not appear in OBT published. Metacognitive knowledge is included as a knowledge domain but this inclusion renders metacognitive knowledge as an inert object to be acted only by the cognitive processes for included not only declarative knowledge but also the active component of self-regulation. This active dimension is illustrated in (Meijer *et al.*, 2006) metacognitive taxonomy. Learning is to learn is the ability to pursue and persist in learning and to organize one's own learning including through effective management of time and information both individually and in groups (Qaisur and Tanwir, 2020). This competence includes awareness of one's learning process and needs identifying available opportunities and the ability to overcome obstacles in order to learn successfully. According to the EU metacognition is a key antecedent of lifelong learning and has five dimensions:

1. Ability to motivate our self and to develop your self-esteem.
2. Ability to reflect learning experiences.
3. Ability to manage our time.
4. Ability to organize information.
5. Ability to learn in groups.

Metacognition is not explicitly mentioned in the taxonomy although (Boulton Lewis 1994) used the SOLO taxonomy to assess university students' metacognitive knowledge and finding that students' learning strategies became more sophisticated as their responses moved up the SOLO levels. Webb's makes no explicit mention of metacognition although Level 3 of strategic thinking does identify developing a plan or sequence of steps to approach the problem. It has a taxon called learning how to learn which includes metacognitive concepts such as becoming better student inquiring about the subject and self-directed learning. Metacognition may be inferred in application taxon particularly in its thinking sub-category. This also implies metacognitive concepts in its taxon reflection and critique although the term metacognition is not explicitly used (Irvine, 2020-a). The metacognition plays a very significant role and is seen as an active critical component of learning only to student motivation of the self-system. This identifies three metacognitive sub-levels specifying goals process monitoring clarity and accuracy. These important dimensions of metacognition included in (Meijer *et al.*, 2006) taxonomy such as planning evaluating and elaborating. In spite of these it provides the most treatment of metacognition in the taxonomies studied.

HIGHER ORDER THINKING SKILLS

Identification of HOTS is one of the most frequent uses of taxonomies. In OBT and HOTS are identified as falling in the upper three taxa to analyze synthesize evaluate and there are many examples of the use of OBT for this purpose. Similarly the levels of analyze evaluate and create are identified as HOTS. However in the apply level the sub-level implementing occurs when a student selects and uses a procedure to perform an unfamiliar task (Anderson and Krathwohl, 2001). In the SOLO taxonomy the top two levels Relational and Extended Abstract require HOTS because they go beyond accumulate of information to identify relations among the data and potential abstractions from the data. Similarly the top two levels of Webb's strategic thinking and extended thinking require HOTS for reasons similar to SOLO taxonomy. For the application taxa the thinking critical creative practical at sub-level is indicative of HOTS. As well the taxon of learning how to learn can arguably be included in HOTS as it involves metacognitive concepts such as self-directed learning and developing learning strategies. For the taxa reflection and critique as well as judgment and design are indicative of HOTS and elements of the taxon performance and action and of the taxon commitment and identify can arguably be included in HOTS (Afferbach, *et al.*, 2015). It provides a similar identification of HOTS as OBT and HOTS includes the Metacognitive taxon at all the sub-levels of the knowledge utilization taxon in cognition and the sub-levels generalizing and specifying of the cognition level analysis because these sub-levels refer to situations unfamiliar to the student.

LEARNING AS DISCIPLINARY CONCEPTS

The taxonomies all explicitly present theories of learning as support or justification of their taxonomies. It explicitly attaches constructivism to his taxonomy. He is clear that the motive for constructing with what he perceived as stagnant teaching styles in higher education and content that was not meeting the needs of students nor of the community as a whole (Fink 2013). Fink introduced the concept of significant learning to address this perceived need and associated with concepts of active learning and students constructing knowledge (Krippendorff, 2013). The wheel format of was intended to indicate that the taxa were relational and interactive reinforcing each other in symbiotic relationships where by gains in one taxon had associated gains in other taxa (Fallahi, 2008). However Shulman (2004) represents STOL as an initial starting position for learning and thought while he indicates a primary position for engagement and motivation he also recognizes the interactional and relational nature of learning. For example STOL in a circular reinforcing cycle commitment engagement which leads to greater understanding and so on through the stages of the taxonomy. It also identifies paired relationships among the taxa. For understanding promotes better judgment which reinforces understanding reflection modifies action which leads to further reflection (Mayer, 2002). It also suggests that judgment and action are critical elements acting on the other four taxa knowledge understanding analysis and design each need on the one hand to be worked upon in a critical and reflective manner via judgment and on the other hand to be enacted in practice as a crucible or reality test for the ideas. Thus it recognizes the malleable nature of learning where ideas and concepts are formed tested and reformed based on evidence or deeper investigation. It clearly presents this taxonomy as a foundation for thought and rearrangement of elements based on further study (Boyles, 2016). The theory of learning identifies the critical role of affect in the learning process. It indicates that without engagement there is no learning also indicates that metacognition plays a large part in learning once the decision to engage has been made and is a top-down taxonomy however the cognitive sub-levels are not hierarchical but appropriate sub-levels will be accessed in order to address the task based on the plan designed at the metacognitive level and then appropriate knowledge domains will be accessed to acquire the knowledge needed by the cognitive processes (Harrow, 1972; Mortier, and Yatezak, 2016; Qaisur and Tanwir, 2020).

DISCUSSION

The taxonomy of educational objectives is a scheme for classifying educational goals objectives and most recently standards. It provides an organizational structure that gives a commonly understood meaning to objectives classified in one of its categories thereby enhancing communication (Betts, 2008). The original taxonomy consists of six categories nearly all with sub categories. They were arranged in a cumulative hierarchical

frame work achievement of the next more complex skill or ability required achievement of the prior one. The original taxonomy volume emphasized the assessment of learning with many examples of test items largely multiple choices provided for each category. In combination the knowledge and cognitive process dimensions form a very useful table in the taxonomy (Irvine, 2020-b). Using the table to classify objectives activities and assessments provides a clear concise visual representation of a particular course or unit. Once completed the entries in the taxonomy can be used to examine in relative emphasis curriculum alignment and educational opportunities (Burnett, 1999). Based on this examination teachers can decide where and how to improve the planning of curriculum and the delivery of instruction. Like the original knowledge categories of the revised taxonomy cut across subject matter lines. The new knowledge dimension however contains four instead of three main categories. Three of them include the substance of the sub categories of knowledge in the original frame work (Lucander *et al.*, 2010). But they were reorganized to use the terminology and to recognize the distinctions of cognitive psychology that developed since the original frame work was devised. The metacognitive knowledge provides a distinction that was not widely recognized at the time of the original scheme was developed. Metacognitive knowledge involves knowledge about cognition in general as well as awareness and knowledge about one's own cognition of this issue (Dubas and Toledo 2016). It is of increasing significance as continue to demonstrate the importance of students being made aware of their metacognitive activity and then using this knowledge to appropriately adapt the ways in which they think and operate.

CONCLUSION

The taxonomies examined in this paper represent the most recognized of a wide variety of available taxonomies extant. OBT is a seminal product that has not only withstood the challenges of time but that also has been applied across a very wide areas and subjects. In some ways this is unfortunate because it is no longer a representative of current knowledge in the field of learning. However the change in education allows educators to categorize learning activities and assessments and thus shape future educational curricula. More recent taxonomies reflect the growth in knowledge about learning. This has helped in higher education to critically examine both curricula and instructional strategies and cognitive rigor has been used extensively to map assessment items to state standards recognizing that the intended curriculum and assessment of curriculum are not always congruent. Other taxonomies such as STOL has emphasized that learning cannot be one-dimensionally focused only on cognition but rather must recognize the broad requirements of educating the whole student. Taxonomies will continue to play an important role in supporting educators' understanding of the learning process and its dimensions.

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SIGNIFICANCE ROLE OF VALUE EDUCATION ITS IMPORTANCE AND NEED AT PRESENT EDUCATION SYSTEM IN INDIA

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University,
Hazaribag-825301, Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

Values are conscious and unconscious preferences beliefs and attitudes which are accepted by the majority of members of society and are socially regulated. Values are standards to evaluate and judge. Values reflect one's personal attitude and judgments decisions and choices behaviour and relationships dreams and vision. They guide us to do right thing. The programme of action (1992) also emphasized on integration the various components of value education into the curriculum at different stages of school education. The government of India's report in its preamble itself the constitution lays down four universal values justice social economic and political liberty of thoughts expression belief faith and worship equality of status and of opportunity and to promote among them all fraternity assuring the dignity of the individual and the unity and integrity of the nation. According to Mahatma Gandhi 'Your beliefs become your thoughts your thoughts become your words your words become your action your actions become your habits your habits become your values and your values become your destiny'. A good and comprehensive education system is expected to create the necessary human capital and knowledge workers who will bring the country to greater heights. However the main emphasis in education today lies in acquiring amounts of information passing exams and getting qualification for future employment. But now we are realizing the need of human values in our education system. Majority of works are committed by the students whether they are from school or colleges. There is a significant lapse on the concept of human development and nation building process. The main behavioral problems in the society are vividly mirrored in schools through other issues. With so many external influences demands and constraints it can be easy to lose hold of the values that make up a civilized society. The best way to address these issues is to impart value based ethical

education that is incorporated in the academic curriculum just the way it was being practiced in the ancient time. Where the education system was value based then education would help in the improvement of human character and recognition of their inner purity. In this paper the main aim was to focus upon the education with human values programmes which will help teacher's parents and children to re-focus on the basic positive values that underlie all aspects of a moral society. The curriculum instructional materials and technology methods should be directed to inculcate values of humanism socialism national integration as well as ethical and moral values in general education. Life-long learning should aim at the pursuit of excellence and the attainment of quality life. Therefore value oriented education is essential for balance personality and harmonious society. It helps a person in unfolding his personality by bringing it forth and revealing the potentials and qualities in him.

Key words: Significance Role, Value Education, Need, Education System.

INTRODUCTION

Education occupies a very important place in human life. Education is capable of making life meaningful to give proper momentum to the development of society. In today's technological and materialistic era our fundamental and moral values are being lost and only material comforts remain part of the race for prosperity which we can be rich physically but are becoming weak in spiritual and mentally process. Therefore there is a need to know understand and adopt these human values so that along with the material progress we can flourish the human civilization and culture and inspire the whole world to contemplate the new direction. The good and comprehensive education system is expected to create the necessary human capacity and knowledge that will bring the country to greater heights. In this regard a holistic education programme is needed which can equip students with both the hard and soft skills required as well as human values. However the main emphasis in education today lies in acquiring large amounts of information passing examinations and securing qualifications for future employment. The stress of an ever increasing work load and the working environment dominated by social problems will continue to make a teacher's profession more difficult and less satisfying. With so many external influences demands and constraints it can be easy to lose hold of the values that make up a civilized society. This education in human values programme seeks to help teacher's parents and children to re-focus on the basic positive values that underlie all aspects of a moral society. This is done through what is called a Triple Partnership for Education between teachers, parents and students meaning that all three

groups play key role in reversing current trends and in reaching towards the goal of truly successful value based education. Education has long been recognized as a central element in human development. It is considered as an important input in modernization where the developing countries like India began its drive for social and economic development since its independence. Education is important in a small country India because it promotes the knowledge skills power habits values attitudes and understanding of the people in the country and it is also considered because the backbone of the event of India. Therefore greater concern and emphasis must be put into the means and ways by which education transfer the need of the knowledge and information to students. It helps people to become a useful member of the society and to develop an appreciation of their culture heritage and live more satisfying human lives. There is an acute need for incorporative values on the real of faith education welfare works economic and politics in India. The term value refers to a development of heart. It is not enough to seek out for India a contemporary independent secular technological process within the lost hearts. The value education is much needed in our modern society because our lives became more miserable. The quantity of education has considerably increased but the standard had decreased. The human values integrated learning concept obtained though institution has gained wide acceptance around the world. The students and teachers have benefited greatly from this unique method of teaching and learning experience. The nation needs heroes who can be their country to greater heights what we witness today is that current approaches to education only addresses at most one or two aspects of personality in the teachings. In most education system individuals are treated merely as action agents unable to bring out the divine potential within a child. By adopting the human values approach with the right teaching techniques. It has been proud that it is possible to create a balanced individual and society. A good education system with the education in human values can make it a reality. Human values are necessity in today's society and business world. Human values are the features that guide people to take into account the human element when one interacts with other. They have many positive characters that create bonds of humanity between people and thus have value for all human beings. They are strong positive feelings for the human essence of the other. These human values have the effect of bonding comforting reassuring and procuring serenity. Human values are the basis for any practical life within society. They build space for a drive a movement towards one another which leads to peace. In simple term human values are described as universal and are shared by all human beings whatever their religion their nationality their culture and their personal history. Value education is always essential to shape one's life and to give one an opportunity of performing on the global stage. The need for value education among the parent's children teachers is constantly increasing as we continue to witness increasing violent activities

behavioural disorders and lack of unity in the society. Value education enables us to understand our needs and visualize our goals correctly and also indicate the direction for their demand.

OBJECTIVE OF EDUCATION

Each society wants that its children acquire the desirable sets of values and the goal of education in every country is development of desirable values. Evidently it's important to understand on what values are held by its school students. What kind of values do they possess such a knowledge is important to style curricular experiences for the achievement of the objectives of education which the society wants to formulate. We see today the disintegration in society. One of the explanations for the disintegration is conflicting values. We discover that the society is changing rapidly and the impact of the west has caused changes in it. The western ways of thinking dressing and behavior influenced the Indians. This impact is seen in every big society. It is rather increasing. Values have social psychological economic spiritual and philosophical aspects. They have a wide impact not one vital action in life time of a person's being are often said to be valueless. Thus if values are good life are going to be peaceful and useful if values are undesirable then life are going to be burdensome and unwanted.

SIGNIFICANCE ROLE OF VALUE EDUCATION ITS CONCEPTS

The value education as it is generally used refers to a wide extent of learning and activities ranging from training in physical health mental hygiene etiquette and manners appropriate social behaviour civic rights and duties to aesthetic and even religious training. To some value education is simply a matter of developing appropriate behaviour and habits involving inculcation of certain virtues and habits. In opposition to such a notion it is pointed out that value education has an essentially cognitive component in it and that this should not be ignored. Actually the ability to make moral judgement based on sound reasoning is very important aim of value education and has to be deliberately cultivated. The word value derived from the Latin root *valere* meaning to be strong and vigorous to be a worth is to possess a specific value that is the power to be some specific thing. It is the worth of a thing or a thought that creates us desirable or useful to us which can produce to an urgent demand for interest in something that we think of having great value. People can love only what's dear to them i.e. of very high value and only what's felt to be of high value can produce to the energy and motivate for possession. Life is a matter of choices. In human life there are certain things looked upon as admirable honorable to be approved of and there are other things which entertain and please us but we may view them not admirable not honourable and to not be approved of the concept of values is presented by various angles.

DEFINITION OF VALUES

The value is one by which men live for which they are willing to sacrifice comforts facilities and even lives to preserve their values. This is the very best value consistent with Indian Philosophy. International Encyclopedia of Social Sciences (1968) defines values as a set of principles where by a conduct is directed and controlled as a guide for individual or social groups. Values as defined by any characteristic deemed important thanks to psychological social moral and aesthetic considerations.

NEED OF VALUE EDUCATION

Values are standards or principles considered important in life. They come from within love kindness compassion mercy sympathy empathy and also by practicing punctuality discipline obedience behaviour conduct and character. They are the foundation of human existence. Without the knowledge of values society cannot sustain. Values tell a man to differentiate between good and bad what one should do and what one should abstain from. They bring quality and meaning to our life. Value gives a person his identity and character. Value act as guide lines they tell him what he should and he should not do. Education has long been recognized as a central building block in development. It is considered as a crucial input in modernization where the developing countries like India began its drive for social and economic development since its independence. Therefore greater concern and emphasis must be put into the resources and ways by which education transfer the needed knowledge and information to students. It helps people to become a useful member of the society and to develop an admiration of their culture heritage and live more satisfying human lives.

HUMAN VALUE EDUCATION

Human values make life worth-while noble and excellent and are those qualities that lie within the human personality waiting to be drawn out and translated into action. Education is based on five human values truth right conduct peace love and non-violence. Drawing out these five inherent human values develops good character. Human values are fundamental to human existence and are integral to any society. They are universal and are inherent in all human beings and are intertwined with the cultural and spiritual aspects of life. Human value based education therefore is complimentary to value based education. Bringing out and nurturing of the human values in children during the formative years will result in caring and responsible adults in the future. Bringing out human values in adults is an internal motivator that reinforces good character morality and ethics resulting in caring and responsible citizens. There is a need for framing human value education model carefully and wisely aiming at the harmonious development of multiple dimensions of the human personality. Without a deep understanding of one's relationship with nature fellow human beings society and a deep respect for all life one is

not really educated. The sense of equality mutual respect the philosophy of live and let live are the cherished results of human value education model in order to achieve peace well-being and settled order of the human world which are desperately needed in the present context. School education must revisit the concept of living together religiously socially and environmentally. Human value education should concentrate on producing socially awareness culturally sensitive and intellectually cosmopolitan students. Human values such as trust respect honesty dignity and courtesy are the building blocks of any free and advanced society. Human values courses such as curriculum seminars readership and scholarship are the future of school education in plural societies that are marked by differences which political economical social and cultural demand of co-existence for inclusion. Human value education in schools and its relevance and methodology highlights Indian experiments and experiences. It focuses on cases ranging from the ancient India to contemporary episodes and exercises to inculcate human values of integration sharing and inclusion as good practices worth emulating in school education. Teaching of human values ideal life led by teachers and examples of extraordinary personalities cited from the epics poetry literature and history of all these are great help in this regard. Developing insights in the students for attaining a desirable personality is a challenge which is worth accepting.

INTEGRITY

Integrity is defined as the unity of thought word and deed honesty and open mindedness. It includes the capacity to communicate the factual information so that others can make well informed decisions. It yields the person's peace of mind and hence adds strength and consistency in character decisions and actions. This paves way to one's success. It is one of the self-direction virtues. It enthuse people not only to execute a job well but to achieve excellence in performance. It helps them to own the responsibility and earn self-respect and recognition by doing the job. Moral integrity is defined as a virtue which reflects a consistency of one's attitudes emotions and conduct in relation to justified moral values. Integrity comes in many forms but honesty and dependability are two traits that are expected in most work place situations. Without responsible behavior distrust can make a work environment tense and uncomfortable. The strong work ethic shows workers and clients that are reliable and take responsibilities seriously. Polite communication respectable behavior and fiscal responsibility also help us to stand out as a trust worthy people.

ROLE OF TEACHER

The role of a teacher is very vital for the greatest share in moulding the future of a country. For all profession he is the noblest the most different and the most important. He has to cultivate in himself humanity compassion and the spirit of loving service much

more than those belonging to other profession he is an ideal and an example to his pupils. The school should not be considered to be just a common place of arrangement designed for teaching and learning. It is a place where consciousness is aroused and illumined purified and strengthened the place where the seeds of discipline duty and devotion are planted and fostered into fruit. The constructive companionship between teachers and students must be developed. The teacher influenced their students by practicing what they preached these qualities are intimately connected with the faculties of man and his soul. These come from intellect will and heart which combine to produce understanding in a joint response to environment. Such understanding is called felt thought. To develop this teacher must understand the child fully and gauge his intelligence by holding discussions and debates in the class. The teacher cares his students as a child. He should teach and behave like a friend.

IMPORTANCE OF EDUCATION

The substance of education should lead to the creation of a complete man in the sense of having a person capable of positive interaction with the environment. The latent resources and potential energies dwelling deep within the people should be evoked through operational scientific and rational organization. Each child should have the opportunity under competent guidance to develop fully and richly as an individual and as a co-operating member of an inter-dependent society full of manifold social religious economic community and governmental agencies. The human values cannot be taught they have to be brought out from within the learner. It has been a mistake in the past where teachers have been teaching morality ethics values good character as subjects. Learners can memorize them and can pass examinations but they fail to put them into practice in their daily life. There seems to be a general decline in morality throughout the world. Transformation of the person cannot take place by mere teaching but can be achieved through self-realization when the values come out from within the learner. In such cases there is a direct experience of the human values in the life of the learner.

COMMON MORALITY

Common morality is the set of moral beliefs shared by all management students. It is the basis for the other types of morality. Many of the principles of common morality are negative. The common morality is designed primarily to protect individuals from different types of violations or invasions of their person hood by others. Although the common morality is basically negative it contains positive or aspirational features in principles. Further it includes even more positive principles such as help the needy promote human happiness and protect the environment. This distinction between the positive and negative aspects of common morality will be important in discussing professional ethics. The common morality makes a distinction between an evaluation of a

person's actions and of his intentions. An evaluation of action is based on moral principles considered but an evaluation of the person himself is based on one's intention. Personal ethics or personal morality is the set of moral beliefs that a person holds. Our personal moral beliefs mostly and closely run parallel to the principles of common morality. But our personal moral beliefs may differ from common morality in some areas especially where common morality appears to be in the change of state.

VALUE EDUCATION IN THE CURRENT PERSPECTIVE

The subject value in education has come to acquire increasing prominence in educational discussions at all levels during recent times in our country. The issue has been projected as one of national priority in the National Educational Policy NPE (1986). The policy declares the growing concern over the erosion of essential values and an increasing in society has brought to focus the need for readjustments in the curriculum in order to make education a forceful tool for the cultivation of social and moral values. According to national curriculum for primary and secondary education the crisis of values our society is passing through the demands area more explicit and deliberate educational efforts towards value development. The first term of reference for the National Commission on Teachers was to lay down clear objectives for the teaching profession with reference to the search for excellence breadth of vision and cultivation of values. The working group to review teachers training programmes in the light of the need for value orientation set up by the government of India in recommended for the inclusion of a value education component in the teacher education programme besides spelling out details of curriculum methodology and teachers role. The values are generally regarded as those things that are good in themselves. Values are believes of man that guides his ethics and choice. Human values in the other hand are the habits or thought one acquires as one grows from child hood to adulthood which enables one to assess and deal with things that are right or wrong. Human values are the principles standards convictions and belief that people adopt as their guidelines in daily activities. Human values are the foundations for any viable life within the society which build space for a drive and movement towards one another that leads to peace as well as freedom. Some of these human values are love honesty hard word peace openness loyalty respect friendship kindness justice fairness, discipline problem solving care for one another and being mindful of the environment. Some of these human values can be achieved or attained through education such as spirit of hard work problem solving and self-discipline.

CONCLUSION

Values are bridge between individual and social. Individual holds value but others influence the formation of those values. Families groups and societies tend to share common values. Young generation needs an appropriate guidance for helpfulness

self-control honesty logical thinking self-control and responsibility. The values will be beneficial for young generation students as well as for family well-being freedom self-respect self-development personality development and behavior management. It is needed to develop positive attitude towards values and its implication in right direction. Through various activities in schools as well as home little efforts can be done in this dimension by teachers and administrations. The academic education of today is improved and useful because it has value orientation bringing transformation in them. If children of today are fortunate enough to have ideal teacher along with ideal parents their progress towards development is smoothened. Teachers and parents ought to keep in touch and exchange views. The teacher should established contacts with parents for welfare of children periodic meetings should be there they should realize that mere shifting will have its heavy toll on the young ones. There will be healthy environment between teacher parents and children.

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DEVELOPMENT OF ELEMENTARY EDUCATION IN ASSAM: A STUDY ON HISTORY OF EDUCATION

Dr. Abdus Salam

Associate Professor in Education, West Goalpara College,
Balarbhita-783129, Goalpara, Assam, India
Mobile: 9101470863; E-mail: abduss10@gmail.com

ABSTRACT

Primary education or Basic education is a fundamental right of every child. At the same time it transmits the knowledge and skills needed for the community's economic and social development as well as for the self- fulfillment of the child. In addition to the 3 RS (Reading, writing and Arithmetic), the ability to think, criticize, seek out and use information needed for solving problems of everyday life, for improving health, productivity and living standards for protecting the environment and cultural heritage, these skills are crucial to the development of the child. Primary education constitutes a very vital part in the entire structure of educational program. In this stage the child starts going to a formal institution and his formal education starts. It means that the child comes directly from home to primary school and has many adjustments to make primary education is that education which is given between 6 to 14 years age. The education which he receives there provides the foundation of his physical, mental, emotional, intellectual, social, and the progressive development of his personality. The present paper is an attempt to study the development of primary education in Assam along with the significance of primary education for all round development of every child.

KEY-WORDS: *Primary Education, Basic Education, Development, Fundamental Right, and Universalization etc.*

INTRODUCTION: Primary education constitutes a very vital part in the entire structure of educational program. In this stage the child starts going to a formal institution and his formal education starts. It means that the child comes directly from home to primary school and has many adjustments to make primary education is that education which is given between 6 to 14 years age. The education which he receives there provides the foundation of his physical, mental, emotional, intellectual, social, and the progressive development of his personality. The child gets the first lesson in discipline co – operative spirit and group feeling are developed during this period. At this stage the daily routine

under goes a basic change. Primary education is often considered to be the first stage of the entire super structure of educational set up in India. It is the primary education when foundation of child's physical, mental, emotional, intellectual and social development is laid. Values and its characters are built. In India, primary education means schooling of children in the age group of 6 – 14 years comprising of classes from I – V and VI – VII. There is no denying the fact that the nation's strength rests on the sound foundation of its primary education. But it is primary education which plays the most significant role in laying that foundation. It is primary education which helps in removing mass illiteracy, thus making the most significant contribution to the efficient functioning of democratic institutions. India has entered 21st century and modernization of social structure and development of science and technology is a must.

SIGNIFICANCE OF THE STUDY: Creation of a sound in primary education system appears to be a basic component of any strategy for social, political and economic development of a country. In fact, it is a primary education, which develops basic innate abilities of a person to live a full personal life as an individual and as a member of a family and an economically productive as a worker and a socially useful life as a citizen (Hoque 1975). Education at the primary level acquires special importance and it provides an opportunity for capturing and nurturing talents at the early stage of growth, thereby contributing to the development of a national pool of ability, (Islam1975). Many studies regarding the role of schooling in economic development have shown that primary education plays a vital role in national, economic development in developed as well as developing countries. The education at this level has a pervasive value in reducing cost and in improving the productivity of the economy, as the rate of return is higher in this stage than in any alternative investment. It would be more appropriate in the context of the situation in the developing countries to say that more and better primary schooling should be relevant to the needs and realities of life in the country, where the rate of illiteracy is very high and the per capita income is low. In a country, in which the level of economy is low if the level of schooling is raised substantially and rapidly, it becomes a substantial source of growth assuming of course, that the education provided is of the type and quality most relevant to development and growth of the nation. It is seen that primary education contribute to the productivity of the labor force, and at the same time, it creates in enlightened and responsible citizens. The value of primary education as an instrument of social change lies in its capacity to contribute towards equalization and expression of economic opportunities in promoting educational and social mobility in creating social concern and civic responsibility, inculcating cultural and moral values. Primary education is the basic foundation of all higher education. In this stage, a child first learns to read, write and do mathematical calculation. We can expect the future progress of our country only from a well planned implemented primary education. At this stage

child's cultural, emotional, ethical, intellectual, moral, physical, social and spiritual development also takes place. The knowledge of primary education can produce a literate and numerate population who can deal more or less satisfactorily with their problems encountered in daily life and serves as a basis on which a society is to be reconstructed and further education planned. It can bring a positive effect on the productive capacity of a society according to their own ability. Primary education advances human capability, economic opportunity and political participation. It fructifies multiple dimensions of freedom from fear and want, generates self- confidence and supports orientation towards future, offers coping mechanism in terms of crisis. Without a quantitative and adequate development of primary education, the process of development of the country will come to a grinding halt. It may be observed that most of the developed countries like U. K. Soviet Russia, USA, Japan have already attained a high level of schooling. It is also true that developing countries in general have not succeeded in their efforts to bring each and every child to school. However it is important to mention that most of the countries irrespective of their economic status and ideologies have taken the provision of universal primary education in the form of a constitutional guarantee.

OBJECTIVES OF THE STUDY: The most important objectives of the study on primary education are:

1. To give an adequate mastery over the basic tools of learning.
2. To bring about a harmonious development of the children's personality by providing for his physical, intellectual, social, emotional, aesthetic, moral, and spiritual needs.
3. To prepare children for good citizenship, to develop in them a love for their country.
4. To develop international understanding and the spirit of universal brotherhood.
5. To inculcate a scientific attitude.
6. To inculcate a sense of the dignity of labor and
7. To prepare children for life through the provision of worthwhile practical activities and experiences including work experiences.

MATERIALS AND METHODS: The present paper is descriptive one. The paper is basically compiled with the help of various secondary sources like- News papers, Books, Thesis, Dissertation, Journals, and Web Pages etc.

DISCUSSION: The discussions on development of primary education in Assam Pre Independence and Post Independence Era are discussed accordingly below:

Development of Elementary Education in Assam Pre-Independence: The accounts of the Chinese pilgrim Hiuen-Tsung threw much light on the ancient system of education prevalent during the rule of King Bhaskar Varmana of 7th century who took keen interest in spreading education among the people in Kamrup. Major part of the teaching and learning in ancient Assam took place via the "Gurukula" system where students learnt about Vedas, Vedangas, Smritis or other religious scriptures. The system of writing books in Sanchipat was started in Assam. It is crucial to mention here that prior to the introduction of scripts; education was imparted orally. Assam when invaded and ruled by Ahom kings for 600 years since 1228 AD 'education' was given due importance and recordings of the historical accounts in books were maintained. Nevertheless, Assam has had her indigenous system of imparting education through formal institutions like Pathsalas for Hindus, Tols for Brahmins and upper class Hindu, Muktabs for Muslims and Satras for the Vaishnavas. These indigenous institutions in Assam, although not very organized, played a crucial role in imparting education to the mass.

Development of Education System in Assam during the British Era: Assam came under the control of East India Company after the "Treat of Yandaboo" in 1826. In particular, Mr. David Scott the first agent of the East India Company took interest in the promotion of the indigenous system of imparting education. He opened eleven schools, mostly in lower Assam. Students passing out from these schools were offered jobs under the Government. Also, he opened a school in Garo hills for the expansion of primary education among the hill tribes. Scott's principle was to retain the old system as far as possible and implement new rules as little as possible. As a result, the old 'Paik' and 'Khel' system was retained in Upper Assam. However, these were replaced by modern education system by the Company in subsequent years. After the revolt of 1857, the power of administration was transferred to the Crown. In this context, the Hunter Commission-1882 laid emphasis on the importance of local bodies in the matter of expansion of primary education. This resolution empowered the local boards to establish aid, manage and control the primary schools. Furthermore, general supervision and funding were determined based on the performance of the schools (Govt. Resolution, 17th November 1882). This immensely affected the growth of primary education in Assam. It was only after the liberal policy of Lord Curzon in the early period part of 20th century that primary education received renewed attention. The Assam local self government Act of 1915 gives wider power to local bodies to manage all affairs of primary and middle education. In Assam, the first compulsory primary education Act was passed in 1926. Provisions of Assam Primary Education Act, 1926 are:

- It extends to the whole of Assam.
- Any local authority with a majority of two-thirds of the members present in a meeting may resolve to introduce compulsory primary education within its jurisdiction for children between 6-11 years of age.
- The local authority shall submit the resolution to the Government for consideration.
- The local authority shall submit the government a statement showing all particulars concerning the total existing expenditure incurred by the local authority and by the government and the additional cost required for introduction of compulsory primary education.
- Local authority of any area shall provide one-third of the additional cost without diminishing the current expenditure and shall levy an education cess for this purpose.
- In the event of the proposal being sanctioned the government shall provide the local authority the remaining two-third of the additional cost.
- If any local authority fails to submit a scheme, the Government may call upon to do so.
- The Government may by notification make rules regarding the education cess, the manner in which the education funds shall be maintained.
- No fees shall be charged from any students.
- Poor children will be provided books and other writing materials if education committee recommended.
- The local authority and the education committee concerned shall be responsible for enforcement of the provisions of the Act.

The primary education, however, made slow progress in Assam during this period. The wrong policy of the Government in giving grant-in-aid, the inefficiency of the local boards to control primary education and indifferent attitude of the people contributed to this slow progress.

Due to limited achievements, the Act was revised in 1930. This revision brought elementary education into limelight, with imperial grants being released to Assam for the promotion of elementary education. The educational organization that emerged gradually got graded into primary education (vernacular), high/secondary education and college/higher education. Nevertheless, education was also imparted through Tols and Madrassa. There were around 162 Tols and 120 public madrassa in 1935.

Contributions of Christian Missionaries: The beginning of modern education and the promotion of language and literature in Assam can be attributed to the efforts of the Christian Missionaries. The Christian Missionaries rendered unique service towards the

promotion of vernacular and for the upliftment of the tribal areas of Assam. The American Baptist Missionaries under Rev Nathan Brown and Oliver Cutter came to Assam and setup nearly 14 schools in Sibsagar. The first Assamese newspaper "Arunodoi" was published by Nathan Brown in 1846. They went into the interior places of the hills and plains and established schools in Garo hills, Khasi-Jaintia hills, Nagaland, Darang, Nowgaon, Guwahati etc. They wrote several books in Assamese language. Another American Baptist missionary, Miles Bronson edited the first Assamese Dictionary in Assamese and English in 1867.

The chief contributions of the Christian missionaries in the field of education are:

- Starting of charity school
- Establishment of printing press
- Importance on the development of vernacular language
- Education of orphans
- Printing and publication of text books.
- Publication of newspapers
- Translation of books to Assamese language.

Development of Elementary Education in Post-Independent Assam: After independence Basic Education was accepted as the national pattern of education at the elementary level. The Government of Assam also accepted Basic Education as its future pattern of elementary education and passed the Assam Basic Education Act, 1954. The Act provides for:

- The Constitution of a state Board for Basic education to advise the government on matters such as making grants to schools, control and management, recruitment and service condition of teachers, selection of text books, training of teachers etc.
- The State Advisory Board will maintain a fund of which the D.P.I. will be in charge.
- Schools shall be recognized as basic school under this Act are All Government M.V. School, All M.V. schools managed by private bodies, All primary schools, All basic schools, Any private elementary schools.
- The state government may impose an educational tax in any area for the purpose of this Act and can make rules regarding the age of a child, the curriculum, duration and standard etc. This Act introduced certain changes in the administration by entrusting more power on the Govt. 4 In spite of all these measures the system of Basic education failed in Assam as in other parts of the country. It was considered to be impractical and insufficient to meet the demands of the modern society.

The Assam Elementary Education Act, 1962: The act was passed to make provisions for the management and control of elementary education and to provide for free and compulsory education in Assam in gradual stages. The major provisions of the Act were as follows:

- It extends to the whole of Assam with exception to the autonomous districts, provided the Governor may, with the consent of the District council concerned, extend all or any of the provisions of the Act to all or any of the Autonomous districts on such date may be notified on his behalf.
- Definition: Elementary Education means education up to such class or standard not beyond the eighth class, as may be prescribed.
- 'Local authority' means, a Municipal Board, or a Town committee or a Gaon Panchayat established under the Municipal Act and Assam Panchayat Act, 1959.
- Constitution of a State Board for elementary education was made to advise the Government for the development, expansion, management and control of elementary education in the state with the Minister of Education as its Chairman and other members. The members of the Board will hold office for five years.
- The State Board will lay down principle on the allocation of grants to local authorities for the purpose of this Act, lay down procedure for recruitment of teachers and the conditions of their service, lay down condition for recognition, expansion, amalgamation and opening of new schools.
- The State Government may make rules for carrying out the purpose of this Act.
- This Act is an improvement on the earlier Acts as it makes the State Government responsible on certain matters relating to elementary education. This Act entrusted the responsibilities for management of elementary education on the local authorities of the area concerned.

The Assam Elementary Education Act, 1962 provides guidelines for the constitution of the State Board of Elementary Education for management, improvement and expansion of primary education to advise the State Government on all matters relating to elementary education.

In 1977, with the establishment of a new Government new policy for primary education was declared. A separate Directorate of Elementary Education was constituted in Assam. Under the provision of this Act rules were framed in 1977 called, the Assam Elementary Education (Provincialisation) Rules 1977. These rules prescribe the qualifications for appointment of teachers for elementary schools and the conditions for taking over of schools by the State.

A. Age & Qualifications of Teachers:

1. **Age:** (a) A candidate shall be within the age limit of 18 to 36 years on 1st January of the year of advertisement; (b) the upper age limit shall be relaxed in favor of Scheduled Castes and Scheduled Tribes as per rules made by the Government.
2. **Qualifications:** (a) Assistant Teacher: minimum qualification is Higher Secondary or any other examination of equivalent standard having 45% marks in any one of the qualifying examination (HS / HSLC) for General Categories and minimum 40% for reserved categories for the post of Assistant Teacher in Lower Primary and Upper Primary schools; (b) Hindi Teacher: HSLC Examination passed along with Hindi Visharad of Assam Rastrabhasa Prachar Samiti or Higher Secondary (HS) Examination passed with Hindi as one of the subjects or equivalent thereof; (c) Arabic Teacher: Intermediate Examination passed under Madrasa Education Board, Assam, or Higher Secondary Examination passed with Arabic as one of the subjects or equivalent thereof; (d) Language Teacher: Higher Secondary Examination passed with certificate of Language examination from competent authority and Board Examination at the HS Level; (e) Science Graduate Teacher: Bachelor of Science (B.Sc.) from any recognized university, (preference will be given to the trained candidates).
3. **Character:** A candidate shall furnish the certificate of character from- (1) The Principal / Academic Officer of the school / college last attended by the candidate, and (2) a respectable person who is well acquainted with (not related to) the candidate.
4. **Selection Committee:** there shall be a Selection Committee in each Educational District constituted as follows: (1) An eminent educationist / social worker as Chairman/ Chairperson; (2) 7 educationists and social workers to be nominated by State Government as Members, at least two each should be from women and parents and at least one should be from the weaker section to be nominated by the Government; (3) The Deputy Inspectors of Schools of the District (all) under the District Elementary Education Officer concerned as Members; (4) The District Elementary Education Officer of the District concerned as Member Secretary of the Committee. The term of the Committee is generally one year, but can be extended by the Government if necessary.

B. Conditions for Taking over Elementary Schools:

1. Every inhabited village shall have at least one Elementary School. In a village where there are more than one schools the minimum distance from one to other should be [1.1. 6 K.M.] provided there are more than two hundred populations in

- case of L.P. School and Junior Basic Schools and [3 K.M.] in case of M.E., M.V. and Senior Basic Schools.
2. The enrolment in each of the School shall not be less than 40 in case of Lower Primary Schools and Junior Basic Schools and 90 in case of M.E., M.V. and Senior Basic Schools, provided that the enrolment may be relaxed by the Government in suitable cases.
 3. The teachers of venture school may be retained at the time of taking over if they possess the minimum qualifications and age for recruitment provided that such teachers have put in at least two years' continuous service immediately preceding the taking over of the school and provided further that the prescribed ratio of students and teacher is maintained in the school.
 4. A venture school should possess at least 2 bighas of land in the rural areas and 1/2 bigha of land in the urban area.
 5. Immediately after the Assam Elementary Education (Provincialization) Act, 1974 comes in to force all liabilities of the Regional Boards and State Board for Elementary Education including liabilities incurred by various authorities constituted under the provision of the Assam Elementary Education Act, 1968 shall vest in the state.

School Fund: A fund shall be created and operated by the Managing Committee for maintenance of the school buildings, supply of furniture, equipment and teaching aids and maintenance of school garden. The fund shall be raised from donation, subscription and grant received from the Government. All money shall be deposited in Savings Bank Accounts in the nearest Post Office or Bank and shall be operated jointly in by the Secretary and Treasurer.

Under these rules, the government guarantees the payment of salaries of teachers and other staff as also scholarships and stipends for students under different schemes of the government. Occasionally grants may be provided for expanding the infrastructure of the school, but that is not guaranteed.

District Primary Education Program (DPEP): The constitutional provision in "Article 45" and the subsequent legislative provisions made way for expansion and improvement of elementary education in Assam. Accordingly, the Government of India formulated the "District Primary Education Program" (DPEP) scheme in 1993. DPEP is an effort to decentralize educational planning at the district level. It is planned in such a way that it suits the educational needs and demands of the district concerned.

The District Primary Education Program (DPEP) was launched in Assam in the year 1994- 95 to achieve the goal of universalisation and to work for quality improvement of Elementary education. Initially the program was launched in 4 districts. Later it was

extended to 5 more districts. These districts were: Goalpara, Kokrajhar, Dhubri, Bongaigoan, Barpeta, Darrang, Sonitpur, Morigaon, and Karbi Anglong.

The teacher training program of DPEP aimed at increasing the awareness and motivation of teachers leading to activity-based and learner-centric teaching for achieving MLL.

Teacher training programs and other academic activities of DPEP were carried out at the following level:

1. State Level (SCERT and DPEP)
2. District level (DIETS)
3. Block level (BRC)
4. Cluster level (CRC)

Sarba Shiksha Abhiyan (SSA): Efforts have been made to extend the opportunity of Elementary Education to a large number of children through Operation Black Board, Non-Formal Education, Mahila Samakhya, Nutrition program, Total Literacy Campaign, DPEP, etc. But, in spite of implementation of all these programs a large section of children of the country continue to be deprived of the opportunity of Elementary education. On the other hand, the Supreme Court in 1993 has proclaimed the right of education of children up to the age of 14 years as a fundamental right. Now that the 93rd amendment bill of the Constitution has sought to give Constitutional status to the right of education as a fundamental right, it has become imperative for all of us to work unitedly in achieving the goal of education for all. To ensure this fundamental right of children, new efforts have been made through decentralized planning process. All the ongoing programs for development of Elementary education in the district level have been sought to be taken up under one organization/program, named as Sarba Shiksha Abhiyan (SSA). Now through Sarba Shiksha Abhiyan the aims of UEE is sought to be attained by need based and decentralized planning, enhanced community participation, and by involving the Panchayat Raj Institutions (PRI) in matters of school management and supervision.

The Sarba Shiksha Abhiyan, a people's movement for education for all, attempts to provide useful and relevant Elementary education of satisfactory quality for all, bridging all social and gender gaps with the active participation of the community in the affairs of the school.

The SSA is an integrated effort to enhance the efficiency of the schooling system, and to ensure building of community ownership for quality Elementary education. The challenge now is to convert this Abhiyan into a mass movement.

CONCLUSION: Primary education must be given priority because it is a fundamental right. At the same time it transmits the knowledge and skills needed for the community's

economic and social development as well as for the self- fulfillment of the individual. In addition to the 3 RS (Reading, writing and Arithmetic), the ability to think, criticize, seek out and use information needed for solving problems of everyday life, for improving health, productivity and living standards for protecting the environment and cultural heritage, these skills are crucial to the development of the individual. The importance of primary education in all aspects of National Development has been recognized by economic planner's long time back as education is a resource as well as a factor of production. Development of necessary infrastructure, assessment procedure, teacher's qualification and training, teaching method etc. at each school for effective implementation of the curriculum is of utmost importance. Thus, a good education system needs to have three important considerations, i.e. providing high quality education, ensuring equity and catering to the aspirations of different sections of society. It becomes necessary for it to be based on a good curriculum to be accountable to all stakeholders and have an efficient management system in place along with a participative involvement of the community. Development of primary education depends on variety of factors that operate in the actual setting i.e. at the primary schools. The physical facilities of school, instructional program, teaching methods, and assessment procedure followed in the school and so on. It also depends on the perception of the teacher in implementing the curriculum. To make primary education compulsory for all, many attempts have been made in India since independence. In 1986 National Policy of Education was formulated to strengthen the educational situation of the country. As per the policy various schemes and programs have been launched nationwide. Recently in the year 2001-02 another new scheme has been introduced in India with the aims to achieve universalisation of primary education within 2010.

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PERCEPTION OF DIFFERENT STAKEHOLDERS WITH RESPECT TO GENDER IDENTITIES CONSTRUCTION OF SECONDARY SCHOOL STUDENTS

Ms. Astha Kotnala

M.Ed Scholar, University School of Education, GGSIP University
&

Dr. Shalini Yadava

Assistant Professor, University School of Education, GGSIP University

ABSTRACT

The present study focused on exploring the gender identities construction of secondary school students in formal education. The research studied the perception of students and teachers about their gender identities construction in formal education system. Through the findings based on teachers' perception towards gender identities construction of students, it was highlighted that majority of the teachers did not have a clear understanding of gender identity. There were also a small percentage of teachers who considered gender diverse people as someone having some problem with their gender identities. In the case of students, it was found that a large percentage of students considered gender as a biological entity. They also defined gender in terms of the gender binary. It was also found that a small percentage of students consider gender diversity as some disease. The data from the document analysis stated that there is a need to work on removing the barriers of gender inequity and gender issues with the help of several state interventions and through the medium of equitable quality education.

Keywords: Gender Identities, Socialisation, Stereotypes.

Introduction

The process of socialization has the power to construct the entire perception of an individual. Through perceptual experiences which an individual gets in a social environment helps them to perceive the world and form their identity. This is how the gender identity of the child is also governed by how the child gets socialized. This process begins when the family starts playing an important role in the socialization of children. When children are born, the family assigns a gender to them based on their genitalia. This assigned gender comes with well-established gender norms, roles and responsibilities, and practices which children need to follow as they grow up.

The socialization of children expands and becomes dynamic, once they enter the school. From here, they get new experiences and they get to know about multiple opinions and experiences of other students and teachers. The classroom experiences, teacher-student interaction, group dynamics during play and other group activities, messages through hidden curriculum, textbook representations, and so on, help to contribute to forming the gender identities of students.

By the time students reach their secondary stage of education, they undergo a process of their identity formation in which they try to understand themselves, their bodies, and the role which they play in society. This process is complex and leads to the formation of different identities of students. One of the integral parts of their identity is gender identity. All the environmental factors, the cognitive processes of students and their biology play an important role in forming their gender identities.

The process of gender identities construction is complex and to understand this process, it is necessary to understand the perception of students towards their gender identities. This study is based on exploring the perception of students about their gender identities construction. It also tried to understand the perception of teachers about how students' gender identities are constructed and what role do they play in the construction of their gender identities.

Review of Related Literature

Paul, S. (2014) in "Social Construction of Gender in School", highlighted that different agent of socialization like family, media, school, religion, peer group, and so on, socialize children in a structurally rigid environment. This leads to the construction of their gender identities. There is a subjective in gender performances of children. This element of subjectivity comes from the interaction of culture and how children assign meanings to the cultural symbols. When cultural factors change, the meanings assigned to the culture also changes which leads to subjective experiences and change in gender identities. When children's gender identities do not fall in the dichotomy of socially defined femininities and masculinities, they are labeled as "deviant". The paper also suggested that it is important to socialize children in a gender-neutral environment to liberate them from the gender binary.

Asher, N. (2007) in "Made in the (Multicultural) U.S.A.: Unpacking Tensions of Race, Culture, Gender, and Sexuality in Education" acknowledged that educational institutes do not accept differences in race, caste, gender, ethnicity, and sexual orientation. They are considered as "different" and not a part of the culture as they do not conform to the homogeneous culture. In classrooms, it was found that providing a secure and democratic space did not serve in enabling students to come out about their identities. The paper suggested that through the pedagogy of self-reflection and dialogue,

it might be possible to help students comfortably talk about different aspects of their identities.

Browes, N.C. (2015) in "Comprehensive sexuality education, culture, and gender: The effect of the cultural setting on a sexuality education program in Ethiopia" studied the implementation of a computer-based sexual health program. The study was based on students and teachers of Ethiopia. It was found that teachers and students discussed the issues of contraception, sexuality, and gender. However, those discussions were majorly influenced by socio-cultural views. It was found that a morality-based approach was adopted while discussing the issues of sexuality and sex. It was stated that teachers from non-comprehensive sexuality education, did not find topics of masturbation, and homosexuality as appropriate.

Stromquist (2007), in "The Gender Socialization Process in Schools: A Cross-National Comparison" stated that there is a need to prepare schools to address and challenge the issues on gender to fight against gender-based inequalities, and power division among people of different gender identities. It also highlighted that reflective discussions do not take place in classrooms on the issues of gender and sexuality. The paper also unveiled that a sex education program of Botswana was studied and it was found that students were warned against sexual temptations and messages were given to instill fear regarding HIV/AIDS. Teachers only cited the examples based on boy's sexuality and did not mention any examples of the sexuality of girls.

Objectives of the Study

- To examine the existing literature on gender identities construction of adolescents.
- To gauge the perception of teachers about the construction of gender identities through formal education.
- To explore the perception of students towards the construction of their gender identities in formal education.

Research Design

A descriptive research design was used for this research. Descriptive research focuses on exploring the phenomenon and describes it based on the findings. The research used questionnaire method to explore the perceptions of teachers and students about how formal education contributes to the gender identities construction of students of secondary education. The research also employed a document analysis to examine three major documents, the National Curriculum Framework (2005), the National Curriculum Framework for Teacher Education (2009), and the National Education Policy (2020). These documents were analyzed with a gender perspective to examine the existing issues on gender and provisions to address these issues.

Sample : The sample of the study was chosen using the purposive sampling technique. The sample of the study was three national documents on education: The National Curriculum Framework (2005), the National Curriculum Framework for Teacher Education (2009), and the National Education Policy (2020). 15 teachers and 30 students of secondary schools of Delhi were chosen to explore the gender identities construction among students.

Tools: The documents analyzed in the study were examined using document analysis. To collect the data from 15 teachers and 30 students, questionnaires were made and administered to them to gauge their perception of gender identities construction.

Data Analysis Techniques : Data for the research was analyzed using a descriptive data analysis technique in which the data was analyzed using open coding. Through this, major themes got emerged which became the response categories. This data was represented using frequency and percentage which helped to find the results and formulate educational implications.

Findings

The present study tried to uncover the perception of both students and teachers about their gender identities construction. Some major findings have drawn attention to how teachers and students perceive the concept of gender and gender identities. It also sheds light on the major findings from the three major documents on education, The National Curriculum Framework (2005), the National Curriculum Framework for Teacher Education (2009), and National Education Policy (2020) on gender in education.

Findings of Examining the National Curriculum Framework (2005), National Curriculum Framework for Teacher Education (2009), and National Education Policy (2020).

- In the NCF 2005, it was found that in schools students multiple discriminations, based on their characteristics of identities like race, caste, class, gender, sexuality, religion, and so on. It can be inferred that through such practices, students would form a perception that on the ladder of hierarchy, people are positioned based on their social status.
- NCF 2005 acknowledged that textbooks are a strong medium to bring social change. However, textbook reviews have found that several NCERT textbooks represented gender stereotypes and depicted the masculinization of several professions.
- It also stated that the reproductive and sexual health of adolescents is a necessary component of their overall health. Through this, it can be inferred that it is important to address the issues, myths, and taboos, revolving around the biology, gender identities, and sexuality of students.

- The framework also put major emphasis on fostering the values of respecting diversity and equality among students. It proposed to provide a learning environment that is democratic and where students do not feel insecure about their identities.
- In the NCFTE 2009, it was found that it proposed a course on Gender, school, and society, for the teacher education programs of India. The framework defined coursework that would focus on various gender theories and also developing a critical insight on various gender issues.
- NCFTE 2009 stated the importance of linking the theoretical aspect of the course with real-life situations. To achieve this objective, it was found that there was a lack of practical work in the course.
- NEP 2020 acknowledged the marginalization of socio-economically disadvantaged groups. It specifically stated the underrepresentation of females and transgender people in the education system.
- The policy proposed to form a 'Gender Inclusion Fund' specifically for females and transgender, to increase their ratio in the education system and to provide them equitable educational opportunities to get quality education.
- The policy also proposed to establish free and safe boarding facilities for students and strengthening Kasturba Gandhi Vidyalayas to increase enrolment of female students from disadvantaged sections of society.
- The policy recommended sensitizing teachers, and students of both school and higher education about issues related to gender and gender identities, through dialogue and discussions. It also proposed to introduce material on gender and gender identities in school education.

Perception of Teachers on Gender Identities Construction of Students

- Results suggested that 42.11% of teachers believed that gender is a social construct. 26.32% of teachers believed that gender is defined by society as the characteristics, roles, behaviour, and responsibilities of girl/boy, man/woman. 21.05% of teachers also defined it in terms of sex, biological difference, and being male or female. 5.26% of teachers defined it as an identity of a person in a socio-cultural context. From this, it can be inferred that a large percentage of teachers defined gender as a social entity. However, some percentage of teachers believed that gender is biological and equivalent to sex.
- According to 53.33% of teacher sex and gender are distinct concepts. Sex is biological while gender is a social construct. 13.33% of teachers also believed that there is no difference between sex and gender. 6.67% of teachers believed that

- sex is defined by the biology of the person while gender is the sexual orientation of a person which is influenced by their socio-cultural context. From these findings, it could be deduced that a large section of teachers was able to differentiate between sex and gender, however, there was a small section of teachers who understood gender as a sexual orientation of an individual and need to learn about the clear distinction between the concepts of gender, sex, and sexual orientation.
- According to 40% of teachers, gender identity is the role played by females/males, which is constructed by society. 40% of teachers responded that gender identity according to them is how individuals identify with a gender. 6.67% of teachers stated that gender identity is the personal sense of sex. However, 6.67% of teachers also stated that gender identity is how a boy or a girl behaves in a particular way. From this, it can be inferred that some percentage of teachers believed that gender identity is the roles assigned to particular sex by society. It is interesting to note that the same percentage of teachers believed that gender identity is a person's sense of self and not defined by society. A small percentage of teachers understood gender identity in terms of the gender binary.
 - Results indicated that 58.82% of teachers believed that a person's gender identity can be defined by characteristics, roles, and behaviour assigned to sex by society. According to 23.53% of teachers, an individual's gender identity is defined by the feelings, choices, and the way they want to live. 11.76% of teachers responded that it is defined by biological aspects of that person. 5.88% of teachers responded that it is defined by the sexuality of an individual. From the results, it can be inferred that according to the majority of teachers, socially defined roles, behaviours, and traits are some of the aspects to define someone's gender identity. This corroborated with the previous finding where 40% of teachers defined gender identity as the socially assigned role played by males and females. This shows that more than half of the teachers do not have a clear understanding of the concept of gender identity.
 - Results suggested that 22.22% of teachers are against dividing students based on gender for classroom activities. According to 16.67% of teachers, the division should be based on the individual interest of the students. Another 16.67% of teachers stated that they would use roll numbers or the first letter of the name of the students to form groups. 5.56% of teachers suggested random distribution should be the criterion for dividing the students for activities. Another 5.56% of teachers responded that using an inclusive approach and forming mixed groups helps students to understand each other better. 5.56% of teachers also believed that making different groups of boys and girls create a feeling of competition and a feeling of superiority or inferiority among those groups. This highlighted that

- according to the responses of teachers, for organizing group activities, gender is not a criterion used by them. They believed in dividing the students with the help of different small games or through random distribution and preferred mixed groups over gender-segregated groups.
- According to 33.33% of teachers, in context to the statement “you are so weak! Are you a girl?” this statement represents the behaviour of the boy, which is governed by stereotypes and orthodox formed by society. 23.81% of teachers responded that certain traits are being associated with people based on their gender like girls are weaker than boys, and boys do not cry. 14.29% of teachers stated that such statement would have been used around him at home or society and hence he used it. This highlighted that teachers are aware that how society labels people with certain traits based on their gender identities. They are aware of the fact that certain myths and stereotypes are present in society that promotes gender-based differentiation and discrimination.
 - According to 29.42% of teachers, a transgender is a person whose gender identity does not align with his/her sex. 11.76% of teachers defined transgender as a person who feels that she/he is in the wrong body type. 5.88% of teachers responded that people who are transgender show emotional affection towards all people, whether boy or girl. According to 5.88% of teachers, it is a biological malfunction of male/ female identities. It can be deduced that teachers require to learn and understand about the transgender community as some percentage of teachers still do not have a clear understanding about it.
 - Results suggested that 27.78% of teachers believed that behaviour of bullying among students towards students of different gender expression is evoked due to gender norms and stereotypes existing in the society. 16.67% of teachers believed that as a result of their socialization, students observe particular sex playing limited social roles, and performing a particular behaviour. When someone behaves differently, some students react in this way. It can be inferred that teachers feel the need to help students to understand that having different gender identities and expressions is something normal.
 - Results found that 50% of teachers responded that they would use classroom activities and discussions to help students understand different gender identities and the negative consequences of stereotyping, to curb gender-based bullying. 25% of teachers stated that they would counsel students who engage in the practice of bullying to help them respect and accept every individual. 5% of teachers also stated that they would take the help of media to bring change in the perception of students. From this, it can be inferred that the majority of teachers

- would work on changing the perception of students to develop among them the feeling of respect and acceptance towards different gender identities.
- According to 21.05% of teachers, classroom experiences play an important role in the gender identities construction of students as a school provides an environment where students can learn through observation and imitation. 10.53% of teachers believed that different classroom practices like asking students to choose a subject based on their gender also promote gender identities construction of students. 5.26% of teachers also believed that when someone bullies or teases the other student based on their gender expression, it creates an impression in the mind of other students that something is not right about that person.
 - Results also found that 42.11% of teachers believed that students observe and imitate their teachers. With other behaviour, they also try to imitate the stereotypical and discriminatory behaviour of teachers. 10.53% of teachers stated that teachers should give equal opportunities to the students and give them space to be who they are. It can be inferred that teachers believed that they play an important role in the gender identities construction of students in the classroom.

Perception of Students about their Gender Identities Construction

- Results found that 40.63% of students defined gender as the differences in people based on their biological characteristics. 25% of students defined gender either as sex binary or gender binary. 15.63% of students linked gender with socially defined responsibilities, roles, and traits. These results presented that for the majority of students, gender is associate with the biological features of an individual which comprises genitalia, chromosomes, hormones, and genetic composition of the individual. The results also highlighted that some percentage of students understood gender in the form of sex or gender binary, i.e., it consists of male/female, girl/boy, or woman/man.
- Results found that 38.24% of students defined their gender based on sex, biology, and physical appearance. This can be corroborated with the previous finding where 40.63% of students stated gender as the differences among people based on their biology. 11.76% of students associated gender with culturally and socially assigned roles, characteristics, obligations, and behaviour. 5.88% of students also stated that gender is the sexual orientation of an individual. 2.94% of students did not know how to define their gender identities. It can be inferred that a large percentage of students are unaware of the difference between sex and gender.
- Results highlighted that 40% of students stated criteria like physical appearance, habits, names, adjectives, and behaviour to define gender other than theirs. 23.33% of students defined it based on the biology of the person. 6.67% of

- students responded that it is not possible to define someone else's gender. 3.33% of students stated that the inner feelings of a person help to explore the gender identity of that person. 3.33% of students did not know how to define gender other than theirs. Through these results, it can be stated that students require interaction with people of other genders to understand that gender identity is experienced personally and is not defined by societal gender norms.
- Results found that 51.85% of students expressed a fire fighter as a man holding a fire extinguisher. 30.43% of students expressed a female person as a flight attendant. 29.17% of students responded that a female or a male person would be a pilot. 42.31% of students expressed a fruit vendor as a boy or man selling fruits on the cart. 40.91% of students mentioned a female as a classical dancer and 4.55% of students expressed a male as a classical dancer. 4.55% of students also responded that classical dancing is a profession only for girls. 13.64% of students had a mental representation of classical dancers as a person of any gender identity and sexual orientation. 34.78% of students responded a house help as a female, 4.35% of students expressed a house help as a male person, and 8.70% of students had a mental representation of a male and female person. 30.75% of students had a mental representation of doctors as female and male persons. 3.85% of students had a depiction of a female person as a doctor and interestingly equal percentage of students expressed a doctor as a male person. 3.85% of students also expressed a doctor as a male/female/transgender. 25% of students expressed a teacher as a female person wearing spectacles and a saree. 14.29% of students had a mental representation of male and female people as a teacher. 3.57% of students expressed a teacher to be a second mother and an equal percentage of students expressed a teacher as a sir punishing a boy. These results shed light on the fact that students have stereotypical representations of various professions of society. Responses like a female teacher wearing a saree and classical dancing as a profession only for girls highlighted that our occupation and professions are gendered. Through this gendering process, the gender becomes functional and this forms the perception of students about different gender identities.
 - According to 44% of students haven't faced a situation in which they were denied for choosing a profession based on their gender. 4% of students stated that fashion designing was considered the most suited profession for girls. 8% of students stated that hotel management was not considered a suitable profession for girls. 4% of students responded that being a girl they were denied to opt for chartered accountancy. It can be inferred that students have faced denials from society for what they want to pursue further in their lives. They faced this denial as

society has formed a certain level of association between professions and gender of an individual. Certain professions are considered suitable for a particular gender. This restricts students' mobility to choose and pursue the career which they find according to their interest.

- According to 16.67% of students, girls were not encouraged to get involved in activities that require physical strength. 6.67% of students also stated that girls were not encouraged to play kabaddi because of the fear of getting injured. 3.33% of students responded that boys were not allowed in the workshops related to body and diseases. In schools, workshops are organized for girls to discuss menstruation and hygiene but boys are not allowed to attend those workshops.
- Results found that 29.03% of students were denied to go out for long hours due to their gender. 22.58% of students were not allowed to do household work. 3.23% of students responded that they were not allowed to invite their friends at home however their brothers were allowed to do the same. Through these results, it can be stated that students experience how gender functions in their daily life. Students face restrictions in their life activities due to the societal expectations and norms forced on them based on their gender.
- It was found that 22.58% of students stated that the teacher stopped Manan from taking help from Fatima because the teacher stereotyped boys as being physically powerful, and brave. 19.35% of students responded that it is believed that girls are weaker than boys. 9.68% of students stated that when boys take help from girls, they are considered weak. Through this, it can be stated that students were able to understand the gender power relationship which exists in society. Gender becomes hierarchical once power is given to a particular gender group. This makes the entire group dominant and powerful in the entire hierarchy hence making other groups weak and submissive.
- It was found that 26.32% of the students believed that despite being a girl biologically, Riya felt like a boy because he might be a female biologically, however, from the inside he felt like a boy. 18.42% of students stated that Riya liked the lifestyle and freedom which boys get. This response represented that students felt that boys and men are privileged to get freedom in life. This also means that all other genders do not get that freedom to live their lives and they face restrictions. 13.16% of students acknowledged that Riya might be a transgender or third gender. 7.89% of students associated it with hormonal changes faced by Riya. 2.63% of students were not able to explain this situation. 5.26% of students also stated that Riya might have a disease. It can be stated that the majority of students were able to understand that Riya had a gender identity

- that was different from the gender binary. Some students did not have a clear understanding of different gender identities and were unable to understand the situation provided.
- According to 22.58% of students, Riya's teachers and parents did not accept his choices because they were fearful about the humiliation they would face from society. 16.13% of students responded that our society does not accept transgender/third gender. They are considered as bad in our society. 16.13% of students responded that his parents ignored Riya's choices and wanted him to behave like other girls. 12.90% of students responded that Riya's behaviour and gender expression were not in alignment with that of other girls. 3.23% of students responded that society does not accept people belonging to the LGBTQ+ community and considers them as criminals. 3.23% of students also said that they do not know about it. It can be inferred that students were able to acknowledge that society disapproves to accept people with different gender identity. They face a lot of humiliation and disrespect from people who do not believe that gender is a spectrum and consists of many different gender binaries.
 - Results found that according to 36.36% of students if a child like Riya gets admitted in their class, they would accept him as their friend and respect his opinions. 27.27% of students stated that at first, they would be comfortable with the situation however; with time they would try to become his friends. 12.12% of students responded that they would not feel surprised in this situation. They would not make fun of Riya. 9.09% of students also responded that they would be curious to know about him. 3.03% of students also stated that they don't know about it. It can be stated through the results that some students wanted to understand Riya and would accept him as he is. Although for some it would be unusual initially, however, with time would understand and accept him.
 - Results found that 25.81% of students stated that they would accept Riya as their seat partner because gender is not a criterion for them to decide their seat partner. 22.58% of students responded that they would accept Riya as a seat partner because he is a human, like everyone, and every human has the right to live as they want to. 3.23% of students admitted that they would not sit with Riya as others would humiliate them. 3.23% of students also responded that they would not sit with Riya as they do not want a girl near them. This response unveiled that some percentages of students see Riya as a girl and not as a boy. It is also highlighted that there is an aversion among students to be with students of another gender. They do not feel comfortable being around them either due to the fear of getting humiliated by others or because they have developed certain aversive feelings towards people of a gender other than theirs.

Educational Implications

- In pre-service teacher education, it is very important to have course content on different gender identities. Student-teacher not only need to know about how gender is performed in society based on the gender binary but also about the different gender identities existing in the society and how they are constructed.
- It must also discuss how hegemonic masculinity is being practiced in society in general and schools in particular. There needs to be a discussion on how this leads to gender power relations among students in school.
- To understand the gender power division in society, a gender analysis of objects could be used in the classroom. In this activity, students and teachers could do a gender analysis of different objects like hobbies, professions, different clothing styles, gestures, behaviour, and so on. This activity could be used as a pedagogical tool to help students understand how the process of gendering takes place in society and how it leads to the division of power among different genders.
- For teachers who are in service, different workshops need to be organized as a part of their in-service teacher education. The workshop must address the concept of how students' gender identities take shape through the process of socialization and how to work on the issues which are evident in school based on gender-based bullying and gender dysphoria.
- It is important to bring important gender discourse in the classroom to understand how multiple gender experiences are produced. These discourses must be analysed through dialogue between students and teachers to understand gender-based inequalities and gender power dynamics existing in society. In the case of secondary school students, different stories, poems, texts, news articles, and pictures could be analysed in the classroom using a gender lens.
- To break the established gender binary, it is important to help teachers to understand gender identities construction among students belonging to different socio-cultural backgrounds. This would help them to get an understanding of different gender experiences of people.
- Teachers need to know about the difference between the concepts of sex and gender. Results highlighted that Teachers confuse these terms and consider them as the same entity. Hence both in-service and pre-service teacher education programs must address that these are the gaps in the learning of teachers related to the clear understanding of these concepts. These learning gaps must be filled by discussing with teachers that how they perceive gender and sex and how these terms are different from each other.

- Along with discussions in teacher education programs both in-service and pre-service teachers could be asked to maintain a reflective journal where they could write about the multicultural experiences and differences in gender. This would help them to have a dialogue and find out about how gender power relations and power order existing in our education system.
- There is a need for teachers to understand that having different gender identities is neither a deviation nor a malfunction of our biology. It is the subjectivity of the gender experiences of people which depends on the culture in which the individual lives and the cognitive processes through the individual attach meanings to it. For teachers, it is important to understand such concepts so that they can address various issues which arise when a person expresses different gender identities.
- To challenge stereotypical representations and gender power hierarchy, it is important to have continuous textbook reviews. The reviews must focus on different cultural taboos, myths, and misconceptions highlighted through pictures, and text.
- Schools need to make students aware of their sexual and reproductive health. Schools must organize workshops for all students where they should learn about their reproductive processes, gender identities, and sexuality.
- The pedagogical analysis could be an important method to help teachers analyse the important units where some activities and learning experiences could be organized to discuss the issues of gender hierarchy and gender inequalities existing in society.
- In the course of gender, school, and society, in teacher education, it is important to associate the theoretical aspect of the course with the school internship. This would help pupil teachers to take a research project in the schools in which they would be placed on the issues of gender and sexuality.
- The state must ensure that after the establishment of the 'Gender Inclusion Fund' proposed by the NEP 2020, it must be utilized in such a way that it helps to break the social barriers that avoid disadvantaged sections to access quality education.
- It is the responsibility of schools to provide a safe, secure, and democratic environment, where students learn the values of respecting diversity, equality, equity, respecting different opinions, and raising voice against injustice.
- The state must ensure that every student gets access to equitable and quality education irrespective of their gender and sexuality. The State must perform surveys and research studies to explore the gender ratio in every stage of

education and after that find the barriers which are halting students from receiving quality education in school.

- Teachers must ensure that there is no feminization of different professions and subjects. Students must have the freedom to choose any subject based on their interests. They should not be stopped from pursuing any discipline, based on their gender. All the subject options must be open for all the students.

Conclusion:

The study clearly pointed out that parents, teachers and peers have a profound role in construction of gender identities of students. Most of the stakeholders are not aware of the fluidity or continuum that gender identities may have over a period of time. Education is still stuck with the notion of existence of gender binaries only. It is high time that workshops and master trainer programmes that sensitise all the stakeholders with respect to the myths, misrepresentations and stereotypes associated with gender are organised regularly to move towards a gender inclusive society. This needs to be done at the school, college as well as community level in order to include all towards this movement of gender sensitisation and empowerment.

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STUDY OF CURRICULAR IMPLICATIONS OF INTER DISCIPLINARY EDUCATION THROUGH PEDAGOGICAL STRATEGIES FOR PLANNING AND LEARNING

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University, Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

The interdisciplinary learning should create knowledge that is more holistic than knowledge built in discipline specific studies. Interdisciplinary approaches while arguably less effective than traditional approaches for building the depth of single subject knowledge emphasize higher order thinking such as analyzing applying generalizing and seek meaningful connections between and among disciplines. Interdisciplinary approaches also lead to complex internalized organization of knowledge. It defined this organization of information as a knowledge structure an internalized frame work of all the related perspectives concepts ideas and methods of inquiry making up the knowledge domain and giving it meaning. Interdisciplinary learning is characterized by the integration of multidisciplinary knowledge across a central program theme or focus. With repeated exposure to interdisciplinary thought learners develop more advanced epistemological beliefs enhanced critical thinking ability and metacognitive skills and an understanding of the relations among perspectives derived from different disciplines. Further planning should aim to organize structured programs based on a suitable balance of learning through curriculum areas and subjects and through interdisciplinary learning taking account of the design principles and the stage of development of the learners. The structure of the observed learning outcome illustrates the stages of interdisciplinary knowledge integration and explains corresponding patterns of learners intellectual functioning from acquisition of single subject information to transfer of interdisciplinary knowledge to other topics issues or problems. The cycle of evolution as new disciplines emerge digital humanities like science and technology must inevitably have some impact not just on research in these areas but also on learning and teaching. This research deals with curricular implications of interdisciplinary education and pedagogical strategies. This focus on application activities aimed at

developing critical thinking creativity collaboration and communication to prepare students to meet the challenges of the 21st century.

Keywords: Curricular Implications, Interdisciplinary Education, Pedagogical Strategies, Planning, Learning.

INTRODUCTION

The curriculum should include space for learning beyond subject boundaries so that children and young people can make connections between different areas of learning. Interdisciplinary studies based upon groupings of experiences and outcomes from within and across curriculum areas can provide relevant challenging and enjoyable learning experiences and stimulating contexts to meet the varied needs of children and young people. Revisiting a concept or skill from different perspectives deepens understanding and can also make the curriculum more coherent and meaningful from the learner's point of view (Qaisur, 2021). Interdisciplinary studies can also take advantage of opportunities to work with partners who are able to offer and support enriched learning experiences and the opportunities for young people's wider involvement in society. Interdisciplinary learning enables teachers and learners to make connections across learning through exploring clear and relevant links across the curriculum. It supports the use and application of what has been taught and learned in new and different ways. It provides opportunities for deepening learning. This evolving landscape generates new demands for global citizens and future employees who have the skills to work in multi professional teams and adopt holistic approaches to complex problems but higher education largely remains structured on a conventional disciplinary basis (Sandholtz, 2000). While disciplines will continue the foundations of our knowledge the issue of interdisciplinary provision becomes increasingly relevant for institutions preparing students for a changing world. Bodies related to higher education as well as institutions themselves have taken up this issue. The opinions differ on whether increasing trends towards more problem focused research to tackle real world issues will lead to the introduction of more interdisciplinary elements in degree programmes (Blackmore and Kandiko, 2012) or whether the increased marketization of higher education will turn the focus away from curriculum innovation and back towards traditional single subject disciplines. HEIs may see interdisciplinary as an opportunity or as a threat depending on the institution while some may be attracted by the interdisciplinary courses and many are slow to provide supporting structures to deliver interdisciplinary courses effectively (Chandramohan and Fallows, 2009). Nevertheless there is pressure on higher education providers for increased emphasis on employability to justify the investment which has led to an increased focus on the practical application of learning. This employability agenda led the desire for agile learners who can utilize their graduate skills rather than simply acquire knowledge. This may result in trends towards competency based education enquiry based learning and student learning pathways in a sense that needs of fit traditional

institutional structures (MacKinnon *et al.*, 2013). The interdisciplinary poses a range of challenges to the sector. These include the level of preparedness and skills of staff to undertake work outside of their area of disciplinary expertise striking the balance between theory and practice (Strober, 2011) avoiding disadvantaging students by exposing them to different disciplinary perspectives the willingness of students to take modules outside the home department or familiar discipline and possibly jeopardize their grades and the challenge of assessing changed student perspectives as a result of interdisciplinary learning (Blackmore and Kandiko, 2012). Educators are increasingly coming to the realization that teaching skills and vague concepts without connection to real world applications are seen by students as irrelevant and in turn are easily forgotten (Ciesla, 2009). If the purpose of teaching is to help and prepare for adulthood including meaningful careers then one can understand why young adults tend to tune out instruction that is focused solely on the acquisition of content. Real world problems rarely arise within orderly disciplinary categories and neither do their solutions (Palmer, 2001). For good connect theory and content with application and to prepare students for the real world of the 21st century universities are developing interdisciplinary approaches to degree programs. Since knowledge is not acquired in isolation the interdisciplinary education is an important tool in creating new ways of thinking and helping to connect fragmented knowledge in a coherent way. Interdisciplinary approaches are not new to education. The concept first began in the 20th century and has been commonly associated with the progressive education movement (Oberholzer, 1937) and (Vars, 1991). Interdisciplinary education allows students to see different perspectives and work in groups with the synthesis of disciplines the ultimate goal. Encouraging students to reach beyond the typical constraints of a single content area and engage in interdisciplinary learning fosters critical thinking creativity collaboration and communication skills. Interdisciplinary learning enables instructors and learners to make connections across learning through exploring clear and relevant links throughout the curriculum. It supports the use and application of what has been taught and learned in new and different ways (Orillion, 2009). It provides the opportunities for depth learning. It affirm that interdisciplinary studies develops a frame work for instructors that allows more authentic relations with students and the ability to teach cognitive skills e.g., co-operation and critical thinking that connect to real life learning scenarios. It asserts interdisciplinary instruction connects research with real world problems. Vacca and Vacca (2005) affirm that students from interdisciplinary educational settings prevail in the application of real world skills. Moreover interdisciplinary education helps to increase student achievement by promoting positive attitudes toward subject matter creating curricular flexibility and integrating rapidly changing information with increased efficiency.

INTER DISCIPLINARY EDUCATION

The scholarship on interdisciplinary generally though not always stresses the importance of integration as the need to critique the insights of different disciplines and to seek common ground when these insights disagree. As demonstrated through case study interdisciplinary education allows professors to impart personal knowledge about ideas with colleagues develop common learning goals and see their discipline from another perspective. Students enrolled in interdisciplinary programs see instructors as they model continued learning have an opportunity to build upon their individual strengths and become personally invested in their work (Szostak, 2007). Furthermore students have more ways to associate learning with their interests and relate learning experiences with real world application as knowledge in the real world is not applied in bits and pieces but in an integrated fashion (Summers, 2005). This increases the ability of students to make decisions and synthesize knowledge beyond single disciplines and increase the ability to identify assess and transfer significant information needed for problem solving gain a better overall comprehension of global inter dependencies and develop multiple perspectives points of views and values. From an instructor point of view interdisciplinary education is a way to share pedagogical ideas with colleagues and to be energized by seeing one's own discipline from a fresh new perspective. Interdisciplinary education allows students to become proficient in a number of related areas (Klein, 2010). Instead of limiting instruction to one particular area a number of disciplines are combined to create thematic approach with instructors from various disciplines. Interdisciplinary education promotes knowledge transfer as students learn to use the skills and concepts attained in one field and apply it to another. Since students cannot be prepared for every situation the ability to apply existing knowledge in multiple situations is essential to function effectively in the real world environment of constant change (McTighe and Thomas, 2003) and (Caine and Caine, 1991) respectively. The need for interdisciplinary education has developed as a result of the growth of knowledge fragmented scheduling and maintenance of curricular relevance. Even with technological innovations that have facilitated interdisciplinary education creating degree programs is easier. It is because of a lack of pedagogy training instructors rarely having the required competencies to implement interdisciplinary educational models (Van Dam-Mieras, *et al.*, 2007). Moreover there are a number of logistical problems that should be addressed including class room scheduling awarding course credit sharing resources teaching assignments, and most importantly creating and maintaining a team approach to curriculum lesson design and instructional delivery. Interdisciplinary programs that are not cognizant of logistical issues and do take steps to address those issues are rarely successful (Moss *et al.*, 2008). The importance of interdisciplinary professional training and support for instructors cannot be overstated. Professional development opportunities will help to maintain enthusiasm when interdisciplinary pedagogical strategies are being employed (Shibley, 2006). Administrators should acknowledge the importance of training by allocating appropriate

time and resources. Likewise they should provide recognition for those involved and validate the time invested in professional development for tenure and promotion purposes (Lefebber, *et al.*, (2013; Kirkpatrick, 2007). There are two broad types of interdisciplinary learning which in practice can often overlap. Learning planned to develop awareness and understanding of the connections and differences across subject areas and disciplines. This can be through the knowledge and skill content the ways of working thinking and arguing or the particular perspective of a subject or discipline. Using learning from different subjects and disciplines to explore a theme or an issue meets a challenge to solve a problem or complete the final project. This can be achieved by providing a context that is real and relevant to the learners in the school and its community. To be genuinely interdisciplinary learning must support learners in using knowledge and skills from different disciplines in applying and deepening their learning in relevant contexts and help them to make real connections across subjects and disciplines.

BACK WARD DESIGN APPROACH MODEL

Using a Backward Design approach (Drake and Burns, 2004) and (Jacobs, 1989) developed a concept map for design of interdisciplinary programs called the Know Be Do frame work. This model is based on three primary questions of what kind of people do we want students to be and what should students be able to do. What assessments are needed? What should students know and what content knowledge is required? However Drake and Burns (2004) further delineated their conceptual model by detailing several key components. These components are intended to promote student engagement. Understanding by Design the methodology that connects backward design with different levels of learning is integrated throughout the frame work.

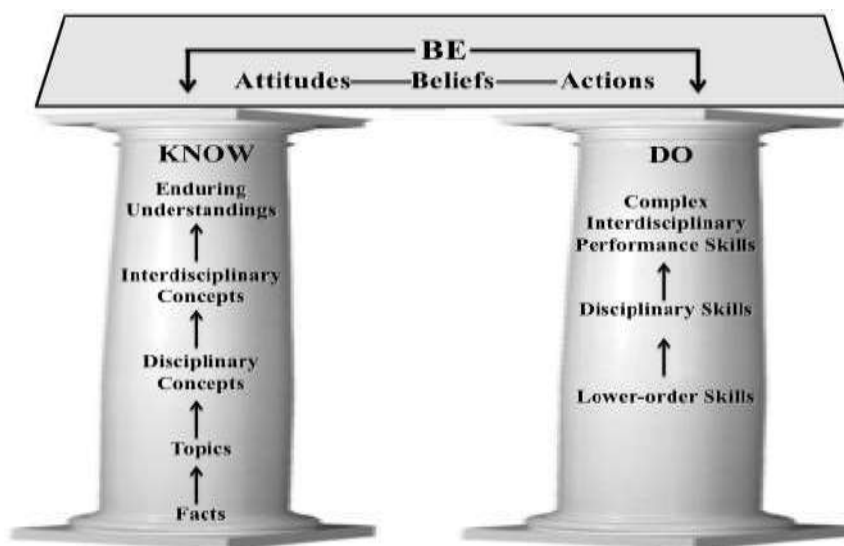


Figure 1: Drake and Burns Concept Model

The instructional frame work preparation is for the 21st century work place interdisciplinary education that improves the ability of students to think critically and improves their creativity collaboration ability to work in teams and communication skills.

PEDAGOGICAL STRATEGIES

One of the greatest advantages of interdisciplinary learning is that the activities and discussions combine and overlap different subject's approaches to the same theme of materials and opens the door for using different teaching techniques that appeal to various student intelligences (Jones, 2009). Two teaching techniques or strategies that appeal to various intelligences and present a structure conducive to interdisciplinary education are team based and inquiry based learning. These strategies foster every skill and both utilize group learning. Some interdisciplinary scholars debate whether the interdisciplinary technique of team teaching is the best approach for student progress in the classroom. But in many cases instructors do not realize common concerns (DeZure, 2010). Team taught courses often fail to achieve their objectives precisely because the individual members of the instructional team never really begin to understand their common concerns in a fashion that may be properly called interdisciplinary (Richards, 1996). Team teaching can also be associated with problems such as lack of sufficient time for collaborative work lack of training in group dynamics overlapping roles in areas and status conflicts of inadequate funding (Haynes, 2002). Although it has disadvantages for interdisciplinary team teaching which still remains popular instructional strategy.

TEAM BASED LEARNING

Team based learning is a form of active learning that is rooted in collaborative learning. It utilizes very specific instructional strategies including intentional selection and permanence of student groups of readiness assurance process and an empowering procedure for students to challenges determined by the instructor and peer evaluation Spelt, *et al.*, 2009. The activities based on real world problems scenarios or cases are constructed around the same problem students make a specific choice in terms of solutions and each team reports their choice simultaneously (Michaelsen, *et al.*, 2004).

INQUIRY BASED LEARNING

Another form of active learning is inquiry based learning which is a student centered and instructor guided instructional approach that engages students in investigating real world questions that they choose within a broad thematic frame work. Inquiry based instruction complements traditional instruction by providing a vehicle for extending and applying the learning of students in a way that connects with their interests within a broader thematic frame work (Yang, 2009). Students acquire and analyze information develop and support propositions provide solutions and design technology and art of products that demonstrate their thinking and make their learning visible. Inquiry based learning engages students in the learning process and changes the traditional role of instructor from lecturer to learning facilitator and model (Luneburg, 2011). Inquiry based learning is

predicated on building knowledge as opposed to passive learning which follows the more traditional instructional model that is based on primarily lecture. Constructivism constitutes the foundation of Inquiry based learning as it fosters the development of thinking skills and collaboration through the use of questions scenarios or problems with authentic forms of assessment. Problem based learning students are presented a problem with a problem only one solution but many methods for determining that solution and project based learning in students are presented with a problem but there are many possible solutions of two types of inquiry based learning.

CURRICULAR IMPLICATIONS

In a report of a study conducted by inter professional education collaborative an expert panel identified four cores competencies of professional practice for instructors who utilize interdisciplinary pedagogical approaches. These competencies were grouped into four domains including value ethics roles responsibilities communication and collaboration (Chettiparamb, 2007). They are integrated into a frame work of team work and collaboration among instructors that creates an awareness of each participating members' as roles and responsibilities. As with excellence in any field for instructors to excel at interdisciplinary education there must be the desire to do so. Desire represents the foundation for all effective instruction whether it pertains to interdisciplinary education or not. Beyond desire instructors should challenge students by presenting them with questions addressing skills and concepts slightly above their existing level of competence. When students reach a new level an entirely new set of challenges should be presented and once again slightly above their existing level of competence. This scaffolding strategy helps to keep students from becoming bored and provides them with the support they need to build their confidence. In addition instructors should have a positive attitude toward what they are doing (Toynton, 2005). Involvement in decision making is the best way to ensure positive attitudes. This involvement provides them with solutions to problems they may experience. Students are very perceptive and no matter how instructors try to mask it if they do not approach pedagogy with genuine desire and a positive attitude students will pick up on it and become skeptical of the learning process (Csikszentmihalyi, 1991). They include instructors who respect students because each person's ideas and opinions are valued which makes students feel safe to express their feelings and learn to respect and listen to others. It creates a sense of community and belonging in the class room through mutual respect by developing a supportive collaborative environment which is warming accessible enthusiastic and caring that possesses good listening skills. They never mind taking time out of their busy schedules for anyone who needs them and set high expectation for all students through realization (Nikitina, 2006). Students perform their expectations learning and willing to share what he has learned with colleagues. The skilled leaders who focus on shared decision making and team work as well as on community building can shift gears by constantly checking

for understanding and delivering instruction in new ways to make sure every student understands and collaborate with on the basis of sign and weakness but as a way to learn from fellow professionals and to maintain professionalism in all areas from personal appearance to organizational skills and preparedness for each day (Hothem, 2013). Additionally instructors participating in interdisciplinary education should have excellent communication skills and high levels of creativity. They should believe in team teaching and active learning which have confidence in their abilities and not be afraid to take a risk. Instructors who do not possess all of the competencies described in this document based on natural ability should feel comfort by the fact that these behaviors can be learned through professional development and life experiences (Rogers *et al.*, 1997).

The advantages of interdisciplinary learning are similar to those of other high quality and effective learning and teaching situations.

1. Learners are motivated and involved and they demonstrate an inquisitive attitude.
2. Learners develop confidence in facing challenges in both intellectual and practical.
3. Learning is connected and directly related to real life experiences.
4. Learners work individually and collaboratively.

In addition there are particular benefits of interdisciplinary learning. It allows more in depth exploration of topics issues and problems within and across subject areas and disciplines. It enables the understanding of different perspectives across subject areas and disciplines. It makes learners want to understand the different curricular areas in greater depth. It promotes critical thinking by supporting learners to grasp main ideas and consider different ways of working across subjects and disciplines. It compares and contrasts what is learned in different subjects and disciplines and identify the appropriate knowledge and skills needed to investigate a particular issue or problem (Qaisur, 2021). This bring together information and ideas from different subjects and disciplines and consider alternative ways of doing things or alternative solutions to predict outcomes and explain all of these practices critical literacy skills in context. It supports the development of skills for learning life and work. The above characteristics of interdisciplinary learning can support individual learners in integrating and using what they learn in different subject areas and disciplines and they also contribute to the development of high order thinking skills.

PLANNING AND LEARNING

The planning of interdisciplinary learning should provide a clear focus for learning and explore relevant connections across learning. Interdisciplinary learning often requires collaborative planning which may involve in classes groups or departments for capitalizing on the contexts and connections which enhance learning within curriculum areas and subjects and the input and ideas of children and young people for working with partners. The starting point when planning for interdisciplinary learning will be the

experiences and outcomes (Qaisur, 2021). However there are occasions when planning might begin with a particular context community or national event. The connections across learning and the relevant experiences and outcomes should be clearly identified. Planning should reflect the principles of curriculum for excellence to build on prior learning experiences and contexts to take into account progression and coherence to relate the planned learning in the experiences and outcomes. To identify learning intentions and learning experiences success criteria and the evidence of learning required as part of the assessment process to make the connections across different subject areas and disciplines explicitly and frequently to ensure that tasks are suitably challenging. This ensure that a suitable range of learning and teaching approaches are identified in space and opportunity to respond to children and young peoples' learning and their proposals for further learning. Assessment is an integral part of the planning process (Qaisur, 2021). Through planning the learning teaching and assessment together and ensuring that there are opportunities to gather a wide range of evidence of learning and learners can reflect on what has been achieved and agree next steps in learning and progression. This evidence can include examples of what the learners say write or do. Judgments should be supported by criteria for success which have been agreed with the learners so that they can actively contribute to the assessment process through self and peer assessment and are clear about what they are learning and what they need to do to be successful. Record of achievements should be manageable and include how much and how well the learner has met the identified experiences and outcomes as well as next steps in learning. The students engaged in interdisciplinary programs are more likely to acquire integrated perspectives and solution focused strategies rather than content specific knowledge derived from a single discipline (Qaisur, 2021). Proponents of the interdisciplinary approach contend that integrated curricula may help students to cope with increasingly complex and multifaceted work environments and may aid in developing the problem-solving skills and complex perspectives most needed by modern society.

DISCUSSION

Though interdisciplinary study may not equally serve all educational purposes, the intention of promoting complex thinking skills may be facilitated when curricula balance a focus on thinking process with a focus on learning specific content (Baxter Magolda, 1992). The institutions should recognize with anybody all-purpose pedagogy for interdisciplinary as they must articulate clearly their own goals and develop strategy accordingly to the potential for interdisciplinary education to add value to an institution and its outputs should be articulated clearly to staff but also to students parents employers and other stakeholders (Augsburg and Henry, 2009). The curriculum enhancement integrative learning and interdisciplinary learning and teaching represent different goals and require staff and students to develop different sets of well aligned competences in learning and teaching. If institutions are to develop effective

interdisciplinary learning and teaching this requires a whole institution approach in order to overcome to the many academic and administrative barriers that exist (Borrego and Newswander, 2010; Liebert, 2013). Some of these barriers may be perceived rather than real but it will require a concerted process of institutional change to overcome both the misperceptions and the realities not all institutions nor will indeed every part of each individual institution embrace interdisciplinary as this is reasonable in a healthy and diverse higher education system. However for those institutions seeking excellence in interdisciplinary education advocacy facilitation celebration and reward will be in promotion and other professional assessments recognition must be clearly available for interdisciplinary activity relevant to education such as teaching mentoring and development of new courses and related research (Burgett, *et al.*, 2011). The development of a coherent interdisciplinary course takes time if it is not rely on students to do the integration and this needs to be recognized for models of work load allocation for some universities this will require considerable culture change if staff are to be adequately trained supported and rewarded (Van der Waltdt, 2014). Skills development should be facilitated in academics taking on the challenge of effective interdisciplinary teaching (Heckhausen, 1972). This training might take various forms whether in house or external short courses or expert in master classes. The various other forms of support may be required in ranging from institutional advocacy to seed for funding for course development to administrative matters such as scheduling and credit-sharing across departments (Lattuca, 2002). Pioneering academics should be facilitated to share their own learning about good practices within their own institutions and across the sector. Proponents of interdisciplinary education feel it mirrors real world events because such events are not typically solitary rather they contain multiple interrelated issues that should be addressed simultaneously to arrive at solution. Interdisciplinary teaching promotes real world learning not isolated educational experiences (Woods, 2006). As such the knowledge base for the treatment of complex problems should be expanded so that it will match the entire aspects of the issues at hand (Pregernig, 2006). To solve problems such as global warming natural resource management or poverty alleviation many disciplines are needed with inputs that should preferably be balanced and integrated (Buanes and Jentoft, 2007). Involvement in the development of an interdisciplinary model by instructors and students is crucial to reduce resistance and help to realize the full potential of the strategy. As learners attain mastery in interdisciplinary studies they use interpretive tools to combine and integrate information into a complex interdisciplinary knowledge structure focused on the program's theme. This knowledge structure reflects many central facets of the program and its integrated theories essential concepts effective modes of inquiry and primary paradigms. Interdisciplinary studies facilitate higher order cognitive processing by motivating students to engage in deep learning. When students take a deep approach to learning they seek meanings reflects on what

has been learned and internalizes the knowledge by creating personal understanding among learners.

CONCLUSION

Implementing interdisciplinary education requires the command of an integrated set of instructor competencies. The inclusion of interdisciplinary pedagogical strategies requires a substantial commitment to professional development and support by both instructors and administrators. This includes training sessions aimed at supporting pedagogical approaches such as team-based learning and inquiry based learning in addressing topics such as student and professorial team work curriculum integration authentic assessment reflective questioning creating application activities and using real world scenarios in development of student learning outcomes. Interdisciplinary education promotes focus on big ideas and thinking beyond the constraints of a single content area through the acquisition of critical thinking creativity collaboration and communication skills. As a result it may be best suited to prepare students for real world challenges as today's problems are not contained within discrete skills and concepts but across a broad spectrum of skills and concepts of best addressed through integrated competencies.

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A PEEP INTO THE BRIEF HISTORY OF THE BACKWARD CLASSES: A QUALITATIVE ANALYSIS

Babita Barman

Ex-student, Department of Education, University of Gour Banga
Mokdumpur, Malda, W.B.32103

Ph. No.9679221473, E-mail: babitabarman81@gmail.com

Dr. Pradip Debnath

Assistant professor, Department of Education University of Gour Banga
E-mail-ugbpdn@gmail.com

ABSTRACT

Backwardness is the most important issue in Indian context. A big chunk of Indian population belongs to the underprivileged section of the society who being deprived by the upper classes in the society since ancient time when the society was led by the Brahmanas and priestly classes. They were treated as untouchables and economically depended upon agriculture, and they had no right to acquaint themselves with education. In the present time, the government and some non-government agencies are trying to bring changes in right and responsibility and the government appointed many committees and commissions for the upliftment of backward classes. After independence Indian constitution has provided special provisions for the backward classes but yet any remarkable changes did not occur. Even so in the 21st century, backward people remain backward and now they are dominated by the political leaders or influential people of the society. There the question arises why the backward people are backward? What are the causes behind their backwardness? The present paper seeks to get answers to such questions.

Key Words: Backward classes, scheduled castes, scheduled tribes, present status, underprivileged

Introduction

Every human is very important as a source of development. Nobody is born with backwardness but our system makes them backward. Backwardness is not today's problem; it has come out from the ancient time when some priestly classes and Brahmanas were playing the leading roles in the society and all the other people in the society were deprived by them; but things did not change in the Medieval time. During the British period some great men like Raja Rammohan Roy, Vivekananda, Derozio, Iswar Chandra Vidyasagar, Mahatma Gandhi brought revolutionary changes in the then existing system because they were concerned about the situation which was not good for the

nation. After independence, the Indian government took the responsibility to bring them back in the main stream and the Indian constitution provides special provisions for the backward classes. But till now, after 74 years of independence all of them remain backward as they do not know their right and cannot acquaint themselves with the existing system.

Backward Classes

The term 'backward classes' refers to those people who share some common difficulties of living or having same deficiencies in a common geographical area and they have some common characteristics --- lower caste, illiteracy, low status and poverty. A man is identified as backward when he does not live a life in a normal way or does not have sufficient money. The Indian government defines backward classes as SC, ST, OBC, etc. according to the annual income.

Scheduled Castes

First group of the backward classes i.e. Scheduled Castes belongs to the 'sudra varna' and practice untouchability; they follow hereditary profession as daily laborers, agriculture. In Indian population they cover 17% of total population.

Scheduled Tribes

Scheduled Tribes is the next group of the backward classes identified as having primitive culture, geographical isolation and landlessness. They are also known as 'Adivasi', live a life in a different way as animal hunters and live in jungles. They cover 8% of the total population.

Other Backward Classes

The word OBC is used by the Indian Government after the Mandal Commission report 1980 to identify those people who are socially and economically disadvantaged but not categorically identified as SC, ST. According to the Mandal Commission report, these people are cover 52% of the total population.

Before Independence

Backward classes are noticed since ancient time when the caste system had been started; but they were not classified as backward; then four caste systems existed in the society-- Brahmanas, Kshatriyas, Vaishya and Shudras. Brahmanas were at the top of the caste pyramid and the Brahmanas and some princely classes basically belonging to the Kshatriyas led the main role in the society. And the last two classes-- Vaishya and Shudras were at the bottom of the same caste pyramid; and the Shudras were also known as untouchables. In the same time the lower caste people were used by the upper classes and they had no opportunity to acquaint themselves with education and choose other professions available in the society.

In the medieval and British time other two dominated groups of people-- Muslim kingdom and British kingdom joint. In that time the British government and some princely states in

India used the non-Brahmans people for getting more support for themselves for extending their empire.

After Independence

After independence the Government of India recommended many committees and commissions to investigate and check the living conditions of backward class people. The Indian Constitution provides some special provisions for the educational and economic upliftment spread through different Articles like the following-----

Article 15 prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.

Article 16 equality of opportunities in matters of public employment.

Article 17 prohibition of untouchability.

Article 21(A) free and compulsory education 6 to 14 years of age (45).

Article 46 special care for educational and economic interest of the backward class.

Article 340 appointment of a commission for investigate the conditions of backward class.

Besides the constitutional provisions, the Government of India appointed a commission on 29th January 1953 known as Kaka Kalelkar commission under the article 340 to investigate and improve living conditions of backward class people. The commission submitted its report in 1955 but the Government of India rejected the commission's report and appointed the second commission Mandal Commission in 1979-1980 to investigate and recommend the criteria of living conditions. On the basis of Mandal Commission report in 1980, the government of India took the historic decision on (i) reserve 27% quota for backward class and (ii) used the term OBC.

After the Mandal Commission the Govt. of India established a separate ministry in 1985-- Minister of Home Affairs to attend the matters related to the backward classes -- SCs, STs, OBCs, it was replaced in 1998 by the Ministry of Social Justice and Empowerment.

Present status

In the present time After 74 years of independence we have not brought back them into the main stream. Many committees and commissions come into existence and recommended time to time and the government always provided some benefits for the upliftment of backward classes. For instance, on the basis of Planning Commission estimation, poverty line was provided on the basis of annual income-- BPL (Below Poverty Line) and APL (Above Poverty Line) and categorically divided as SCs, STs, OBCs; but till now they are no brought back in the main stream. Even it's so unfortunate that they are not able to fulfill the reservation seats in the field of admission and job placement. Here the question arises, why they don't bring back in the main stream? Why the government fails again and again?

Causes of the backwardness

Here there are more than one reason for constantly holding backwardness--- (i) lack of awareness about government facilities (ii) backwardness become a hereditary phenomenon like one child getting SC category form his predecessor, no matter annual income or present economic conditions (iii) when it's responsibility going to the crooked leader who fill the quota for his own profit (iv) improper distribution of government facilities (v) lack of government representative facilities provided by the government, which depends on the political leader involve political power.

Conclusion

Now backwardness is not only a problem, it has become an opportunity for getting some facilities from the government. All the people are so excited to get these opportunities. But it is very unfortunate, till now there are some people who have no shelter, no food but they have not any category; the authors talk about those people who live in footpath or open field. During this study the authors experienced that there is lack of awareness; and other important factor is lack of government representation by the backward. Now-a-days we are more independent and aware of what is going on in the society, because of the effort of the government and some non-government agencies. Despite that the problem persists, and the gap between the rich and the poor is widening day by day. Actually, financial assistance should be provided by the government on the basis of economic conditions only, and not by judging the caste category.

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STUDY OF CONCEPT ATTAINMENT MODEL AS TEACHING AND LEARNING STRATEGY AMONG STUDENTS

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University, Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

Our world is filled with an infinite number of objects events and ideas yet we manage to talk about them all with a few thousand words. What helps to make this possible is the process of concept attainment and development. Concept attainment is the process of defining concepts by determining the attributes that are absolutely essential to the meaning and disregarding those that are not. It also means learning to discriminate between what is and what is not an example of the concept. Teaching concept attainment is very similar to the natural process of concept learning. Concepts are our tools for organizing information. The concept attainment model is designed to teach concepts and help students to become more efficient at learning and creating concepts. It is effective in defining comprehending applying and using concepts. The concept attainment model is based on the research efforts of Jerome Bruner. This model is designed to lead students to a concept by asking them to compare and contrast examples that contain the characteristics or attributes of the concepts with examples that do not contain these attributes. It is based on the assumption that one of the best ways to learn a concept is by observing examples of it. Instructional strategies for successful teaching concepts are found throughout the instructional design literature. These strategies primarily consist of presenting learners with definitions examples and non-examples. Consequently test items referring to encountered examples may have less value in assisting evaluators in discerning whether or not a learner has attained of concepts. There appears to be evidence supporting the notion that examples are not sufficient discriminators for judging a learner's level of concept attainment. Concept attainment model as an approach to teaching is concerned with the Concept formation and concept attainment. The study aimed at finding the effectiveness of concept attainment model of teaching on learners. Concept attainment is a process of finding out defining attributes of a given category. Concept attainment model helps to clarify ideas. It engages students in formulating a concept through the use of

examples. Concept attainment model is well suited to class room use. The study was conducted on students by using experimental method. The sample of the study included 80 students. Purposive sampling technique was used to collect data. Intelligence test was used for selection of experimental and control groups. The students were divided into two groups on the basis of intelligence score. The experimental group was taught through concept attainment model and control group was taught by using traditional method. After completion of teaching achievement test self-developed was administered. The result showed that students exposed to concept attainment model possessed higher marks through teaching and learning process.

Key words: Concept Attainment Model, Teaching, Learning Strategy,

INTRODUCTION

The concept attainment model is an instructional strategy founded on the works of Jerome Bruner. Built on the principle of concept formation the concept attainment model promotes student learning through a process of structured inquiry. The model helps students to understand and learn concepts by identifying attributes or key features through a process of analysis comparison and contrasting of examples. Concept map is a visual learning means that corresponds to thinking process allowing the students to organize ideas read write and think better. It also provides a skill to organize knowledge into a progressively more multifaceted conceptual frame work. Concept mapping supports the idea of building better frame work of knowledge by enhancing the relationship building between concept and ideas. It serves as a pedagogical means to encourage the learner to envisage inter relationships to identify the mis conceptions and to build bridges between two concepts. It represented a theoretical argument stating that the hierarchical nature of a concept map is appropriate for organizing and representing static relationships between concepts and stimulates dynamic thinking. Concept mapping is effective in bridging the gap for students between critical ideas of information as an object and as sense of making corroborated the usefulness of concept mapping to enhance the bridge building in class to improve achievement. As students gain more sophisticated sets of knowledge and skills it is expected that they apply their knowledge and skills to more difficult situations. Concept mapping provides the basis to develop student's structural knowledge in a domain that promotes development of higher order thinking skills necessary for difficult situations. In multidimensional environment of class room where students learn in different ways and with different approaches it is important that these approaches must be helpful in students learning. Meaningful learning is a generative process of representing and manipulating concrete things and mental representations rather than storage and retrieval of information. By their graphical representation concept mapping helps in integration of new knowledge with the existing

knowledge that make learning meaningful. Concept maps manifest a person's knowledge structure and can help to identify conceptual misconceptions related to the knowledge structure of the person by this evaluation of knowledge and consequent recognition of misconceptions consents for needed for remediation. It is suggested that most new learning occurs through derivative of deductive way in deriving subordinated concepts from super-ordinated concept and correlative ones of learning of new concepts. It also stated that cognitive structure is organized hierarchically by more inclusive concepts. For meaningful learning three conditions is necessary. The material to be learned must be conceptually clear and presented with language and examples relatable to the learner's prior knowledge. The learner must possess relevant prior knowledge and the learner must choose to learn meaningfully. Students think that their role in learning is only to take as much information as possible from the teacher or text book and store it by rote memorization. In the present scenario the goal of learning is only passing the examination and there is no or little thought to learning with understanding showing that when teacher narrate the content and student may adapt rote learning by memorize the content. Meaningful learning will only be possible when the new content will be based on existing knowledge in conceptual structure of students. Concept map is a better way to represent conceptual knowledge and understanding.

PRACTICING LEARNING STRATEGY

Divide the class into small groups or pairs and provide them with concept attainment work sheets. A sample is included at the end. Instruct students to find the essential attributes of a concept identify the concept and define it. An additional sheet with random examples can be included which students can be instructed to categorize. At the end of the session each group can present and discuss their findings. Teachers can combine the concept attainment model with the method by placing different concept worksheets at different work stations. Each group starts from one work station and eventually visits each work station identifying attributes and records them. At the end of the groups return to their original work stations and using the information recorded and try to identify and define their concepts. Each group can then present their concept to the class teaching using the concept attainment model. The Concept Attainment model serves as a powerful teaching and learning strategy. For teachers it is advantageous to use the model to introduce and teach new concepts through an active student centre and inquiry based approach. Simultaneously the model as a learning strategy helps students to link past knowledge with new information and critically analyze compare and categorize information. It examine and understand a concept from multiple perspectives strengthening understanding and developing of the concept.

USED AS ADVANCE ORGANIZER CONCEPT

Advance organizers are concept maps given to students prior to the material to be learned to provide a stable cognitive structure. It directs the learner to understand what is

important in the material to be given and helps to relate among ideas that will be presented and reminding the relevant information that is already present in the memory of students. The concept map advance organizer can be presented before an instructional unit. It can be used as a guide for a lecture that is presented in a class. It can be presented with the help of multimedia and related with the instructional material simultaneously. It was found that concept mapping used as advance organizer can significantly improve student's achievement. This can provide better direction to learn concept than any other strategy.

CONCEPT ATTAINMENT MODEL AS TEACHING AMONG STUDENTS

Concept attainment is an instructional strategy that uses a structured inquiry process. Concept attainment model has been developed. This is based on research work of Bruner and his associates. They investigated how different variables affected the concept of learning process. The concept attainment strategy is based on the assumption that one of the best ways to learn a concept is by seeing examples of it because examples are central to concept attainment activity. According to concept attainment it occurs by making decision about what attributes belong to which categories. It helps to teach students about the nature of concepts and attaining specific concepts. It enables students to understand the relationship among examples attributes concepts and thinking patterns that are being used to attain the concept. It enables students to understand how objects are distinguished by attributes and placed in category. The concept attainment model enriches and clarifies thinking on previously acquired concepts. With the help of this strategy learners become aware of their own thinking process and strategies. Students become able to formulate and test the hypotheses related to attributes or concepts and the type of teaching practices impact of positive development on student's achievement confidence and engagement. They focus on teaching on the learner and encourage teachers to introduce content in ways that facilitate and enhanced cognition. Concept attainment is an instructional strategy that uses a structured inquiry process. In concept attainment students find out the attributes of a group or category that has already been formed by the teacher. Students then separate the examples into two groups. Concept attainment is the search for and identification of attributes that can be used to distinguish examples of a given group or category from non-examples. Concept attainment requires a student to figure out the attributes of a category that is already formed in another person's teacher mind by comparing and contrasting examples that contain the characteristics of attributes of the concept with examples that do not contain these ones.

The learning of concepts involves successfully identifying these common characteristics that defines them as a category. Most of the times concepts are explained at the most with suitable examples and students are made to remember the concept by rote. Students never get the idea of what attributes formed a particular concept and such clarity remains alien to them. Students never get an opportunity to form their own

concepts based on certain attributes of their own. The Concept Attainment Model (CAM) tries to address this issue and provides opportunity for a child to explore the attributes of a concept. It engages students and encourages them to form the concept by using illustrations word cards or specimens called examples. Also this model ensures that teacher starts from the student's previous knowledge. In this approach students go beyond merely associating a key term with a definition. Hence the concept is learned more thoroughly and retention is improved. This approach can be used effectively for teaching as the study involves of many concepts. Concept maps can help a student to focus on how to organize knowledge and its structure within a particular domain and fluency and efficiency by which knowledge can be used. To retain the information it is important to encode information into long term memory. It is only possible when learner links new information with the existing information. Concept mapping helps in this process of linking information. Concept mapping as a learning strategy enhances comprehension memory and promotes meaningful learning. Concept mapping encourages meaningful learning by processing of the information effectively through dual coding by using both verbal and nonverbal i.e. graphic representation. It also increases possibility of information that shows concept mapping is effective for teaching subjects as effective strategy for teaching and learning ones. In this way brain storming can be used throughout the teaching when students begin a new phase or when individual students groups feel stuck and in need of new ideas. It is a good tool for group facilitators who can use it to focus the group to generate new ideas. There are many assessment opportunities in brainstorming session for students as well as teachers. The most striking and important significance is that there is a possibilities of easy and facilitating shift over of creative thinking and ability in teaching if the techniques like brain storming are applied successfully. The techniques have policy implication in yielding an insight into the negative effect brought about by the conventional and traditional teacher training strategies. If teachers are trained in developing creative ability to integrate teaching skills they have significant influence on productivity of children in terms of originality fluency flexibility and other creative factors.

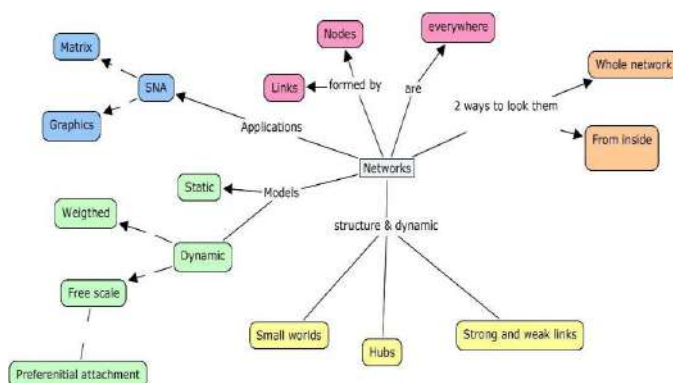


Figure 1: Showing network of concept attainment model

CONCEPT MAPS

The use of concept maps as a teaching strategy was first developed by J. D. Novak in the early (1960). It is derived from Ausubel's learning theory which places central emphasis on the influence of student's prior knowledge on subsequent meaningful learning. The fundamental idea in cognitive psychology is that learning takes place by the assimilation of new concepts and pre- positions into existing concept and pre-positional frame works held by the learner. Concept mapping is a strategy based on meta-learning. Concepts maps are diagrammatic representations which show meaningful relationships between concepts in the form of propositions which are linked together by words circles and cross links. Concepts are arranged hierarchically with the super ordinate concepts at the top of the map and sub ordinate at the bottom which are less inclusive than higher ones. Cross links are used to connect different segments of the concepts hierarchy which indicate syntheses of related concepts as new interpretation of old ideas and some degree of creative thinking. The basic of concept mapping is that learners seek to relate new concept with the concept that already exists with the help of preposition in their cognitive structure. It is knowledge representation and graphical strategy comprised of boxes connected with labeled arcs. It includes nodes or linking lines unidirectional arrow which connect two concepts and linking phrases describe relationship between concepts. Linking line with linking phrases is called labeled lines. Two nodes connected with labeled lines are called preposition. Concept arrangement and linking line orientation determine the structure of a map hierarchical or non-hierarchical illustrated a structure of a concept map.

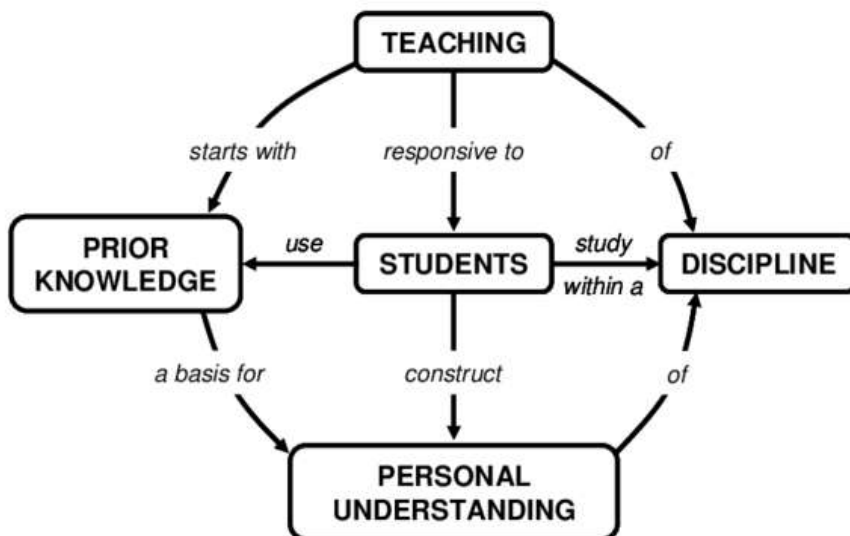


Figure 2: Showing cyclic concept map as teaching and learning among students

ORIGIN AND STATEMENT OF THE PROBLEM

All teachers have their own beliefs and temperament about teaching learning and learners. Some teachers believe that their responsibility is to teach only the material and the student's responsibility is to learn what is taught. What student achieves is totally his responsibility. It described instruction as being unfriendly in three specific areas student-teacher interactions physical environment and content presentation. Content presentation is related to various teaching strategies. It is an important vehicle for driving student's cognitive development in a wide range of aspects. Thus teachers must nurture students by providing them with a strategy designed to help them to process information effectively. Students must learn how scientific thinking and use scientific information to make decisions. To prepare students to live and work in tomorrow's world teachers must try to develop scientific thinking by decreasing their emphasis on teaching as a sequence of lectures and reading assignments. Motivation for this research comes from the need to improve the practice of teaching.

OBJECTIVES OF THE STUDY

1. To study the concept attainment model as teaching and learning strategy among students.
2. To study the concept attainment model as teaching among students.
3. To study the concept map as learning strategy among students.

HYPOTHESES

1. To examine the concept attainment model as teaching and learning strategy among students.
2. To examine the concept attainment model as teaching among students.
3. To examine the concept map as learning strategy among students.
4. To examine that no difference was seen in study of concept attainment model as teaching and learning strategy among students.

TYPES OF CONCEPT

During the flow of the lesson the teacher needs to be supportive of the students hypotheses emphasizing that they are hypothetical in nature and are meant for creating a dialogue in which the major content is balancing of one person's hypothesis against another's. The teacher also supplies additional examples if students are not familiar to the presented examples. In the later phases of the model the teacher must turn the students' attention toward analysis of their concepts and their thinking strategies again being very supportive. The teacher should encourage analyses of the merits of various strategies rather than attempt to seek the one best strategy for all people in all situations. The teacher selects the concept and organizes the material into positive and negative examples. The teacher acts as a recorder in keeping track of hypothesis as they are

mentioned of the attributes. In the initial uses of concept attainment it is helpful to be very structured. It is important to identify the concept because presentation of example is based on sort of concept. According to Bruner there are three types of concepts:

- (1) **Conjunctive concepts:** In this type of concept several attributes are jointly present.
- (2) **Disjunctive concepts:** In this type of concept attributes and attribute value can be used at place of one another. There require the presence of some attributes and absence of others. These concepts can be defined as either or characteristics.
- (3) **Relational concepts:** In this type of concept several attributes should be present but they must be in a particular type of relationship to one another.

Becker, Engelmann and Thomas (1971) classified concepts in following types:

- (1) Concepts about objects.
- (2) Concepts about object properties.
- (3) Concepts about object relationships in space.
- (4) Concepts about events in time and space.
- (5) Concepts about relationships among events in time and space i.e. cause and effect.

Concepts about objects and properties these are simplest type of concepts. Properties of these concepts can be learned by direct observation of examples. Concepts about object relationships in space events in time and space and relationships among cause and effect are more abstract and critical ones it can be acquire by other concept that are already known.

DISCUSSION

Concept attainment model helps to clarify ideas and to introduce aspects of content. It engages students in formulating a concept through the use of examples. All thinking abilities can be challenged throughout the activity with experience. They also provide practice in inductive reasoning and opportunity for altering and improving student's concept building strategies and nurture an awareness of alternative perspectives and sensitivity to logical reasoning in communication and tolerance of ambiguity. It also helps the teachers to understand the effectiveness and necessity for the application of model approach in teaching. Concept attainment model is very useful in teaching the concepts through the inductive reasoning. The model works wonders in class room for language learner as they attain the linguistic structure of every language. The concepts formed in minds of the learners can be retained by them for a long time. Concept attainment model helps the students to work together in co-operative group to present information. Students may become open minded to other people's thoughts and ideas through their group work. Students easily learn how to examine a concept from a number of perspectives. The teaching process is the focal point of entire educational process. Learning appears before us as a result of teaching. These days all the research efforts of

educationists are absorbed in making the teaching and learning process effective. The process of teaching learning aims at transmission of knowledge skills and formation of attitude values and behavior. The teacher's role is to encourage children to use cognitive process at the maximum by using the best teaching strategy. Every day a new teaching system appears. Each and every term in the field of education is being interpreted comprehensively so that the teaching can be defined scientifically. Various educationists have given their own definitions to interpret the term teaching and on the basis of these definitions the different models of teaching have been prepared. Models are prescriptive teaching strategies designed to accomplish particular teaching goals. Model is a way of thinking a way to talk and think about instruction in which certain facts may be organized classified and interpreted. The teacher learning process is the important variable that influences directly on achievement of the students. The effective teaching strategy helps the students to attain the educational objectives in a better way. Teaching is considered as the sharing of experiences between teacher and students in a teaching learning situation. A model of teaching is such a specific pattern of plan which can be used to shape curriculum to select instructional material to guide teacher's action and to help the learner to achieve the specific objectives. The objective of teaching is the optimum development of the learner. Teaching is to cause the pupil to learn and acquire the desired knowledge skills and desirable ways of living in the society. In modern age teaching is considered as science on the basis of which all the activities of teaching can be supervised and analyzed. It is the interaction between the teacher and the learner under the teacher's responsibility in order to bring about desired change in learner's behavior. Thus teaching is a process of helping the learner to acquire desired behavior. The most recent concept of teaching is to teach the child how to learn how to discover how to think and how to inquire. The emphasis is upon how to know rather than what to know. Concept attainment model is an approach to teaching concepts with the help of examples and non-examples which a teacher provides to the students. Concept attainment model emerged out of the study of thinking process in human beings. It is concerned with the concept formation and concept attainment. Concept formation is the process of sorting of given observation of phenomena into meaningful classes. Concept attainment is a process of finding out defining attributes of a given category. In concept formation the examples of a concept are categorized together and in concept attainment the negative and positive examples are differentiated. In concept attainment model students figure out the attributes of a group or category that has already been formed by the teacher to compare and contrast examples that contain those attributes. It was found that the utilization of learning ability with technological support was effective in influencing the students' performance. The study of this nature can aim to popularize the use of similar pedagogical practices at developing active learning of the students in addition to improve in achievement of the context. The study revealed that active learning ability with technological support can improve the students' performance hence it can be made

integral part of the curriculum in secondary level and teacher should encourage to employ there methods in class. The study stresses the need to take deliberate efforts for promoting and participation of the students. Hence the teacher must be oriented about the various means of fostering the thinking skills of students and apply them according to their context and purpose. The study revealed that students have enjoyed the classroom experiences and the strategies enabled them to be responsible in the process of learning. Therefore such process can be made use of successfully in the class room to promote healthy learning environment and pleasurable learning experiences to the children.

CONCLUSION

The concept attainment model has many advantages over traditional methods of teaching. It develops information processing skills in children. Students become better analytical thinkers their critical thinking sharpens as they have to describe their thinking and students also become more articulate in their descriptions of their thinking. If used judiciously this model can help children learn with joy with more clarity. Concept attainment model was found to be effective in influencing the achievement level of students. It helps to clarify ideas and to introduce aspects of content. Achievement level of the students taught through concept attainment model was found to be higher than the achievement level of students taught through the traditional method. The students of group were looking well motivated and ready to learn through the concept attainment model. The superiority of any educational process mainly depends upon the excellence of teaching process and teacher. Though teaching is considered as a science and a skill basically it is a transcendent art. The education is the process of facilitating learning or the acquisition of knowledge skills values beliefs and habits. The purpose of the education is not only to make the students learning but also to make them creative knowledgeable think of their own and to meet the work force.

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NATURAL RESOURCE EXPLOITING TRENDS OF COMMON PEOPLE: A SURVEY

Biswajit Das

Ex-student, Department of Education, UGB, Malda, West Bengal, India

ABSTRACT

Introduction

Environment is taken to mean all those which are physical, chemical, organic and non-organic components of the atmosphere, lithosphere and oceans. The environment is meant to almost everything around us. In addition to the overall sensory natural world, the current technological world created by humans, even its social and cultural issues is also meant. But unfortunately; this unprecedented progress in technology has accelerated the degradation of the environment in many cases. The use of highly harmful chemicals for more crops in the field of agriculture is one case. In addition to the levels of deadly poisonous toxic waste in the field of insecticides, the levels of toxic chemicals have been exposed to extreme danger today; we are not too keen to make heavy losses to compensate for the loss of our livelihood and to meet the unlimited needs.

The natural resources refers to all the living and non-living endowment of the earth, but traditional usage confines to that are useful to humans. For a long time, humankind believed that resources endowed by nature were unlimited as was the exploitation of natural resources by human activities. Exploitation of natural resource is an essential condition of the human existence. Throughout history, humans have manipulated natural resources to produce the materials they needed to sustain growing human population.

Review of related literature

It is necessary to study the related literature before finalizing the plan of survey. The surveyor has studied the related literature to become familiar with survey areas related to the survey work. The purpose of review of related literature is allowing the surveyor to acquaint people with current knowledge in the field of environment.

Billon, Philippe. Le. (2001) has found throughout the 1990s, many armed groups have relied on revenues from natural resources such as oil, timber, or gems to substitute for dwindling Cold War sponsorship, and resources not only financed, but in some cases motivated conflicts, and shaped strategies of power based on the commercialisation of armed conflict and the territorialisation of sovereignty around valuable resource areas and trading networks.

Gibson, Clark. C. (1999) found the poor conservation outcomes that followed decades of intrusive resource management strategies and planned development have forced policy makers and scholars to reconsider the role of community in resource use and

conservation. In a break from previous work on development which considered communities a hindrance to progressive social change, current writings champion the role of community in bringing about decentralization, meaningful participation, and conservation.

Martin, S. (1994) provides some differential game models of natural resource exploitation when environmental pollution takes place. The “classical” approach to determine optimal harvest rates of renewable resources utilizes Optimal Control models, i.e. there is either a monopolistic market structure or there is pure competition. In case of pollution, however, all agents can be put together, forming the groups of the resource harvesters on one side and of polluters on the other side. So differential games can be used to analyse environmental problems.

Pandya, Amit (2009) has conducted exploitation of natural resources in the Middle East and Southeast Asian countries is forest water and mineral resources for which the unrest and conflicts in the development of the area are observed, on the other hand, in the Middle East South-East Asia-Southeast Asia and East Africa Policy on emerging international security challenge Specialist challenge project for information and analysis is dedicated.

Thorsten, Janus (2012) studies two armed groups fighting to control a resource and possibly a second prize. Labor is used in the agricultural, resource extraction and conflict sectors, and the groups also buy a capital input to conflict subject to the constraint that capital spending cannot exceed resource earnings. I find that exogenous shocks can have different effects on conflict intensity depending on whether the credit constraint binds

Objectives of the study

There is purpose behind any of our work, because if the purpose is not to make progress as such, then the purpose or effectiveness of the work cannot be seen without any purpose. So, we have specific objectives to accomplish every task properly, as well as environmental impacts related to the exploitation of natural resource –

- To provide a minimum awareness of the people's environment in that particular area.
- To provide public awareness of the natural environment and the resources.
- To provide knowledge about how to use the resources of the people through the work environment.
- To make different people aware of the environment to stimulate the feeling.
- To develop the concept of the balance of the environment
- To report to the people about pollution of various natural resources in the environment.

- To give general knowledge about the various resources in the environment so that people do not use excessively.

Emergence of the study

At present, human society has brought a great deal of civilization. As a result of this, the effective changes in our society can be seen in different areas. This change affects human societies as well as human environment. For which natural environment is widespread in many ways, as a healthy environment, such as accelerating our civilization, we also have some responsibilities that are environment friendly or to keep healthy, it can be said in large measure that regardless of the environmental conditions, day-to-day use of various components of the environment is being used more effectively. To make people aware of their proper knowledge, to make people aware of their resources and to conserve wealth for their future generations, as well as to make people aware of this, they can also create wealth for the future generations.

Exploitation of natural resources

Natural resources exploitation mining and processing have caused different types of environmental damages which include ecological disturbances, destruction of natural flora and fauna, pollution of air, water and land, instability of soil and rock masses, landscape degradation, desertification and global warming. Natural resources are so valuable, but in many cases they are wasted. According to the environment scientists, 50 percent of the huge amount of natural resources that people consume is wasted; in one place it is called exploitation of natural resources. The exploitation of natural resources is the use of natural resources for economic growth, sometimes with a negative connotation of accompanying environmental degradation.

Methodology of the study

A survey much follows any establishment method, because the quality of the survey based on the method which is follows. The surveyor collecting information about the people of the environment as follows are---

Area Specification: - The areas that I have selected for my work are Shiala, a village in Chingishpur area of 11th no GP of Dakshin Dinajpur district and another village Bangshidharpur in Falakata 2 no GP region of Alipurduar district. There are specific reasons behind selecting these two villages Alipurduar and Dakshin Dinajpur are one of the backward districts of North Bengal. A part from this, people from different communities live together in two areas of these two districts, I think collecting the information about the environment will be more important and accurate. Observe the environment very well, because different types of thoughts, mentality awareness, and different types of activities can be observed for those living in different nationalities. Through this, the environment related to different people of that village becomes clear.

Which will help me to accomplish this task in particular; it is possible to see the presence of both literature and illiterate.

Significance of the study

Here are some of the important aspects of the environment that are evident in this work of natural resources:

- The man gets an idea about the natural resources of ordinary citizens in the work.
- Through the work, people are aware of the proper use of natural resources and how they can be used to make it clear.
- Through the work, the public can easily get the necessary ideas about the exploitation of natural resources and knowledge related skill skills etc.
- The concept of conservation of natural resources can easily be provided through the work, helping the public to realize the needs of the resources.
- Through the work, the people give the ideas necessary for the future or for the future generation to secure wealth or assets, in order to help change the attitude of the person's wealth.
- One of the important significance of this work is to understand the awareness of the general public's various aspects of the environment and to monitor and monitor and to collect some information.

Action Plan to conduct the Study

In order to complete any work, it is best to plan properly. In order to complete this work related to the environment, the surveyor selected three dimensions or fixed the work based on those three dimensions. For the purpose of gathering information through the interview method, it was decided that for every work done or complete work can be done properly, there are three members in each of the ten titles, each of the 30 questions has been set, so that we have a total of 10. The surveyor decided to do the whole thing (10x3) divided into 30 questions by themselves.

Description of tool for Collecting Data

The method used to do this work - first the surveyor selected an environment topic and then selected three (3) dimensions based on that topic and decide from 10 to 10 in each dimension; so, 30 questions were selected from three (3) dimensions. Three dimensions are-

D1-Exploitation of Water, No of question---10

D2-Exploitation of Tree, No of question---10

D3-Exploitation of Electricity, No of question—10

Total No of question = 30

Then, to apply those questions to the public, the surveyor selected two Districts (Alipurduar & Dakshin Dinajpur) and two villages. He chose 200 families in two villages (100x2), his total sample was 200, those villages surveyed for a total of two weeks, and went to each family to present those questions before them and to try to see their

Environment, at first he introduced himself and immediately tried to summarize the entire contents of the Survey in front of them.

Description of the Sample

The area that the surveyor applied for the survey was mainly in the two areas of the rural areas which he selected as sample, two areas of 2 no Falakata GP in Alipurduar district and 11 no-chingishpur GP in Dakshin Dinajpur district. The total sample was 200 people. Since the area's two villages were very low the education rate. There were both male and female samples.

Description of Total Male Sample (out of 200)

Age	No of Sample	Occupation		Educational Qualification				Caste			
		Farmer	Others	Illiterate	Below VIII	Below X	Above H.S	Gen	SC	ST	OBC
15-30	22	8	14	3	8	5	6	9	5	6	2
31-45	40	35	5	7	19	10	4	14	6	10	5
46-60	28	23	5	5	8	12	3	9	5	6	8
Above 60	5	4	1	2	2	--	1	2	1	--	2
	T=95										

Description of Total Female Sample (out of 200)

Age	No Of Sample	Occupation		Educational Qualification				Caste			
		Farmer	Others	Illiterate	Below VIII	Below X	Above H.S	Gen	SC	ST	OBC
15-30	45	17	28	13	7	21	4	9	13	19	4
31-45	41	31	10	8	13	11	9	7	9	13	12
46-60	13	13	--	3	2	6	2	3	2	4	4
Above 60	6	6	--	1	4	--	1	1	3	2	--
	T=105										

Presentation and analysis of data

Analysis of Data and Interpretation

Interpretation of Index

Level of Scale	Value of Significant
51—60	High
41----50	Above Average
31----40	Average
21----30	Below Average
11----20	Low
0----10	Very Low

Analysis of Mean Deviation of Total Sample

Table -1

Total	Mean	Median	Mode
200	39.24	39	38.52

By analysing the above table, it has been found that, Here Total sample 200 and Mean value is **39.24**. Therefore, here significance value is Average. It's Means that Exploiting of natural resource about Knowledge, Awareness, Activity are **Average** of this areas people.

Analysis of Mean Deviation of Male Sample

Table-2

Male	Mean	Median	Mode
95	39.71	40.04	40.7

By analysing the above table, it has been found that, Here Male sample 95 and Mean value is **39.71**, that is little higher than total mean value.so, male people or sample has knowledge, awareness, activity of this matter, **Average**.

Analysis of Mean Deviation of Female Sample

Table-3

Female	Mean	Median	Mode
105	38.8	39.16	39.88

By analysing the above table, it has been found that, Here Female sample 105 and Mean value is **38.8**, that is little higher than total mean value.so, male people or sample has knowledge, awareness, activity of this matter, **Average**.

Analysis of t-test

Table-4

Gender	N	Mean	S.D	SED	t	df	NS/S
Male	95 (N1)	39.71	2.76	0.28	3.28	(N1+N2-2) =198	Significant
Female	105 (N2)	38.8	2.88				

By analysing the above table, it has been found that, Here 't' value is **3.28** and $df=198$, so 0.05 Level of Significant at Table value 1.97 and 0.01 Level of Significant at Table value 2.60. so that There is a lot more than table value. so therefore, the corresponding null hypotheses have been rejected.

Analysis of Correlation

Interpretation of Index

Correlation Scale	Significant
00--- ± 20	Negligible
± 20 --- ± 40	Low
± 40 --- ± 70	Moderate
± 70 --- ± 80	High
± 80 --- ± 1.00	Very High

Correlation between D1 and D2

Table-5

D1~D2	$r = -0.1374$
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Correlation between Exploiting of water (D1) and Exploitation of Tree (D2) is Negligible. ($r = -0.1374$).

Correlation between D2 and D3

Table-6

D2~D3	$r = -0.4518$
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Correlation between Exploiting of Tree (D2) and Exploiting of Electricity (D3) is Moderate ($r = -0.4518$).

Correlation between D1 and D3

Table-7

D1~D3	$r = -0.1409$
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Correlation between Exploiting of water (D1) and Exploiting of electricity (D3) is Negligible ($r = -0.1409$).

Conclusion of the Study

The surveyor started surveys of fifteen days 200 families in two villages, Chingishapur 11 no Gp (Dakshin Dinajpur District) and Falakata 2 no Gp (Alipurduar District), in view of this he can say that through the surveys, he saw the real picture that most of the village or most people There is little sign of illiteracy and the number of educated people is very low or not, there are people who are not aware of the different elements of the environment. They are noticed in the absence of indifference mentality about environmental pollution

and the preservation of different types of environments. It can be said that the idea about their environment is very significant. If the surveyor can give his ideas, knowledge and awareness about the environment through his survey, then he thinks that the purpose of this surveys will be fruitful.

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CONCEPT OF MAPS AS TOOL FOR TEACHING AND CLASS ROOM ASSESSMENT OF TEACHERS PERCEPTIONS

Dr. Qaisur Rahman

Department of Education, Vinoba Bhave University, Hazaribag-825301 Jharkhand, India
Email: qaisur.rahman@gmail.com

ABSTRACT

The generations of understanding and beliefs of the world differ greatly from that of the generations preceding them. If these children are to be given education it becomes essential to succeed in our technologically concentrated future which is global in nature and then a new system of education is required that is built on children's instinctive learning abilities and technological skill must replace our existing methods. Our education system is geared towards teaching and testing knowledge at every level as opposed to teaching skills. Teaching and learning are dynamic complements of the knowledge sharing at a time of increasingly rapid technological advancements. These days all countries aim to reach efficient education system. In the current scenario problems of education system can only be controlled by qualified people. So for the fruitful learning teaching approaches procedures practices and tools should transfer knowledge in a way that can be inspected from different dimensions enlightening a view in situations and depiction of new ideas creation. In this way it can be stated that one of the most important aspect of teaching and learning tool that promote meaningful learning is concept maps. The concept mapping as a tool has gained a lot of recognition and acknowledgement in science education both in the practice and in the literature as well. But how concept mapping is seen in the teaching profession is the aim of this research and how much beneficial and effective concept maps are in teaching learning process. Interviews were conducted from teachers. Results of the study involving 20 teachers of university revealed that nowadays concept map is an efficient teaching tool in the class rooms used by teacher and its effectiveness can be measured through prevailing learning environment increased student participation and understanding level of students. It also shows the advantages and some perceived difficulties associated with concept maps. The research was descriptive and focused on the understanding and experiences. Results of study led to the conclusion that at higher level the university teachers need to be aware of new and interesting teaching tools as

concept map which can leave positive effects on students learning and may be used frequently in the class rooms for providing better understanding.

Keywords: Concept Maps, Tool Teaching, Class Room Assessment, Teachers Perceptions.

INTRODUCTION

The learning process of the students can be enriched by a number of teaching learning strategies which have been designed by outlining the role and characteristics of teacher's students and contents. Presently in India class room environment is mostly controlled by the teacher and the students are passive learners. The national curriculum emphasizes and stresses upon the standard shift to constructivism from the behaviorism to increase conceptual learning and to generate such attitude towards the learning Qaisur (2021). Thus such teaching learning strategies are the demand of curriculum that can involve pupils in building of their own knowledge and considers the students as the focus of learning activity whereas the teachers as organizers in the class room. Concept mapping approach comes under constructivism approach as described in David Ausubel's (1960). Assimilation theory of cognitive learning that focuses on increasing significant for learning by students. This approach uses a shared environment in which students work independently and in groups as well to help each other in the process of teach Oakley (2004-b). Novak, (2002) stated that concept mapping refers to a visual illustration of important ideas or thoughts in the form of graphics or in pictorial form. It also let the learner to identify the relationships among isolated concepts in making an organized knowledge structure. Thus conceptualization allows the learner to understand the global concept instead of isolated facts by promoting in depth learning above the rote memorization. However Canas (2003) describes concept mapping as a procedure of making out sense. It infers taking a list of concepts that is selected by labels and then organizing it in a graphical illustration in which linking phrases and sets of concepts form prepositions. Hence the key of building depend upon a concept map is based upon the set of concepts. Today concept mapping is generally and successfully useful in many fields of education recently there has been a lot of investigation done on concept mapping in education but considerable accomplishment has been achieved by the solicitation of concept mapping in the teaching learning procedure to assimilate fresh concepts into the current scheme of information. Benefits of concept mapping in teaching and learning of fresh information is that it also delivers a trail into better quality assessment and accomplishment check Qaisur (2021). The concept mapping is also cherished when there is a requirement for free association and knowledge organization. The usefulness of concept mapping in education is that concept mapping can be used at any stage of teaching process it can be used at the start of the lesson where a new concept is about to be introduced or it can be used at the conclusion of the lesson for the

sake of revision. It can be applied to the children. It can be used by the students in the universities and also by the professionals in their respective fields. The traditional methods of teaching like lectures and learning from book by rote memorization of evidences concepts and philosophies are being used generally in teaching learning process nearly in all subjects at every level of education in regardless of knowing the merits and demerits of these. Now day's researcher's educationist's curriculum planners and all the other people from academia have taken it seriously and they are thoughtful on how they can improve the quality of education and all other disciplines as well by the effective use of instructional methods. In today's era of information and communication technology it is imperative to develop teacher for growth of society as well as for self-education system should not be looked at provider of education only rather it should be treated as a means of achieving social elevation but also as a motive of progressions in a period of knowledge and research dominance. Innovation is the track to progress for any nation and the future of the nation is built in class rooms. Hence the teacher must be oriented about the various means of fostering the thinking skills of students and apply them according to their context and purpose Qaisur (2021). The study revealed that students have enjoyed the classroom experiences and the strategies enabled them to be responsible in the process of learning. Therefore such process can be made use of successfully in the class room to promote healthy learning environment and pleasurable learning experiences to the children. The authorities should provide sufficient support system including the availability of infra-structure resource material flexibility in class management. Expert and researcher in the field of education should work for developing pedagogical practices suitable to classroom and propagate them productively among the children.

OBJECTIVES OF THE STUDY

The Objectives of research were:

1. To explore the concept of maps as tool for teaching and class room assessment of teachers perceptions.
2. To explore the effectiveness of concept maps in teaching and learning process.
3. To explore the perceived difficulties associated with concept maps.

SIGNIFICANCE OF THE STUDY

The significance of the study lies in using results to help researcher's teacher's curriculum planners and all other people from academia about how to increase the quality and excellence of education by integrating concept map as a teaching tool.

EFFECTIVE TEACHING

Effectiveness can be defined as the degree to which an action achieves it's aimed towards goal and purpose. It is the degree of the similarity between specified aims and attainments. The possibility to achieve easy and low standard goals is always high. So

we cannot state that quality in higher education and can only be a query of attainments but it should also include decisions about the defined goals. The effective measures the quality of attainment of the precise educational aims or the degree to which a higher education institution can be expected to achieve specific requirements Harvey, (2017). For effective teaching the teaching tool or teaching material is the resource for a teacher that he uses to deliver his lecture. A teacher needs so many tools to make the student learn. The purpose of all these material resources is to deliver the knowledge to the students or learners and also to encourage and engage the student with knowledge in diverse ways to enhance learning. So concept map is one tool which can help in effective teaching and learning.

CONCEPT OF MAPS IN EDUCATION

Novak, *et al.*, (1984) defined that the concept mapping is planned to direct association between the concepts in form of schemes. The concept map is the uniformity in objects or events designated by a specific label. The maps are shaped with the wider more comprehensive concepts at the upper most level of the hierarchy linking words with former concepts. Hence the concept maps have their foundation in the learning program called constructivism. If concept maps are correctly created it is very strong way for students to achieve higher levels of cognitive performance. It is not just a tool for learning but a perfect tool for the evaluation of educators to measure their growth and evaluating learning of students. As students create concept of maps they create ideas using their own words and help to identify incorrect ideas and concepts. The educators are able to see what students do not understand providing an accurate objective and way to evaluate areas in which students do not get concepts fully.

CONCEPT OF MAP AS TEACHING TOOL

Lee *et al.*, (2012) stated that the usage of concept maps as a teaching approach was first developed by Novak in the early (1991). It was resultant from Ausubel's (1960) learning theory which puts focus on the impact of students' previous knowledge on significant learning. It describes that if teachers learn how to generate concept maps and use them for preparation and measuring lessons they will be able to communicate students better how to create concept maps to establish their opinions and philosophies in the class rooms.

In specialized education the method of concept mapping is used typically for teaching and for assessment. We could not find the use of concept mapping for free associating or information organization in the occupations so it does not mean the implementation is not there in the class rooms. The concerning of concept mapping in specialized education that focuses on learning and the use of concept mapping as a knowledge tool. Concept mapping as a method was involved in lots of ways as instructional stages and activity practices. Furthermore to use as a learning tool in professional education it is also commonly used as an assessment device. Concept maps are significantly used for

assessments through which teacher can self-assess themselves. Novak (1991) stated that concept maps are repeatedly used as learning and study instrument in the subjects. Concept maps as a learning instrument used in the areas of math and science. Concept maps are also being used as a device to train pre service and working teachers because they involve little amount of written text and concept maps may be typically effective apparatus for students with low verbal abilities. Making concept maps at the conclusion of a unit or lesson is a more actual learning plan than using them to display concepts at the start of a lesson for student's long lasting retention of the material Nesbit and Adesope (2006). Concept map should complete minimum three rounds of revision so that students can attain practice. They are more effective summary creation learning plans such as making lists or frame works and to comprehend the associations between important concepts may be like wise considered real.

USE OF CONCEPT MAPS IN TEACHING AND LEARNING

The concept maps can be used for teaching and learning process.

- Information instruction
- Learning process
- Assessing of students in shaping their knowledge
- Evaluating students learning ability
- Recording maintaining
- Problem resolving ability
- Application of knowledge
- Integration of knowledge
- Instructional procedure

The concept maps are useful tools to help students learn about their knowledge organization and the process of knowledge building. Concept maps can also help the student to learn manifold ways of learning. Concept mapping involves the learner to inculcate at cognitive domain of Bloom taxonomy. Concept Maps had been used to check students' previous information and to keep stream line the student's progress of knowledge in entire development for matching and doing comparisons of students at numerous stages of knowledge.

USES OF CONCEPT MAPS

The publications shows that concept maps have been used in quantitative and qualitative studies and in qualitative approaches used throughout all stages of the research process while in quantitative approaches used for data analysis. Concept maps can be used to construct experiences individually and in groups in data collection and analysis in qualitative research. Concepts maps can be used to collect reduce organize and interpret data. Concept maps graphically demonstrated the concepts and connections in areas

such as critical thinking and online learning. Jackson and Trochim (2002) write about the use of concept maps as an alternative approach for the examination of open ended survey responses. It gives a snapshot of perception and allow for the refining additional data collection processes. Maxwell (2013) shows how to use concept maps to explain a conceptual framework. Concept maps can help see links or to identify gaps in the theory and to determine themes.

TEACHERS PERCEPTIONS OF CONCEPT MAPS

The key benefit of this method is giving an influential depiction instrument to show compound relations between various concepts. Furthermore those problematic concepts can be explained and can be organized in a logical order. This helps teachers to convey a clear general picture of the topics and their relationships to their students. Usage of concept maps can strengthen students' towards understanding level and to learn more easily and effectively. The concept maps helps in testing and learning facility Jackson and Trochim (2002). The usage of concept maps can also be helpful for teachers in measuring the development of teaching. Concept mapping may be used to enhance problem solving phases and making additional solutions of ranges in the teaching learning process. Learning is also benefited from the interaction and growing possessions of concept mapping evaluation. Students' achievement can be checked or surveyed by the technique of concept mapping as the concept maps can also be used as assessment and evaluation tools in the class room Stoica, *et al.*, (2011).

- Concept mapping signifies ideas or views from a large group of members in an easy to understand the setup process.
- It creates data that can be interpreted qualitatively or quantitatively.
- It pin points complex relationships with the help of graphic format.
- It is participant motivated.
- It is simple to implement and understand.
- Concept mapping uses an organized process that can be imitated easily.
- It encourages active participation.
- It can be done by using computer software or using paper.

DISADVANTAGES OF CONCEPT MAPS

- In the lack of an organized approach for creating concept maps this approach can become confusing and difficult to read.
- Concept mapping includes only a high level representation so it does not easily allow for the addition of detailed information.
- In concept mapping it may be difficult to identify all the relationships between the concepts or ideas.
- Interpretation of the concept map and data may require a knowledgeable organizer.

RESEARCH METHODOLOGY

SAMPLE

The study was based on data collected from the teachers of University and the study involving 20 teachers of the university from different department. The semi structured interviews were conducted to collect data for this study. The purpose was to check the usage of concept maps and how much beneficial and effective concept maps are in teaching learning process at higher level.

DATA ANALYSIS

Data were analyzed by generating themes after transcribing the data. The common recurrent and emergent themes were usage effectiveness of concept maps advantages and disadvantages of concept maps.

RESULTS

The results revealed that teachers mostly use concept maps in the class rooms according to the requirement of the topic. One of the respondents describes that making concept map is fun and enjoyable teaching tool in the class rooms and generally used at higher level according to the requirement of the topic whereas other respondents explained that concept maps are usually preferred to use wherever it fits into the topic. Most often concept maps are used in the class rooms elaborated by a respondent especially while teaching following courses.

- Teaching of Science as pedagogy course.
- Teaching of English as pedagogy course.
- Science as content course.
- Philosophy of education as core course.

Concept maps can be used in other subject or any discipline because it depends upon the topic because it is the best tool to describe lengthy chapters in shortest form. The respondents explain the comfort level of using concept maps as they are easy to construct for giving graphical representation of the relationships or hierarchies whereas one of them reported that concept maps are used in teaching of science as there are many concepts and topics which needs classification and organization so concept maps are helpful as tool. According to two respondents concept maps can be used in any topic because it helps the teacher to explain the content of the lecture easily. Visualization and images helps the student to enrich their information. Concept maps are better teaching material than words. Furthermore two respondents explain that using concept maps generates significant connections between the key idea and other related information. They can be used in the form of flow charts. So it has been found that comfort level of using concept maps gives sound teaching experience for delivering the instructions in the class rooms. As reported by one respondent that concept mapping allows the learner to identify relationships between compound concepts while increasing a consistent

knowledge construction. Concept mapping while delivering the lecture promotes deep learning rather than rote memorization of the concepts in the class rooms. It helps learners to understand global concept rather than isolated facts. Presenting the topic in very systematic and hierarchical manner and it also helps in capturing the attention and thus maintaining readiness of students throughout the lesson and also supports brain storming phase of lesson delivery. But two respondents describe that delivering the topic by concept map also helps students in the integration of new ideas out of old ones. However two respondents also explain that the delivery of any concept by using maps is to give clear picture of the processes and relationships. It gives learners pictorial form which makes their learning easy and the use of concept maps in delivering the topic is to give more understanding of the topic. For example science is a disciplined initiative that shapes and organizes information in way of testable clarifications and forecasts about the world. Science is thought what you think empirically. Biology is about life. Physics is about energy that how energy is converted from one form to another form. Chemistry is all about structures. So these students can easily understand the concept of science as a subject that with how many branches it is dealing and there are three types of thoughts if we perceive science as a thought.

As far as we are concerned with concept map it provides sequence while delivering the topic. Organization and grouping of topics provides clear picture to the learners. Dynamic feature of concept is flexibility while presenting the topic in the form of flow chart or in pictorial way and graphical ones. One of the respondents found the concept maps an efficient method or tool nowadays. The use of concept maps increasing day by day because it is easy to explain something that we have seen as complex ones. So it tried to explain it with diagrams and mind maps it is very easy. For example the process of photo synthesis involves lots of procedure and process. So students get the main idea using concept maps and can be explained like this way. Other respondents were agreed that concept maps are helpful in enhancing the cognitive level of the students and evaluating the understanding level of learners. Because the use of concept map is interesting it gives a whole picture in one single diagram and gives pictorial and visual demonstration of concepts. Concept maps very easy and effective because it reduces writing too much text on board but only a single picture can be drawn and verbal explanation may be provided. It has been found by views of all the respondents that concept maps enhance comprehension and understanding level and helpful in checking prior knowledge and for reviewing the lesson. Linking theoretical concepts to practical experiences and concept mapping is a useful device. Complex terminologies can be better explained as well as quick learning takes place. Memorizing can be enhanced. Main ideas can be built effectively. According to scientific research as reported by one of the participant that visual information is better to remember than other methods. The advantages which are as follows:

- Associations and relationship between dependent and independent variable.
- It can be used as a revision tool because it has images rather than huge paragraphs.
- It has great impact on student's minds because they don't have to remember the whole lecture so lots of students are motivated by concept maps.
- It promotes logical thinking. Logical thinking through related justifications especially in analytical reasoning can be effectively implied through concept mapping of research based concepts.

There are also some perceived difficulties associated with concept maps that were elaborated by participants given as follows:

- Teachers are not well aware and well trained to draw concept maps. They don't know the importance and effectiveness of making concept maps. Awareness about nature and various formats of concept mapping is not clear among academia.
- Concept map in different subject is not common and some teachers are reluctant to use in their class rooms due to time constraints and resource unavailability.
- Inappropriate method or diagrams that are not meaningful makes no sense.
- There are many types of mapping mostly teacher's perceived difficulties which type of mapping should be used for the particular topic.

DISCUSSION

Since (1990) the concept maps have been used in many ways as a research topic in science stream. Kilic and Cakmak (2013) have been proved under the validity reliability and practicality of concept map as a method of teaching. The analysis and researches of more than 30 scientific articles about concept mapping shows that in professional education this method is more used in the subject fields which are directly connected to natural or exact sciences. The main idea of using the method is as teaching and learning tool which is often combined with assessment tool. In most articles the faculty and students feedback are positive and the authors suggest the method of concept mapping for further use in class room. The result of this study is consistent with the views of Ausubel (1960) specifically shows the importance of pre learning the linking of new ideas to previous knowledge and also with the findings of Kinchin (2000) and Lewis (1987) that the Ausubel's teaching strategies found to enhance significantly the conceptual understanding of the students. The data collected through interviews shows that concept maps are effective and mostly used tool in the class rooms in many discipline either teaching of English Science, Philosophy Education and in any content area. It provides comfort in delivering the topic using multiple types of mapping for multiple topics mostly in science. It provides sound experience to the teachers in transmitting knowledge to the learners. A concept map plays a significant role for assessing students' performance. Teachers most often use concept maps for evaluating the students' performance to test the students that have main idea about the concept taught to them. Concept maps

consumes less time of teachers so it has been found that most teachers often like to use concept maps for delivering the instructions. The study also sheds light on the effectiveness of concept maps and it has been found that nowadays concept map is an efficient teaching tool in the class rooms used by teacher and its effectiveness can be measured through prevailing learning environment increased student participation and understanding level of students. The study also shows the advantages and some perceived difficulties associated with concept maps as everything in this world has some pros and cons depending upon the circumstances around Qaisur (2021). So as far as concerned with concept maps they can be difficult to use because at all levels not only higher but primary and secondary the teachers are not aware of the benefits associated with concept maps they are stick to the traditional teaching tools. Construction sometimes can be challenging for complex topics but the benefits of concept maps cannot be denied. The above discussion led to the conclusion that the university teachers need to be aware of new and interesting teaching tools as concept map if teachers use this tool in the class rooms than it can leave positive effects on students' learning. It will help teachers to modify their instructions in easiest possible way and can enhance the students' learning.

Assessment is the course of collecting and deliberating information from manifold and varied sources so that to improve a deeper understanding of what pupils know comprehend and can fix with their information as a result of their instructive experiences in the class rooms. Two of respondents reported that assessment in education is extensive variability of procedures and devices used to evaluate and assess the students. Asking students to draw concept maps can help teacher to assess the cognitive level of students and learners. Inductive and deductive concepts similarities and differences advantages and disadvantages of any concept can be assessed through concept maps. The brainstorming previous knowledge testing can be done through concepts maps Qaisur (2021). Recapping the lesson or revising can also be done through it. Whereas one of the respondents put emphasis on using concept maps for assessment purpose because it is the easiest way of teaching. The teacher doesn't have to do all work or doesn't have to waste his stamina on minor matters. He can explain the whole situation just by few diagrams and arrows. If they are well arranged it can be used in any type of assessment. According to one participant the most efficient method of teaching is the concept maps. It helps us to deliver the thoughts not just information. Its effectiveness depends on the person who is making the mind or concept map. For example if we are trying to teach the students about some science project or information we can deliver all the information but it is not under stood by students because their mind caliber is not on the same level of teacher Qaisur (2021). The teacher has to go through all the information and have done practices so it is easy to elaborate what we have seen. Whereas one other participant explains that effectiveness of concept maps that it can be measured through increased student's participation in the classroom activities. Similarly their readiness attention and improved performance in quiz mid-terms final exams

presentations and assignments are predictors of effectiveness of concept maps in teaching learning process. It can also be measured by evaluating the prevailing learning environment of class. By viewing the objectives of the lesson that are being achieved than it would be easy to measure the effectiveness of concept map as explained by other participants. But two of participants while explaining effectiveness shared that it can be measured by the level of understanding of the learner using through various traditional and alternative assessment techniques. Effectiveness of concept maps relies on the evaluation and assessment. Benefits and advantages of using concept maps cannot be denied. Concept mapping can be useful in many situations when it comes to understanding level of students learning memorizing relationships connections, main ideas and concepts. The graphical methods of understanding the organizing information as revision tool which is easy to use in student motivation in the development of meaning and logical thinking. In developing hierarchical structures works as visual learning ways is helpful in learning terms and definitions and constructivism is huge benefit which leads to creativity.

CONCLUSION

Teaching practice time spent in schools is recommended as the central pillar and integral part of education programs. It allows prospective teachers to provide a scaffold of support mentoring and learning that progressively builds the desired knowledge skills and attitudes. The quality of education is linked with the quality of instruction in the class rooms. Teacher is the most important factor in implementation of all educational reforms in the masses. The academic qualifications knowledge of the subject matter competence and skills of teaching and the commitment of the teacher have effective impact on the teaching learning process. There is a need of building up awareness about concept maps and its usage in the class rooms at higher level. By keeping in view the professional development of teachers they may have knowledge and skills to use such tools in the class rooms. Teachers may be trained about how effectively they can deliver instructions to the students in the class rooms and can help in improving students learning by using concept map. Teachers may use concept map as instructional strategy when the subject matter of a unit is hierarchical and basically conceptual and this strategy may be used for one unit at a time to transfer the lesson.

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YOGA IN THE PRESENT PANDEMIC SITUATION CAUSED BY nCOVID-19: A QUALITATIVE ANALYSIS

Mithu Karmakar

M. Phil. Scholar, Department of Education University of Gour Banga
E-mail-karmakarmithu1992@gmail.com

&

Dr. Pradip Debnath

Assistant Professor, Department of Education University of Gour Banga
E-mail-ugbpdn@gmail.com

ABSTRACT

The present day human beings are affected by many diseases very easily. Most of the diseases are curable, but some diseases are incurable. There are currently a number of viruses that have affected not only familial life but also social life and economic life of every human being. One of these viruses is nCOVID-19. Yoga is a process of healthy living of the individual. Yoga practices help to reduce depression, frustration and anxiety etc. Yoga practices develop positive thinking among the individual. It makes the individuals not only physically strong and healthy but also mentally strong and healthy, and enhances immunity in the process. The present paper seeks to analyse how yoga can play an effective role in the minimisation of physical and mental weaknesses of us today caused by nCOVID-9.

Key words: Yoga, pandemic situation, nCOVID-19, physical, mental, virus, disease.

Introduction: Today's age is the age of science and technology. It has made human beings powerful; they can control and manipulate their situation perfectly from any kind of barrier. Using science and technology a man can reach highest peak of success. It has impacted almost all aspects of the society like Medical field, Education, and Business, Management or other aspects of the society. Use of science and technology, we can solve many different kinds of problems very easily and improve many techniques for unsolvable problems of human beings. Besides science and technology, research also plays vital role to grow and develop society. Research helps us to know new knowledge, verifying existing knowledge and establishes new knowledge. In the collaboration of science, technology and research, we can overcome different problems of many sectors of the society. In the present days, we have found a terrible virus in our medical sector which is affecting human beings and challenging our existence. So many people have already died being infected with this virus. This virus has affected not only our familial life

but also the economy system of the country. The name of the virus is nCOVID-19 which started to spread from China and then all over the world.

Objectives of the study

Here objectives of the study were-

- To know about nCOVID-19
- To know the role of yoga in the present pandemic situation caused by nCOVID-19

COVID

Corona virus disease is an infectious disease caused by a discovered corona virus. Corona viruses are a large family of respiratory viruses, known to cause illness. It is ranging from the common cold to more severe illness such as Middle East Respiratory Syndrome (MERS) and severe Acute Respiratory Syndrome (SARS) (www.who.int). The current outbreak has been caused by a strain of corona virus that had not been detected anywhere in the World before the outbreak was reported in Wuhan, China in December, 2019.

nCOVID-19

This corona virus was found in China in December, 2019. In general, COVID virus came out in December, 2019 in our life surface. So, it is known as nCOVID-19. It is known as severe acute respiratory syndrome corona virus 2(SARS-coV-2).The disease it causes is called corona virus disease, 2019 (COVID-19). World Health Organization declared the nCOVID-19 outbreak a pandemic situation in March 2020 (mayoclinic.org).

Symptoms of nCOVID-19

The symptoms of COVID-19 are variable ranging from mild symptoms to severe illness. Common symptoms of COVID-19 are headache, loss of smell and taste, nasal congestion and rhinorrhea, cough, muscle pain, fever, multi-organ dysfunction, etc. but some people who become affected by nCOVID-19 have no symptom; according to some experts, this type of people , who do not carry symptom of nCOVID-19 can easily spread the disease.

Diagnosis

COVID-19 can be tentatively identified basing on symptoms and then verified using reverse transcription polymerase chain reaction (RT-PCR) or other nucleic acid testing of contaminated secretion. Chest CT scans, in addition to laboratory tests, may be useful in diagnosing nCOVID-19 in people who have a strong clinical suspicion of infection. The nasopharyngeal swab is mostly employed here. A nasal swab or sputum sample may be utilised instead.

Prevention

To prevent the spread of nCOVID-19, we should always remember several things. These are mentioned below-

- We should always use soap and water or an alcohol-based hand sanitizer to clean hands.
- We should always maintain a safe distance from anyone to avoid coughing and sneezing.
- We should always wear a mask for safety.
- We must keep physical distance up to 2 feet.
- We should not touch eyes, nose or mouth directly.
- We must stay home if we feel unwell.
- We must seek medical treatment in hospital or nursing home, .if we feel bad or have fever, cough and difficulty breathing

Yoga

Yoga is a technique or a way of a better living. It ensures efficiency in work and a better control over mind and emotions. Yoga has been comprehensively propounded by the maharshi Patanjali. According to Aurobindo-“Yoga is the way or method through which internal and external faculties of man meet in totality and changes occur and by which may achieve God and feel His existence and may become the part of Him.” It is a process of controlling mind consciously. Yoga has been divided into eight limbs like- Yama, Niyamas, Yogasanas, Parayama, Dhrana, Pratyahara, Dhyan, Samadhi (Bera:2017). These eight limbs are discussed below----

Yama: It is a controlling process of desire, hope and aspiration. There are five ways to control this desire, hope and aspiration; these are --- Ahimsa, Satya, Brahmacharya, Asteya, Aparigraha.

Niyamas: It basically follows rules and regulation. These rules and regulations are Saucha, Santosha, Tapas, Swadhyaya, Ishwara, Pranidhana.

Asana: This usually refers to the sitting posture. There are different asanas like- Savasana, Vajrasana, etc

Pranayama: It is a process of controlling of the speed of breathing.

Pratyahara: It is a process of withdrawal association of mind and sense.

Dharana: The idea is to hold the mind steadily to a certain point. In other words, the idea is to concentrate the mind by gaining mental strength.

Dhyana: Meditation is a state of deep thought.

Samadhi: It is state of detachment of worldly things (pal et.al.2017).

Yoga in pandemic situation caused by nCOVID-19

In the present situation, the virus not only affected the people physical health, this virus has impacted people's mental life, social life, and economic condition also. So, we can

say that nCOVID-19 has directly influenced human physical health, mental, social, emotional aspects and also influenced their economy system, education system.

Due to nCOVID-19 everyman is closed in their home. They cannot go outside of home or house for their safety. As a result, they are becoming victims of different types of pain and problem; they cannot digest their food properly and they are having misbalanced gesture and posture. Many people suffer from frustration, mental stress, tension, anxiety, conflict and fear. They feel loneliness.

Now, yoga plays a role of helper to overcome the pandemic situation. Different types of yoga helps may be got from yoga in such a critical condition. These are discussed below-

Asana

Different types of asanas help in COVID-19 situation. These are given below-

Matsya Krida Asana relaxes nerves in the leg, relieves tension in the pelvis and improves digestion power. Marjaryasana and Bitilasana relieve stress and massage the spine and stomach organs. Kurmasana improves the functions of the respiratory and digestive systems. Pavanamuktasana strengthens the abdominal muscles and massages the intestines and internal organs of the digestive system. Sukhasana calms the mind; enhances the condition of peacefulness and serenity. Uttanpadasana improves the functioning of digestive organs. It improves digestion and removes constipation.

Mudra

Different types of mudras help in the n COVID-19 situation. These are mentioned below—

Gyana Mudra eases tension and improves positive feelings, and helps in depression. Vayu mudra eliminates excess air/gas, bloating from the body. It provides immunity against cold and cough and relieves chest pain. Surya mudra improves digestion. Prana mudra strengthens the immune system and relieves mental tension, anger, restlessness, frustration.

Pranayam

Different types of pranayama help in such situation these are discussed below-

Surya Bhadana Pranayama increases heat in the body; it helps to gain body vitality and treat anxiety, depression and lack of energy. Ujjayi pranayama is good for throat, cardio-respiratory, nervous and digestive systems. Skeetkari Pranayama calms mind and reduces negative emotions, improves immunity, purifies blood and refreshes the body. Sheetal and Sheetkari Pranayams reduce blood pressure in hypertensiin. Sheetal Pranayama can be beneficial in summers as it cools down the mind and body. It also reduces bad breath, regulates blood pressure and elevates mood. Bhastrika Pranayama reduces tension, anger and anxiety, decreases blood pressure, headache and migraines and improves concentration and memory. Moorchha Pranayama promotes happiness of mind, helps the mind to draw inward, removes body fat and reduces muscle weakness.

Plavini is an advanced Pranayama, which increases the body capacity to sustain without food and water for several days, helps to detoxify the body and decreases stress. Kapalabharti improves blood circulation and increases oxygen level of the human body. Anulom-vilom cleans respiratory tract and clears the nasal passages.

Meditation

Meditation improves psychological well-being and reduces stress and anxiety.

Conclusion

It may be concluded from the above discussion that yoga can help us in many ways, especially in a critical situation like nCOVID-19 situation. It helps in positive thinking towards life and society. It reduces depression, anxiety; different kinds of pain, tension, stress etc.; besides yoga, science and technology play a vital role in this situation. With the help of science and technology we can reduce fear, loneliness. We can easily gain information about what we should do and what we should not do. There is no particular treatment found in the research to cure the nCOVID-19 properly but the researchers or medical practitioners are researching on nCOVID-19 and they have invented various types of vaccine. In our state (West Bengal) mainly two types of COVID vaccine, one Covaxin and other Covishield vaccine are used. However, to overcome this situation we should take proper vaccination from vaccine centre to break down chain of such harmful virus. Our world will be nCOVID-19 free and we shall be relieved again.

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A STUDY OF THE ATTITUDE OF IN-SERVICE AND PRE-SERVICE TEACHERS TOWARDS THE SIGNIFICANCE OF COMMUNICATION SKILLS FOR TEACHER EMPLOYABILITY AND THE ROLE OF TEACHER EDUCATION

Dr. Sairindhree Sen

Assistant Professor

Gopal Chandra Memorial College of Education, West Bengal, India

E-mail: sairindhree.sen2805@gmail.com

ABSTRACT

The present study seeks to explore the attitude of in-service, pre-service trained and pre-service trainee school teachers towards the significance of communication skills for teacher employability. It also explores the role of teacher education curriculum in this respect. The sample consists of 100 school teachers including in-service, pre-service trained and pre-service trainee teachers. An on-line questionnaire developed by the researcher has been used for the purpose. The study explores the attitude of teachers towards employability skills in general, teacher employability skills and teacher communication skills. It also studies their attitude towards situations in which teachers require communication skills. Finally, it explores the effectiveness of present teacher education curriculum in developing teacher employability skills and teacher communication skills. The data has been analysed qualitatively. Major findings indicate that the participants have clear conception about communication but are not acquainted with certain aspects about employability. The teachers have identified the major communication and employability skills needed in the teaching profession. They have also pointed out situations in which teachers require expertise in communication skills. Though most teachers feel that the present teacher education curriculum teaches most aspects of communication skills, they have identified some of the shortcomings in the area. Though 86% teachers agree that the present teacher education curriculum develops employability skills, yet they have identified some gaps lying in it. They have also provided their suggestions related to what should be included in the teacher education curriculum to increase employability of teachers. The article also discusses the role of teacher education based on the findings. (255 words)

Key words: *Communication, communicative competence, employability, employability skills, teacher employability skills, 21st century skills, teacher education*

Introduction

According to *21st Century Skills - A Handbook* by Central Board of Secondary Education, Delhi (2020), 21st century skills can be grouped into Literacy skills, Life skills and Learning skills. Learning skills comprise of 4C's namely - Critical thinking, Creativity and Innovation, Collaboration, and Communication. Four critical 21st century skills are collaboration, critical thinking, self-direction, and complex communication. Besides the basic skills of reading comprehension, speaking, writing, grammar and spelling, complex communication includes comprehension of information, sharing of information or ideas, recognition of diversity in culture, and implementation of information and communication technology. Comprehension of information includes active listening to conversations and oral presentations and comprehending text, media, and non-verbal cues. Sharing of information or ideas can be done through engaging in discussions and using non-verbal communication. Information communication technology enhances comprehension, presentation and sharing of information. And recognition of cultural diversities leads to respect for differing values, attitudes, beliefs, and behaviours across socio-cultural backgrounds. (Thompson, J., 2020)

Communication and its types

"Communication is not about the sender or the receiver; it's about the sending. And that's done with language." -Richard O'Barry.

Communication is the act of transmitting information through some medium or channel from one source to another in verbal, non-verbal or visual forms. Communication can be considered as transmission, as interaction, as transaction and as instrumental for social construction. (Edwards, A, et al., 2017). It is a dynamic process that individuals use to exchange ideas, relate experiences, make sense of situations, or convey meaning, through a variety of forms, codes and channels. (Ewing, Lowrie and Higgs, 2010). An idea developed by the sender is encoded and transmitted through some channel. When it reaches the receiver, it is decoded and thereby understood. Thereafter the receiver sends feedback, and the communication process is completed. Some messages may be lost on the way due to noise. Communication may be verbal, non-verbal, or visual. It generally has three types of goals - self-presentation, relational and instrumental. In the first case, it is related to our perception about ourselves. The second type is aimed at developing, sustaining, and handling our relationships. The third type deals with our interpersonal strategies by which we influence others to achieve our desired purposes.

Communicative competence

"Speak in such a way that others love to listen to you. Listen in such a way that others love to speak to you." (Anonymous)

The term "communicative competence" was coined by Dell Hymes in 1966. According to the British Council, "communicative competence refers to a learner's ability to use

language to communicate successfully". Canal, M. and Swain, M. (1980) proposed that it includes competence in words and rules, appropriacy, cohesion and coherence and use of communicative strategies. Canale, M. and Swain, M. (1980) and Canale, M. (1983) suggested the following four components of communicative competence:

1. Linguistic competence is the knowledge of the grammatical and vocabulary related aspects of language. It is the knowledge of phonetics, phonology, morphology, syntax and semantics.
2. Sociolinguistic competence is the knowledge of appropriate socio-cultural usage of language depending on the setting, the topic, relationships, cultural norms, prejudices, and social attitudes.
3. Discourse competence is the knowledge of organising language structures into oral and written text forms by combining words, phrases and sentences into conversations, articles, messages, poems, speeches and so on.
4. Strategic competence is the ability to identify and mend communication loopholes or hindrances before, during or after their occurrence through clarification, gestures, repetition, reducing the pace of communication, etc.

Employability

Employability refers to the skills, achievements and attributes of a person that help him to gain employment, sustain and make progress in a chosen job, and change the job if required for better opportunity. Employability refers to perceived suitability for employment of a potential candidate by a prospective employer. They are the skills, knowledge, achievements, and attributes of a person that help him to gain a job, succeed in it and change it for a better opportunity, if required.

Employability implies the following skills:

Personal skills -Integrity, work ethics, professionalism, responsibility, adaptability/flexibility, self-motivation, emotional intelligence, self-regulation, self-management, trustworthiness and conscientiousness, resilience, critical thinking.

Technical skills grounded in academics-Computer and technology literacy, health and safety, service orientation, job-specific skills, professional development.

Workplace skills- Communication which can be verbal, non-verbal, speaking, listening, writing, decision making, teamwork, reliability, multicultural sensitivity and awareness, planning, organizing and management, leadership, conflict resolution, problem solving, taking responsibility for one's own actions, time management, willingness to learn and embrace new ideas, enterprising.

Education for employability

It is essential to relate education with employability. Education of course has its liberal and enlightening aspects to aspire for but in a pragmatic sense, educational qualifications

should help individuals to attain competencies to secure a job in congruence with one's choice and aptitude to earn a living or in other words - to make him/her employable. Many individuals attain educational qualifications for career prospects. However, not all of them get satisfactory employment. This is because they are not trained and prepared with job-orientation. It is highly frustrating for educated individuals to remain unemployed. However, they fail to realise that apart from achieving certified degrees they must be trained for field work and practical experience. Hence, it is essential to steer education towards employability.

In the teaching profession, many aspiring teachers with academic qualifications are unable to qualify for jobs because they lack the abilities and competencies that employers expect. Apart from jobs in government and government aided schools, a considerable segment of teachers is employed in private institutions. With the trend of privatization, private schools are growing popular and must keep pace with the rising competition by upgrading their resources and quality from time to time. Private English medium schools with ample co-curricular opportunities are expanding day by day. Even government-aided institutions must keep enhancing their quality to cope up with the expectations of the transient generations. In a scenario such as this, capacity building of teachers to fulfil the expectations of the employing agencies is extremely crucial. Often, individuals who happen to be excellent teachers in the classroom are not necessarily able to adjust smoothly with administrators, colleagues or parents despite their subject expertise or teaching skill competency. This is due to the gap in their communication ability and some essential employability skills. Effective communication is not just being able to talk or express oneself and be understood. Skillful communication is much beyond that. Even silence is a form of communication.

Communication skills required by teachers in their profession

A 21st century teacher should have the readiness to handle pedagogy for flipped classroom, project-based learning, cooperative learning, problem-based learning, gamification of learning, design thinking, thinking-based learning, and competency-based learning. (Realinfluencers, R. 2019). Jan, H. (2017) suggests that teachers should think globally, develop sensitivity towards cross-cultural differences and build partnerships and alliances beyond the classroom. Keeping in view the above-mentioned skills, teachers also need to develop their competencies according to the need of the century. "Competency is more than just knowledge and skills; it involves the ability to meet complex demands by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context. Competency is essential to an educator's pursuit of excellence." (Nessipbayeva, O., 2012). Nessipbayeva points out that 21st century teachers ought to have competencies in leadership, establishing a respectful environment for accommodating a diverse population, knowledge of the content they teach, facilitating students' learning, and pursuing reflective practice. They should demonstrate effective

classroom management, effective teaching practices, effective assessment, and effective technological competencies. A 21st century teacher needs to be a leader, a model, a visionary, a communicator, an adaptor, a risk taker, a collaborator, a learner (Borabo, M.L, 2013). According to Roberts, R. (2020), there are four types of communication that teachers need to learn, namely - Physical, Cognitive, Linguistic, Social-emotional.

The conventional notion about a teacher is a qualified expert presenting lessons before a class of students. But a teacher's role does not limit itself to the classroom. Before a teacher is professionally appointed in an institution, he or she is an applicant, an interviewee, a demonstrator, and even a candidate in an examination for selection. On being appointed, a teacher becomes a member of an organisation wherein, he or she is required to reach out to the administrative body, the colleagues both teaching and non-teaching, the parents and of course the students. The teacher then is a part of a galaxy of individuals who form an organisation called the school, composed of persons from different age groups, multicultural backgrounds, and diverse socio-economic levels. So, as teacher educators we must remember that we ought to prepare the trainee teachers not just for a classroom but for an entire organisation. Hence a teacher requires communication skills such as active listening, presentation, body language, questioning, response management, managing technical and scientific language, interpersonal communication, public speaking, discipline management, multicultural sensitivity, motivation and negotiation, collaboration, counselling, digital communication, and sense of humour. Thus, communication skills are a necessary requirement for teacher employability. Teachers of the present day need to prepare themselves for multicultural, multilingual, and inclusive classrooms. These classrooms are extremely sensitive and require adept communication skills to handle a wide variety of students. The school environment must be such that children feel happy to be a part of that institution and parents should feel content with the guidance and opportunities that the children receive from their schools. The new generation of schools want teachers to be accommodating both with the children and their parents. Applicants for teaching jobs must qualify a rigorous process of screening from presenting an impressive resume to confronting several rounds of interviews, written tests, and demonstration tests before they are considered fit for employment. Hence, communication skills become an essential prerequisite for them not just to perform well in classrooms but also adjust well as a member of an educational organisation.

Teachers need communication skills to handle multifarious activities like - interacting with parents of students, collaborating with colleagues and superiors, share knowledge with students, interact with administrators for organizational activities, understanding students, providing feedback to students, preparing good CV for job application, writing letters to school authorities before or during service, performing well in interviews to gain employment, building good relationships to create a healthy learning environment,

planning effective learning designs, managing classroom discipline, interacting with multicultural sensitivity, making good classroom presentations, making use of digital technology, organizing events in school, asking effective questions, managing students' responses, resolving interpersonal conflicts, practising reflective teaching, preparing good assessment strategies, practice reflective teaching, preparing good assessment strategies, and so on.

Teacher employability skills include interpersonal and non-verbal communication skills, team work, leadership, decision-making, self-regulation, logical reasoning, academic writing, planning and organizing, interview, numeracy, time management, critical thinking, adaptability, conflict management, class management, questioning, lesson designing, board work, presentation, response management, demonstration, preparing CV and applications, listening, support skills, cognitive ability, digital skills, etc.

The present study

The present study seeks to explore the attitude of in-service, pre-service trained and pre-service trainee school teachers towards the significance of communication skills for teacher employability. It also explores the role of teacher education curriculum in this respect.

Statement of the problem

A study of the attitude of in-service and pre-service teachers towards the significance of communication skills for teacher employability and the role of teacher education.

Objectives of the study

1. To assess the teachers' conception about the communication process.
2. To assess the teachers' conception about employability
3. To find out the attitude of teachers with regard to
 - i) teacher employability skills.
 - ii) teacher communication skills
 - iv) situations where teachers require communication skills
 - v) self-reflection as a form of communication
 - vi) teacher's social media image
 - vii) effectiveness of present teacher education curriculum in developing teacher employability skills
 - viii) effectiveness of present teacher education curriculum in developing teacher communication skills for employability

Methodology:

Variables

Dependent variables - Teacher employability, teacher communication, role of teacher education in developing teacher employability, role of teacher education in developing teacher communication skills.

Dependent variables - Type of teacher (trained in-service, trained pre-service and trainee school teachers) and gender.

Sample

The data was collected through random sampling. The participants were trained in-service school teachers, trained pre-service school teachers, and trainee teachers (n=100) belonging to Kolkata, Burdwan, Hooghly, Howrah and North 24 Parganas districts of West Bengal.

Sample profile:

Gender	Type of teacher			Total
	Trained in-service	Trained pre-service	Trainee	
Male	6	6	7	19
Female	26	28	27	81
Total	32	34	34	100

Tool

An online inventory developed by the researcher has been used. It consists of a small personal information schedule followed by 13 test items. Time taken to complete the inventory is approximately 10 minutes.

Administration

The online inventory was circulated among trained in-service and pre-service teachers and trainee teachers. The responses were measured on a two-point scale and the data was analysed qualitatively.

Findings of the study:

Communication Process

Aspects of communication process	% of teachers who agreed	% of teachers who disagreed
Sender	99	1
Receiver	99	1
Message	100	0
Noise	45	55
Channel	91	9
Feedback	91	9
Encoding	89	11
Decoding	92	8
Silence	34	66

Different types of communication

Types of communication	% of teachers who agreed	% of teachers who disagreed
Verbal	100	0
Non-verbal	95	5
Listening	77	23
Written	92	8
Visual	87	13
Tactual	69	31

Self-reflection -a form of communication

Self-reflection - a form of communication	% of teachers who agreed	% of teachers who disagreed
	92	8

Employability refers to the skills, knowledge, achievements and attributes of a person that help him to -

Employability refers to the skills, knowledge, achievements and attributes of a person that help him to	% of teachers who agreed	% of teachers who disagreed
Attain an educational qualification	28	72
Gain employment	49	51
Succeed in a chosen employment	81	19
Change job for better opportunity	71	29

Skills to be considered as teacher employability skills

Skills to be considered as teacher employability skills	% of teachers who agreed	% of teachers who disagreed
Teamwork	97	3
Interpersonal communication	96	4
Problem solving	100	0
Support skills	94	6
Listening	99	1
Speaking	100	0
Academic writing	89	11
Cognitive ability	99	1
Non-verbal communication	90	10
Leadership	94	6
Digital skills	96	4

Skills to be considered as teacher employability skills	% of teachers who agreed	% of teachers who disagreed
Creative ability	100	0
Logical reasoning	99	1
Decision-making	100	0
Self-regulation	94	6
Numeracy	79	11
Planning and organizing	100	0
Interview	87	13
Time management	100	0
Critical thinking	95	5
Adaptability	99	1
Conflict management	91	9
Skills for preparing CV and application	76	14
Questioning	98	2
Class management	100	0
Lesson designing	99	1
Presentation	99	1
Response management	98	2
Board work	98	2
Demonstration	100	0

Communication skills that teachers require

Teacher communication skills	% of teachers who agreed	% of teachers who disagreed
Active listening	98	2
Presentation	96	4
Body language	100	0
Questioning	99	1
Managing technical and scientific language	87	13
Response management	98	2
Interpersonal communication	99	1
Public speaking	91	9
Discipline management	99	1
Multicultural sensitivity	94	6
Motivation and negotiation	98	2
Collaboration	95	5
Counselling	99	1
Digital communication	97	3
Sense of humour	92	8

Teacher communication skills are required for -

Situations that require teacher communication skills	% of teachers who agreed	% of teachers who disagreed
Interacting with parents	99	1
Collaborating with colleagues	92	8
Sharing knowledge with students	100	0
Interacting with administrators for organizational activities	92	8
Understanding students	100	0
Providing feedback to students	99	1
Preparing good CV for job application	59	41
Writing letters to school authorities before or during service	69	31
Performing well in interviews to gain employment	81	19
Building good relationships to create a healthy learning environment	99	1
Planning effective learning designs	93	7
Managing classroom discipline	99	1
Interacting with multicultural sensitivity	96	4
Making good classroom presentations	96	4
Making use of digital technology	92	8
Organizing events in school	97	3
Asking effective questions	99	1
Handling students' responses	100	0
Resolving interpersonal conflicts	95	5
Practising reflective teaching	95	5
Preparing good assessment strategies	92	8

Teacher's social media image

Impact of a teacher's social media projection on professional image	% of teachers who agreed	% of teachers who disagreed
	79	21

Present teacher education curriculum develops employability skills

Present teacher education curriculum develops employability skills	% of teachers who agreed	% of teachers who disagreed
	86	14

Employability skills developed by the present teacher education curriculum

Employability skills developed by the present teacher education curriculum	% of teachers who agreed	% of teachers who disagreed
Teamwork skills	91	9
Interpersonal communication skills	91	9
Support skills	89	11
Listening skills	93	7
Speaking skills	95	5
Academic writing skills	83	17
Cognitive skills	94	6
Non-verbal communication skills	87	13
Digital skills	89	11
Creative skills	93	7
Logical reasoning	88	12
Leadership skills	86	14
Self-regulation	92	8
Numeracy	73	27
Planning and organizing	98	2
Interview	69	31
Time management	92	8
Critical thinking	91	9
Decision-making	92	8
Adaptability	92	8
Problem solving	95	5
Conflict management	82	18
Lesson designing	98	2
Questioning	98	2
Presentation	99	1
Response management	93	7
Board work	99	1
Demonstration	98	2
Preparing CV and application letter	54	46
Class management	97	3

Communication skills developed by the present Teacher Education curriculum for teacher employability

Communication skills developed by the present Teacher Education curriculum for teacher employability	% of teachers who agreed	% of teachers who disagreed
Using diverse teaching strategies	96	4
Writing CV and covering letter for job application	42	58
Interacting with parents of students	72	28
Guiding students whenever necessary	94	6
Facing interviews	69	31
Addressing a large school audience	86	14
Preparing good learning designs	100	0
Using information technology for teaching	93	7
Using digital technology for communicating	90	10
Practising reflective teaching	95	5
Collaborating with colleagues	82	18
Managing class discipline	95	5
Helping students in need	95	5
Designing good assessment strategies	95	5
Asking effective questions	97	3
Managing students' responses	97	3
Providing feedback to students	99	1
Organizing group discussions	96	4
Interacting with administrators	74	26
Building good relationships to create a healthy learning environment	95	5
Problem solving	95	5
Resolving interpersonal conflicts	85	15
Self-regulation	94	6
Critical thinking	93	7

The sample group provided the following suggestions on what should be included in the teacher education curriculum to increase employability of pre-service teachers:

1. Inclusion of spoken English course.
2. Fluency in languages training in English, Bengali and Hindi
3. Public speaking practice.
4. Mock-interviews

5. Practical hands-on training in digital technology for teaching and interpersonal communication.
6. Training on preparation of CV and application letters.
7. Both on-line and off-line teaching experience through internship.
8. Field-based training for handling children with special needs.
9. Practical training on handling slow learners and providing remedial teaching.
10. Provisions for placement services and campus interviews.
11. Communication and interacting with parents of students.
12. Training in soft skills
13. Handling digitized smart classrooms.
14. Inter-personal conflict management skills
15. Teacher mental health self-management strategy training
16. Training in non-verbal communication and listening skills.
17. Critical problem-solving skills
18. Anger management techniques

Implications of the study

Results of the study reveals that teachers have a clear concept about the communication process.

Though teachers have a clear idea about verbal, non-verbal written and visual communication, 23% teachers do not realise that listening is also a very important aspect of communication. Further, 31% teachers also do not agree that communication can also be done with touch, which is a very crucial form of communication such as a gentle caress, or holding a hand, or guiding a person with visual impairment.

Most teachers understand that employability helps to succeed in a chosen employment and change one's job for better prospects. But only 49% think that employability helps to gain employment. This shows that many teachers are not aware that employability skills also help to gain employment. Academic writing, interview skills and preparing CV and job application are considered as not so significant skills for employability. It is indeed tragic that most teachers are yet to realise that teacher communication starts right from the moment they send their CV and job application letters. Short listing candidates for interview takes place only if their applications and CV are impressive. Interview skills are equally important as aspiring teachers are not only assessed based on their demonstration skills but also based on how they perform in interviews. This awareness is essential so that aspiring teachers may be groomed not only for the teaching in classrooms but also for faring well in the selection procedure for teacher recruitment that is practised in almost all schools in the present day. Besides, teachers need to continually

communicate through school authorities in verbal and written forms for which they need adequate communicative competence. So, teaching soft skills and communication skills to trainee teachers is indispensable. They also need to engage in academic writing activities like preparing learning designs, students' portfolio, cumulative assessment reports, and so on for which they need to have expertise in written communication skills. Most teachers consider that body language training, interpersonal communication, digital communication, questioning, counselling, and discipline management are the most significant communication skills that teachers require. Besides, response management, active listening and motivating and negotiating are also considered as essential communication skills for teachers. However, some teachers do not realise that managing technical and scientific language also requires expertise in communication, for example use of specific terminology is required in subjects like science, mathematics, computer, psychology, etc. Teachers do not feel that they need communication skills for preparing their CV and job application. This shows lack of awareness in them. Most teachers consider self-reflection or communicating with oneself as a form of communication. This implies that teachers realise the significance of a reflective teaching practice. Though many teachers agree that how a teacher presents oneself in social media such as on Facebook, Twitter, What's App and so on represent one's image and has a significant impact on one's professional image as well, some do not think so. It depends how a person handles privacy settings on social media platforms. But it should be realised that if we want our students to see our communication on social media, then we must be careful with our posts.

Most teachers think that the present teacher education curriculum develops employability skills; however, 14% think otherwise. They have identified some gaps lying in terms of preparation of CV and application letter, numeracy, interview, non-verbal communication, conflict management and academic writing skills. According to their views, conflict management and academic writing skills also need to be included in the curriculum. In the case of communication skills for teacher employability, there seems to be some lacunae in providing training in preparation of CV and job application letters, facing interviews, interacting with school administrators, interacting with parents of students, resolving interpersonal conflicts, addressing a large audience in school, and using digital technology for teaching and communication.

Role of teacher-education

Maphosa, C. and Mashau, S.T. (2014) suggest that 21st century aims at holistic education to develop global citizenship qualities, collaborative learning, problem-solving approaches, and development of the 4C's namely - critical thinking, communication, collaboration and creativity and innovation, requiring a common understanding of language in the classroom. Hence teacher education curriculum should be learner-centered and in keeping with the 21st century skills.

Upadhyay, S. (2018) suggests that teacher education of the 21st century should be linked with manpower planning, resource development and economic growth. And exchange programmes of teachers and students should be promoted through international collaboration. TE21, A teacher education model for the 21st century, A report by the National Institution of Education, Singapore (2009), states that teacher education should focus on inculcating knowledge, skills, and values in trainee teachers. And one of the core skills recommended under attributes of 21st century teaching professionals is communication.

The existing teacher education curriculum does develop most employability skills, but some skills are not inculcated to the same extent as others. Some of them are writing job application letters and preparing CV, interview skills, academic writing skills such as students portfolio making, preparing routines, writing letters for job application, conflict management, and so on. Teacher education does include viva voce in every semester but that is quite different from facing job interviews. The curriculum does include seminar presentations which might be helpful for public speaking in school. In present times, we try to inculcate certain hard skills and soft skills in the trainees so that they can become an integral part of an educational organisation. The present teacher education curriculum considers the significance of language across the curriculum and the importance of enhancing reading and reflective ability in the trainees. But one aspect of teacher training remains most neglected, and that is communication skills. Of course, they are taught teaching skills for classroom presentation. But a 21st century teacher is expected to attain expertise in communication both in and outside the classroom, from online teaching to face to face mode. From the time a trainee applies to an educational institution for a job, he or she requires communication skills in every sense of the term - from writing an application letter for a job and composing a curriculum vitae to appearing in several rounds of interview and performing classroom demonstration of teaching - everything requires communication skills. How a candidate presents himself or herself to the interview board, to students, to the management, to colleagues, to parents, and so on requires as much expertise in communication skills as how he or she presents his lesson in the classroom. Communication skill is an essential part of soft skill training and of immense significance to attain employability in this profession. The National Council for Teacher Education (NCTE) makes it mandatory for all teacher education institutions to have a language laboratory. However, there is no such provision in the teacher education curriculum to utilize the language laboratory for developing the communication skills of the trainees. The curriculum should include decisive activities for communicative competence development as an essential capacity building tool. The curriculum should also emphasize on soft-skills training of the trainee teachers for both online and frontal teaching. The teachers in the study have also suggested that training in fluency in spoken English, digital communication, skills for communicating with parents of students, strategies for interpersonal conflict management within the institution should be provided

during the training. They have also expressed an earnest appeal for arrangement of mock interviews and placement facilities in the college campus.

Conclusion

“Communication is the mortar that holds humanity together.” (Anonymous).

Teachers today are expected to handle multicultural, multilingual, and inclusive classrooms with sensitivity, hence expertise in communication skills becomes indispensable for teachers. No matter how far we progress in digital technology, teachers cannot be replaced by machines. Teachers have the flexibility to change with the transforming needs of the society, to understand gender issues, and to be sensitive to inclusive multicultural milieu. Only teachers can use low-cost teaching learning materials and prepare themselves to brace the challenge of handling many students in each class and make the most out of the available resources even in remote areas. Only teachers can support and guide children who have suffered traumas and come from disturbed living conditions. Only teachers can guide students to be sensitive to the global environmental crises. In a situation, when the world is seeking refuge in peace education, practices in happiness and gratitude, it is only teachers who can help to build happy global communities from the classrooms. For all these reasons, it is essential to equip teachers with personality development training, and training in soft skills and communication for capacity building. Spontaneous, constructive, and versatile communication helps to build harmonious and cordial relationships. If teachers are skilled in communicative ability, they can act as role models for the tender minds and guide the new generations towards weaving healthy relationships in life which can make them more sensitive, amicable, and congenial citizens of the global community.

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A STUDY ON ATTITUDE AND UNDERSTANDING TOWARDS OPEN EDUCATIONAL RESOURCES (OER) AMONG POST-GRADUATE STUDENTS OF UNIVERSITY OF KALYANI

Nilay Mondal

Ph.D. Research Scholar (JRF)

Department of Education, University of Burdwan, Burdwan, West Bengal 713104

Email: nilaymondal433@gmail.com

ABSTRACT

The present study explored the attitude and understanding of postgraduate students towards open educational resources (OER). The descriptive survey method was employed for this study. A total 164 postgraduate students from University of Kalyani in Nadia District of West Bengal were taken as samples of the population as a whole. Stratified random sampling was adopted during the selection of the participant. An attitude scale of OER (five-point Likert type) was constructed for collecting the data. As a statistical method mean, S.D. and t-test (two-tail) were used to analyze the data. The study showed that the degree of attitude of postgraduate students towards open educational resources is average or moderate. The study also uncovered that there was no significant difference in attitude of postgraduate students towards open educational resources (OER) regarding their gender, stream of study, locality and semester.

Keywords: Open educational resources, Attitude, Postgraduate student, Online learning

INTRODUCTION:

The Open Educational Resources (OER) has risen as a very important aspect for providing the various knowledge or educational content to the mass population freely. In daily life modern digital technology have become essential and universal and an important factor for changing education sector (Orr, Rimini & Damme, 2015). In the present day, open educational resources (OER) have made a great opportunity for educators, teachers, learners, researchers for enhancing their knowledge. The tremendous development of digital technologies has played a massive impact to foster the OER movement. Integration of ICT in education is one of the main reasons for the necessity and development of OER.

Currently, the entire education system is running online or partly online in covid-19 situation. Students have become very dependent on open education resources in this situation. As a self-dependent learner, postgraduate students are also dependent on this.

They need a variety of information for their studies with the help of open education resources. Blended methods are currently being used in higher education specially in various university. In this method both conventional education and online education are used together. The use of open educational resources (OER) along with conventional learning is a method of blended learning.

The main theme underlying the concept of open educational resources (OER) “is the freedom to share knowledge and that knowledge should be legally, socially and technologically open” (Thomas,2018; Torres,2013, p88)

In the present-day UNESCO defines OERs as “open educational resources are teaching, learning or research materials that are in the public domain or released with an intellectual property license that allows for free use, adaptation and distribution” (UNESCO,2012)

According to Hylén “Open Educational Resources are digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research” (Hylén, 2006, p49).

Currently, there are many initiatives taken for development of open educational resources in India, such as *Shodhganga* (<http://shodhganga.inflibnet.ac.in/>), *National Digital Library (NDL)* (<http://www.ndl.iitkgp.ac.in>), *National Knowledge Network (NKN)* (<http://nkn.gov.in>),

Vidyanidhi (<http://http://eprints.uni-mysore.ac.in>), *ShodhGangotri* (<http://shodhgangotri.inflibnet.ac.in>), *National Programme on Technology Enhanced Learning (NPTEL)* (<http://nptel.ac.in>), *Consortium for Educational Communication (CEC)* (<http://cec.nic.in/Pages/Home.aspx>), *SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds)*, *e-PG Pathshala Project* (<http://epgp.inflibnet.ac.in>), *Agropedia* (<http://agropedia.iitk.ac.in>), *Project OSCAR (Open Source Courseware Animations Repository)* (<http://oscar.iitb.ac.in>), etc.

RATIONALE OF THE STUDY:

The present age is the age of technology. Modern technology has influenced every aspect of our daily lives. Technology also helps in all aspects of education. Open educational resource (OER) is a big field of the uses of technology in education. Generally, Open educational resources (OER) are digital contents, which educators, teachers, and learners can use at any time freely for their purpose. At present, many new things of knowledge are constantly being discovered. We need to be aware of that knowledge. And for this instant and current knowledge, we rely heavily on OER. Nowadays, with the advancement of internet technology, we can easily learn about various aspects of knowledge from the internet. Currently, in the situation of Covid-19, all the education system is online. So, Open educational resources (OER) are more relevant now. So, the researcher tried to find out how much the postgraduate students are aware

of this. It is very important to conduct such a study related to the awareness and attitude of postgraduate students towards OER because there is very little research done related to this topic in West Bengal.

REVIEW OF RELATED STUDY:

Issa, Ibrahim, Onojah & Onojah (2020) conducted a study and tried to find out the attitude of undergraduate students towards the utilization of open educational resources for learning. They employed the descriptive method of quantitative research. They surveyed on 398 samples randomly. The findings showed that undergraduate students' have positive attitude regarding the utilization of OER in learning. And there was significant difference in attitude towards the utilization of OER between male and female undergraduate. The study revealed that there exists a positive attitude towards the use of OER for learning.

Hussain, Chandio & Sindher (2013) conducted a study to find out "the attitude of university academia towards the use of open educational resources (OER) in higher education". The objectives were i) to study a general perception of university academia towards using OER. ii) to examine the attitude towards the use of OER of university academia. iii) and identifying challenges in using OER in higher education. They prepared a questionnaire for collecting the qualitative data and conducted interview for qualitative data collection. The findings showed that the participants were accepted the uses of OERs helped in promoting higher education in potential. There were some problems like bandwidth of internet, bugs and computer virus, electricity failure.

Praveen kumar & M. Vasimalairaja (2018) conducted a study on higher education students' awareness and attitude towards open educational resources. They took 300 respondents as a sample and conducted a survey. They found that there exists moderate awareness and attitude level towards open educational resources among higher education students. They also found that a positive correlation exists between higher education student's awareness and attitude towards OER.

STATEMENT OF THE PROBLEM:

The researcher's purpose was to study the attitude of post-graduate students towards open educational resources (OER). He conducted a survey on selective representative sample of Kalyani University. So, the researcher entitled his study as "**A Study on Attitude and Understanding Towards Open Educational Resources (OER) Among Post-Graduate Students of University of Kalyani**"

PURPOSES OF THE STUDY:

- a. To know the post-graduate students' understanding and perception towards open educational resources (OER).
- b. To find out the significant attitude differences between male and female post-graduate students towards open educational resources (OER).

- c. To find out the significant attitude differences between arts and science post-graduate students towards open educational resources (OER).
- d. To find out the significant attitude differences between rural and urban post-graduate students towards open educational resources (OER).
- e. To find out the significant attitude differences between 2nd semester and 4th semester students towards open educational resources (OER).

HYPOTHESIS OF THE STUDY:

The null hypotheses for the present study are follows

- H₀₁: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their gender (Male & Female).
- H₀₂: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their locality (Rural & Urban).
- H₀₃: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their stream of study (Arts & Science).
- H₀₄: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their semester (2nd & 4th semester).

METHODOLOGY:

Research Design:

In the present study, the researcher used the survey research method. Here only a quantitative research approach has been employed in the data collection and data analysis process. "A research study that used a survey to obtain a description of a particular group of individuals is called a survey research design" (Gravetter & Forzano, 2012).

Participants:

The theoretical population for the present study is all the post-graduate students of the University of Kalyani.

The sample of the present study is 164 students from the University of Kalyani. By adopting stratified random sampling, samples were selected from various academic departments under Arts and Science faculty. The researcher tried to take equal representation but due to limitation, some variables are lesser than others. The demographic details of the participants are given in table no-

Table No- 1: Demographic details of the participants

Area	Category	Number	Percentage (%)	Total
Gender	Male	82	50	164
	Female	82	50	
Stream of study	Arts	82	50	164
	Science	82	50	
Locality	Rural	82	50	164
	Urban	82	50	

Instrument Used:

For the collection of the data, the researcher used a self-constructed OER awareness and attitude inventory consisting of 30 items both positive and negative.

The tool is based on a five-point Likert type scale: 1) Strongly agree, 2) Agree, 3) Undecided, 4) Disagree, 5) Strongly disagree. The reliability of the tool was found 0.78 by Cronbach's Alpha. The content and face validity of the tool were ensured by faculty members of Kalyani University.

ANALYZE THE DATA:

Objective-1

Table No-2: Attitude of post-graduate students towards open educational resources (OER)

Scores	Frequency	Percentage (%)	Levels of Attitude
Above 126	26	16	High
Between 102-126	79	48	Moderate
Below 102	59	36	Low
Total	164	100%	

Analysis & Interpretation: Table no- 2 shows the general attitude level of postgraduate students towards open educational resources (OER). It reflects that the majority of students (48%) have moderate or average attitude level towards OER. 36% of students have a low attitude and 16% of students have a high attitude level towards OER. So, it can be concluded that postgraduate students' have a moderate or average attitude towards open educational resources (OER).

Hypothesis-1

H_{01} : There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their gender (Male & Female).

Table No-3: Attitude of post-graduate students towards open educational resources (OER) concerning their gender (Male & Female)

Groups	N	Mean	S.D.	Mean Difference	S _{ED}	df	t-value (two-tail)	Level of Significance	
Male Students	82	113.01	11.54	0.6	1.83	162	0.33	5%	Not significant
Female Students	82	112.41	11.95						

Analysis: The table shows that the calculated 't' value is 0.33. The tabulated value of 't' with 162 degrees of freedom (df) at 0.05 level of significance for two-tail test is 1.97. Whereas the calculated value (0.33) is lesser than the tabulated value (1.97), the difference between the two groups is not significant.

Interpretation: Hence, the null hypothesis (H_{01}) is accepted and the alternative hypothesis is rejected. It means that there is no significant difference in attitude towards open educational resources (OER) between male and female postgraduate students. And male students have a slightly positive attitude towards OER.

Hypothesis-2

H_{02} : There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their locality (Rural & Urban).

Table No-4: Attitude of post-graduate students towards open educational resources (OER) concerning their locality (Rural & Urban)

Groups	N	Mean	S.D.	Mean Difference	S _{ED}	df	t-value (two-tail)	Level of Significance (5%)
Rural Students	82	111.77	12.64	1.41	2.01	162	0.70	Not significant
Urban Students	82	113.18	13.22					

Analysis: The table shows that the calculated 't' value is 0.70. The tabulated value of 't' with 162 degrees of freedom (df) at 0.05 level of significance for two-tail test is 1.97. Whereas the calculated value (0.70) is lesser than the tabulated value (1.97), the difference between the two groups is not significant.

Interpretation: Hence, the null hypothesis (H_{02}) is accepted and the alternative hypothesis is rejected. It means that there is no significant difference in attitude towards open educational resources (OER) between rural and urban postgraduate students. And urban students have a positive attitude towards OER.

Hypothesis-3

H₀₃: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their stream of study (Arts & Science).

Table-5: Attitude of post-graduate students towards open educational resources (OER) concerning their stream of study (Arts & Science)

Groups	N	Mean	S.D.	Mean Difference	S _{ED}	df	t-value (two-tail)	Level of Significance	
Arts Students	82	112.71	11.31	2.24	1.66	162	1.34	5%	Not significant
Science Students	82	114.95	9.92						

Analysis: The table shows that the calculated 't' value is 1.34. The tabulated value of 't' with 162 degrees of freedom (df) at 0.05 level of significance for two-tail test is 1.97. Whereas the calculated value (1.34) is lesser than the tabulated value (1.97), the difference between the two groups is not significant.

Interpretation: Hence, the null hypothesis (H₀₃) is accepted and the alternative hypothesis is rejected. It means that there is no significant difference in attitude towards open educational resources (OER) between arts and science postgraduate students. And science students have a positive attitude towards OER.

Hypothesis-4

H₀₄: There are no significant differences between the attitude of post-graduate students towards open educational resources (OER) concerning their semester (2nd & 4th semester).

Table-6: attitude of post-graduate students towards open educational resources (OER) concerning their semester (2nd & 4th semester)

Groups	N	Mean	S.D.	Mean Difference	SED	df	t-value (two-tail)	Level of significance	
2 nd Semester	82	112.20	10.25	1.97	1.70	162	1.16	5%	Not significant
4 th Semester	82	114.17	11.51						

Analysis: The table shows that the calculated 't' value is 1.16. The tabulated value of 't' with 162 degrees of freedom (df) at 0.05 level of significance for two-tail test is 1.97. Whereas the calculated value (1.16) is lesser than the tabulated value (1.97), the difference between the two groups is not significant.

Interpretation: Hence, the null hypothesis (H_{04}) is accepted and the alternative hypothesis is rejected. It means that there is no significant difference in attitude towards open educational resources (OER) between 2nd and 4th-semester postgraduate students. And 4th-semester students have a positive attitude towards OER.

MAJOR FINDINGS:

After analyzing and interpreting the results, the following findings are drawn out

- I. The attitude of postgraduate students towards open educational resources (OER) are moderate or average.
- II. There are no significant differences between the attitude of male and female post-graduate students towards open educational resources (OER).
- III. There are no significant differences between the attitude of rural and urban post-graduate students towards open educational resources (OER).
- IV. There are no significant differences between the attitude of arts and science stream post-graduate students towards open educational resources (OER).
- V. There are no significant differences between the attitude of 2nd and 4th semester post-graduate students towards open educational resources (OER).

LIMITATION:

The following limitations of the present study are-

Sample size: The researcher has collected the data only from 164 participants.

Instrument used: For collecting the data the researcher used only a close-ended questionnaire. So, other important aspects may be omitted.

Statistics used: During analysis and interpretation of the collected data, the researcher has adopted Mean, S.D. t-test (two-tails) only.

CONCLUSION:

The present study was carried out with the purpose of measuring the attitude and understanding of postgraduate students towards open educational resources at the University of Kalyani. Generally, the findings of the study reveal that the postgraduate students of the University of Kalyani have a moderate or average attitude towards open educational resources.

As we know, the use of open educational resources can help students to develop their knowledge more comprehensively. And the findings showed that they have a moderate attitude, so it would be the duty and responsibility of teachers, educators, and educational leaders to develop a positive attitude towards OER among them.

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TRIBAL EDUCATION IN INDIA: AN ANALYSIS

Dr. Rajiv Gogoi

Assistant professor, Department of Education
Jhanji HNS College, Sivasagar, Assam

ABSTRACT

Anthropologically, tribe is a social group, a number of which live in a community having a common dialect, uniform social organization and cultural homogeneity with common ancestor, political organization and religious pattern. In India specification of tribes and tribal communities as "Scheduled Tribe" arose after the constitution came into force. The tribal people are one of the backward classes and historically disadvantaged group of Indian society. It is only through education that scheduled tribes can fully utilize the opportunities for Socio-economic development. Education is also an instrument of liberation and endows the deprived groups with confidence, courage and ability to resist exploitation. Although government of India has given stress on promotion of education in tribal areas since independence, the literacy rate among Scheduled Tribes has remained lower. This paper is an attempt to highlight the various issues of tribal education in India.

Key words: Scheduled Tribe, Education, Literacy

Introduction:

Education is a tool to empower the individual. It is precondition for removing the barriers of backwardness and marginalization of any society. Education is one of the primary agents of transformation towards development. The relationship between education and social change takes a dual form i.e. education as an instrument and education as a product. This implies that education as an instrument which is used as a means for bringing about desired changes in the society and in the later case changes in the educational structure follows as a consequence of changes which have already taken place in the society. Education is an important parameter for any inclusive growth in an economy and it is the key for improvement of economic and social conditions of the Scheduled Tribes.

India is a home to a large variety of tribal people. Tribes are geographically, socially isolated and economically marginalized communities of India. The economic and social development of a country should be hindered if proper and effective attention is not paid to education of the backward section of the population. That is why it is necessary to pay special attention to the education for the tribal and improve their overall status in the multicultural society of India. Although after independence government of India has taken

steps for improving the condition of tribal people, But till now no substantial benefits have been arrived so far.

Objective of the paper:

The main objectives of the paper are

- To analyze the various issues of tribal education in India.
- To assess the educational gaps and suggest suitable remedial measures for improvement of tribal education.

Methodology:

This study is descriptive in nature and therefore the information stated is based on the secondary data. The Secondary data has been collected from various research studies including census data, committee reports on tribals, journals, government reports etc.

Tribal Scenario in India:

The tribal population in India is represent an huge diversity of groups. They have unique language, dialects, physical features, size of the population, religion, belief etc. Traditionally they lived largely in isolation, but they spread over the country. Prior to the Constitution, the tribes were variously termed as aboriginals, adivasis, forest tribes, hill tribes, primitive tribes, etc. Up to 1919, these groups were included in the 'Depressed Classes'. Later on, the Indian Franchise Committee of 1919 had accorded a separate classification for these groups for census reports and in 1931, they were recognized as primitive tribe. Only in 1951 order, they were identified as scheduled tribe (Verma 1996). In 1951, the number of schedule tribes was only 212, and their number has increased to 705 by 2011 census. India has total tribal population of 10.43 crores which is 8.6 per cent of total population of India as per 2011 census.

Table-1: Scheduled Tribe population in India

India	Total	Rural	Urban
	104,281,034	93,819,162	10,461,872

Table-2: Percentage of Scheduled Tribe

Total	Rural	Urban
8.6%	11.3%	2.8%

More than half of the Scheduled Tribe population is concentrated in Central India, i.e., Madhya Pradesh (14.69%), Chhattisgarh (7.5%), Jharkhand (8.29%), Andhra Pradesh (5.7%), Maharashtra (10.08%), Orissa (9.2%), Gujarat (8.55%) and Rajasthan (8.86%). The other tribal populated areas are in the North East, i.e., Assam, Nagaland, Mizoram, Manipur, Meghalaya, Tripura, Sikkim, and Arunachal Pradesh. Among the states of India, Mizoram has the highest proportion of Scheduled Tribes (94.43%).

Literacy trends of scheduled tribes in India:

The first census after independence in 1951 did not collect data on the literacy rates of the tribals. The literacy rate among the tribal's has increased in the post independence period. The literacy rate among the tribals has increased from 1961 when it was just 8.54% to 63.1% in 2011.

Table-3: Literacy rate of Scheduled Tribe in India (From 1961-2011)

Year	Male	Female	Total
1961	13.83%	3.16%	8.54%
1971	17.63%	4.85%	11.39%
1981	24.52%	8.05%	16.35%
1991	40.65%	18.19%	29.60%
2001	59.17%	34.76%	47.10%
2011	71.70%	54.4%	63.1%

Source: Census report 2011

Table-4: Gap in literacy rate

Year	Total literacy rate	S.T. literacy rate	Gap
1961	27.86%	8.54%	19.32%
1971	33.80%	11.39%	22.5%
1981	41.30%	16.35%	24.95%
1991	52.21%	29.60%	22.61%
2001	64.84%	47.10%	17.74%
2011	72.99%	63.1%	9.89%

Source: Census report 2011

Steps taken by government of India regarding tribal education:

The geographical isolation and distances from the mainstream of society lead the tribal people vulnerable and exposed to the problems of gross social injustice, discriminations, inhuman suppressions and economic exploitation. So, Government of India after independence made special provisions in the constitution for protection of the scheduled tribes from exploitation and for their development. These special provisions are contained in the Article 15(4), 16(4), 19(4), 19(5), 23, 29, 46, 164, 275(1), 330, 332, 334, 335, 338, 342 and fifth and sixth schedule of the constitution .

Starting from the First Five Year Plan Period (1951-1956) the government of India is steadily allocating financial resources for the purpose of tribal development. Towards, the end of the plan (1954), 43 Special Multipurpose Tribal Development Projects (MTDPs) were created for the development of tribal people.

Elwin committee was constituted in 1959 to examine the functioning of multi-purpose development blocks, the basic administrative unit for all tribal development programmes.

The schedule areas and scheduled tribe commission under the chairmanship of U.N. Dhebar was constituted in 1960 to address the overall situation of tribal groups. The Commission identified certain specified reasons for the educational backwardness of tribals. They were vague generalizations like inappropriate and unattractive teaching methods adopted by the teachers etc. It also touched other problems like poor economic condition and subsistence economy.

During the Third Five Year Plan Period (1961-1966), the government of India adopted the strategy of converting areas with more than 66 per cent tribal concentration into Tribal Development Blocks (TBDs). By the end of Fourth Five Year Plan (1969-1974), the number of TBDs in the country rose to 504. Additionally, in 1972 the Tribal Sub-Plan Strategy (TSP) was implemented by the Ministry of Education and Social Welfare. Tribal Sub-Plan Strategy was based on twin objectives of socio-economic development and protection against exploitation.

The Shilu Ao committee was set up in 1966 like the Elwin committee to address the issues of tribal development and welfare..

The Panchayats Extension to Scheduled Areas Act was passed 1996 by government of India. The Act has made it mandatory for the States having scheduled areas to make specific provisions for giving wide-ranging powers to the tribes on the matters relating to decision-making and development of their community.

A centrally-sponsored government scheme of Ashram schools exclusively for ST children from elementary to higher secondary levels was initiated in the year 1970. But the poor quality of education in Ashram schools has undermined confidence in education as a vehicle for social mobility.

Kothari Commission, 1964-66 apart from the education in general dealt with the tribal education of the country. The commission recommended to provide a five year effective education for all tribal including intensive programme of parental education and education of girls.

The National Policy on Education, 1986 has made following recommendations relating to education of the Scheduled Tribes.

- a) Priority will be accorded to opening primary schools in tribal areas.
- b) b) There is a need to develop curricula and devise instructional material in tribal languages at initial stages with arrangements to switchover to regional languages.
- c) Promising Scheduled tribe youths will be encouraged to take up teaching in tribal areas.
- d) Ashram Schools/ Residential Schools will be established in a large scale in tribal areas.
- e) Incentive schemes will be formulated for Scheduled Tribes, keeping in view their special needs and lifestyle.

Schemes for construction of hostels for Scheduled Tribe Girls and Boys was launched in 1989-90. The scheme for construction of ST Girls' Hostel was started during the Third Plan period. The objective of the scheme is to promote literacy among tribal students by providing hostel accommodation to such ST students who would otherwise have been unable to continue their education because of their poor economic condition and the remote location of their villages.

Schemes for the establishment of Ashram School in Tribal Sub-Plan Areas was launched in tribal sub plan 1990-91. The objective of this scheme was to promote and extend educational facilities to Scheduled Tribe students. Ashram Schools provide education with residential facilities in an environment conducive to learning. This is a centrally sponsored scheme on a cost sharing basis between the Centre and the States.

National Overseas Scholarship Scheme for Higher Studies Abroad, was a Non Plan Scheme which became a Plan Scheme from 2007-2008. The objective of this scheme is to provide financial assistance to selected ST students pursuing higher studies (Masters, Doctoral and Post Doctoral level) in certain specified fields of Engineering, Technology and Science only.

Rajiv Gandhi National Fellowship scheme has been launched from the year 2005-2006. The objective of this scheme is to provide fellowships in the form of financial assistance to students belonging to the STs to pursue higher studies such as M.Phil and Ph.D. This scheme covers all the Universities/Institutions recognized by the UGC under section 2(f) of the UGC Act.

Scheme of Top Class Education for ST student was launched by Ministry of Tribal Affairs for providing scholarship to pursue Top Class Education for the ST students from the year 2007-2008. The objective of the scheme is to encourage meritorious ST students for pursuing studies at degree or post degree level in any of the selected lists of institutions.

In addition to this fourteen Tribal Research Institutes have been set up in Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu, West Bengal, Uttar Pradesh, Manipur and Tripura. These research institutes are engaged in providing planning inputs to the state government, conducting research and evaluation studies, collection of data, codification of customary law and conduct of training, seminars and workshops in tribal issues.

Problems of tribal education in India:

The enhancement of the system of tribal education has been one of the major responsibilities of the Government since independence. Though there have been number of developments towards the expansion of the education system in tribal communities, but the tribal people are experiencing setbacks. There are number of problems and challenges that are overwhelming tribal communities, these are, poverty, illiteracy and deprivation etc. Due to the occurrence of problems, they remain in a secluded and backward state (Akula, 2013).

The major issues of tribal education are stated as follows:

Economic Condition of the parents: Within the course of acquisition of education, financial problems are regarded as major barriers. The economic condition of tribal people is so poor that they do not desire to spare their children or their labour power and allow them to attend schools.

Language and medium of instruction: Language and medium of instruction are regarded as significant barriers that tribal students experience within the course of acquisition of education. Research has indicated that due to differences in language, they experience problems in establishing effective communication terms with teachers as well as fellow students.

Attitude of the parents: As education does not yield any immediate economic return, the tribal parents prefer to engage their children in remunerative employment which supplements the family income.

Management of Household Responsibilities: In tribal communities, the children, especially girls are usually involved in the management of household responsibilities. They assist their parents in various household tasks and due to this they are unable to attend schools.

Low Levels of Motivation: It is essential for students to possess interest, enthusiasm and high levels of motivation, particularly within the course of attainment of academic goals. Tribal students usually possess low levels of motivation (Rani, 2007). The primary causes behind this are, lack of efficient understanding of academic concepts, learning disabilities, unavailability of learning materials, lack of infrastructure and other facilities and lack of support from parents, particularly in academic learning.

Lack of Proper monitoring: Proper monitoring of tribal education and poor coordination between the Tribal Welfare Department and School Education Department is one of the major problem of tribal education.

Teacher Related Problems: In the remote tribal areas the teacher absenteeism is a regular phenomenon and this affects largely the quality of education.

Lack of Facilities and Amenities: In tribal schools, there are lack of facilities and amenities. For example lack of appropriate teaching-learning materials, technologies, furniture, clean drinking water, library facilities, laboratory facilities, playgrounds, extra-curricular and creative activities etc. Hence, this has proved to be a major challenge within the course of acquisition of education.

Suggestions:

Some suggestions for improvement of tribal education

- a) Literacy campaigning should be done to generate awareness about the importance of education among the tribal people. In this regard government as well as non government organization should play active role.

- b) There should be provisions of financial assistance to the tribal students so that they can able to meet all educational expenses in an appropriate manner.
- c) It is also suggested that so far as possible tribal teachers should be appointed in the tribal area schools.
- d) Proper infrastructure development of the schools of tribal area like, the furniture, teaching materials, tools, library and laboratory facilities are needed to promote effective teaching learning environment.
- e) Steps should be taken to supply all study materials in local languages of tribes.
- f) Higher level officials should monitor the functioning of the educational institutions situated in the tribal areas. They should supervise about the teaching methods, working hours and attendance registers of both students and teachers etc.
- g) Promotion of extra-curricular and creative activities in the schools of tribal areas according to their needs.
- h) More residential schools should be established in each states and districts and extended this up to post graduation level in tribal areas.

Conclusion:

Education is one of the essential requirements for promoting well-being of the individuals and leading to overall progression of communities and country as a whole. Though the development of the tribes has taken place in India, but the rate of development has been relatively slow. Hence time has come to think it seriously about tribal education and inclusive growth. So, the various government intervention, planners and policy makers should address this problem and allocate more funds in the central as well as state budgets for tribal education.

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ATTITUDE TOWARDS SANSKRIT OF THE UPPER PRIMARY STUDENTS

Prahlad Gain

Research Scholar, Department of Education, University of Kalyani
Kalyani, Nadia, West Bengal, India -741235

INTRODUCTION:

Language is the medium of communication. It is the vehicle through which our feelings, emotions, ideas and thoughts are conveyed. Animals and birds keep in touch with each other. They communicate through their words, body language and gestures. But people communicate through their language. Language is the medium of communication at the primary level, in the case of education it is the medium of instruction also. Language allows a person to think and reason. His expression is expressed only when he expresses it through language. The development of human intelligence is related to the development and growth of language. The Culture and civilization grow together with language and mankind develops with it. There is no art, science or technological innovation that can be expressed in any knowledge without proper means of language. Language is a significant possession of a human being. We cannot imagine a society without it. From birth to death we are surrounded by language. It is a means of communication, a means of social control. No society can function without it. It is not possible to think without language. When we think about something, we shape our thinking with the help of language. Language is related to people's identity, their way of life, indigenous knowledge and worldview and a lot of information and knowledge of specific linguistic communities. (Ponnammal, 2017)

Language is one of the burning issues in India at present. It plays an important role in our lives. In India, there are as many states as there are languages. Naturally, people are also multilingual for mutual communication. Considering the multiplicity of multilingual countries and languages and the need to establish national unity, it has become very important to learn two or more than two Indian languages besides one's own mother tongue. (Ratti, 2015) After independence, various education committees and commissions constituted by the Government of India insisted on language education in their recommendations. The present situation in India is such that while due importance is given to the teaching of first and second languages, the teaching of third languages is naturally neglected. The Three Language Formula (TLF) emphasized that at least three languages should be taught at the school level and that the provision of teaching should ensure that a student who has passed secondary school must have adequate knowledge of the three languages. An uninterrupted course in language learning should be taught for at least three years. The importance of following the three language formulas in caste and spirit is repeatedly reflected in education policy (NPE-1986, NCFSE-2000, NCF-

2005). The NCF-2005 also emphasized the importance of the three language formulas in school education regarding language teaching in the Indian education system.

ATTITUDE:

Attitude can be defined as a tendency to be taken or acquired that prepare a person to balance a particular object or class toward a particular object, subject to the prevailing conditions of the environment. It is a tendency to behave in a specific and specific way in a given situation. It is universally acknowledged that attitudes are learned rather than inherited. It is certainly influenced by the history of the nation and the current political and socioeconomic situation in the modern world. Attitudes are stable, but significant situations can be subject to change. It is very important that the attitude affects the actions of the students.

Attitude is derived from the Latin word "Apatus". It refers to a subjective or mental state of fitness on the one hand or preparation for an activity. It is an organ of individual personality. Attitude is "a condition of preparation for a particular type of activity."

The psychologists define attitude in various ways. They are as follows:

K. Young defined Attitude as – "essentially a form of anticipatory response, a beginning of action not necessarily completed." (Dr. Bipin Asthana & N.R. Agarwal, 1994)

According to Britt - "An Attitude is a mental and neutral state of readiness, exerting directive or dynamic influence upon the individuals' response to all objects and situation with which it is related." (Dr. Bipin Asthana, N. R. Agarwal, 1994)

Krech and Crutchfield defined Attitude as "an enduring organisation of motivational, perceptual and cognitive processes with reference to some aspect or the individual's world." (Dr. Bipin Asthana, N. R. Agarwal, 1994)

According to Gardner "An individual's attitude is an evaluating reaction to some referent or attitude object on the basis of the individual's beliefs or opinions about the referent." (Gardner, 1985)

Gagne and Driscoll defines Attitude as "an Acquired internal state that influences the choice of personal action." (R.M. Gagne & M.P. Driscoll, 1988)

Chapman and McKnight say that, "Attitude is your general disposition – your mental "starting point" for viewing life and the people and events in it. From your viewpoint, attitude is the way you look at things mentally and it all starts inside your head. For others, your attitude is the overall mood they interpret from what they see you say and do." (Elwood N Chapman & Wil McKnight, 2002)

Baker says that attitudes are dispositions to approach an object, a person, an institution or an event favourably or unfavourably. (Baker, 1988)

Gorden Allport said that, "attitude is a mental and neural state of readiness organized through experiences, exerting a direct or dynamic influence upon the individual's response to all objects with which it is related." (Skinner, 2009)

REVIEW OF RELATED STUDIES AND LITERATURE

Mouly states that, "Survey of related literature avoids the risk of duplication, provides theories, ideas, explanations or hypotheses valuable in formulating the problem and contributes to the general scholarship of the investigator" (**Mouly, 1964**).

Gay says that "the review of related literature involves the systematic identification, location and analysis of documents, containing information related to the research problem." (**Gay, 1976**)

According to *Cooper*, The review of literature is, in itself, a study, and, as with any study, has possible threats to validity at each stage (**Cooper, 1998**).

Fink defined the literature review as "A research literature review is a systematic, explicit, and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners" (**Fink, 2005**).

Research Methodology

SOURCES OF THE DATA:

Two types of data were collected for this study:

- 1) Primary data and
- 2) Secondary data.

1) Primary data: Primary data were collected from 600 respondents who were selected for this study through a stratified random sampling. Data were collected using two questionnaires to measure attitudes and academic achievement.

2) Secondary data: In consultation with the resource faculty, secondary data were collected from Library, especially the Central Library of University of Kalyani. Recent publications, journal articles, edited publications, published and unpublished doctoral theses, seminar-conference proceedings were carefully selected for effective data collection. Some of these are covered in the literature review and many of them have been used for research design and methodology formulation and also for findings, conclusions and recommendation.

POPULATION OF THE STUDY:

The population is all objects, elements or organisms collected on the basis of a feature in the study. This mean all the people, documents, etc. who are proposed to come under this study. Population is a specific group of human or non-human beings that are endowed with one or more characteristics that are of interest to the researcher.

In upper primary level of West Bengal govt. and govt. aided/sponsored Bengali medium school, English as second language taught VI to VIII standards but Sanskrit as third language taught only VII and VIII standards in school level. In this study the students of VIII standards of Bengali medium govt. aided and govt. sponsored schools are the target population.

SAMPLE OF THE STUDY:

The representative part of the whole population is called the sample. The method by which the sample is selected from the population is called sampling, i.e. sampling is only the experimental part which can show the characteristics of population. Sampling is the process of selecting certain elements from a larger aggregate. Accurate results can be obtained in a scientific way through proper sampling. So the importance of sampling in social studies is immense.

3.1 OBJECTIVES OF THIS STUDY:

Objectives are the milestone in achieving the ultimate goal of any study or reaching the destination. This is a matter by which any type of study can achieve the ultimate desired condition within the fixed time frame and the available resources with precisely targeted goals. The next step in research problem selection and research rationality is the purpose or objectives of the research. The final task of specifying the research project is accomplished by setting the research objectives. Usually the final objectives discuss what research findings might contribute.

The basic objectives of this study are follows:-

1. To estimate attitudes of the students of upper primary level towards learning Sanskrit as third language.

Data Analysis

[Obj 1- To estimate attitudes of the students of upper primary level towards learning Sanskrit as third language.]

Table 1: Significance of the Difference between the attitudes of the students of upper primary level towards learning Sanskrit as third language.

OBJECTIVE	BETWEEN GROUP	MEAN	'F' test	Level of Significance
1	Students x Sanskrit	100.36 x 101.46	4.47	0.05

Hence, it can be concluded that the attitudes of the students of upper primary level towards learning Sanskrit as third language is significant

Conclusion

From the above results the researcher could draw some conclusion about the study.

The boys and the girls have no significant difference in achievement in Sanskrit

and English. Therefore it may be concluded that “gender” does not have any effect on the achievement test. In case of attitude towards Sanskrit and English the similar results were found. In the present study both boys and girls get similar scope and facilities for their Sanskrit and English. That is why there may be no such observable and significant difference between boys and girls.

The factor which has really influenced the achievement towards Sanskrit and English is the “strata” of the students i.e. the locale or their place of habitat, rural or urban. In this respect, significant difference has been observed between urban and rural boys in case of achievement tests towards Sanskrit and English, however their attitudes towards Sanskrit and English remain similar, i.e. there is no significant difference in their attitude towards the subject.

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ATTITUDE TOWARDS ENGLISH OF THE UPPER PRIMARY STUDENTS IN RELATION TO ACADEMIC ACHIEVEMENT

Prahlad Gain

Research Scholar, Department of Education, University of Kalyani
Kalyani, Nadia, West Bengal, India -741235

INTRODUCTION

The three language formulas help to encourage bilingualism and multilingualism, traits that improve cognitive growth, social tolerance, diverse thinking, and educational achievement. But the formula is never followed uniformly in the country. The state government plays an important role in the implementation of the National Education Policy.

At present three languages are being taught to the students in school education in West Bengal. Generally, Bengali is the first language in government and government sponsored schools in West Bengal and students read it as their mother tongue. English is the second language. Most students like it in school. Now English has become a language of international communication, business, banking and finance, science and technology, cultural exchange and a language of global international relations. Many studies have shown that when people are interested in a particular second language, they see that the language is a tool to achieve higher economic status, to ensure life and to satisfy one's life value. Practice has shown that proficiency in English is the key to success in life. Learner's attitude is an important factor in determining success or failure.

The third language in West Bengal is mainly Sanskrit. Apart from this, Hindi, Urdu, Arabic, Alchiki etc. are also taught as a third language in some areas. In the present study, only Sanskrit will be considered as a third language. In West Bengal, at present the third language is taught at vii and viii standards. It is noteworthy that the third language is not a compulsory language in other classes. Various committees and commissions recognize the importance of the third language in school curricula and emphasize that the third language must be taught for at least three years at the school level. Yet the researcher found that the third language was neglected and that it was only taught for two years. Thus, researcher have discovered that students cannot learn third language properly and learning of different language necessary for a student's overall development in his or her academic life is not taught properly.

Review of Related Literature

Viet, Vo Van (2017) conducted a case study "Undergraduate Students' Attitude towards Learning English: A case Study at Nong Lam University" to explore the attitude of students towards learning English. This study used quantitative approach. Primary data for this research was collected through questionnaires consists of two independent

section including demographic profile questions, attitude questions. Attitude items were selected and adjusted from survey instruments developed by Samar Rukh (2014) and Sk. Abdullah al Mamun et al. (2012). Total numbers of sample were 694. Data were analysed using the SPSS (version 22.0). Descriptive statistics was conducted to determine the frequency, the mean and the standard deviation of the demographic profile and attitudinal data. The statistical results of this study shows that students have a positive attitude towards learning English. The mean value of three components of attitudes including cognitive, emotional and behavioural was positive. Most of the students are aware of the importance of English in their studies and in future career development. Most of the students agreed with that learning English is important because it's a very useful tool in modern society.

Mariyati Haji Mohd Nor, Robe'ah Yusuf &Norhana Md. Salleh (2016) conducted a study "Influence of Attitudes in Learning Foreign Languages among Students of Sultan Idris Education University (UPSI)"to determine the attitudes of students in learning foreign languages, namely Spanish, German and Japanese at Sultan Idris Education University (UPSI).This study measured the attitudes through the aspects of interest, motivation and perception of students on the basis of Socio-Educational Model presented by Gardner (1985). The study found out that interest of students to attend foreign languages courses was influenced by the internal factors like preferences, interests and enjoyment in learning foreign language. In addition, integrative and instrumental factors also influenced the attitudes of the students.

Nyamubi, Gilman Jackson (2016) in his study "Students' Attitudes and English Language Performance in Secondary Schools in Tanzania" trying to examine how students' attitudes to learning English correlate with their performance in the subject, to explore the performance level of secondary school students in English. This study was conducted in secondary schools at Morogoro Region in Tanzania. 450 students of six secondary schools were randomly picked as sample. 4 teachers of English from each school were included in the study. Data collected through questionnaires and achievement tests. Questionnaires, which included attitudinal rating scales, were two fold. There were One for students and one for teachers. The standardised instrument for measuring individual students' attitudes towards a language they learn was adopted from Krashen (1981). Data were analysed through SPSS (version 21) for windows following IBM guidelines. Descriptive statistics was conducted to determine the frequency, means, t-test and Pearson's correlation of the attitudinal data. The findings show that the students' performance in English is related positively to the attitudes they have towards learning the language. The whole test result has moderate but positive correlation coefficients across the two attitude types, that is, interest attitudes and utilitarian attitudes. This indicates that students' mastery of the language is facilitated by the attitudes they have towards the language. The findings show a positive correlation between students'

attitudes to English and their performance in the subject. The attitude to the language is an essential factor in the overall process of learning. Acquiring language skills empowers students to discover themselves and explore meaning through effective interaction. Teachers contribute in a number of ways to helping students acquire language skills through sustaining an interest in and positive attitudes to the English language.

Research Methodology

SOURCES OF THE DATA:

Two types of data were collected for this study:

- 1) Primary data and
- 2) Secondary data.

1) Primary data: Primary data were collected from 600 respondents who were selected for this study through a stratified random sampling. Data were collected using two questionnaires to measure attitudes and academic achievement.

2) Secondary data: In consultation with the resource faculty, secondary data were collected from Library, especially the Central Library of University of Kalyani. Recent publications, journal articles, edited publications, published and unpublished doctoral theses, seminar-conference proceedings were carefully selected for effective data collection. Some of these are covered in the literature review and many of them have been used for research design and methodology formulation and also for findings, conclusions and recommendation.

POPULATION OF THE STUDY:

The population is all objects, elements or organisms collected on the basis of a feature in the study. This mean all the people, documents, etc. who are proposed to come under this study. Population is a specific group of human or non-human beings that are endowed with one or more characteristics that are of interest to the researcher.

In upper primary level of West Bengal govt. and govt. aided/sponsored Bengali medium school, English as second language taught VI to VIII standards but Sanskrit as third language taught only VII and VIII standards in school level. In this study the students of VIII standards of Bengali medium govt. aided and govt. sponsored schools are the target population.

SAMPLE OF THE STUDY:

The representative part of the whole population is called the sample. The method by which the sample is selected from the population is called sampling, i.e. sampling is only the experimental part which can show the characteristics of population. Sampling is the process of selecting certain elements from a larger aggregate. Accurate results can be

obtained in a scientific way through proper sampling. So the importance of sampling in social studies is immense.

There are many methods of sampling. In this study, researcher adopted multistage stratified random sampling. The West Bengal School Service Commission has divided all the schools in the state into five zones. The present study follows this division to divide whole population. Thentwo urban schools and two rural schools have been selected from each region. Then 30 students of class VIII from those selected schools were used as samples, out of which 15 were boys and 15 were girls. The total number of sample are used in this study is 600.

Table 1: Table showing Distribution Of Sample

Region of West Bengal	No. of Schools		No. of Sample		No. of total Sample
	Rural	Urban	Boys (15 each school)	Girls (15 each school)	
Northern Region	2	2	60	60	120
Southern Region	2	2	60	60	120
Eastern Region	2	2	60	60	120
Western Region	2	2	60	60	120
South-Eastern Region	2	2	60	60	120
Total	10	10	300	300	600

HYPOTHESES OF THIS STUDY:

1. There is no significant difference of positive attitudes of the students of upper primary level towards learning the English language.

Data Analysis

[Ho1: There is no significant difference of positive attitudes of the students of upper primary level towards learning the English language.]

Table 1: Significance of the Difference between the positive attitudes of the students of upper primary level towards learning the English language

HYPOTHESIS	BETWEEN GROUP	MEAN	'F' test	Level of Significance
H ₁	Positive Attitude x English Language	102.36 x 103.46	0.45	Not Significant

Hence, it can be concluded that the positive attitudes of the students of upper primary level towards learning the English language is not significant.

CONCLUSION

Similar results are obtained in case of urban and rural girls where their achievement scores are significantly different, nevertheless their attitudes towards the

subject are similar and thus statistically insignificant.

Since this was found to be a common trait in both rural and urban boys and girls, therefore it may be inferred that the rural students get lesser facilities than the urban students regarding their Sanskrit and English. Lack of infrastructure, poor amenities, socio-economic condition and many other factors may be responsible for this marked difference.

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THE SUCCESSFUL JOURNEY OF PRODUNOVA BY PADMA SHRI INDIAN WOMEN GYMNAST DIPAKARMAKAR

Mr. Arup Das

Research Scholar

Department of Physical Education, University of Kalyani

Email id-itsmearupdas2@gmail.com

ABSTRACT

August 9, 1993 is an Indian artistic gymnast born in Agartala, the capital of Tripura. She was the first Indian gymnast to win a bronze medal at the 2014 Commonwealth Games in Glasgow. Earlier, Ashish Kumar was the first Indian to achieve the first success in an international gymnastics competition. (15,100). She also won a bronze medal at the Asian Gymnastics Championships and finished fifth at the 2015 World Artistic Gymnastics Championships, both first for her country. In April 2016, Karmakar became the first Indian woman gymnast to qualify for the Olympic Games with 52.698 points, making her the first Indian gymnast to compete in 52 years. Mr. Nandi and Dipa Karmakar started practicing Produnova 5 to 6 months before the 2014 Glasgow Commonwealth games. In 2010 Delhi Commonwealth games when Dipa did not get any medal in the final, then Mr. Nandi was planning internally that it was hard for Dipa to get any medal if she did not do something extraordinary. While doing his research on Produnova, he came to know that handspring double front landing was first attempted by North Korean gymnast Choe-Jong-Sill in 1980 Moscow Olympic on Vaulting Horse. But his landing was not successful. After nineteen years the Russian gymnast Yelena Produnova attempted the same vault successfully. She successfully did this tough vault in the 1999 world championship in Tianjin in China.

Keywords- *Produnova, Vaulting Horse, Vaulting Table, Training, Olympic, Commonwealth Games*

History of the Produnova Vault -

The famous Russian gymnast Yelena Produnova is named after the 'Produnova Vault'. This vault is placed on the vaulting table of Artistic Gymnastics. The vaulting horse has been resized since 2002 and then converted to a vaulting table in accordance with the rules of the International Gymnastics Committee. Ualina Produnova exhibited her famous vault in 1999 at an international competition in Tianjin, China. Everyone in the gymnasium hall was very surprised when he displayed this vault. North Korea's Cho-Jung-shil first

tried to demonstrate the handspring double-front Somersault at the vaulting horse at the 1960 Moscow Olympics, but unfortunately failed. He could not land successfully. Nineteen years after this attempt, Yelena Produnova made the attempt and succeeded. Later many gymnasts tried to practice this vault and many gymnasts were seriously injured in it. The slightest mistake can lead to death in the display of this vault. That is why this vault is called the 'Death Vault'. Dipa Karmakar is one of the five female gymnasts in the world to perform the Produnova vault successfully. The female gymnasts from all over the world who have so far competed in the Produnova Vault are:

Sl.No	NAME	COUNTRY
1	Yelena Produnova	Russia
2	Yamilet Pena	Dominican Republic
3	Fadwa Mahmoud	Egypt
4	Oksana Chusovitina	Uzbekistan
5	Dipa Karmakar	India

Collection of Data-

For the study data has been taken from primary sources and secondary sources.

Dipa and her Produnova journey -

Dipa Karmakar and her coach Shri Bishweshwar Nandi started preparing to practice the Produnova Vault a few months before the start of the Glasgow Commonwealth Games-2014. They watched the video of Produnova Vault many times on YouTube and decided that they would try to show this solid vault. Because Mr. Nandi noticed that Dipa has tremendous speed and explosive power of legs which is very important for this vault.

Different Barriers to Produnova Practice and Overcoming -

The most necessary infrastructure for Produnova practice is 'foam pit'. The initial practice of this vault is done through a foam pit. For Foam Pit, the injury problem of the players is reduced a lot. The Indira Gandhi Gymnasium in Delhi did not have foam pit facilities, Mr. Nandi told the SAI-appointed gymnastics project officer about the matter, the project officer listened to him seriously and assured him that he would help as much as possible. The project officer himself was a gymnast so perhaps he understood the importance of this infrastructure. He told the then Director General of SAI about the demand for this foam pit and the Director General agreed to his words. A month of foam pit was made at the Indira Gandhi Gymnasium in Delhi at a cost of about forty lakh rupees. The second problem was that the Produnova vault was placed on a practice competitive mat. Because the Indian camp is going on than if any major mishap happens to the player during the practice of this vault then maybe the gymnastics camp will be closed and other coaches will also be found guilty. In such a situation, it became necessary to get approval from the head coach of the Indian camp. Needless to say, there was an American coach of the camp who was running this Indian camp. He told other officials of SAI that Mr. Nandi was going to take such a big risk with Dipa unnecessarily. It could hurt Dipa, Mr.

Nandi was very disappointed to hear this, but his morale never cracked. After practicing Produnova in the foam pit for a month, one Friday he told Dipa that on Monday he would practice in a competitive mat without the foam pit. On Saturdays and Sundays, Nandi told Dipa to be mentally prepared for these two days. When Mr. Nandi went to the Chief Coach on Monday to ask for permission, he asked Mr. Nandi to think again. Mr. Nandi became a bit negative and he told Dipa that he would not do Produnova today. Dipa was very disappointed after hearing this. Dipa was very excited for this day but she thinks that dream may not come true. Mr. Nandi was very upset and promised Dipa that Bajrangbali would be born tomorrow Tuesday and he would make her Produnova tomorrow. After hearing this, Dipa replied that if she is not given Produnova tomorrow, she will practice that vault alone. When Mr. Nandi came to the gymnasium on Tuesday, a fear was born in his mind. He sought permission from the chief coach that day. Mr. Nandi told a young assistant coach that he should be very careful when she performed the Produnova vault and that Dipa should be saved from danger in case of any mishap. Mr. Nandi was very much concerned about Dipa that she may not get any injury so that her participation in Commonwealth Games. Mr. Nandi always had a fear in his mind that if Dipa had any mishap, he would be the one to be blamed and punished for it. Mr. Nandi realized that Indian gymnastics could only move forward if something extraordinary could be done. The only progress in Indian gymnastics was in the mind of Mr. Nandi. For him, he was ready to face any challenge at the age of fifty-eight.

Training Process-

Produnova vault to perform properly, speed of running, explosive force of feet to jump on the springboard, quick blocking of the vaulting table by hand and its dependence to complete the rotation of the double front somersaults at a very fast speed and landing correctly. Dipa used to have a handspring single front on the vaulting table. So before asking Dipa to practice on Vaulting table, Mr. Nandi made Dipa practice double front somersault on floor exercise for one week. This practice gave Dipa a lot of confidence. Before Dipa two male gymnasts of India used to perform Produnova one was Mayank Srivastava and other was Ashish Kumar and Dipa with full concentration tried to follow them. Then Mr. Nandi makes Dipa practice on foam pit. The foam pit supported her practice. Luckily Dipa did not get seriously injured. For two months practiced on a foam pit. She continued to practice like this for two weeks and also practiced Produnova on a foam pit. Every day she practiced for six to eight hours in two sessions. She focused mainly on doing Produnova but also practiced on other apparatus. After apparatus practice Mr. Nandi made her practice hard conditioning. Sometimes the conditioning turned so hard that Dipa would cry that she is not a machine but a human. Mr. Nandi knew that if she did not go through this hard training, she would not be able to achieve success. Before the 2014 Glasgow Commonwealth Games. She had practiced Produnova more than six hundred times and executed it more perfectly and beautifully.

Stages of Produnova Training-

Mr. Nandi divided Produnova training into various stages to perform successfully.

First Phase	Mr.Nandi first of all tried to make her practice on Vaulting Table in the first flight phase to reach an adequate height in the second flight phase to perform Handspring. It is a basic practice for Produnova.
Second Phase	Mr.Nandi asked to place a spring board on Floor Exercise and trained her to do a single front somersault with maximum height.

Third phase was divided into three Sub-stages- that is Progression-1, Progression-2 and Progression-3

Third Phase (Progression-1)	After acquiring the skill of single somersault with adequate height she was trained to do double front somersaults with proper landing on foam pit.
Third Phase (Progression-2)	In this stage she was trained to do double front somersaults with a mat on the foam pit to make her understand the concept of landing.
Third Phase (Progression-3)	In this stage she was trained to do double front somersaults on the Floor Exercise with an additional landing mat for proper landing.

Fourth Phase	In the fourth phase she was trained to do handspring single forward somersault on Vaulting table with an adequate height and with proper landing on landing mat
Fifth Phase	Then she was trained to do handspring single somersault on the mat equal to the Vaulting Table, So that she could have time for her second rotation.
Sixth Phase	In this phase, she was taught to do the concept of blocking and hand push after her first flight with the help of spring board, so that she could be made to do double somersault in her second flight with a landing on the foam pit. Mr.Nandi regards this phase to be very important for teaching Produnova.
Seventh Phase	In this phase, she was taught to do handspring double front somersault on the foam pit and she acquired proper concept of Produnova. This practice is very crucial as the techniques like height, speed of rotation and the tuck of the rotation are very essential to perform Produnova successfully.
Eighth Phase	In this phase, she was taught to do handspring double front somersault on the foam pit with a thin mat placed on it.
Ninth Phase	In this phase, with the help of an assistant, she was taught to do handspring double front somersault on the soft and thick landing mat for safety purposes.
Tenth Phase/Final Phase	This is the final phase of Produnova training. In this phase Mr.Nandi taught Dipa how to perform in the competition arena. She was taught to execute the Produnova Vault perfectly and beautifully.

During the Indian camp for the 2014 Glasgow Commonwealth Games, Dipa Karmakar and her coach Bishweshwar Nandi Produnova dreamed of the vault and made no mistake in trying to make it a reality. Almost everyone in the camp had a negative attitude when Mr. Nandi prepared Dipa for the Produnova vault before going to the Commonwealth Games, but they did not stop. They continued to practice as best they could. Before going to the competition, Bishweshwar Nandi wanted to practice in the competitive mat, that is, in the same way that mats are given in the competition. Because there is a big difference between practicing foam pit and practicing on mats. Besides, before going to the competition, Bishweshwar Nandi had to see how Dipa was ready to go to the Commonwealth Games. There was a strange silence in the whole gymnasium on the day when Dipa stood on the running mat of Vaulting on the day that the world Nandi wanted to make Dipa Produnova, and all eyes in the hall were on Dipa, eagerly waiting to witness history.

Then when Dipa Produnova finished the salute to the vault, immediately some of the trainers in the camp thought that Dipa's leg might have been seriously injured but right after that Dipa got up and started dancing with joy and jumped up and sat on the lap of the universe Nandi. Such a reaction shows how excited and delighted Dipa was with the Produnova vault, above all her trainer Bishweshwar Nandi who is the mastermind of this history. Did not back down. Everyone in the gymnasium saw Dipa Produnova vault and applauded for about five to seven minutes and greeted Dipa and her trainer. This was the first step in their history.

The world told Nandi Dipa that she would then go to the Glasgow Commonwealth Games to practice on such a mat. Dipa performed the Produnova vault twice that day, and twice during the landing, first touching the soles of the feet on the mat, meaning that the judges could not cancel her vault or give it zero. Dipa and her trainer were very optimistic after seeing this show because the number of vaults in Produnova was much higher - 7.00. So they realized that if Produnova's performance and landing were correct, Dipa's medal would be guaranteed. But Dipa's performance in the Glasgow Commonwealth Qualifying Round did not go as well as expected. But Dipa's impeccable performance in the final on July 31, 2014 and the beautiful landing of Produnova made the Indians proud. The combined score of the two vaults in the final was 14.36. It was a historic day for all Indians. She was the first Indian woman to win a bronze medal in gymnastics at the Commonwealth Games and was the first woman to display the Produnova vault at the Commonwealth Games. As a result of the tireless work of Bishweshwar Nandi and Dipa Karmakar, Indian gymnastics got back to good times. Four years ago, Ashish Kumar won the first silver and bronze medals in the men's division at the 2010 Delhi Commonwealth Games in the floor exercise and vaulting table. Needless to say, he won a bronze medal in floor exercise at the 2010 Guangzhou Asian Games that same year. In other words, from this picture we can see that the first success in the international competition came in

the hands of Ashish Kumar and Dipa Karmakar carried this success. Dipa and her Olympic tour - After winning a bronze medal in the 2014 Commonwealth Games, Dipa and Mr. Nandi's main goal was to participate in the Olympics.

But not everyone can participate in the Olympics. In 2014, Dipa finished fourth in the Incheon Asian Games. Her performance was not as expected and her Produnova landing was not good. It can be said that he was quite good at the 2015 Glasgow World Championships. 324 men and women from different parts of the world can participate in the Olympics. This is why all competitors must ensure a medal at the World Championships individually or as a team. Since the Indian women's team did not win any medals at the World Championships, Dipa had to secure the medals individually. There were two world championships before the 2016 Rio-de-Janeiro Olympics but Dipa's performance at the first World Championships was not very promising. Dipa was ranked 26th in the individual rankings, which means that the first 24 individuals will get a chance. In that case Dipa was the extra 3rd player. Within a few days, a surprise event occurred, with three of the 24 selected gymnasts picking up their names for some reason. For that one place, Dipa gets a chance to get a place in the Olympics. But in this case Dipa has to win gold in any one apparatus. Standing in front of this challenge, Dipa and Mr. Nandi started dreaming of touching the ground of the Olympics. The Olympic test event is held in the same place where the 2016 Rio-Olympics were held, and those who win gold in the individual event will be able to participate in the Olympics. All the countries of the world participate in this test event. Dipa Karmakar became the first woman gymnast in the country to win gold at the vaulting table apparatus after 52 years. Get the opportunity to participate in the Olympics as the first female gymnast in the country. In this World Test event, the average point of two vaults at the vaulting table was 15,100. Dipa and Mr. Nandi's dream comes true. Shortly after the Rio Olympics 2016 began, Dipa Karmakar finished eighth in the Olympic qualifying round and qualified for the vaulting table apparatus final. A personal apparatus can qualify for a maximum of eight in the final. The main reason for Dipa to reach the final was the Produnova Vault. Because the Produnova vault had a D-value - 7.00 which were much higher than other gymnasts' vault tires. This unforgettable success of Dipa inspires the whole world. Because she was the first Indian woman to participate in the Olympics and reach the Apparatus final. Then August 14th was the day of the historic Apparatus final. The whole world was looking at Dipa Karmakar and needless to say the whole country was radiant then. After the finals began, gymnasts from other countries continued to display their vaults, and it is worth mentioning that Produnova Vault had another gymnast that day.

She is 41-year-old gymnast Oksana Chusovitina, Who competed in the Olympics eight times in a row since the 1992-Barcelona Olympics. She has all the three medals that are gold, silver and bronze. But the landing of her Produnova vault that day was not very promising. There was a strange silence in the whole gymnasium when Dipa Karmakar

started her vault. Many supporters from home and abroad were present that day to encourage Dipa. Dipa's first vault was Tsukahara 720 degrees. This Tsukahara vault was first built by Japanese gymnast Mitsuho Tsukahara in 1982. His name is Tsukahara Vault. Dipa's first vault score was 14.6. Her second vault was Produnova. After finishing the second vault she landed with more broken knees during landing but landed much better than Oksana Chusovitina. But surprisingly, according to the rules of the International Gymnastics Organization (FIG), a gymnast has to be evaluated within forty seconds of her performance. In other words, the number obtained by the gymnast must be officially announced within forty seconds. But unfortunately Dipa's Produnova was shown her number about six minutes after landing. The reason it took so long is still unknown to us. Dipa's Produnova's score was 15.26. It was one of the best performances of his life and averaged two vaults - 15.06.

Results of Vaulting Table -

Sl.No	NAME	COUNTRY	FINAL SCORE
1.	Simone Biles	USA	15.966
2.	Maria Paseka	Russia	15.253
3.	Giulia Steingruber	Switzerland	15.216
4.	Dipa Karmakar	India	15.066

Looking at the above results, it is understood that the difference between Dipa Karmakar and the third place gymnast is only 0.150. On the day of the final, the first four failed to cross the 15th boundary and the remaining four failed to cross the 15th boundary. This result shows how close Dipa Karmakar was to winning the medal. But the irony of fate is that winning an Olympic medal in our country is like a nightmare. Milkha Singh's fourth place in 1980, PT Usha's fourth place in 1984, Joydeep Karmakar's fourth place in 2012 and Dipa Karmakar's fourth place in 2016 kept repeating in Indian sports. But it is safe to say that Dipa's fourth place finish was no less than winning gold at the Olympics, her first female participation in the Olympics and her fourth place finish is an impeccable achievement. For which the whole country and our Bengalis feel proud. Nadia Comaneci, known as 'Perfect Ten' and her trainer Bella Colony personally congratulated Dipa and Mr. Nandi for this impeccable achievement. Above all, the International Gymnastics Organization (FIG) honoured him with special honour. Award Winning - Dipa Karmakar and her trainer Shri Bishweshwar Nandi were honored by the Government of India in 2014 with the Arjuna Award for Sports. In 2016, Dipa Karmakar received the Khel Ratna Award, India's highest sports honour, and on the same day, her coach, Shri Bishweshwar Nandi, received the Dronacharya Award for her outstanding contribution, perhaps a rare event in Indian sports history. Accepting is a matter of pride for the whole nation. In 2016, the Government of India honoured Dipa with the Padma Shri, the country's fourth highest civilian honour, for her outstanding achievement. Finally, it can be said that the

indomitable efforts and hard work of Dipa Karmakar and her trainer Shri Bishweshwar Nandi and the impeccable example they have set by overcoming various adversities should be carried on by the future generations.

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GENDER DIFFERENCES IN TIME MANAGEMENT AND ACADEMIC PERFORMANCE

Dr. Shafayat Ahmad

Associate Professor, Maulana Azad National Urdu University,
College of Teacher Education, Darbhanga, Bihar
E-mail: shafayatahmad@ymail.com

ABSTRACT

In today's turbulent and fast-paced world, education has its utmost importance. Education is the main source of human development. It is only by getting education that one's modification of behavior is possible which provides guidance to human beings to lead a better, cultured and standard life. Education has played an important role in the welfare and development of the country and society and it is possible to eradicate ignorance from the society. Just as education has its own value and time have a different value because no one can succeed in any area of life without managing time in a timely manner. Different educationists have also pointed to the importance and organization of time. Time is something which can't buy by a currency. In the world, if a person loses something valuable, there is hope that it will be regained, but time is such a thing that once it has passed, there is no hope of its return. Therefore, everyone should value time and manage it in a timely manner so that success can achieve in every sphere of life. This study started with the objectives of studying the time management and academic performance on the basis of gender. The study reveals that there was a clear difference in time management skills on the basis of gender among the Private secondary school students. Significant differences were found in the academic performance of Private secondary school students on the basis of gender.

Key Words: Time Management, Academic performance

INTRODUCTION

No single person can perform better all the activities of life without the management of time. Human beings cooperate together in the form of groups and organizations to achieve their personal goal as well as the goals of organization. Every organization like family, college, school, army, business enterprises, government etc. is basically a group of people which is moving towards achieving some common objectives also needs time management skill. An organization needs a central body or agency to coordinate the activities and efforts of different people working together so that they can work collectively

as a team. But an individual needs to manage their time according to their task, work and life goals. The students should form their objectives for academic excellence and academic performance so could be achieved with the management of time. Management is principally the task of planning and execution of the task as per the plan towards specific objective. Management is simply the process of decision making and control over the action of human beings for express purpose of attaining pre determined goals.

Henri Fayol who is known as the father of modern management expressed that management is to forecast, to plan, to organize, to command, to coordinate and control activities of others. Management is essential for organized life. Good management is the backbone of a successful life. To live is to work to achieve life's goals. But in actual practice management depend on the individual who is performing the particular task and manage their time accordingly. Therefore one should have knowledge about the management of time or time management.

Time Management

Time management refers to managing time efficiently and effectively so that it can be used in the right and appropriate tasks. Effective time management allows individuals to perform their activities within the allotted time according to their needs and importance. Time management refers to the best use of time because time is always limited. According to Peter, F. Druker "Time is the scarcest resource of the manager, if it is not managed, nothing else can be managed."

Improved time management emerged as a tool between the 1960s and 1950's to help managers to make better use of time. The concept of time management was developed by Fredric Winslow Taylor, with the aim of reducing unproductive work and wastage of time. According to modern concepts, time management is a method of planning to spent time on activities. To achieve the goal of increasing productivity has become a topic in the field of time management. Especially for white collar workers who find it difficult to measure work output. The goals of modern time management are still to increase productivity. Many researchers and experts have studied this topic and come up with different ideas for effective time management. Rai (2016) looked at the effect of time management of students in school on academic performance. Findings revealed that there is a direct positive relationship between time management and academic performance and students who manage their work on time perform better than others.

Carla Crustinger has defined effective time management as a process which are as follows:

- Setting goals
- Prioritizing that goals
- Deciding how much time
- To allocate to space for tasks

- Adjusting plans as they change
- Revising the goals a priority regularly
- Observing results

According to William E. Kelly also emphasized on time management in the following points:

- Making task list and organizing resources & work
- Setting goals,
- Creating and revising schedule
- Breaking down large tasks into smaller pieces

Time management involves planning and organizing events. In particular, it is a way to increase the efficiency and productivity as well as the time spent on specific activities. This is an important aspect of business and project management. But in the present age, its use is increasingly increasing in the personal activities of the education people. Smith defined "Time as a continuum in which event succeed on another from past through present to future."

Singh and Jinalee (2018) made a study of time management models and theory. The purpose was to review selected time management models and theories. The researcher conducted a descriptive study for the study. The research concluded that time management technique is helpful for productive work as well as social interaction. Time management also helps to better predict and plan the completion of work. In addition, time management skills also reduce psychological stress.

Trueman et.al (1996) conducted a survey of 293 psychology students using the American Time Management Scale. The study found that women performed better in time management skills than men and students of 25 years of age and older are more efficient at managing their work than younger students.

Sansgiry et.al (2006) looked at various factors such as Anxiety, Academic Competence, Test Competence and Time Management on low CGPA students studying Pharmacy at the University of Houston. A cross sectional study was done to assess the effect. The study was also conducted to assess the time management and academic ability of Nigerian post graduate students. The study revealed that not only time management but also other factors affect academic performance.

Academic Performance

An academic course is a means to an end of a course or academic phase, in which students are awarded a certificate as an honor. This is usually reflected in the grades or test scores given by the teachers or both. According to C. V. goods, academic performance, knowledge attains or skills develop in school subjects usually designed by test score or by marks assign by teachers or by both. Haves defined academic

performance is successful accomplishment or performance in particular subject area or courses usually be reason of skilled hard work and interest typically summarized in various types of grades, marks, and score on descriptive commentary. These introductions show that an educational paradigm is very important for students. It boosts students' self-confidence. The prospects for a brighter future are even greater. Increases interest in higher education. The present age is the age of competition in which ability is of paramount importance and education is a key to students' individual development.

Khatib (2014) studied the relationship between time management stress, gender and academic performance of college students and 352 under graduate students were selected for the research study as a sample using stratified random sampling technique. The 59.7% of students have a time management score at a low to moderate level while 25.7% students had high time management score. The female time management was higher than that of the boys.

NEED AND SIGNIFICANCE OF THE STUDY

There is an English phrase, "Time and tide wait for none" which refers to the importance of time in life and its value, because time never waits for anyone. It is important for an individual to manage the value of time in order to succeed in every aspect of life. People who waste time for no reason fail to establish their own identity. Time is a precious, scarcest, asset that provides every student equally but for a number of reasons such as no proper schedule organization the students have their own. Lack of guidance, target, mission and objectives and lack of primary purpose and lack of social engagement fail to use the time properly.

Many literature also disclose that time management is an element of academic success among students. According to Misra and McKean (2000), there is a link between time management and increasing academic performance. According to Pehlivan (2013), there is a positive correlation between time management and average grade point. Better academic performance can be achieved by providing proper guidance in time management techniques. Therefore, poor academic success of time management is the biggest reason for poor academic success. Therefore, time management is an important factor for students to manage their every performance and avoid delays, and it leads to success and it affects every aspect of people's lives. That is why punctuality is very important for students. Therefore, the author chose this subject to study the time management skills and academic performance of the students studying in the secondary schools of Darbhanga.

Objectives of the Study: The objectives of the study are as follows:

1. To study the time management skills of boys and girls of Private secondary school.
2. To study the academic performance of boys and girls of Private secondary school students.

3. To study the difference between academic performance and time management of boys of Private secondary schools.
4. To study the difference between academic performance and time management of girls of Private secondary schools.

Hypotheses of the Study: The hypotheses of the study are as follows:

1. There is no significant difference between the time management skills of boys and girls of Private secondary school students.
2. There is no significant difference between academic performance of boys and girls of Private secondary school students
3. There is no significant difference between academic performance and time management of boys of Private secondary schools.
4. There is no significant difference between academic performance and time management of girls of Private secondary schools.

METHODOLOGY

The research methodology includes the systematic procedure by which the researcher starts identifying the problem and decides on the stag and finding answers to research questions involved in research and controlling variability.

Population and Sample

The population for the present study included all the Private secondary schools of Darbhanga district. All the students of these Private secondary schools comprise as population of the study. Tenth grade students from all Private secondary schools of Darbhanga have been included for the present research.

The study selected 60 students as sample. Out of all the Private schools located in Darbhanga district, three Private secondary schools have been selected through random sampling. Then 60 students from these three schools have been selected through stratified random sampling. From these 60 students of Private schools of 10th class i.e. ten boys and ten girls from each school have been selected. The sample comprises the girls and boys from three Private schools.

Tools of the Study

Any research is based on data. And the use of tools to obtain data is considered essential. Because the results obtained from research instruments are more reliable and reliable according to the research topics and objectives. The existing research required two devices. Time management scale was used as a tool and the second is for academic performance for which the annual examination of 10th class students has been used. There are a total of 42 items in this questionnaire where 31 are positive and 11 are negative item which consists of five dimensions which are as follows:

- Time Planning

- Attitudes towards Time
- Time Punctuality
- Time Wasting
- Time Utility

RESULT AND DISCUSSION

Analysis and dissemination of data is a process in which the information obtained is made meaningful, the significance is determined and the results are enforced. This is an important step in the real process because it allows a researcher to reach his or her research results. The author collected data through time management questionnaire and then classified the obtained data, examined the Null Hypothesis, and concluded the study.

Objective 1: To study the time management skills of boys and girls of Private secondary schools.

Hypothesis 1: There is no significant difference between the time management skills of boys and girls of government secondary schools.

Table. No. 1 Time management skills of boys and girls

Group (Private Schools)	N	Mean	SD	df	t-value	Result
Boys	30	140.60	16.19	58	2.53	Significant (At 0.05 Level)
Girls	30	151.00	15.61			

It is clear from Table No. 1 that the mean of boys of Private secondary school for time management is 140.60 and the mean of girls students is 151.00 and the standard deviation is 16.19 and 15.61 respectively. When compared between the two means, the t-value is 2.53 which is significant at 0.05 Level, so there is a significant difference between the time management skills of the boys and girls of the Private secondary schools. The Null hypothesis is not valid, so it is rejected.

Objective 2: To study the academic performance of boys and girls of Private secondary school students.

Hypothesis 2: There is no significant difference between academic performance of boys and girls of Private secondary school students.

Table: 2 Academic performance of boys and girls

Group (Private Schools)	N	Mean	SD	df	t-value	Result
Boys	30	78.57	6.11	58	1.28	Not Significant (At 0.05 Level)
Girls	30	81.14	9.11			

It is clear from Table 2 that the average academic performance score of Private secondary school boys is 78.57 and the average academic performance score of girls is

81.14 and the standard deviation is 6.11 and 9.11 respectively. When compared between the two mean, 1.28 t-value was found which is not significant at 0.05 level. Therefore, no significant difference was found in the academic performance of boys and girls of Private secondary schools. So the null hypothesis is valid and it is accepted.

Objective 3: To study the difference between academic performance and time management of boys of Private secondary schools.

Hypothesis 3: There is no significant difference between academic performance and time management of boys of Private secondary schools.

Table No. 3 Difference between academic performance and time management of boys

Group (Private Schools)	N	Mean	SD	df	t-Value	Result
Boys- Time Management	30	140.60	16.19	58	19.63	Significant (At 0.05 Level)
Boys- Academic performance	30	78.57	6.11			

It is clear from the above Table No. 3 that the mean score of Private secondary school students is 140.00 and the average achievement score is 78.57 and the standard deviation is 16.19 and 6.11 respectively. When compared between the two averages, the calculated t-value is 19.63, which is higher at Significance Level 0.05. The Null hypothesis is not valid, so it is rejected.

Objective 4: To study the difference between academic performance and time management of girls of Private secondary schools.

Hypothesis 4: There is no significant difference between academic performance and time management of girls of Private secondary schools

Table No. 4 Difference between academic performance and time management of girls

Group (Private School)	N	Mean	SD	df	t-Value	Result
Girls- Time Management	30	151.00	15.61	58	21.17	Significant (At 0.05 Level)
Girls- Academic performance	30	81.14	9.11			

It is clear from above Table 4 that the mean of private secondary school girls is 151.00 and the mean of academic performance is 81.14 and the standard deviation is 15.61 and 9.11 respectively. When compared between the two averages, the calculated t-value is 21.17 which is higher than the 2.00 tabulated t-value at 0.05 Significance Level. Therefore, the Null hypothesis was not proved correct and therefore it was rejected.

CONCLUSIONS

The purpose of the present study was to study the time management and academic performance of Private secondary schools. There was a clear difference in time management skills on the basis of gender among the Private secondary school students.

Significant differences were found in the academic performance of Private secondary school students on the basis of gender. The reason for the difference in time management skills of Private secondary school students is the actively engaging of students of Private school by administrators of these schools and performance of each school. That is to say, the Private school system is run in such a way that the teachers and students do it from the very beginning. Instead of wasting their time on sports, social media, TV, they use their time wisely and intellectually.

It can be safely conclude that students in Private schools manage their time better and therefore time management has a positive effect on the academic performance of Private secondary school students. Private secondary school students academic performance is better because Private school students are motivated to work in every direction. Unit test, assessment, attendance, and co-curricular activities of the students are given importance and from time to time they are prepared from every aspect so that the academic performance can be better. Therefore, the academic performance of Private secondary school students is much better.

As we know that time is a very precious and scarce resource. It can neither be managed nor saved. Rather, it can be used in a better and more intelligent way. In this context, it is our responsibility to make students aware of the importance of time so that students can improve their performance and be successful. That is why time constraints and educational implications for time management and academic performance are important. Therefore, based on the present study, there are some suggestions that the teacher should explain the importance of time to the students from the very beginning and make them practice it so that their love for time can be developed in the students and the teacher and students ultimately do not feel the pressure of time. Students should be made aware of the importance of education and time from the very beginning so that the students can make the best use of their time in their practical field and perform their performance effectively and achieve success.

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USABILITY AND PRACTICES OF MOOCS: MAKING SIGNIFICANT STRIDES FOR PROFESSIONAL DEVELOPMENT OF ODL PROFESSIONALS

Binayak Dey

PhD Scholar, RIE, NCERT
Mail: binayakdey.nips@gmail.com

ABSTRACT

The success of the Open and Distance Learning (ODL) system in our country's higher education system is attributable to its technological capabilities, accessibility, and flexibility. Open and online education is viewed as a source of educational innovation and a foundation for modernizing higher education systems. MOOCs are ideal for encouraging lifelong learning in this regard. MOOCs provide access to higher education and beyond for people who cannot afford a traditional education and are disadvantaged since they are offered free of charge to any number of people, anywhere and at any time. In conjunction with this, the researcher intended to investigate the usability and current practices of MOOCs among the ODL professionals for their capacity building and professional development. The study adopted a descriptive survey design and 80 ODL professionals were selected through a convenience sampling method, among which the researcher received 68 responses. A questionnaire was used as an instrument for data collection. Data gathered from the administration of the instrument were analysed using frequency and percentage statistics. This study has revealed that most of the ODL professionals are not completely aware of MOOCs, their strength, mode of offering, nature of the courses and other benefits. Many ODL professionals are not familiar with the usability of MOOCs for their capacity building and professional development. The researcher found that there is a huge gap between enrolment and successful completion rate in MOOCs. The study concluded that more awareness and training programme is required to acquaint the ODL professionals with this online learning system for effective teaching-learning and their professional development.

Keywords: Open and Distance Learning (ODL), Massive Open Online Courses (MOOCs), ODL Professionals.

INTRODUCTION

Open and Distance Learning (ODL) provides open access to higher learning to an enormous number of heterogeneous learners without discriminating the factors like., age,

gender, location and choice of courses. Open and Distance Learning (ODL) system helps to transform a sense of reliance in the mind of the ODL learners and ODL professionals to make them prepared for facing the new innovations and challenges of the competitive world. Open and Distance Learning (ODL) in recent years has undergone a very significant paradigm shift with technological advancements and innovations. Open and Distance Learning system has the potential to provide quality education in diverse range of subjects on cost effective basis and with the help of collaboration, digital invention and networking, Open and Distance Learning strengthening the globalization of education. Open and Distance Learning of in recent years governed by e-learning and virtual classroom system provides very significant opportunities for the learner and ODL professionals to get acquainted with the application of the modern technologies for collecting valid information, storing and disseminating relevant information for the advancement of knowledge and capacity building of ODL professionals.

In recent years technology has become the driver of our effective teaching-learning process. Massive Open Online Courses (MOOCs) are a great example of such type of technological inventions. Primarily, MOOCs started its journey as a simple online learning, now a day, have developed into a significant technological intervention to enhance access to lifelong learning for everyone. Massive open online courses (MOOCs) have the potential to enhance access to and improve the quality education. MOOCs offer a full course experience for free; open access, audio and video based instructional material for all kind of learners (formal and non-formal). Only one digital device and internet connection is needed to have access to online education. MOOCs thus can offer high-quality of education with universal entry feature at zero cost to the all learners. One of the very important features of this technological intervention is that it is very flexible in time and place. In this type of online learning, the learner has a well-organized environment in which to learn and does not have to monitor his or her own learning.

In foreign parts, the largest MOOC providers are Coursera (USA), edX (USA) and Future Learn (UK). In 2017, University Grant Commission (UGC), Govt. Of India has notified that the Massive Open Online Courses (MOOCs) are to be offered through SWAYAM. SWAYAM is a platform introduced by Govt. Of India and it is designed to achieve the access, equity and quality of education. The main purpose of this initiative is to take the best resources to all for quality education. UGC has introduced the Credit Framework for online learning courses through SWAYAM and advising the Universities to identify the courses where credits can be transferred and the regulation known as UGC Regulation 2016. In India the momentum of MOOCs by the learners is at very initial stage. This is the right time for our education system to synchronize with it, to eradicate digital divide and to achieve the objectives of education for all. To digitalize our education system and to reach the remote areas all over the India, Govt. of India has initiated Massive Open Online Courses (MOOCs) through SWAYAM platform. For this purpose, the learners

under Open and Distance Learning mode and ODL professionals must acquainted with the use and application of the modern technologies for their advancement of knowledge and professional development.

In order to ensure best quality of online education, nine National Coordinators have been appointed by the Ministry of Education, Government of India. They are AICTE, NPTEL, UGC, CEC, NCERT, NIOS, IGNOU, IIMB, and NITTTR. AICTE has been appointed National Coordinator for preparation of Annual Refresher Programme in teaching for faculty of the Engineering/University or Institutions for MOOCs Development under SWAYAM. NCERT and NIOS has been appointed for School Education, NPTEL for Engineering, UGC for non-technical post-graduation education, CEC for under-graduate education, IGNOU for out-of-school students, IIMB for Management studies and NITTTR has been appointed for Teacher Training Programme. NITTTR is also offering a programme on ICT in Teaching and Learning through SWAYAM for professional development. IGNOU offering courses on Teaching and Learning, Communication Skills through SWAYAM. It is very clear that for getting benefitted from MOOCs, our education system should be well acquainted with the application of different modern technologies to achieve the goal of education for all. MOOCs can be used as an effective tool for learner's better academic achievement and professional development of ODL professionals. Here, the researcher has tried to explore the level of awareness about the usability and current practices of MOOCs for professional development among the ODL professionals under dual-mode universities.

REVIEW OF THE LITERATURE

This section involves the systematic identification, location, and analysis of documents containing information related to the research problem. One study shows that the awareness of MOOCs among student teachers is very low and also it shows negative perception towards MOOCs (Shaheen Altaf Shaikh, 2017). The awareness on MOOCs is very high among post-graduate students rather than under-graduate students (Nagasampige & Nagasampige, 2017). One study reveals that there is a need to encourage learners to adopt MOOCs as a learning resource (Ambadkar, 2020). Learners have different type of needs so MOOCs platforms must provide multiple options to fulfil learners needs (Aharony & Bar-Ilan, 2016). Student possess a positive perception when learning through MOOC (Fesol et al., 2017). It is observed that majority of the students are well aware about MOOCs nature, benefits and its power (Rusli et al., 2019). The teacher educators are aware about basic things of MOOCs but to develop more understanding, integrating MOOCs in their regular classroom practices is very essential (Singh & Chauhan, 2017). Lecturers' perception and attitude towards massive open online courses were positive and it was recommended among others that education lecturers should be encouraged to participate in MOOCs in order to update their knowledge and skills (Caleb et al., 2019). There are some issues that are faced while

implementing MOOC in India. A theoretical and technical discussion and comparative analysis is needed for conceptual understanding and its implementation (Chauhan, 2017). MOOCs can be a cost- and resource-effective means to deliver quality education in order to further professional teacher development (Jobe et al., 2014).

Proper utilisation of MOOCs leads to more effective teaching-learning and professional development. In the review it has been found by the researcher that most of the studies mainly related to awareness about MOOCs among the learners. Some studies are conducted on perception towards MOOCs among the learners. Most of the studies are conducted on the students. After going through all these researches, the researcher found that a smaller number of studies are conducted on practices of MOOCs among the ODL professionals. In this context the researcher decided to conduct a study on usability and practices of MOOCs among the ODL professionals and different aspects of MOOCs for professional development and capacity building in their field.

STATEMENT OF THE PROBLEM

The statement of the problem of present research is:

“Usability and Practices of MOOCs: Making Significant Strides for Professional Development of ODL Professionals”

DELIMITATION OF THE STUDY

The present study was delimited to the ODL professionals or ODL teachers at PG level of different LSCs under the dual-mode university. Only the ODL professionals from 16 LSCs under the dual-mode university, were taken as sample for the study.

OPERATIONAL DEFINITIONS

Usability: It is the degree to which a product or service can be utilised by specific users to fulfil stated goals with effectiveness, efficiency, and satisfaction in a specific context of usage.

Practices: Practice is the application or use of an idea, belief, or method in practical situation. Repeated exercise in or performance of an activity or skill so as to acquire or maintain proficiency in it.

MOOCs: MOOCs are online courses designed for large numbers of participants, can be accessed by anyone anywhere as long as they have an Internet connection, are open to everyone without entry qualifications and offer a complete course experience online for free (United Nations Educational, 2016).

ODL professionals: ODL professionals can be defined operationally for the study as the faculty members teaching in different Open and Distance Learning Institutions and are responsible to provide the quality education that the ODL learners desire or need.

Professional Development: Professional development refers to the continued training and education of an individual in regards to his or her profession. The goal of professional

development is to keep you up-to-date on current innovations as well as help you develop new skills and capabilities for the purpose of advancement in your field.

Learner Support Centres (LSCs): LSCs means a centre established by the Higher Educational Institution for guiding, counselling, providing interaction session between the teachers and the learners, rendering any academic and any student support service and assistance required, by the learners of Open and Distance Learning mode (University Grants Commission - Government of India, 2017).

Dual Mode University: Dual Mode University means a Higher Educational Institution where the conventional mode of education and distance mode of education or online education both are available for the sake and interest of the learners.

RESEARCH QUESTIONS

1. What is the level of awareness about the concept of MOOCs among ODL professionals?
2. What is the level of awareness on the usability of MOOCs for professional development among ODL professionals?
3. What is the level of practices of MOOCs for professional development among ODL professionals?

RESEARCH OBJECTIVE

The major objective of this study is to find out the usability and practices of MOOCs and its different aspects for the professional development of ODL professionals.

METHODOLOGY OF THE STUDY

Research Design: Quantitative descriptive survey method was utilized for the conduct of the present research study. The research study was conducted using an online survey tool. Data was analysed by using different statistical methods and interpreted for arriving at conclusions. There were three dimensions that were taken up in the present study, viz. conceptual understanding of MOOCs, usability of MOOCs for professional development and practices of MOOCs for professional development among ODL professionals.

Population and Sampling Technique: Population for the present study was ODL teachers or professionals teaching in PG level of different LSCs under the dual mode university. Researcher have uses convenience purposive sampling method. The tool was framed using Google forms and digitally sent through email and different social media platforms to the ODL professionals or teachers. The sample size was 80 ODL professionals, among which the researcher received 68 responses (response rate: 85%) from ODL professionals or teachers teaching at PG level under a total of 16 LSCs.

TOOLS FOR DATA COLLECTION

A self-designed questionnaire containing 26 items was framed using Google forms and digitally sent to ODL professionals. It was a mix tool which includes different items. The

questionnaire was both open-ended and close-ended in nature. The first section greeted the respondents about the section details and instructions for filling the online survey. The second section collected details about the respondents. The final section comprised the three dimensions namely, understanding of MOOCs, usability and practices of MOOCs for professional development of ODL professionals.

INTERPRETATION OF DATA

The first part of the questionnaire was designed to examine the conceptual understanding about MOOCs among ODL professionals teaching at PG level under different LSCs. In relation to the basic understanding of MOOCs, it is found that only 54.42% i.e., 37 ODL professionals are aware about the full form of MOOCs. It means that still 45.58% of ODL professionals are not aware about the full form of MOOCs. Researcher found that 45.58% i.e., only 31 ODL professionals are aware that MOOC is offered in online mode. It means that around 54.42% of ODL professionals have no idea about its mode of interaction. Some of them said that it is blended in nature, where some components of the study are face-to-face and some components of the study are done online. Researcher found that only 41.17% i.e., 28 ODL professionals are aware that MOOCs are offered through SWAYAM online learning platform initiated by the Govt. of India. Around 61.76% i.e., 42 ODL professionals are not aware that MOOCs are flexible in time, pace and it promotes self-study of learner. Study reveals that 85.29% i.e., 58 ODL professionals have no idea that there are no prior qualifications is required to enrol in MOOCs. It is found that 60.29% i.e., 41 ODL professionals are well aware that certificate is provided after successful completion of MOOCs through SWAYAM platform. Most of the ODL professionals are not aware about the certification criteria for MOOCs under SWAYAM platform. Around 48.53% i.e., 33 ODL professionals are not aware that MOOCs through SWAYAM platform offers unlimited number of students to enrol. Around 72.05% i.e., 49 ODL professionals are aware that Email Id and internet connectivity to your device is the basic requirement to access MOOCs under SWAYAM platform. Around 67.65% i.e., 46 ODL professionals have no idea about the four important quadrants (video lecture, reading material, self-assessment tests, and discussion forum) of MOOC under SWAYAM online learning platform.

The second part of the questionnaire was designed to examine the usability of MOOCs for professional development of ODL professionals teaching at PG level under different LSCs. In relation to the usability of MOOCs for professional development of ODL professionals, it is found that 95.58% i.e., 65 ODL professionals have supported that the MOOCs can be used for capacity building and professional development of ODL professionals. Researcher found that around 97.06% i.e., 66 ODL professionals shows positive attitude towards integration of MOOCs in their teaching. It is found that 50% i.e., 34 ODL professionals have no idea about the nature of the courses on different disciplines available in MOOCs program on SWAYAM online learning platform. Around

41.17% i.e., 28 ODL professionals have said that the process and utilization of MOOCs on SWAYAM platform is quite complicated because of poor internet connectivity. All of the ODL professionals shows positive attitude towards integration of credit-based MOOCs on SWAYAM platform. Around 88.24% i.e., 60 of ODL professionals have no idea that NIOS is offering 24 weeks Diploma in Elementary Education (D.El.Ed) program for teacher training and their professional development.

The final part of the questionnaire was designed to examine the level of practices of MOOCs for professional development. Researcher found that none of the institution offers training program on online learning. It is found that none of the institution offers MOOCs for their students. Researcher also found that only one LSC out of 16 LSCs are well equipped with educational e-content or audio-visual production unit in their institute. Others have no audio-visual production unit for MOOCs. Only 8.83% i.e., 6 ODL professionals said that they have virtual learning environment at their institute. Few of them have no idea about virtual learning environment. It is found that the institutions have no dedicated policy to promote or support MOOCs program for betterment of teaching-learning which leads to professional development. There is no policy in dealing with MOOCs for professional development of ODL professionals in their institute. Researcher found that around 83.83% i.e., 57 ODL professionals have never participated or enrolled in any MOOCs on SWAYAM for their professional development but all the ODL professionals shows positive attitude to enrol themselves in near future in different MOOCs on SWAYAM online learning platform for their professional development and they want to integrate MOOC in their teaching-learning. It is also found that the ODL professionals from this LSCs have never participated in the development of MOOCs or e-content development for MOOCs. Out of 68 ODL professionals only one ODL professional successfully completed MOOC on ICT in Teaching and Learning and another one on Academic and Research Report Writing offered by NITTTR on SWAYAM online learning platform for the professional development.

FINDINGS AND DISCUSSION OF RESULT

Basic Understanding of MOOCs: This study found that many ODL professionals are not aware about the full form of MOOCs. Most of the ODL professionals are not aware about the mode of interaction of this type of MOOC on SWAYAM platform. This study also shows that most of the ODL professionals are not aware about nature of the courses, course structure, enrolment and access procedure and they have many misconceptions about its mode of offering (online or offline). Many are not aware that MOOCs are offered through SWAYAM online learning platform initiated by the Govt. of India. Most of the ODL professionals have no idea that there are no prior qualifications is required to enrol in MOOCs on SWAYAM online learning platform. Anyone can join in MOOC with minimum knowledge of technology. It is also found that the ODL professionals are not aware that certificate is provided after successful completion of

MOOCs through SWAYAM online learning platform. Many ODL professionals have no idea about the course content material, assessment procedure and criteria to get a certificate. Many of them have no understanding about the four important quadrants (video lecture, reading material, self-assessment tests, and discussion forum) of MOOC on SWAYAM online learning platform. But most of the ODL professionals are well aware about its basic technical requirement to access MOOCs. Thus, it can be concluded that most of the ODL professionals are well aware about the technical requirement to pursue MOOC but unfortunately many of them have no clear idea about the nature of the course, course structure, mode of interaction, online learning platform, enrolment procedure, engagement procedure (synchronous and asynchronous), assessment procedure, and criteria for certification etc. So, it can be concluded that the conceptual understanding about MOOCs among the ODL professionals is very low.

Usability of MOOCs for Professional Development: This study reveals that most of the ODL professionals have supported that the MOOCs can be used for capacity building and professional development of ODL professionals. It shows a positive attitude towards integration of MOOCs in their teaching. It is found that half of the ODL professionals are not aware about the nature of MOOCs and different dimensions available on SWAYAM online learning platform. Few of them said that the process and utilization of MOOCs on SWAYAM platform is quite complicated because of poor internet connectivity. Without internet connection and a device (computer or laptop or smartphone) they will not be able to join in MOOCs program on SWAYAM platform for their professional development. All the ODL professionals shows positive attitude towards integration of credit-based MOOCs on SWAYAM platform. Many of them felt that the MOOCs on SWAYAM platform are costly because of the requirement of computer or laptop or smartphone with strong internet connection and finally need to pay an amount for proctored examination and for certification. Most of the ODL professionals have no idea about the nature of courses on SWAYAM platform. When they are asked to name any one MOOC under SWAYAM online learning platform, they could not. They have no idea that different types of professional development and teacher training courses (MOOCs) (like., Design and Facilitation of E-learning Courses by IGNOU, Development of Self Learning Material by NITTTR, E-content Development by NITTTR, ICT in Teaching and Learning by NITTTR, Academic and Research Report Writing by NITTTR, and Psychological Foundation of Education by CEC and Diploma in Elementary Education by NIOS etc.) which are available on SWAYAM online learning platform. The ODL professionals felt that the interaction rate is higher in traditional face-to-face mode of teaching than MOOCs. The ODL professionals are not aware that through discussion forum we can clarify our general misconceptions, if any, and share our view on particular content, which is one of the very unique features of MOOC on SWAYAM online learning platform. This shows that the ODL professionals are not familiar with the usability and overall benefits of MOOCs for their capacity building and professional development. More awareness and training

programme is required to acquaint the ODL professionals with this online learning system for effective teaching-learning and professional development.

Practices of MOOCs for Professional Development: The final section reveals that none of the institution offers MOOCs for their students and for better academic achievement. Even the institutions do not offer any training programme for capacity building on online learning or MOOCs. The institutions have no audio-visual production unit or e-content development cell for MOOCs. It is also found that most of institutions don't have any virtual learning environment. Few of them are not aware of virtual learning environment. Institutions have no dedicated policy to promote or support MOOCs program for betterment of teaching-learning which leads to professional development. Most of the ODL professionals have never enrolled in any MOOCs on SWAYAM for their professional development but all the ODL professionals shows positive attitude to enrol themselves in near future in different MOOCs on SWAYAM online learning platform for their professional development. There is a huge gap between enrolment and successful completion rate in MOOC. In reality, the course completion rate is very less than enrolment rate. The ODL professionals were interviewed to understand the reason for not enrolling in any MOOC program, and therefore it is found that lack of awareness, pressure to complete syllabus, language (lack of proficiency in English), poor internet access and lack of institutional policy are the major reasons for not enrolling in MOOCs.

The researcher has studied the usability and practices of MOOCs for professional development of ODL professional at post-graduation level. Through the study the researcher found that majority of ODL professionals have no clear idea on MOOCs and its usage for professional development. Ministry of Education, Govt. of India has taken many initiatives to promote self-directed and self-paced learning and for this purpose they recommended to all higher education institutions to integrate MOOCs in their course curriculum. In this respect, they also recommended to take necessary steps to develop MOOCs for their learners and professional development of the ODL professionals. There must be a dedicated policy for the ODL professionals to promote or support MOOCs in their institution. An academic department is required to support pedagogical use of technology.

CONCLUSION

Online education can be seen as an innovation driver for improving the overall quality of education and as a foundation for the transformation of higher education systems. Regard to this, MOOCs are admirable for promoting and supporting continuous and lifelong learning. MOOCs can be offered to any number of people, anywhere and at any time. MOOCs provide the complete course experience to the different kinds of learners. In this respect, only an internet connection and one device (laptop, desktop or smartphone) are needed to access this type of quality education. MOOCs enable us to enrol and pursue higher education on online platforms. It is also helpful for those, who

cannot afford education in formal system and belong to the disadvantaged sections. MOOCs are excellent for promoting skills development and different capacity building programs among professionals. MOOCs can also be offered in our lifelong learning to enormous numbers of people. So, it can be concluded that MOOCs are contributing a lot to the process of democratisation of higher education and improving the quality of our education system. MOOCs offer universal entry to a high quality of education and finally, it leads to our professional development (United Nations Educational, 2016).

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A CONCISE APPRECIATION OF ADULT EDUCATION

Dr. Mintu Halder

Principal, George College (Department of Education)
Kolkata, W. Bengal

Introduction

Many countries of the world especially in Afro-Asian and Latin American countries people often fail to receive school education because of various reasons. However, no one can deny the impact of education in the era of globalization. Therefore, education of the illiterate citizens has become more important than before. Without education a citizen is considered as a liability of the nation as a whole. It is well said that education is an investment; therefore, minimum education must be given to the illiterate persons to make them literate. Naturally, the concept of adult education would benefit the world as a whole.

Adult education aims at extending educational options to those adults who have lost the opportunity of school education. It is distinct from child education in that it is a practice in which adults participate in methodical and organized activities through which they learn many things and are able to upgrade their knowledge, skill, abilities and aptitude. The adults develop motivation and interest in learning when they feel the necessity of education to meet their needs. In particular, adult education reflects a specific philosophy about learning and teaching based on the assumption that adults can and want to learn, that they are able and willing to take education, and that education and learning would respond to their needs.

Meaning of Adult Education:

'Adult education' is education for adults in a variety of ways on different subjects most of which are practical, not academic.

Therefore, the education of adults is complex in nature through which various subjects are taught to inculcate knowledge, attitude, skill, values etc. in the minds of adult learners. It is a practice of teaching and educating adults.

According to Reddy, adult education is a part-time or full-time education for men and women of all ages either organized by themselves or provided by schools, learning centers or other agencies which enable them to improve their general or professional knowledge, skills and abilities by either continuing their education or resuming their initial or incomplete education of previous years.

Liveright and Haygood in 1969 define it as the process whereby persons who are no longer attend school on regular basis undertake sequential and organized activities with an intention of bringing about changes in information, knowledge, understanding, skills, appreciation and attitudes for the purpose of identifying and solving personal or

community problems.

Difference between Childhood Learning and Adult Learning:

The way children and adults learn is a subject of much discussion. There is general idea that there has a difference between childhood education and adult education. Following differences may be mentioned:

Childhood Education	Adult Education
1) Rely on others to decide what is important to be learned.	1) Decide for themselves what is important to be learned.
2) Accept information being present at face value.	2) Need to validate the information based on experience.
3) Expect what they are learning to be useful in future.	3) Expect what their learning to be immediately useful.
4) Have little or no experience upon which to draw.	4) Have much past experience upon which to draw.
5) Little abilities to serve as knowledgeable resource.	5) Significant ability to serve as knowledgeable resource.
6) Encourage convergent thinking.	6) Encourage divergent thinking.
7) Use specific concrete thought.	7) Use generalized abstract thought.
8) Rote learning.	8) Active learning.
9) Subject centered.	9) Task or problem centered.
10) Motivated by external issues.	10) Motivated by internal issues.
11) Reward/ Punishment.	11) Incentives / Curiosity.

Characteristics of Adult Education:

The philosophy of adult education is dynamic in nature. The purpose and functions of adult education is different parts of the globe may not be one and the same. Accordingly, its nature and character also undergoes changes. However, there are some common characteristics features of adult education

- A) Adult education programmes depends on the necessity of the community. It assumes great significance in specific situation or context.
- B) The program of adult education depends on the prevalent social culture. Therefore, it varies from one culture to another cultural set up.
- C) There is an element of flexibility in the program of adult education so that adults may feel comfortable in the process of teaching learning.
- D) The adult education programme always addresses to the need of the society and nation.
- E) Adult education program does not ignore the experience of adults.

- F) There is no fix method and strategy for adult education programme. It depends on the characteristic features of adult learners.
- G) It is a pre-determined organized process; however, there is an element of flexibility in this endeavour.
- H) Adult education programme paves the way for social cohesion, because adult learners come in contact with each other and develop social relations.

Objectives of Adult Education:

The concept of adult education does not uphold only the idea of literacy and numeracy, it has got wide connotations in that it paves the way for nation building, promote equal society, development of awareness etc.

- A) **Nation Building:** It aims at unification of the people within the state so that it remains politically stable and viable in the long run. During the teaching learning, adult learners enter into relationship with others. This bonding with each other paves the way for making the nation more viable and sustainable. It would also promote peace and communal harmony in the nation.
- B) **Equal Society:** Eradication of social and economic disparity is also an objective of adult education. The potentialities inherent in human being may be translated into full flagged constructive action through the adult education programme.
- C) **Development of Awareness:** One of the most important objectives of adult education is to develop and inculcate awareness in the minds of the adult learners that they are no less important than any other persons, that they can contribute to the development process of the nation and that they can develop their own position in the society.

Principles of Adult Learning:

Malcolm Knowles' six principles Adult Learning – Knowles is known as the father of adult education. He has defined the term Andragogy in 1970 as **'the art and science of helping adults'** learn. To make education program a grand success the educator and trainers should keep in mind the following principles.

I) Adults have higher sense of self direction and motivation:

Adult learners make choices relevant to their learning objectives. They also direct their learning goals with the guidance of their mentors. Learners need to be given the freedom to assume responsibility for their own choices. Learning programme should be carefully demonstrated what the learners gain out of the program.

Relevant clues -

- a) Demonstration on the values and benefits of learning material should be explained.
- b) Learning should be made interesting to sustain the interests of adult learners.

II) Adults Use Their Life Experience to Facilitate Learning:

Educators encourage learners to connect past experience with current knowledge and activities. Educators must know how to relate some of the learners experience to the current learning experience. All the experiences of the adult learners are valuable; they might not be outdated, incorrect or incomplete. But still, the educators should put value on the experiences of the adult learners.

Relevant clues -

- a) Use of Social Learning theory is suggested.
- b) Develop training materials that draws heavily on scenarios that learners face in their daily life.

III) Adults are Goal Oriented:

Adult learners aim to acquire relevant and adequate knowledge and for this reason intended learning outcomes should be clearly identified. Once the learning goals have been identified, educators must align the learning activities in such a way that objectives are fulfilled within a certain period of time. In fact, adults enter into the learning process focused on results.

Relevant clues -

- a) Need to provide value of information to achieve goals.
- b) Explain the relation between the present information and their current role.

IV) Relevance and Adult Education:

Adult learners gain benefit by relating the assigned task to their own goals. If it is clear that the activities they are engaged in, directly contribute to achieving their personal learning objectives, then they will be inspired and motivated to engage in projects and successfully complete them. The content of training program must be meaningful and relevant to the adult learners. The immediate use of learning needs to be explained to the learners.

Relevant clues -

- a) The principles of Andragogy would work well in this case.
- b) The short term and long term benefits must be introduced to the learners.

V) Adults are Practical:

It is very important for the educators to identify appropriate ways and convert theoretical learning to practical activities. Work placement is a way for students to apply the theoretical concepts learned inside the classroom into real life situations. Learning is assisted when appropriate ways of implementing theoretical knowledge in real life situations is made clear. Learning materials should be constructed with practical examples. Allow learner to set their own path of learning.

Relevant clue -

- a) Focus on delivering knowledge that has close connection with the new learning.

VI) Adult Learners like to be respected:

Adult learners thrive in collaborative relationships with their educators. Learners become more productive when they are considered by their instructors as colleagues. When their contributions are acknowledged then they are willing to put out their best work.

Relevant clue –

- a) Let the adult learners feel that the educators are their friend, philosopher and guide.

VII) Adults are looking for help and mentorship -

Mentorship on the part of educator helps them to access new knowledge and avoiding common mistakes.

Relevant clues :

- a) Extend cooperation during training.
- b) Let the adult learners feel that educators are their friend.

VIII) Flexibility:

The course of adult education needs to be flexible in terms of the structure of the subject and duration. Complex subject should be avoided at the initial period. Long duration may cause passivity in their mind.

Motivating the Adult Learners:

Adults typically differ from children in their motivation for learning.

- 1) Use of positive reinforcement motivates the adult learners.
- 2) Encourage the student to give feedback on the subject.
- 3) Continuous interaction with the adult learners.
- 4) Make the learning convenient to the adult learners.
- 5) Put importance on the emotion of the adult learners.
- 6) Arrange some cultural and social activities with the adult learners.
- 7) Tell stories from the real life experience.
- 8) Put the other learners into teaching.
- 9) Respectful attitude to the adult learners.
- 10) ***Motivate yourself before motivate others.***

Barriers in the Way of Motivation:

- A) As family member, the adult learners have to perform responsibility to the family; therefore, balancing between learning and responsibility may be a problem.
- B) Lack of time.

- C) Lack of interest.
- D) Lack of information about necessity of adult education.
- E) Age and health condition.

Methods of Communication:

Adult learning is substantially different from childhood learning. Pedagogy is applied in the teaching-learning of child, however, Malcolm Knowles has observed that depending upon the mindset of the adult learners, the concept of Andragogy is applied in adult education. Andragogy is the art and science of helping adults learn.

Following are the differences between the two :-

Pedagogy vs. Andragogy

Pedagogy	Andragogy
1) It is a method of teaching children.	1) It is a method of teaching adults.
2) Learners are dependent.	2) Learners are independent.
3) Learners have less or no experience to share.	3) Learners are experienced, hence, teaching involves discussion, problem solving etc.
4) Learners learn whatever the curriculum offers.	4) The content has to be modified according to the learners need.
5) Teachers motivate the learners.	5) The learners are self motivated; they need proper guidance.
6) Learning is curriculum oriented.	6) Learning is goal oriented.

Methods of Communication:

The method of adult education must be free from rigidity. Various kinds of communication methods are there, such as:-

- 1) One way communication method,
- 2) Two way communication method,
- 3) Observation method.

1) One way communication method:

One way communication is primarily focused on transmitting information from one source to a group of adult learners. We may mention here two types of one way communication methods.

A) Lecture and presentation:

Though this process, factual information are given to the adult learners within a short time period. Visual aids may be used here. The main purpose is to provide information to the adult learners quickly.

Relevant clues:

- a) Learners' attention should be sustained properly.
- b) Key points should be highlighted.
- c) Logical pattern should be followed in the process of information distribution.
- d) Use of visual aids for the clarification of given information.

B) Resource person:

Resource person can provide required information on a specialised area, such as banking knowledge, in a special way than other. Not only this, resource person may be able to satisfy the queries of adult learners.

2) Two way communication method:

Two way communication method may be used to facilitate an exchange or dialogue between the information source and the adult learners. We may mention here at least two such communications.

A) Workshop:

In a workshop some individuals try to solve the problem sitting together and discussing and working over it. Workshop is important in practice oriented subjects. It is organised for the increase of knowledge of adult learners. In workshop, an expert coordinates the entire program.

B) Group discussion:

In a group discussion adult learners participate to find out solution of a problem by way of sharing information on a particular problem. Here adult learners act as a group to handle a problem. It helps the development of coordination and human relation.

- a) The coordinator may ask adult learners to find out a topic for discussion.
- b) Prepare a list of relevant questions to stimulate the thinking process.
- c) Learning environment should be arranged accordingly.
- d) Learner should be given equal opportunity.

C) Brainstorming:

It is a process through which a specific and creative topic is given to the adult learners to think and express ideas. Creative topics such as 'use of bio fertilizer is helpful in the conservation of nature', 'ways and means of controlling superstition in the rural social life' etc. may be cited as examples.

3) Observational method:

Observation helps to acquire practical knowledge on a subject. One important means of observation is field trip. It helps to obtain first hand knowledge; such as, the observation of cultivation of a special kind of agricultural product in a controlled experimental environment organised by a government Agriculture University is an example of field trip

related with adult education. In such case, planning to visit the site and follow-up is to be decided systematically. Videography may be used to authenticate the entire teaching-learning discourse.

Selection of Communication Method :

It depends on a number of variables.

- a) Objective of Adult Education Programme: As the objective so the use of Communication method. Besides, motivational level of the learners is also important factor.
- b) Subject Matter of Adult Education: An important variable is subject matter. Depending on subject matter, Communication method may be changed.
- c) Availability of Facilities, Equipments and Resources: There is no doubt that without Equipments and resources, adult education cannot be carried out in reality. Again, equipment and resources depend upon the nature of the programme.
- d) Characteristics and Background of the Adult Learners: The prior knowledge and experience of adult learners will determine the kind of teaching method.
- e) Availability of Time: Adult learners are engaged different fields of activities. They have their family life. Therefore, time is crucial factor to the adult learners.

Importance of Adult Education:

Many adult feel the desire to go back to education. Many of these adults prefer to enroll themselves in the night school. Change in the mindset of adult is a positive sign of the growing needs of adult education programme. It has a deep rooted impact on the nation building process.

- a) Educated adults as a part of the entire population can change the socio-economic condition of our country.
- b) Educated adults add to the skilled workforce of our country. As a result, GDP of our country would improve.
- c) The social fabric of our nation would be strengthened with the help of adult education.
- d) Educated adults would find it easier to implement modern technology.
- e) Educated adults are more responsible in their actions to the society.
- f) Adult education may also help in bringing social harmony in our country.
- g) Adult education programme paves the way for personality development of the learners.
- h) Adult learners will become more conscious about health matters.

Conclusion:

The developments of national socio-economic and cultural aspects depend largely on the

level of literacy and education of the citizens of a nation. However, adult education does not only mean literacy and numeracy; it means a sustained effort towards making more conscious citizens. The conscious citizen acts as the makers of modern democratic society. Keeping the objective in view, the Government of India has introduced a series of adult education programme since the First Five Years Plan. Out of this endeavour literacy rate of our country has increased from 18.33% in 1951 to 74.04% in 2011. However, special emphasis is needed to improve the educational and social scenario of adult education, as because, learning is a lifelong process.

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THE IMPACT OF SARVA SHIKSHA ABHIYAN ON THE ENROLMENT IN THE PRIMARY SCHOOLS IN THE DISTRICT OF BURDWAN

Dr. Mintu Halder

Principal, George College (Department. of Education),
Kolkata, West Bengal.

ABSTRACT

Education has been recognized as an important input which paves the way for socio-economic, national and cultural development. It is the basic ingredient for human resource development. Enrolment is the first step to associate the children with the mainstream of education. It is also said that the enrolment is an indicator of measuring the level of development of education in quantitative terms. To increase the rate of enrolment, several measures have been taken by the Government of India of which SSA is a recent one. An important goal of SSA is to provide five years of primary schooling within a limited time. The objective of this study was to highlight the quantitative change in the enrolment of the children in primary schools in the district of Burdwan due to the organized programme of SSA. The analysis of the collected data unveils an optimistic picture of enrolment of children in primary schools in the district. It has been observed that the enrolment of boys and girls has increased significantly due to SSA. The gender wise analysis reveals that girls are not much lagging behind. They are coming fast to compete with the boy-students in elementary education.

KEY WORDS : Sarva Shiksha Abhiyan (SSA), Enrollment in Primary Education, Gender Parity Index (GPI).

INTRODUCTION

The concept of Sarva Shiksha Abhiyan is fundamentally associated with the improvement of primary education in India. Therefore, it is quite natural that free India has incorporated the concept of universalisation of elementary education in the Part IV of the Constitution of India under the heading of Directive Principles of State Policy. The Art. 45 of the Constitution of India reads, 'The state shall endeavor to provide within a period of ten years from commencement of constitution, for a free and compulsory education for all children until they complete the age of fourteen years.' It is unfortunate that the target was not fulfilled within ten years. Even after the recommendations of the Education Commission (1964-66), the National Education Policy – 1968, the National Policy Education – 1986, the Programme of Action, the Modified National Policy Education – 1992 etc cannot change the unfortunate condition of enrolment of children in the primary schools. Thus, the programme of SSA has been introduced by the Govt. of India.

HISTORICAL BACKGROUND

The 'Education for All' i.e. Sarva Shiksha Abhiyan is a global commitment to provide quality basic education for all children, youth and adults. The movement was launched at the 'World Conference on Education For all' in Jomtiem, Thailand, 5 – 9 March, 1990. Later on the Dakar Framework of Education for All: Meeting Our Collective Commitments endorsed the same idea and advocated to provide quality basic education for all by 2015, with particular emphasis on girls schooling.

Even before the Jomtiem and Dakar Conference, the issue of EFA was discussed in the combined meeting of the tenth consultative meeting of the Asia and Pacific Educational Innovations for Development (APEID) and the Regional Experts Meeting on Universalisation and Renewal of Primary Education of Illiteracy in Asia and Pacific held in Bangkok from 20th to 27th May 1986. In this conference three broad programme was emphasized - a) Eradication of illiteracy, b) Universalisation of primary education and c) Continuing education.

Therefore, it may be said that universalization of elementary education is not only a problem of India; the entire Asia-Pacific Region has been in deep trouble with this problem. The dimension of this trouble could well be comprehended from the observation of Mr. Bow, Director General of UNESCO. On the occasion of Regional Advisory Committee Meeting of Education, held in Manila on August 22, 1982, he says that illiteracy is one of the worst evils of 20th century and Asia-Pacific Region would be entering the 21st century with 3.5 billion illiterate persons of whom 4 % will be under 15 years of age.

Sarva Shiksha Abhiyan

In India the National Committee of State Education Ministers, in its meeting has drawn an exhaustive scheme of 'Education for All'. The result was the programme of '*Sarva Shiksha Abhiyan*'. A National Level Mission has been set up under the Chairmanship of Prime Minister on 2nd June 2001 to give effect the goals of SSA in systematic way. It was observed that *Sarva Shiksha Abhiyan* is a holistic and convergent programme targeting both primary and upper primary stages of education with the main focus on providing quality basic education within a clear time frame. It aims at providing access to schooling to all children in the age group of 6 - 14 years and ensuring their completion of five years of primary schooling and eight years of elementary education of satisfactory quality respectively by 2007 and 2010.

Objective of the Study

The study was conducted to estimate the effects of SSA on the rates of enrolment of children in the primary schools of the district Burdwan. Besides, enrolments of boys and girls in primary schools were also estimated to examine the present condition of Gender Parity Index in the district of Burdwan.

Sample :

Twelve circles (02 from each Sub-division) out of 59 circles were randomly selected to make the study intensive and to verify the hypotheses in relation to the objectives of the study.

In the first stage, in accordance with the requirements of the study, representative samples of students, teachers and parents of the students studying in primary schools were selected.

In the second stage, five primary schools were selected from each selected circle. So that total schools were 60.

Tool :

A set of tools such as check list, tabular proforma, questionnaire, attitude test, and awareness test were used for collection of data. Appropriate statistical methods were adopted for analyzing data and to test the hypotheses. After detailed analysis, findings were deduced on the basis of statistical results.

I

Enrolment in Children in Primary Schools the District Burdwan

The administration of primary education in district of Burdwan is regulated in and through the Office of the Sub-inspector of Schools. There is 59 such type of offices in the district of Burdwan which are also known as Circle Resource Centre (CRC). Out of these 59 CRCs, 12 were selected, taking at least 2 from each sub-division, by using the method of random sampling.

An empirical survey on twelve Circle Resource Centers in the district of Burdwan shows that there has been a remarkable increase in the enrolment of children in primary schools after introducing of the programme of Sarva Shiksha Abhiyan. However, it was found that the average rate of enrolment of students in primary schools from 1998-99 to 2001-02 was only 83.32%. The following table shows the enrolment of children in selected 12 circles in the district of Burdwan after the introduction of Sarva Shiksha Abhiyan.

Table – 1: The number of children enrolled in five primary schools under each CRC along with the total number of children in the villages surrounding the selected primary schools

Sl. No	Name of the Circle	Total number children (6-14 yrs.) in selected villages	No. of children enrolled in school	% of rate of enrolment	Average of the % of enrolment in twelve CRC
1	Kanksha II	786	743	94.52	95.89
2	Ukhra	712	642	90.12	
3	Memari	881	844	98.07	
4	Jamlpur (E)	791	769	97.21	
5	Katwa (E)	702	683	97.43	
6	Ketugram(W)	609	593	97.37	
7	Kalna (E)	603	582	96.51	
8	Purbasthali (N)	483	476	98.55	
9	Asansol	917	864	94.11	
10	Barabani	618	587	94.55	
11	Burdwan (M)	433	407	96.30	
12	Galsi	447	424	95.97	

Interpretation:

Above table indicates that the average rate of enrolment of children in twelve selected CRC in the district of Burdwan is 95.89 %. It may be considered as a very high rate and it has happened due to the introduction of SSA. A comparative analysis of the rates of enrolment of the children before (83.32 %) and after (95.89%) the Sarva Shiksha Abhiyan with the help of statistical tool ('t' test), provides a progressive trend of enrolment of children in primary schools.

Table – 2 : 't' between the rates of enrolment in primary schools before and after the introduction of SSA in 12 CRC in the district of Burdwan in 2006-07

Comparison between	Rates of enrolment	S.E %	't'	Level of significance
Before SSA	83.32%	1.47	8.21	.01
After SSA	95.89%			

Interpretation:

Above table reveals a comparison between the rates of enrolment of students in primary schools before and after the introduction of SSA in 12 CRC in the district of Burdwan. Results indicate that the value of 't' is 8.21 which is significant at .01 level meaning thereby the rates of enrolment of students in primary schools in twelve CRC in the district of Burdwan before and after SSA differ significantly. The trend of enrolment in primary schools in 12 CRC also indicates that the enrolment has increased significantly due to the introduction of SSA.

II

Gender Wise Enrolment

One of the objectives of the SSA is to bring about gender parity in primary classes within a stipulated time period. To verify this objective, the enrolment of boys and girls was estimated separately. At the national level the enrolment of girls was consistently low before the introduction of SSA. It was 46.82% in 2002. During this period, Gender Parity Index (GPI) was only 0.88. But with the passage of time, there has been a progressive development in GPI and enrolment of girls in primary schools. The average GPI at the national level was 0.90 during 2003-04 which rose to 0.93 in the 2006-07. However, an analysis of state specific GPI in enrolment in primary classes indicated that West Bengal had GPI of 0.97 in 2006-07 academic period whereas Sikkim and Manipur had highest (0.99) GPI in the country during the same period. The results indicate the progressive development in enrolment of girls in primary schools.

In this study a comparison has been made between boys and girls about their rates of enrolment in primary schools after the introduction SSA in the district of Burdwan. The following table shows the rates of enrolment of boys and girls in primary schools after the introduction of SSA.

Table: 3 Rates of enrolment of Boys and girls in primary schools after the introduction of SSA in the selected villages under 12 CRC in the district of Burdwan in 2006-07

Sl. No	Name of the circle	Total no. of Children (6-14 Yrs) in selected villages	Total no. of boys	Total no. of Boys enrolled Total no. of enrolment of boys	% of Enrolment of boys	Total no. of girls	Total no. of enrolment of girls	% of enrolment of girls	Average % of enrolment of boys in the district	Average % of enrolment of girls in the district
1	Kanksha II	786	395	377	95.41	391	382	96.62	96.03%	95.75%
2	Ukhra	712	358	336	93.73	354	324	91.53		
3	Memari	881	467	444	95.15	414	405	97.71		
4	Jampur	791	397	386	97.18	394	363	92.24		
5	Katwa (E)	702	353	343	97.16	349	340	97.42		
6	Ketugram	609	318	309	97.32	291	282	96.81		
7	Kalna (E)	603	305	294	96.37	298	289	96.98		
8	Purbasthali	483	256	247	96.45	227	222	97.6		
9	Asansol	917	462	442	95.64	455	424	93.19		
10	Barabani	618	325	306	94.15	293	278	94.82		
11	Burdwan	433	218	210	96.44	215	212	98.6		
12	Galsi	447	225	220	97.78	222	212	95.5		

Interpretation –

The average rates of enrolment of boys and girls in the selected villages under 12 CRC were 96.03 % and 95.75 % respectively. The rates were very high and it was due to the introduction of SSA in the district of Burdwan.

Comparison between the Enrolment of Boys and Girls

The enrolment of boys and girls in the district of Burdwan after the introduction of SSA shows a progressive trend.

Table: 4 ‘t’ between the rates of enrolment of boys and girls in primary schools in the selected villages under 12 CRC in the district of Burdwan in 2006-07

Comparison between	% of enrolment in district	SE %	‘t’	Level of significance
After SSA (girls)	95.75	2.79	0.1	NS
After SSA (boys)	96.03			

Interpretation –

A comparative analysis between the enrolment of boys and girls reveals no significant difference. The value of ‘t’ between the rates of enrolment of boys and girls is not significant at .05 level. Therefore, it may be said that there has been no significant difference between the rates of enrolment of boys and girls in the district of Burdwan after the introduction of SSA. Result indicates that the impact of SSA leads to the abolition of gender disparity in the district.

CONCLUTION –

The objective of the study `was to estimate the overall enrolment of children in primary schools in the district of Burdwan. So far the enrolment is concerned, a significant improvement has been found due to the introduction of SSA in the district. Therefore, SSA was effective to set forth a progressive trend in the overall enrolment in primary schools in the district of Burdwan.

In regard to the enrolment of girls in primary schools, the district Burdwan has made a remarkable progress. Findings of the study reveal that there was no significant difference in the enrolment of boys and girls in the primary schools. All these development become possible due to organized and systematic programme of SSA. Therefore, it may be concluded that the strategy and the objectives of SSA in regard to the development of enrolment and attainment of gender parity has been successful in the district of Burdwan.

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METHOD FOR SOLVING NON-LINEAR PROGRAMMING USING MAXIMUM-ENTROPY PRINCIPLE

Dr. Ramesh Kar

Associate professor, Department of Mathematics,
Bidhan Chandra College, Rishra, Hooghly-712248, West Bengal, India
Email: kar.ramesh@yahoo.com

ABSTRACT

The conventional way to deal a nonlinear constrained optimization problem is through a topological domain defined deterministically by function hyperspaces. This topological, deterministic view gives only the interpretation of mathematical programming. Information theory seems to be incompatible with this conception, as it is concerned with probabilities.

Keywords: Shannon Entropy, Information Theory, Optimization, Entropy Constraint, Surrogate Programming, Lagrangian.

INTRODUCTION

For a numerical solution of a non-linear programming problem we have added a entropy term in the objective function and with the help of the modified Maximum Entropy method we get an approximate solution of the problem. The first attempt to deal entropy in connection with general non-linear programming problem seems to be due to Bregman and Romanovsky [1975]. They also added an entropy term to the objective function. Erlander [1981] introduced a theory to solve problem of non-linear programs with an extra entropy constraints based on which Erickson [1980] applied Newton Kantrovich method in developing an algorithm. Our algorithm is much more easier so far as computer programs are concerned. We claim that this new technique of tackling the non-linear programming problem will emerge as a powerful technique in the sphere of linear or non-linear constrained optimization problem.

Let us consider a general optimization problem of the following form :

Problem – I

$$\text{Minimize } \{g(x) = g(x_1, x_2, \dots, x_n)\} \quad (1.1)$$
$$\{x_i, i = 1, 2, \dots, n\}$$

$$\text{Subject to the constraints } d_j(x) \leq 0, j = 1, 2, \dots, m \quad (1.2)$$

Where x denotes vector of real, continuous-valued variables $x_i (i = 1, 2, \dots, n)$ and the constraint functions $d_j (j = 1, 2, \dots, m)$ represent constraint vector d . Problems of type – I with non-linear functions g have far reaching applications and there are plenty of techniques of solving this type of problems [11, 14]. The numerical solutions of this type of problem are of great importance for engineering design, synthesis and analysis [4, 18].

Numerical solution of this type of problems on the basis of Jaynes maximum-entropy principle [9] is first due to Templeman and Li [17]. The method was modified by Das, Mazumder and De [2] on the basis of kullback minimum cross-entropy principle [10]. Later on Das and Chakrabarti [3] has formulated a modified maximum-entropy principle, which removes some flaws and demerits of the paper of Templeman and Li [17] and that of Das, Mazumder and De [2]. This method enables a powerful algorithm of tackling numerical optimization problems, which are very often of great need in engineering science.

EQUIVALENT SURROGATE PROGRAMMING : MODIFIED MAXIMUM-ENTROPY APPROACH

For clear understanding of the mathematical background of the technique we describe it briefly as follows : The **Problem I** has an equivalent surrogate form [17].

Problem – II

$$\begin{aligned} &\text{Minimize } \{g(x) = (x_1, x_2, \dots, x_n)\} \\ &\{x_i, i = 1, 2, \dots, n\} \end{aligned}$$

$$\text{Subject to the single constraint } \sum_{j=1}^m \mu_j d_j(x) = 0 \quad (2.1)$$

Where μ_j ($j = 1, 2, \dots, m$) are non-negative multipliers known as surrogate multipliers. The surrogate multipliers μ may be assumed to be normalized without loss of generality, i.e.

$$\sum_{j=1}^m \mu_j = 1 \quad (2.2)$$

The solution process is set in a probabilistic context by considering the **Problem I** as posed initially and estimating what level of certainty (probability) should be assigned to the event that each constraint is active at the problem solution. Denoting these probability by μ_j ($j = 1, 2, \dots, m$) it is known that at least one of the constraints must be active so that (2.2) must hold. The desired solution x^* of the **Problem I** will here be sought indirectly through a sequence of solutions of the **Problem II**. This approach assumes therefore, that **Problems I** and **II** are equivalent at the solution point specially that a set of multipliers μ^* exists and can be found such that x^* which solves **Problem II** with μ^* also solves **Problem I**.

The Lagrangian of problem II has the form

$$L_{II}(x, \mu, a) = g(x) + \beta \sum_{j=1}^m \mu_j d_j(x) \quad (2.3)$$

Where β is the Lagrange multiplier associated with the constraint (2.1) in problem II. An essential condition to be satisfied is that (x^*, μ^*, a^*) should be a saddle point of the lagrangian L_{II} of the Problem II

$$L_{II}(x, \mu^*, \beta^*) \geq L_{II}(x^*, \mu^*, a^*) \geq L_{II}(x^*, \mu, \beta) \quad (2.4)$$

The saddle point condition (2.4) may be satisfied, however by iterative means using problem II itself with alternative iterations in x – space and μ space. A typical scheme is as follows :

An initial set of multipliers μ^0 is chosen and problem II is solved to yield corresponding values of x^0 . The multipliers are then updated to μ^1 and problem II is solved again to give x^1 . The process is repeated until the sequence $(\mu^0, x^0), (\mu^1, x^1) \dots (\mu^k, x^k)$, converges to the solution of problem II and hence also of problem I, at (x^*, μ^*) . The iteration process should satisfy the inequality [17]

$$\mu_j^{k+1} \begin{cases} > \mu_j^k & \text{if } d_j(x^k) > 0 \\ = \mu_j^k & \text{if } d_j(x^k) = 0 \\ < \mu_j^k & \text{if } d_j(x^k) < 0 \end{cases} \quad (2.5)$$

The new multipliers μ^{k+1} must satisfy the normality conditions and the surrogate constraints of problem II. Thus

$$\sum_{j=1}^m \mu_j^{k+1} = 1 \quad (2.6)$$

$$\sum_{j=1}^m \mu_j^{k+1} d_j(x^{k+1}) = 0 \quad (2.7)$$

For the conditions (2.7) to be satisfied we require values for $d_j(x^{k+1})$, $j = 1, 2, \dots, m$ which are not known as yet. Therefore, the best current estimates for $d_j(x^{k+1})$ are the values $d_j(x^k)$ which are available and must be used in their place. Consequently (2.7) is modified to

$$\sum_{j=1}^m \mu_j^{k+1} d_j(x^k) = \epsilon \quad (2.8)$$

Where ϵ represents the unknown error introduced by using $d_j(x^k)$ in place of $d_j(x^{k+1})$, $j = 1, 2, \dots, m$. Furthermore, we would expect ϵ to approach zero as the sequence of iterations x^k, x^{k+1}, \dots approaches to x^* .

$$\text{Now let us write } y_j^{k+1} = (\mu_j^{k+1} - \mu_j^k) d_j(x^k), \quad j = 1, 2, \dots, m. \quad (2.9)$$

In view of (2.1) and (2.8) we have then

$$\sum_{j=1}^m y_j^{k+1} = \sum_{j=1}^m (\mu_j^{k+1} - \mu_j^k) d_j(x^k) = \varepsilon$$

Which tends to zero as $k \rightarrow \infty$

Since $\sum_{j=1}^m \mu_j^k d_j(x^k) = 0$ we thus have then

$$\sum_{j=1}^m y_j^{k+1} = \varepsilon \quad (2.10)$$

$$\sum_{j=1}^m \frac{y_j^{k+1}}{d_j(x^k)} = 0 \quad (2.11)$$

and $\mu_j^{k+1} \geq 0, j = 1, 2, \dots, m. \quad (2.12)$

To determine y_j^{k+1} we pose the following problem :

Problem – III

$$\text{Maximize } s = - \sum_{j=1}^m y_j^{k+1} \ln y_j^{k+1} \quad (2.13)$$

$$\text{Subject to the constraints } \sum_{j=1}^m y_j^{k+1} = \varepsilon \quad (2.14)$$

$$\sum_{j=1}^m \frac{y_j^{k+1}}{d_j(x^k)} = 0 \quad (2.15)$$

and $\mu_j^{k+1} \geq 0, j = 1, 2, \dots, m. \quad (2.16)$

The solution of problem III gives :

$$\ln y_j^{k+1} = (\alpha - 1) + \frac{\eta}{d_j(x^k)}, j = 1, 2, \dots, m.$$

$$\text{Or } y_j^{k+1} = Be^{\eta/d_j(x^k)} \quad (2.17)$$

Where η is determined from the equation

$$\sum_{j=1}^m \frac{e^{\eta/d_j(x^k)}}{d_j(x^k)} = 0 \quad (2.18)$$

Let the value of η be η^* then from (2.17), we have

$$y_j^{k+1} = Be^{\eta^*/dj(xk)}$$

$$\text{So, } \sum_{j=1}^m y_j^{k+1} = \sum_{j=1}^m Be^{\eta^*/dj(xk)} = \varepsilon$$

$$\text{Implying } B \sum_{j=1}^m Be^{\eta^*/dj(xk)} = \varepsilon \quad (2.19)$$

Since we expect ε gradually approaches to zero as the iteration proceeds (i.e. $\varepsilon \rightarrow 0$ as $K \rightarrow \infty$) therefore, equation (2.19) states that B is a non-negative quantity which in fact gradually approaches to zero as the iteration increases.

By virtue of (2.9) the solution of the problem III gives the following assignment of μ_j^{k+1} :

$$\mu_j^{k+1} = \mu_j^k + \frac{Ae^{\eta^*/dj(x^k)}}{d_j(x^k)}, \quad j = 1, 2, \dots, m \quad (2.20)$$

$\mu_j^{k+1} \geq 0$ we have

$$B \leq \frac{-\mu_j^k dj(x^k)}{e^{\eta^*/dj(x^k)}}, \quad j = 1, 2, \dots, m \quad (2.21)$$

In view of this it should be possible to prescribe procedures for selecting sequence $\{B\}$ of positive numbers that converges to zero. The above method satisfies the conditions (2.5) absolutely confirming the convergence of μ [3].

APPLICATION TO PROGRAMS

Here we are going to deliberate an interesting application of the above modified maximum-entropy method in the solution of linear and non-linear programming problems. Bregman-Romanovsky [1] and Erlander [5] studied entropy constrained linear programs. Bregman-Romanovsky [1] add an entropy term to the objective function with the purpose of introducing an element of smoothing into the solutions of linear and non-linear programs. Erlander [5] adds an entropy constraint to the classical linear programs in order to achieve a desired level of accessibility in the solutions.

In the present section we are going to deal with the technique of section 2 in the solution of linear and non-linear programming problems. This technique has been shown to be very successful in generating an iterative procedure in the numerical solution of linear and non-linear programs. The different steps in the iterative procedure are as follows :

- a) The first step is to reduce the original program into a surrogate and reduce the number of constraints into a single constraint

- b) The next step is to add an entropy term to the new objective function so that the new objective function becomes a non-linear function (in case of linear program) of its arguments in consistent with the formalism of the section 2.
- c) Next is to write down the lagrangian for the surrogate problem introducing a Lagrangian parameter β (say).
- d) Maximization of the Lagrangian with respect to the new surrogate variables y (say) leads to the set of equations which determine the lagrangian parameter β .
- e) We start with the computation scheme by setting surrogate multipliers μ equal so that their total sum be unity. This is consistent with Laplaces principle of insufficient knowledge-a particular case of Jaynens'maximum-entropy principle [9].
- f) By starting with the initial values μ_i^0 , we upgrade their values step by step and find the corresponding values of the surrogate variables y_i and hence original variables x_i ($i = 1, 2, \dots, n$). The whole iterative process can be arranged in a tabular form for a better representation of the solution. The procedure has been explained more explicitly by two numerical examples presented below.

Numerical Example 1 :

In this example we study with the non-linear programming problem.

$$\text{Minimize } f(x_1, x_2) = -4x_1 + x_1^2 - 2x_1x_2 + 2x_2^2$$

Subject to the constraints :

$$\left. \begin{aligned} d_1 &\equiv 2x_1 + x_2 - 6 \leq 0 \\ d_2 &\equiv x_1 - 4x_2 \leq 0, \quad x_1, x_2 \geq 0 \end{aligned} \right\} \quad (1.a)$$

The surrogate form of (1.a) is given by

$$\text{Minimize } \bar{f}(x_1, x_2) = -4x_1 + x_1^2 - 2x_1x_2 + 2x_2^2 + x_1 \ln x_1 + x_2 \ln x_2$$

$$\text{Subject to } \mu_1(2x_1 + x_2 - 6) + \mu_2(x_1 - 4x_2) = 0$$

$$\text{Or, } a_1x_1 + a_2x_2 - a_3 = 0 \quad (1.b)$$

Where

$$\left. \begin{aligned} a_1 &= (2\mu_1 + \mu_2) \\ a_2 &= (\mu_1 - 4\mu_2) \\ a_3 &= -6\mu_1 \end{aligned} \right\} \quad (1.c)$$

Now the Lagrangian for the above surrogate problem is

$$L(X, \beta) = -4x_1 + x_1^2 - 2x_1x_2 + 2x_2^2 + x_1 \ln x_1 + x_2 \ln x_2 + \beta(a_1x_1 + a_2x_2 - a_3)$$

Now the maximization requires

$$\frac{\partial L}{\partial x_1} = 0 \Rightarrow 2x_1 - 2x_2 + \ln x_1 + \beta a_1 - 3 = 0 \quad (1.d)$$

$$\frac{\partial L}{\partial x_2} = 0 \Rightarrow -2x_1 + 4x_2 + \ln x_2 + \beta a_2 + 1 = 0 \quad (1.e)$$

Which gives the value of β for known a_1, a_2 for given μ_1, μ_2 . We start the process by

setting $\mu_1 = \frac{1}{6}$ $\mu_2 = \frac{5}{6}$. In fact Jayne's maximum-entropy principle' generates this starting set for μ_1, μ_2 because in the absence of any others extra information about the problem the least biased assumption that we can make is that all the constraints are equally weighted. Table 3 give the iterative result and is as exact as the three decimal place accuracy.

TABLE – 1

K	B	μ_1	μ_2	β	x_1	x_2	d_1	d_2	η
0	–	$\frac{1}{6}$	$\frac{5}{6}$	0	2.78325	1.15428	.98742	1.00012	0
1	.006	.51395	.50569	0	2.78329	1.15412	.98689	1.00009	0
2	.002	.51472	.50523	0	2.78311	1.15401	.98645	1.00007	0
3	.0004	.50211	.50489	0	2.78301	1.154001	.98641	1.00001	0

Numerical Example 2 :

Here also we study with the non-linear programming problem and its constraints also non-linear.

Minimize $f(x_1, x_2) = (x_1 - 1)^2 + (x_2 - 5)^2$

Subject to the constraints :

$$\left. \begin{aligned} d_1 &\equiv -x_1^2 + x_2 - 4 \leq 0 \\ d_2 &\equiv -(x_1^2 - 2)^2 + x_2 - 3 \leq 0, \quad x_1, x_2 \geq 0 \end{aligned} \right\} \quad (2.a)$$

The surrogate form of (2.a) is given by

Minimize $\bar{f}(x_1, x_2) = (x_1 - 1)^2 + (x_2 - 5)^2 + x_1 \ln x_1 + x_2 \ln x_2$

Subject to $\mu_1(-x_1^2 + x_2 - 4) + \mu_2\{-(x_1 - 2)^2 + x_2 - 3\} = 0 \quad (2.b)$

Now the Lagrangian for the above surrogate problem is

$L(X, \beta) = (x_1 - 1)^2 + (x_2 - 5)^2 + x_1 \ln x_1 + x_2 \ln x_2 + \beta[\mu_1(-x_1^2 + x_2 - 4) + \mu_2\{-(x_1 - 2)^2 + x_2 - 3\}]$

Now the maximization requires

$$\frac{\partial L}{\partial x_1} = 0 \Rightarrow 2(1 - \beta\mu_1 - \beta\mu_2)x_1 + 4\beta\mu_2 + \ln x_1 - 1 = 0 \quad (2.c)$$

$$\frac{\partial L}{\partial x_2} = 0 \Rightarrow 2x_2 + \ln x_2 + \beta(\mu_1 + \mu_2) - 9 = 0 \quad (2.d)$$

Now we follow the same argument as in Numerical Example 1, Table 2 give the iterative results and is as exact as the three decimal place.

TABLE – 2

K	B	μ_1	μ_2	β	x_1	x_2	d_1	d_2	η
0	–	$\frac{1}{6}$	$\frac{5}{6}$	2.31796	1.65964	2.95683	1.42645	1.00020	0
1	.0007	.600647	.600783	2.31768	1.65832	2.95584	1.42589	1.00038	0
2	.0004	.600641	.600711	2.31764	1.65821	2.95572	1.42571	1.00001	0

IMPLICATION

The first is concerned with the modification of Maximum-Entropy technique, development of a powerful numerical technique of solution of a general non-linear constrained optimization problem on the basis of Minimum Cross-Entropy Principle, the study of interrelation of the Principle of Maximum-Entropy with its duality. In fact, it may be justified to conclude the paper by saying that this metamorphosis to the surrogate mode has diminished the number of hindrances into a single one and, furthermore, this has lessened the manifold numerical complications of the problem undoubtedly to a large measure.

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Teacher Education in India: Issues and Concerns in Present Scenario

Dr. Waseem Zahra

Assistant Professor

Department of B.Ed., B.N.K.B. P.G. College, Akbarpur, Ambedkarnagar, U.P., India

Email Id: waseemzahra85@gmail.com

ABSTRACT

Over the last half century and especially in the last decades teaching learning has been under gone drastic changes. There has been a shift towards student centred classroom from teachers centred classroom and teacher's role become more as facilitator of learning rather than an autocratic master. In the view of current changes in the social, cultural, economic and political environment, the radical change is essential in the teacher education so that teachers could raise their standard with the changing needs of the society. In the present, the unexpected growth in a large number of non-government teacher training institutions has deteriorated the quality of the teaching programme. It is observed that non-government institutions lack of adequate physical infrastructure and produce a large number of incompetent teachers. Many other problems like the ratio between demand and supply of teachers, the poor standard methods of teaching, traditional curriculum, the problem of supervision, inadequate empirical research, poor infrastructure, etc. has also aroused. Keeping in consideration all these problems and concern, the educationists, policy makers, curriculum planners, and other stakeholders need to reconstruct and reform the teacher education programme for the growth and development of teachers as well as for the nation. The Present paper discusses about the meaning, need, significance, issues and solutions of teacher education.

Keywords: Teacher Education, meaning, significance, issues, suggestions

Introduction:

Education has great importance in building strong and developed societies, and it is considered as a important tool for bringing positive change in the social, political, economic and cultural life of people. The whole process o teaching-learning is shaped by many important agents, and the teacher is one of them. The teacher is claimed to play a pivot role in education. Teachers can craft or blight a nation. Teaching is a fine art, which needs to be practiced through the proper training, acquisition of various skills, competencies and relevant knowledge about the learner and the subject matter in the contemporary world. The Kothari Commission (1964-66) stated that "a sound programme of professional education of teachers is essential for the qualitative improvement of education." It highlighted that investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in the education of millions. The Commission emphasised that

training and orientation of teacher is very important so that he understands and accomplishes his changing role effectively.

Meaning of Teacher Education:

Teacher Education refers to the policies, procedures and provision designed to equip pupil teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classroom, school and wider community. Those professionals who engage in this activity are called Teacher educators or, in some contexts, teacher trainers. Now a days teaching-learning process is going through tremendous change and teacher education is playing important role in the education world. The teacher training program is helpful for teachers in improving their efficiency, ability, knowledge, professionalism and motivation for their work.

Significance of Teacher Education:

There is a tremendous change in today's generation, technology, and environment as compared to earlier. For this evolving environment, it is required that the teachers must be updated, to get better teaching results. Teaching and learning are always like two parallel lines that are bound to go together. It is always seen that students of well-informed and skilled teachers are better than the other students. Therefore, teachers must get training at regular intervals of time for updated knowledge regarding the ever-changing environment. To face the new challenges and changes in the educational world, the Teacher Education is helping Teachers around the globe. Here are some points about the significance of Teacher Education–

- Today's children look at electronic gadgets more than books. They prefer learning online rather than offline. So, the teaching training is useful in teaching teachers how to use electronic gadgets to encourage students to study, like giving assignments online or taking tests online.
- The Teacher Education also teaches teachers how to study student's psychology. If there are any problems, they sometimes need to become emotional or career counsellors.
- Teacher Education will help improve teachers in their teaching methods, time management, technical knowledge, motivating students, teaching skills. This resulting in the overall improvement in the institution.
- Teachers can help students in applying academic knowledge in solving their daily life problems.
- Teachers are taught long-lasting skills and a better way of teaching. They are also trained how to conduct knowledge-based activities for students like quizzes, debates, group discussions, etc.
- The program also taught teachers how they can increase the vocabulary of the students in the classroom so that the students become better communicators.

- In distancing learning courses also, the Teacher Education helps the teacher how to use technology and digital communication tools for better teaching results.

Problems of Teacher Education in India:

In the contemporary situation, a huge number of teachers are untrained. In some areas, the situation is not very hopeful. It has been noticed that teacher educators are neither professionally qualified nor committed to their profession. The quality in pre-service education has shown the worsening condition. While Sharma (2015) emphasized the need for ICT in the professional growth of the teacher and determining the global economy. The rise in substandard institutions of teacher education is the cause of such emerging problems and mismanagements. The National Curriculum Framework for Teacher Education: Towards Preparing Professional and Humane Teacher (NCFTE, 2009) expressed concern over the quality of teacher education. Though, National Council for Teacher Education (NCTE) has taken quality improvement in teacher education, the system is still not fulfilling the essential need of providing competent and committed teachers after completing the initial teacher training programmes. A huge number of teacher training institutions are not following the instruction and guidelines of NCTE. At present, the radical change in the organization of curriculum, use of modern technologies and more emphasis on advanced and creative practices are necessity of the period. Thus, teacher education has to be transformed and reoriented today. Some of major problems and concerns prevailing in the teacher education system are following:

Selection Procedure:

A continuing problem of the pre-service teacher training programme is to select the high-quality aspirants and to refuse admission to those who do not have aptitude and commitment to the teaching profession. The main goal of the teacher education is to identify the candidates who exhibit the personal attributes (sincerity, honesty, potentiality, commitment, impartiality and neutrality). In-depth knowledge of subject, psychology and pedagogy lead to successful learning outcomes. The problem arises when those candidates enter this programme who do not have necessary competencies and qualities required for such an important profession. This results in the production of poor-quality teachers in the education system. Thus, it is need of the hour to evolve a sound procedure which can help in a suitable selection of persons who are likely to become efficient teachers.

Issue Related to Quality:

In the ongoing time, the quality concern in the field of education has emerged as a great problem in the time of globalization and privatization. The present teacher training programme is designed in such a manner that it does not provide the proper opportunities to trainee to develop essential teaching skills. According to Anees (2015) "despite realizing various measures still, numerous problems of teachers training exist in India. The main problem of the present teacher education system has been identified 'the

unproductive trained teachers. Skill and proficiency development aspect is most neglected. The practice teaching aspect is not done according to the need and demand of the trainees. For the teaching of theory, part consumes almost 70% time and practice teaching 30% of the total time available. This situation arises because the organizers of teacher's training programme are not aware of the present problems of schools.

Traditional Curriculum:

The National Teacher Education Curriculum needs to be in accordance with the curriculum framework for school education. A teacher needs to be prepared to fulfil the requirements and demands of the school education and the learners and the learning process. Therefore, it is essential that the curriculum should be organised as per the ongoing demands of the school and society as well as for the nation. Khan (2016) emphasized on 'the need for significant transformation of the curriculum strategies and methods used in teaching.' In the present day, the teacher training institutions are followed the traditional method for teacher training programmes without bringing the essential modifications with needs of the trainee.

Problem of Teacher Readiness for Inclusive Classrooms:

According to the Official Estimate of the Census of India (2011) data on disability about 2.21% of the total population are people with disabilities (PWD) in India. There are many problems in teaching children with special needs in regular classrooms. These problems arise due to lack of proper infrastructure, material resources lack of proper training and undesirable attitudes of teachers. There is an urgent requirement to equip teachers to handle the problems of segregation prevailing in schools. Das, Kuyini & Desai (2013) studied the current skill levels of regular primary and secondary school teachers in Delhi, in order to teach students with disabilities in inclusive education settings. They found that about 70% of the regular school teachers had neither received training in special education nor had any experience teaching students with disabilities.

Lack of Professional Development:

The outdated approach to teaching is prevailing in schools among older teachers who were taught and have been teach in these traditional approaches. Continuous Professional Development is essentially required for the success of the different teaching approaches. In order to give teachers, the opportunity of sound professional development along with content & methodology, there is an urgent requirement to integrate emotional capabilities and life skills with individual development, continuing education, in-service education, curriculum writing, and peer collaboration etc.

Occupational Stress among Teachers:

In the era of science and technology, fast and busy life has made the teaching profession physically and mentally very problematic. The teacher needs a lot of potentialities to deal with classroom situations and professional work. Sometimes, the teacher comes under

stress due to growing pressure. According to Eysenck (2001) “stress occurs when the perceived demands of a situation exceed the individual’s perceived ability to handle those demands.” Occupational stress also affects the professional growth of teachers. Occupational stress takes place when there is a disparity between the demand of the environment and an individual’s capability to carry out a task. The major causes for stress among teachers are excessive working hours, less handsome salary, excessive workload, changes in curriculum and courses, rising class sizes, changes to assessment and, lack of job security etc.

Lack of Training in Information and Communication Technology (ICT)

In the modern era, information and communication technology (ICT) is one of the best tools to achieve access, inclusion, and quality in teacher education. The use of ICT in obtaining knowledge and skills has become an essential pre-requisite in teacher education. But there are some problems which are prevailing in our education system. Lack of infrastructure and equipment results in one of the major issues of present teacher education courses that the teacher trainees are not getting proper training in the information and communication technology (ICT). They do not know how to use ICT for facilitating their teaching-learning process. Even the teacher educators themselves lack in necessary ICT skills.

Less Focus on Research and Innovations:

According to Kumar & Azad (2016) the quality researches have been considerably neglected in the area of teacher education. The sufficient amounts of researches are not being conducted and not as per global standards. It has been observed that researches are conducted without keeping in mind the current issues and challenges of teacher education programmes. It results in no significant transformation in the existing educational system. There is an essential to develop the national arrangement for research in alignment with the local and national level priorities.

Lack of proper Infrastructures:

It is definitely very crucial to have adequate physical facilities in terms of material for providing sound professional training. Chauhan, (2004) stated that “it is the combination of several components such as knowledgeable teacher educators, good classrooms, library and laboratories which make good teacher education institute”. According to Khan, Fauzee & Daud, (2016) the teacher training colleges suffer from inadequate physical facilities, classrooms, laboratories, libraries and Information & Communication Technology (ICT) facilities which do not have updated quality books and overall environment is not conducive. The most important problem is that a large number of teacher training institutions do not have experimental schools attached to them. So, it results in the difficulty of carrying out the practice teaching task of trainees effectively.

Suggestions:

- Proper selection technique should be developed for selecting the proper candidate for the teacher-learning process. The selection process for admission in teacher education should be updated in such a manner that the only those aspirants can get admission who have teaching aptitude and commitment to the teaching profession.
- The teacher training programme should be developed in such a way that it provides sufficient opportunities to pupil teachers to develop their essential professional skills. It will help prospective pupil-teachers in their training to develop an all-round personality and making them competent enough to teach the learners.
- The pupil teachers should be trained in such a way so that they can deal with the 'Children with Special Needs' along with the normal students in the comprehensive and inclusive classrooms. Inclusive education should be made an integral part of the teacher education curriculum.
- Professional development of teacher educators is a continuous process. Therefore, New Refresher Course, Orientation Programmes, Workshops, Symposium and short-term courses should be encouraged on a frequent basis for the professional development of teacher educators. For the growth of professional temperament, the teacher training institution should be sufficiently furnished with facilities for start-up various types of activities such as refresher course, orientation programmes, workshops, symposium and short-term courses, daily assembly programmes, social work and other co-curricular activities.
- Teacher educators need to learn various skills like meditation and yoga to maintain the balance between professional life and personal life. The practice of meditation helps in relieving the stressful mind and save them from occupational stress.
- The teacher education departments should give more opportunity to conducting researches on teacher education, curriculum developments and evaluation procedure. Various induction programmes and exchange programmes with different universities within India and abroad should be sponsored by the government so that teachers can improve their quality.
- Teacher educators need to be updated with advance technology taking place in the area of education. Pupil teachers should be taught the art of using information & communication technology (ICT) in the classroom to facilitate better teaching-learning process.
- It should be confirmed that the teacher training institutions have appropriate infrastructure for teacher training. NCTE should supervise the existing condition so that necessary action can be taken against such teacher training institutions if they have not required infrastructure.

- NCTE should supervise the private teacher training institutions to stop them merely the platform of money making. Strict action should be taken against those teacher training institutions which are involved in commercialization and profit-orientation of education.
- The Central Government and the State Governments should recruit good quality teacher educators to solve the problem of unequal ratio of demand and supply in teacher education.
- The curriculum for teacher training programme should be reorganised from time to time according to changing demand and latest developments of the society, nation, profession and globalized world. Advance research should be conducted to evaluate the course structure. The findings of such advance researches can be beneficial for assessing, evaluating and designing the curriculum of teacher education.

Conclusion:

Education helps in establishing a society which appreciates peace and stability and moves towards progress and improvement. It is a procedure which encourages the innovative capability of an individual and supports him to concentrate his energies on the points he wants to fulfil. A nation becomes rich not by riches person but rather by its educated citizens. The teacher is the vital point of the entire education system and the primary agent for bringing desirable changes in the teaching-learning process. Thus, quality teachers are important factors in attaining sustainable global development. As no education system can rise above the existing level without the quality of its teachers, vigorous efforts would be needed to bring substantial reforms. Therefore, their training, recruitment, retention, status and working conditions should be among global priorities today. But the shortage of well-trained teachers is a significant problem today. To fill this gap, the central government, regulatory bodies like NCTE, UGC and other statutory bodies like NCERT, NUEPA, IASE, Central Universities, and policy planners with other stakeholders have to play a major role in this process of reform. The restructuring curriculum of teacher training programme needs to be revised according to the changing demand of the society and nation. To conclude, proper training, positive attitude and professionalism needs to be instilled in each and every phase of teacher education starting from conceptualisation to evaluation and appraisal to prepare teachers and improve the quality of education.

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Book Review

Dr .Shalini Yadava

Assistant Professor
University School of Education
GGSIP University, New Delhi

Raad-Lang.D, Lang, Everyday Instructional Coaching-Seven Drivers to Support Teacher Effectiveness, 100pp, Solution Tree Press, 2018. ISBN, 9781945349485, Price: Rs 1953.

The book is spread in seven chapters which detail the dynamics of use of the seven critical drivers that prove to be supportive to teachers in teaching effectively such that they are able to achieve the expected learning outcomes. In the introductory chapter the role and expectations of an instructional coach are clearly spelt out. The seven drivers considered to be indispensable for instructional coaching are listed as Collaboration, Transparency, Inquiry, Discourse, Reverberation, Sincerity and Influence. The author builds a case for use of these seven drivers by instructional coaches in order to be empathetic, compassionate and empowering to teachers and students both in teaching-learning environments on a daily basis. The second chapter outlines the role of collaboration as an essential driving force. Most institutions do not encourage collaboration as they do not want to disturb the status quo of the work being undertaken by individuals even if it has lost its validity with respect to purpose and utility both. One important reason for teachers not volunteering to collaborate is that they are already hard pressed for time and collaboration means investing more time in order to understand each other's beliefs, opinions and practices. There is enough research on the other hand that supports that collaborative thinking and creativity flourish when there is diversity at work places. It is important to share ideas, opinions and beliefs with peers who differ from you such that you teachers do not develop an implicit bias by being with like minded peers who keep revalidating your opinions and beliefs. Coaches need to engage with diversity proactively as it is important that they interact with teachers who are different from them with respect to different parameters such as gender, race, region, language, thinking, personality etc and also encourage teachers with differing opinions to speak out in order to engage in reflective dialogues with them to understand them such that the reasons for their dissent are taken on board and understood too. Coaches also need to understand the need to balance collaboration on one end and working independently on the other so that the benefits of either one are not compromised. As a coach the best strategies to ensure the balance of the team are to create a friendly and congenial environment where in everyone is free to voice their opinions, provide ample time for reflection on ideas by giving opportunities in the form of quiet time, clearly look at and differentiate between the different personality types in order to enable the participation of all the member teachers on board. The second driver that instructional coaches bank upon is transparency with respect to their expectations, plans and outcomes they set for teachers. Transparency enables the creation of an environment of trust and facilitates the removing barriers in communication thus making it easy for teacher teams to collaborate. The third crucial driver for coaches is to foster a culture of inquiry .Chapter three details the means of improving inquiry by improvising upon the technique of questioning such

that asking the right questions from teachers and the teachers in turn asking them from their students leads to the development of divergent and convergent thinking in teachers and students both. The fourth important driver for instructional coaches to be successful in achievement of their goals is discourse. A discourse that clearly brings on board the expectations from teachers ,motivates teachers to constantly do better ,provides opportunities to transform challenges they face into opportunities to create and problem solve together is the one that gives the teachers the confidence to achieve their goals of teaching, learning and assessment and create value for themselves. The next driving force in instructional coaching is termed as reverberation wherein there is a cycle of open non threatening feedback from the coach to teachers and teachers to the coach. This continuous feedback throughout the instructional coaching cycle takes place in an environment of trust, sincerity, transparency and where the focus is on improvement of practice rather than judgement. The driver that holds much value in achieving successes with teachers is sincerity on the part of coaches in dealing with teachers. The most important trait one needs to have as a coach for displaying sincerity of efforts is self monitoring. A coach that self monitors his/her own practice is actually in sync with his/her own actions on one hand and the environmental circumstances of the institution on the other hand thus leading him/her to be more focused and less impulsive .In order to be qualify as being sincere the coach needs to be a patient listener to the voices of the teachers and in the process also display readiness in learning from the experiences of teachers .Sincerity also warrants being supportive of teachers in their voyage of creativity and innovation ,making efforts to understand the goals that teachers set for themselves in their journey of self directed growth, taking decisions which are in tune with the value systems of teachers and being flexible and open in our dealings with teachers to prod them to the peak. The last driver outlined in the book is influence i.e coaches must translate their influence into change that is meaningful. It is important for coaches to shift the focus from ineffective teachers to learning practices that are beneficial to students. Lastly coaches need to win over the dissenting voices by convincing them towards their shared vision for students instead of just pinning hopes on the teachers who are often cheerleaders to all ideas of the coaches without any questions.

This book is a must read not only for instructional coaches addressed as supervisors in schools but also for teachers in order to understand the relationship between teachers and coaches. The book details the role and functions of instructional coaches in depth. The only part missing is the documentation of the outcomes of instructional coaching for teachers and students both based on evidence from research .On the whole an enlightening read on instructional coaching.