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Multi-disciplinary, Peer Reviewed Journal

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P. O. –Miapur,P.O-Ghorsala,
Dist. – Murshidabad, West Bengal,
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From the Desk of Editor-in-Chief

The undersigned takes pleasure in bringing out the 12th 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 June, 2022

Editor-in-Chief

JOURNAL OF
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C O N T E N T S

TITLE	PAGE NO.
CHALLENGES FACED BY UNIVERSITY TEACHERS IN THE ONLINE MODE OF TEACHING DURING COVID19 <i>Dr. Shalini Yadava</i>	1
UNDERSTANDING INCIVILITY IN THE VIRTUAL CLASSROOM: A CRITICAL REVIEW <i>Aarti & Dr. Shalini Yadava</i>	12
IRREGULAR ATTENDANCE OF SCHOOL STUDENTS AT CLASS AND ITS RELATION TO THEIR ACADEMIC ACHIEVEMENT <i>Arpan Dutta</i>	25
PROFESSIONAL DEVELOPMENT OF TEACHER AS EXPERT FOR MULTIPLE STRATEGIES ACCESS DURING DISTANCE LEARNING <i>Dr. Qaisur Rahman</i>	37
DEVELOPMENT OF COMPETENCY BASED INTERGRATED LEARNING FRAMEWORK TO FACILITATE TRAINING IN ENGINEERING AND INDUSTRIAL TECHNOLOGY <i>Francis Mafuratidze, Ignatious Chigumira & Sencelia.Kupara</i>	48
HIGHER EDUCATION IN INDIA TODAY SOME CHALLENGES AND RESOLUTIONS <i>Dr. Poulami Bhawal</i>	64
A STUDY OF ACADEMIC ACHIEVEMENT AMONG TRIBAL AND NON-TRIBAL ADOLESCENTS OF WEST BENGAL <i>Bapan Sing & Dr. Shreekanth Gour</i>	70
WOMEN RIGHTS VIOLATION IN JAIL CUSTODY IN WEST BENGAL: A STUDY <i>Mridula Biswas & Dr. Santinath Sarkar</i>	78
REVIEW OF DATAVEILLANCE PRACTICES IN EDUCATIONAL INSTITUTIONS AND REFLECTIONS FROM THE FEMINIST PERSPECTIVE <i>Ms. Saloni Kumar & Dr. Shalini Yadava</i>	97
PERCEPTION OF STUDENTS TOWARDS THE INCLUSION OF TRANSGENDER IN HIGHER EDUCATION <i>Dr. Shalini Yadava</i>	112
A CASE STUDY OF DEVELOPING RELATIONSHIP AMONG STUDENTS AND TEACHER ON LEARNING AND THINKING STYLE <i>Dr. Qaisur Rahman</i>	125

TITLE	PAGE NO.
FACTORS AFFECTING THE ACADEMIC PERFORMANCE OF STUDENTS AT HIGHER SECONDARY SCHOOL LEVEL IN NADIA DISTRICT <i>Arpan Dutta</i>	139
IMPACT OF HOME ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF TRIBAL REGION SECONDARY SCHOOL STUDENTS - A STUDY <i>Bapan Sing & Dr. Shreekanth Gour</i>	152
WOMEN & CUSTODIAL PROBLEMS IN INDIA: A STUDY <i>Mridula Biswas & Dr. Santinath Sarkar</i>	161
AN INTERPRETATION ON DIGITAL TECHNOLOGIES AND ITS RELATIONSHIP WITH INNOVATION IN EDUCATION <i>Dr. Arun Kumar Mandal</i>	179
HIGHER SECONDARY SCHOOLS TEACHERS COMMITMENT AWARENESS ON ORGANISATIONAL EFFECTIVENESS <i>Dr. R. Venkatesan</i>	191
STUDY INVOLVEMENT OF IX STANDARD STUDENTS IN KANCHIPURAM DISTRICT: A SURVEY <i>Dr. R. Venkatesan</i>	201
UPGRADING TEACHING COMPETENCE OF STUDENT TEACHERS THROUGH SUPERVISOR FEEDBACK UNDER MICROTEACHING FRAMEWORK <i>Dr. Vibha Chawla</i>	210
CHALLENGES OF TEACHERS IN PRACTICING SUSTAINABILITY AT PRIMARY SCHOOL CLASSROOMS OF KERALA <i>Prasy P & Dr. Bindu M P</i>	217
DISPARITIES AMONG HINDUS IN INFANT MORTALITY RATES AND THEIR MAJOR DETERMINANTS IN WEST BENGAL <i>Priyanka Das</i>	228
EDUCATIONAL SCHEMES SERVING PRIMARY STUDENTS: A CASE STUDY OF SCHOOLING OF GIRLS AT GOSABA VILLAGE OF SUNDERBAN <i>Nirmal Barkandaj</i>	235
COVID-19 WORKERS OFFSPRING'S MENTAL HEALTH <i>Dr. U. Pandian & Prof. Jayanta Mete</i>	257
PERSPECTIVES OF SCHOOL EDUCATION IN NEP 2020 <i>Prof Dr. Narayan Barik & Ms. Bharati Saikrupa</i>	264
MENTAL HEALTH AND INTERNET USAGE BY STUDENTS <i>Sriparna Mallick & Prof (Dr.) Kartick Chandra Pramanik</i>	270

TITLE	PAGE NO.
RELATIONSHIP OF TOTAL FERTILITY RATE, BIRTH RATE, DEATH RATE IN WEST BENGAL AMONG MUSLIMS <i>Priyanki Das</i>	280
VIEWS AND CHALLENGES OF E-GOVERNANCE IN HIGHER EDUCATION INSTITUTIONS OF WEST BENGAL <i>Dr. Sumit Paroi</i>	285

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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CHALLENGES FACED BY UNIVERSITY TEACHERS IN THE ONLINE MODE OF TEACHING DURING COVID19

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ABSTRACT

It is important to understand the urgency, need and relevance of any change in pedagogy that the teaching fraternity embraces and ultimately adopts and adapts to. The pandemic threw a number of challenges staring at our faces amidst the lockdown in the middle of the semester in most universities and colleges across India. This research study was conceived to document the experiences of faculty in NCR in teaching through the online mode that was suddenly thrust on them during this pandemic. . The data was collected using the narrative research method from a sample of ten faculty members drawn purposively based on their willingness to be a part of this descriptive study using open ended interviews keeping in mind the objectives and time frame of the study, both. The findings revealed that most of the teachers initially struggled with coming to terms with the online teaching mode but gradually adapted to it looking at it as the only option available to teach during the pandemic. The teachers found teaching many a times hindered owing to internet and electricity issues. Most teachers felt that face to face mode offers more promise with respect to discussions and getting feedback from students by raising questions and the same engagement becomes difficult in online mode due to the high teacher-student ratio in courses in most programmes. Teachers teaching in rural universities found that a number of their students especially girls did not have access to either laptops/tablets /desktops or mobile phones as either they were not allowed to use or there was a single device in the family and many users therefore making access to technology itself impossible at all times and thus reinforcing the existence of both the gender and digital divides as an ugly reality staring back at us making education of many coming to a standstill. This research thus builds support to advocate and use the online mode judiciously looking at the ground realities of infrastructure and socio-economic inequalities as otherwise it becomes a means towards exclusion of many from the ambit of education.

Keywords: Pedagogy, Digital Divide, Access, Outreach.

Introduction

Never did we fathom as a fraternity of teachers that technology will become such a potent force to engage in teaching-learning. But necessity (as in the case of often cursed Covid 19 times) becomes the way to adapt to changes exerted by a given set of circumstances. As the pandemic raised its ugly head the lockdown became a reality and the curriculum planners and implementers who were in deep slumber in most higher education institutions with respect to provisioning of adequate digital infrastructure except for a few exceptions(found in the established elite institutions whether public or private)had to now rise to the occasion to somehow create facilities in terms of an enabling environment to use technology to transact the remaining curriculum in the courses running .It took considerable time for many institutions to decide upon the platforms that are relatively safe keeping the issues of safety, security and cost of technology in mind .While the teachers were busy thinking about how to best reach out to their students in terms of content delivery many in the community thought that teachers especially in Higher Education Institutions are enjoying paid summer holidays before time as if coping during the lockdown for teachers and their families was not a reality just like other working professionals. Well when did the teachers ever think they shall also be exercising the option of work from home thrust on them without any discourse with them on decisions taken by policy planners that directly impact them. Anyways most of the teachers embraced the change replete with struggle and challenge and converted it into an opportunity to reach out to their students no matter what. The stakes were high not only in terms of the content to be delivered but also mentoring in courses with research, laboratory and technical components. This mentoring had to be done online without any face to face discourse was a difficult task for many teachers as well as students who had never done it in the online mode before .This made the task on hand challenging and daunting both at undergraduate and post graduate levels for teachers as well as students. Many a times the policy directives with respect to what constituted an online mode of content delivery made the situation complex and confusing especially in rural pockets not exposed to this mode at all. Teachers grappled with the challenges of multitasking at different levels during the pandemic trying to figure out ways and means to effectively deliver the content through online teaching on various platforms, using apps such as whatsapp and the social networking sites to reach out to as many students as possible and on the other hand coping psychologically to the anxieties and fears unleashed by Covid 19 in terms of the safety protocols

to be adhered to at all times. In this entire duration of online teaching there was hardly any discourse on taking care of the psychological well being of teachers and a major reason for this is that often teachers in India or the ‘Gurus’ are equated to be gods thus perceiving them to be omnipresent at all times without looking at them as human beings who too have limited energies, have families to care for and many a chores to engage in .The general public perception is that all they do is manage a few classes that too from the confines of their homes in a comfortable environment. What a fallacy indeed! Teachers are expected to be well motivated, empathetic and caring super human beings but never is a need felt by the curriculum implementers and administrators in Higher Education institutions to look into the Physical, Mental, Emotional and Spiritual well being of teachers which often leads to their psychological burn out. Covid 19 times also reinforced this reality where in, in many higher education institutions there was a general attitude of apathy towards teachers by turning a blind eye to their struggles and challenges of content to be delivered online in a given context. Keeping the above background in mind this research was conceived in order to take an exhaustive look into the struggles and challenges as well as opportunities provided by the online mode as perceived by teachers teaching in universities and colleges in NCR, India.

Review of Related Literature:

Any research is incomplete without a review of related literature, therefore relevant studies pertaining to comparison of face- to-face mode with the online mode have been reviewed based on the studies found in journals through online access. **Stern (2004)** analysed the differences and commonalities between the face to face mode and online mode of teaching through a comparison of teaching the course on Foundations of American Education. The main findings of the study were that online mode requires an effort on the part of the students to identify their learning styles and take the responsibility for being well motivated to attain success in the course as per defined outcomes. Online mode also becomes a concern in terms of exerting pressure on teachers with respect to completion of syllabus and coping with the work load, as in this mode the load of content delivery is comparatively higher .It was found that students with relatively better reading and writing skills will perform better in the online mode. The success of teaching through the online mode was also found to be contingent upon factors such as time management and organisational skills of students apart from teachers monitoring the progress of the students by engaging them in participating in the online teaching-learning. However the study

suggested that more conclusive research is needed to be carried out to look into the efficacy and effectiveness of the online mode of teaching-learning with respect to sample drawn from the vast spectrum of courses in different programmes to decide upon the choice of mode most well suited for teaching which course.

Fortune, Spielman & Pangelinan(2011) examined the perceptions of students of Hospitality, Recreation and Tourism majors in a multicultural state university of Northern California with respect to online and face to face mode of teaching and the use of social media .It was found that there was no significant statistical difference with respect to learning preference among the two learning modes offered to students as students had clarity with respect to the choice they made. The students were able to participate and grow effectively using an online platform for learning without any interaction in physical space whatsoever with their peers or the teacher. The study also explored the perception of students with respect to the use of leisure time and it was found that students visited social networking sites such as Facebook and Myspace but felt that they engaged online less in comparison to face to face mode of interactions to pass leisure time.

Szeto(2014) the research study analysed the instructor experiences by examining the blended synchronous learning effects through a comparison of online and face-to-face mode of teaching-learning.

The study was conceived based on the belief that researches in Higher Education Institutions have lent credence to reasserting that blended synchronous teaching learning environments offer a lot of possibilities in terms of achieving the intended learning outcomes. The study documented the analysis of findings culled out from the qualitative study of experiences of instructors and students in three dimensions: instructional, social and learning through the use of ICT. The findings revealed that both face to face and online modes lead to the attainment of learning outcomes that were not much different although there were different learning and teaching effects on blended synchronous instruction.

Kemp and Grieve (2014) examined the opinions and test performance of undergraduate students of Psychology by comparing them across the traditional face to face mode of teaching-learning and online mode. The findings of the study pointed out that students preferred to complete written activities through the use of online mode however they felt more engagement in discussions is possible in the face to face mode than the online mode. Another reason given by

students for preferring discussions face to face was that feedback they received was immediate thus making it more meaningful and relevant. The study also found that there was no difference in academic performance of students across the two modes. The researcher suggested as implications of the study that the curriculum planners should aim to give flexibility in course delivery such that on one hand the online mode may be used by teachers to deliver content and on the other hand discussions on the same take place in the face to face mode thus making the experience satisfying for both the teachers and students.

Holmes and Reid (2017) compared student performance in the on campus and online mode in a research methodology course with the aim of looking at the outcomes of teaching based on the two modes. The study was run in a counsellor education program offering the research methods course using the pre-test –post test design. The data analysis showed that both the on campus teaching group and the online teaching group scored significantly higher in the post test than in the pre-test. It was also found that there was no statistically significant difference in the mean scores of the groups taught through the on campus and online mode. The researchers suggested that more conclusive research needs to be undertaken using a large sample size in order to empathically find the difference in the efficacy of teaching through the research to counsellors using the face to face mode and online mode. The researchers also felt that there is a need to fill the existing gap in research by replicating this research on different instructors and courses both along-with establishing correlations if any between student experiences and instructional style of teachers holistically across different dimensions. The researchers listed the limitation of the study to non- random assignment of subjects into groups being taught by the face to face or online mode based on the choice exercised by the individual students to choose their mode of study.

Arias, Swinton and Anderson (2018): analysed the efficacy of online versus face to face using the pre-test –post test experimental research design with the sample comprising of students undertaking the Macroeconomics course .The course was taught by the same teacher using the same defined objectives and examination scheme. The performance was assessed using both standardised and instructor specific questions .On comparing the pre-test and post test scores statistically it was found that students in the face to face mode had scored significantly higher in exams and also exhibited significantly higher scores in examination questions that were framed by their instructor. However it was found that there was no significant difference statistically in the overall post test

score nor any improvement in the post test scores on in the realm of standardised questions. The researchers attributed the mixed results towards a direction that in order to study the relative efficacy of the online and on campus modes of education both the course objectives and mechanism of delivery must be taken into consideration in order to understand the difference between the two.

Based on the above reviewed studies it is amply clear that irrespective of the mode of teaching a pedagogue uses to deliver or transact a given curriculum it is a number of other factors such as student motivation, attention, workload of faculty, degree of engagement in a given context ,flexibility of time and space ,the medium used for content delivery ,time management and organisational skills etc that need to be looked at in order to ultimately decide upon the relative advantages and disadvantages of using the mode. Most of the studies have deduced that there is hardly any difference in the outcomes of learning in terms of student scores in the online and face to face mode. However it is clear that the blended mode of teaching-learning is found to be useful as it gives an edge especially with respect to face to face discussions on content that was delivered online as most students were found to prefer the face to face mode for discussions as it gives immediate feedback. A number of studies need to be conducted to especially document the relative effectiveness of the online mode vs face to face mode using the experimental design on a large sample across a number of courses and in a number of programmes across different disciplines in order to establish the advantages more conclusively felt most of the researchers.

Research Questions: The present study tried to find answers to the following research questions:

- a) How was the sudden mid-semester shift from face to face to online mode of teaching during Covid 19 perceived by faculty members?
- b) What were the challenges faced by the faculty using the online mode for teaching?
- c) How did the faculty overcome the challenges posed by the online mode of teaching-learning?
- d) What were the perceived opportunities presented by the online mode of teaching-learning?
- e) What were the perceived relative advantages and disadvantages of the online mode of teaching in comparison to the face to face mode?

Objectives of the Study:

1. To find the perception of teachers towards the sudden shift to online mode of teaching amidst Covid 19.
2. To document the challenges faced by teachers during the use of the online mode for teaching.
3. To find the opportunities provided by the online mode of teaching during Covid 19 as perceived by teachers.
4. To deduce and articulate the relative advantages and disadvantages of online vs face to face mode of teaching-learning based on the findings of the study.

Research Design:

The present research lies in the realm of descriptive research and the narrative research method was used to collect data through in-depth open ended interviews of the participants in the study. The sample comprised of a total of ten faculty members drawn purposively from universities and colleges in NCR based on their using the online mode of teaching for at least a month and their willingness to participate in this study anonymously. In order to achieve the laid down objectives detailed interviews of the ten faculty members were conducted and written notes on the same were analysed to look at the perceived challenges, opportunities and relative advantages and disadvantages of the online mode in comparison to the face to face mode used by teachers before the onset of the pandemic. Since the sample size comprised of only ten faculty members therefore no frequency and percentage analysis was done for the data collected through interviews. The aim of the study was to offer insights rather than generalisation therefore the sample size was restricted in order to collect detailed descriptive accounts of the use of the online mode of teaching during Covid 19 times.

Findings of the Study:**Findings pertaining to perception of teachers towards the shift to online mode of teaching and the challenges there in (objective 1 and 2):**

- a) The teachers felt that online mode is not a substitute for the face to face mode of discourse which is more personal looking at the challenges it poses in the Indian context.
- b) The teachers also felt that sudden shift in the pandemic from the face to face mode to the online mode was difficult due to not having the desired

level of digital infrastructure on ground such as internet connectivity ,electricity and other issues like no access to devices to access technology with students but also training of teachers in the use of it was largely missing. Online training is not a substitute for face to face training with respect to hands on experience were the observations of nearly all the teachers.

- c) A number of teachers also reported that it is quite a struggle to take online classes along-with multitasking at so many levels in home with no support staff available during the lockdown .The teachers felt that they were affected physically, mentally and emotionally in order to cope with the demands of the given situation.
- d) The teachers from teaching in institutions in rural areas particularly found it very difficult to reach out to students especially girls as due to the gender issues surrounding the education of girls it was a sorry state of affairs as girls were denied access to mobile phones and other devices.
- e) The teachers also reported a number of technical glitches like the mic of the system being used not working or mobile phones needing repair and in the lockdown there was no way either teachers or students could have got it repaired.
- f) The teachers also reported that many students were not being able to access online classes delivered due to bandwidth issues at their end and in this pandemic it was not possible to move out and find a spot where the network was better. However they found a way out to reach out to their students such as delivering the content through the whatsapp groups and asking the students to ask related questions either on mail or on whatsapp whenever the network issue is better.
- g) The teachers especially felt that looking at the large class sizes they cater to it is difficult to ensure the attentiveness of students in the online mode in comparison to the face to face mode.
- h) Teaching is accompanied with reading various non verbal expressions of students which serve as cue for teachers to ensure meaningful engagement, the teachers found this aspect difficult to cater to using the online mode.

- i) Teachers also felt that increase in screen time for both students and themselves is also a risk to overall health which may become challenging if not looked into holistically in the long run.
- j) The teachers felt that it is important to address the digital divide as else it becomes difficult to reach every student and becomes a means of perpetuating inequality.

Findings on Opportunities and Relative Advantages and Disadvantages of online mode based on Perception of Teachers using this mode during Covid 19(objective 3 and 4):

- a) Reaching out to students and ensuring their safety in safe confines of homes in this pandemic was found to be a change the teachers looked at as a window of opportunity.
- b) Delivery of content that can be accessed anytime and anywhere became a reality without having to travel long distances physically.
- c) Students can move at their own pace till mastery level learning takes place by revisiting the lectures and content as many times as they want.
- d) Flexibility of learning based on own schedules became a reality for students as perceived by teachers.
- e) Catering to different learning styles through e content that is interesting and challenging was also done by teachers by using the available MOOCs available online for different subjects on portals such as Swayam etc along-with You-tube videos to supplement course readings.
- f) Feedback on teaching can be obtained with ease online and anonymity is ensured too.
- g) Evaluation through online submission of assignments and projects on mail or on university portals especially created for the same post teaching also gave greater flexibility to teachers but was ridden with technical glitches making it a challenging opportunity.
- h) The teachers perceived the online mode as a opportunity in this pandemic but felt it is important to address issues of gender divide and digital divide with respect to technological access first only then can the real relative advantages and disadvantages be examined and analyzed to begin with in Higher Education Institutions in India.
- i) The teachers felt that blended mode of teaching -learning that offers a mix of face to face and online mode may be the road to future delivery

of education in all Higher Education Institutions in near future but keeping in mind not to tamper with the academic freedom and flexibility it offers to teachers to decide in which course to use what and when instead of it being thrust on them in terms of directives .These above are two important considerations to attain success in terms of outcomes of a given course.

- j) The teachers also felt that there is an urgent need to document the impact of increased screen time both for teachers and students (as presently in India there is hardly any discourse on use of technology judiciously and it is a general perception that technology is the panacea for plugging all issues of Education leave alone at Higher Education stage!)

Conclusion

It is important to understand that this sudden shift from face to face mode to online mode put a lot of students , teachers, administrators ,content developers pondering about the ways and means to be used to increase the efficacy and effectiveness of this mode. The shift was imminent as with the pandemic panning out rather aggressively we all had to be in lockdown for a considerable period of time for well founded reasons of safety and well being of community at large. This is also well documented that online mode is not a substitute for the face to face mode of discourse which is more personal as has been the experience vocalised by teachers in the present study .The other advantage that came out quite clearly through the findings is that, the forging of rapports and ensuring attentiveness of students is relatively much easier in face to face mode accompanied with reading various non verbal expressions of students which serve as cue for teachers to ensure meaningful engagement. It is difficult for the teachers to keep a tab on the activities like chats etc students may be engaging in during an online class especially in courses where the student-teacher ratio is high. However to dismiss the online mode without looking at it's relative advantages especially in distance learning and in lending support in these times would be unfair. There is no doubt that the online mode of teaching – learning does offer more flexibility in terms of format of course delivery ,timings and saves the effort of travelling long distances .However it is important to understand that Higher Education Institutions across India are struggling hard to bridge and cope with the big digital and gender divide which still exists owing to different socio-economic and regional disparities in access ,outreach and

issues of training and competence of faculty and students to use technology effectively .

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UNDERSTANDING INCIVILITY IN THE VIRTUAL CLASSROOM: A CRITICAL REVIEW

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ABSTRACT

Incivility is not confined exclusively to offline classrooms; it is also more prevalent in online classrooms. As a result, it acts as a barrier during the teaching-learning process. In order to create a healthy learning environment, classroom behaviour needs to be more civilized. Therefore, this paper attempts to pay attention to the incivility in virtual classrooms. The paper reviews the literature to provide a critical understanding of incivility in virtual classrooms. The study also highlights ways to curtail incivility in online classrooms to create more interactive and civil environments. The paper eventually provides suggestions and educational implications to the stakeholders of education in order to prevent the further proliferation of incivility in virtual classrooms and its consequences.

Keywords: Incivility, Virtual classroom, Education, Online learning environment, online classroom

Introduction

Incivility has emerged as a focal topic in educational settings to understand disruptive behaviour in society. Incivility is the deliberate act of mistreating one's fellow human beings to undermine their mutual respect. It is one of the destructive parts of society that can be characterized as a lack of civility that violates society's values. There is a deep connection between incivility and civility, as civility is defined as politeness, manners, and courteousness when interacting with others. Consequently, respecting others as freely and equally means respecting their civil rights, liberties, and civic standing. The word civility comes from Latin, meaning related to the person or the situation. According to Sistare (2004), "Tolerance, listening, and discussion

of different viewpoints without attacking anyone are essential components of civility." Guinness (2008) defines "Civility is about respecting people's differences and treating them with dignity." Historically, it has been regarded as a source of social strength and attaining social advantages. Civility involves both moral and practical implications. Civility is about how citizens treat each other and what they can expect from each other. The quality of civility is one of the critical ways citizens demonstrate their commitment to democracy. Civil society can contribute to maintaining peace and reducing differences between people. However, in the present day, civility has become a concern to maintain in the community, resulting in an entirely new problem of incivility.

Throughout the past few years, incivility has increasingly become the latest model. Incivility is derived from a Latin word that means "not of a citizen." It describes uncertain intentions, ill-will, and breaches of mutual respect that result in interpersonal mistreatment. According to Ferris (2002), incivility is evident when etiquette, deportment, manners, and politeness are absent. Moreover, he notes that Cultural Influences such as customs, mores, folkways, and other sociocultural expectations also play a role in the definitions of civility and incivility. According to the Random House Dictionary, "incivility refers to the quality or state of being uncivil, as well as uncivil treatment or behaviour" and uncivil as having bad manners, being rude, impolite, or discourteous. As the reverse of civility, incivility is acting inconsiderately or rudely, without respect for other people, infringing upon standards for regard in close collaborations. It includes a few examples of vandalism, cyberbullying, rudeness, and religious intolerance.

As of now, incivility in education is a severe problem on the global stage. Hence, it is necessary to understand the actions of incivility in virtual classrooms. The present study includes all the studies related to online incivility in education from different research disciplines to provide a vital overview of the literature on incivility in an online classroom that might encourage further study in this area. In general, the study presents a comprehensive review and interpretation of online incivility in education.

Incivility in a Virtual Classroom

In order to enhance the understanding of incivility in virtual classrooms, firstly, it is necessary to know the meaning of incivility in education, also known as academic incivility. Academic incivility is speaking or acting in an uncivil manner that negatively impacts the wellbeing of students or faculty members, weakens the classroom teaching-learning process, and leads to the breakdown of

professional relationships. Clark classifies it as any behaviour or act of intimidation or hostility that disrupts the learning environment. Although according to the previous literature, the traditional classroom incivility includes using cell phones in the classroom, offensive jokes, entering class late, packing up early, talking in class, acting bored, or any action that interrupts the teaching-learning process. The incivility of the virtual classroom is a new form of incivility. It is also called online incivility in education since the old classroom has been replaced by an online classroom in which all teaching and learning activities occur. As part of the present study, literature related to online incivility is being examined to understand the phenomenon and draw possible educational implications, which are as follows.

Spohn, J.L. (2016) examined students' experiences of incivility in online classrooms and their community sense. The study sample consisted of 129 undergraduate students taking an online course. The data was collected using a community classroom scale developed by Rovai (2002b) and an incivility in online learning environments survey developed by Clark et al. (2012). The study was to investigate undergraduate students' incivility perceptions in the classroom and what this means for their community sense. This study revealed that the online classroom characteristics are quite different from the traditional face-to-face classroom. The results indicated the students' community sense and their incivility were correlated in a moderately negative manner in an online course. It has been observed that students who experience low levels of the community feel more incivility within the system. Also, students' perceived learning score and classroom incivility score had a stronger negative relationship than did their perceived connectedness score. Participants' behaviour in the study diverged from that of students who used the same instrument but from a different population. The study also showed that incivility differs in types, levels, and regional influences. There has been a significant amount of research conducted on incivility in the classroom that has focused mostly on personal interactions between students and teachers. Therefore, With the increase of online students every year, there is a need to understand the online environment. Thus, online learning is more likely to attract students who are different from the traditional mix.

Patton, J.O., Yuly, J.S., Gomez, S. (2020) conducted a study on welcome to academia, expect cyberbullying: contra power and incivility in higher education. The research showed that Cyberbullying as contra power occurs when students express varying levels of incivility and bullying through assorted online

mediums such as email, online evaluations, or social media sites. This project examined the experiences of three faculty women with different racial/ethnic backgrounds, age differences, years in the academy, and to varying levels within their career, and explored the connection between sexism and racism that persisted in academic settings. Experiencing different levels of cyberbullying and incivility, the authors have found departments, administration, and universities fail to provide training or policies to protect faculty from student bullying behaviours. The research has shown that student-to-faculty cyberbullying and incivility are problems in higher education, causing even more significant burdens on faculty. Some studies examined the causes and effects of student cyberbullying and faculty experiences. Historically, one of the major problems is that universities have focused on keeping their students safe while assuming faculty are exempt from or immune to student bullying. Most institutions have little or no support to assist faculty facing any form of incivility from students. For faculty to continue effectively encouraging the growth and development of their students, their growth and development must not be limited by the actions of a few students and the administration's inaction.

Posner, K.J. (2016) studied faculty perception of online student disruptive behaviour. The sample of the study included 564 online faculty of southeast united states. Researchers discovered that a faculty development workshop on effective measures to deal with student disruptions online is essential and has opportunities for higher education institutions. On the other hand, 123 (57.3%) faculty participants indicated that they do not have any training regarding student disruption, whereas 124 (57.41%) indicated that workshops of faculty development on student incivility would likely be offered online to them. As a result, these institutions have a significant opportunity to train faculty members in classroom management skills and techniques and proactively deal with online student disturbances.

Galbraith, M.W., Jones, M.S. (2010) conducted a study on understanding online teaching incivility. This article presented the problems of online classroom environment incivility. Incivility applies equally to face-to-face interaction and online settings. Some behaviours that are not relevant to online education, such as challenging authority, insulting comments, not complying with deadlines, being reticent to answer questions, confronting the credibility of teachers, unfairness with academics, hostility, or vulgarity remarks, mail inappropriately, etc. The study stated that, the detailed descriptions of behaviours that are not admissible in online courses are the most effective method for

preventing incivility in online classrooms. The study also said that dishonesty in academic settings is an integral component of incivility. A majority of academic dishonesty is attributed to plagiarism and cheating. Also, technology has facilitated the possibility of various types of cheating. Therefore, online instructors should be aware of the many ways in which online students can commit cheating schemes. A second way students may commit educational dishonesty is by plagiarizing. Yet this is a distinct aspect of cheating. Plagiarism is the act of claiming credit for someone's effort while it is someone else's work. The students and instructors can take online plagiarism tutorials and know-how tests to confirm whether the concept of plagiarism is known to both students and instructors. Dealing with incivility involves interpersonal relationships. A single approach cannot solve every problem involving uncivil behaviour.

Although, the study has given the four things to act in any circumstance. The first step is to focus and keep calm. Second, respond immediately to the problem. Third, abstain from sacrificing your credibility by ignoring the consequences as outlined. Fourth, instructors must be willing to be action-oriented when dealing with the results of uncivil behaviour. The online courses instructors also will make an effort to foster an environment where learners can become aware of and accept the fundamental values and beliefs of the teaching-learning settings. Therefore, it is important to create a cultural setting that is conducive to student learning as a key priority. In this regard; it is the instructor's responsibility to be proactive. However, some people also perceive the expected response times as negative consequences of Technology. Hence, it is essential to remember the current generation of learners who frequently share their responses, discussion, and results at a relatively instantaneous level. In general, the most important step is to establish a conducive cultural environment.

Bartlett, M.E., Bartlett, J.E. (2016) investigated a case study on the impact of technology on incivility in higher education. In this study, participants' responses focused on four primary areas with their compound areas emerging from data analysis; reported causes, reported outcomes, types of participant relationships, and ways to reduce the impact of technology on incivility. The study revealed that technology impacts incivility in three distinct areas; dependency, behaviour, and accessibility. As students have increased their use of social media sites, their reliance on technology has become apparent. The increasing use and dependence of technology in everyday communications have impacted behaviours and accessibility. As an outcome of the widespread use of technology in touch, there is a more critical requirement for immediate

responses, an informal communication style, decreased personal interactions, and a gap between acceptable behaviours between face-to-face communication and electronic correspondence. Access to technology has also made incivility more possible by enabling contact without mutual consent, which is impossible in face-to-face interaction. The increased use of technology results in increased opportunities, such as "making it easier to stay in touch with people," "expanding the pool of unethical behaviour by students," and "giving the student the chance to vent immediately." The Participants also described a false sense of anonymity provided by technology, making people more likely to engage in uncivil behaviours. Disrespectful behaviours reported include; lack of privacy, challenging authority, rudeness, and lack of self-control. A student stated, about a lack of privacy, "anyone can look up anyone's email address, phone number, etc. there have been noticeable decreases in social skills and social expectation reported in matters of socialization. Student-to-student incivility was reported in rude emails, text messages, and instant messages. More severe acts of incivility that led to stalking and invasion of privacy were also mentioned. The study noted some basic rules for reducing technology's impact on incivility, using typing with the same level of kindness as face-to-face interaction, respecting others' differing viewpoints, or citing literature to offer support rather than opinion. The majority of participants agree that technology has facilitated increased incivility that we observe in education.

Abas, Hidayah, N.A., Awang, Marinah. (2017). Studied online incivility: exploring from Malaysian academic perspective. The study aims to use negative moods as potential mediators to explore the negative consequences of online incivility in Malaysian academics. This study discovered that negative emotions or moods might mediate the development of work stress in teachers when confronted with uncivil comments from principals. The study also revealed, if teachers use their problem-solving style as the moderator for the sessions, they can reduce the stress they experience at work. As a way to resolve conflict, problem-solving conflict management styles can be defined as being highly concerned about self and others, involving openness, information exchanges, and examination of differences for reaching an agreement. In this way, teachers' problem-solving styles will moderate the negative relationship between principals' online incivility and teachers' work stress. The relationship will be less pronounced when teachers' problem-solving skills are higher. The study also offers advice to the future management of the university regarding developing and implementing incivility policies to prevent this from expanding widely and damaging their teachers' health.

Campbell, O.L., Jones, J.T., Lambie, G.W. (2020) investigated Online academic incivility among adult learners. This study identified factors and consequences associated with online academic incivility and possible approaches for educators to reduce academic incivility in online learning environments. The researcher has shown that academic incivilities within adult learning environments have monetary, academic, and affective consequences. According to the study, online learning affordances contribute to the culture of online learning instructions. Online academic incivilities are also impacted by four situational factors - time, asynchrony, anonymity, and communication (Clark et al., 2012). There are also promising practices and strategies for faculty highlighted in the study, including (a) effective interaction, (b) empathy, (c) feedback on time, (d) agile attention, and (e) transparent expectations. The strategies address online academic incivilities based on findings of face-to-face incivility in academics and the use of online educational platforms.

Hopkins, E.E., Spadaro, C.K., Walter, L., Wasco, J.J., Fisher, M., Sterrett, S.E. (2017) examined the online classroom incivility: guidelines for developing policy. This article's purpose is to describe the student incivility problem and describe the experience of creating and implementing a professionalism policy that aims to deal with student incivility. According to the study, the uncivil behaviour included critical online conversations, derogatory remarks directed at instructors and peers, and academic integrity violations that adversely affect the learning environment. The study also revealed a civility policy was developed by the admissions and progression committee under the guidance of its chair. As part of the policy, examples of civility and incivility in an online classroom were provided to define students' expectations clearly. There were also clear outlines of uncivil behaviour consequences, and both the Academic Integrity Policy and University Honor Code and Policies were mentioned. Therefore, the study listed recommended steps for developing an incivility policy included 1. Identify team members 2. Choose a team leader 3. Meeting 4. Identify steps/tasks in the process 5. task assignment 6. Review, create the draft, revise 7. whole faculty discussion 8. Submit for student feedback 9. Update professional standards with civility/incivility components. Thus, a resolution to the issue of incivility could be achieved by establishing and implementing a policy.

Swartzwelder, K., Clements, P., Holt, K., Childs, G. (2019) conducted a study on confronting incivility in the online classroom. The study stated that incidents of civil behaviour range from simple disruption to overt and covert

threats. They said that these incidents need to be addressed to ensure civil behaviour and engagement in learning. However, many online classroom interactions do not happen in person but rather over the written form of emails, discussion boards, group projects, and other experiential assignments. Incivility in these settings can decrease student participation, lower student satisfaction, and decrease retention. According to the study, uncivil behaviour in online classrooms vary from mild to aggressive. To reduce the incidence of incivility in university classrooms, it is essential to identify those involved in such behaviour, provide callouts to those who do not know their presence and provide corrective action. A sense of academic entitlement refers to students believing they are entitled to academic success without taking other activities apart from paying tuition. It is a common factor in uncivil behaviour. In the absence of an understanding of diverse cultures, life events, and professionally or spiritually, behaviours are interpreted as intentional but are not. Therefore, establishing university policies for dealing with incivility, providing faculty and student handbooks with similar information, and setting appropriate expectations for civil behaviour in online classes.

Lampley, M.T., Curia, M., Vottero, B., Hensel, D. (2016) conducted a study exploring nursing student and faculty perceptions of incivility in the online learning environment. This study assessed the incidence of incivility in the online learning environment (OLE) and its characteristics from faculty and student perspectives. The study collected data from faculty and students to determine the perception, using the online incivility survey "Incivility in the Online Learning Environment (IOLE)" developed by Clark and colleagues. According to the study, the groups had somewhat different perceptions of the degree of incivility but were agreeable about the kinds of uncivil behaviour. While both faculty and students' groups agreed that rude remarks and name-calling were uncivil, other inappropriate behaviours were viewed differently by faculty and student groups. An unclear syllabus and late feedback on assignments are examples of incivility by students. In this way, both students and faculty members perceive that the online environment is uncivil.

Discussion Based on Reviewed Literature:

This research was designed to understand the incivility in a virtual classroom. Thus, the results from the studies showed that incivility is common in both online and offline learning. So, online incivility is a new kind of incivility that develop in the virtual classroom. The characteristics of online incivility are pretty different from traditional classroom incivility. The incivility in online

teaching and learning environment includes challenging authority, making offensive remarks, missing deadlines, inappropriate emails, cheating, plagiarism, challenging instructor's credibility, cyberbullying, lack of timely feedback, making physical threats to the instructor, making hostile or vulgar comments, reluctance in answering questions or participating in online discussion (Given by Galbraith 2010). Incivility negatively impacts the learning environment since it hinders the development of learners and faculty members, leading to lower achievement. It also affects their psychological wellbeing, for example, negative emotions, anxiety, rage, fear, and stress, due to which there is a lack of learning. Sometimes uncivil behaviour occurs due to miscommunication and misrepresentation in the online learning environment because the online learning environment lacks face-to-face interaction. The incivility is perceived by both students and faculty on the different degrees of incivility in a virtual classroom. However, this is not uncommon for faculty and students to participate in uncivil conduct and engage in uncivil behaviour in an online environment. The clear indication of the study is that incivility is terrible and should be avoided in educational settings. Hence, there are ways to deal with incivility in a virtual classroom, such as staying self-control, taking the right action, not losing the temper in the situation, and showing humility. In this respect, the development and implementation of a policy meant to address incivility are considered a possible solution in educational settings to maintain a civil discourse.

Additionally, the universities facilitate workshops for faculty to foster civility and deal with incivility in virtual classrooms. In virtual classrooms, the most effective way to prevent incivility is to clearly outline the expected civil behaviour in the course syllabus, for example, maintain rules for submitting the assignment or project. Overall, in the institutions, there should be an authority/committee responsible for paying attention to the consequences of incivility and managing conflict and repetitive misbehaviour that disturb the virtual classroom. Therefore, in an educational setting, incivility generates problems and diverts the direction from the primary purpose of education, which is to develop an individual to prove an asset for the country.

Educational Implications:

- Firstly, the institution needs to be equipped with advanced technology for online teaching-learning.
- The institution should train the teachers to manage the activities, and features of the online classroom app, such as the host can drag and drop students for a virtual seating chart, mute and unmute the mic of students.

- A teacher needs to provide lessons tailored to the students' needs. It developed the interest of students in a classroom to make learning engaging.
- If a teacher behaves civilly, they will act as a role model for students and help them adhere to civility.
- A teacher should develop the students' understanding of right or wrong; for example, playing games during online class, negative comments, and challenging authority are wrong.
- The faculty should have to clear the behavioural expectation at the beginning of the classroom; for example, raise your hand before turning on your mic.
- The head of the institution should monitor teachers' performance in an online learning environment by taking feedback from students.
- Students and faculty in an online classroom should treat one another with dignity and respect to maintain civil decorum. They should use respectful tone and mannerisms when addressing one another, such as considering listening carefully, speaking politely, and treating everyone equally.
- Teachers must cultivate a good rapport with their students to help them become more disciplined and understanding.
- Rewarding and praising students' good behaviour in the classroom will encourage other students to behave better, for example, setting marks for good behaviours like actively participating in class.
- The faculty should focus on activity-based learning and collaborative learning to make classes interactive, for example, quizzes, debates, storytelling. It will help in maintaining civility.
- The teachers, management, students everyone in the institution should stick to the strategies and policies of universities regarding civility.
- Conduct the orientation classes to explain the norms and regulations of civil behaviour in the online classroom.
- Interact with culturally diverse students in an empathic way to make the online classroom more effective. Also, teach them empathy to create civility.
- The curriculum should include specific activities prepared by teachers which foster civic behaviour in the students.

Suggestions:

This suggestion is based on incivility in a virtual classroom. In various studies, it has been concluded that students behave incivility in the classroom. And to ensure civility in the classroom, policies, and strategies are implemented. However, this research understands the importance of advanced teaching technologies and an attractive online learning environment. So, students will not conduct any kind of uncivil behaviour during the teaching-learning process. It was found by the present study that there is a research gap compared to previous studies in that attention should be paid to upgrading the curriculum of pre-service and in-service teachers training regarding advanced technology of teaching-learning improvement so that incivility will not be reflected by students' behaviour in the virtual classroom. The training should include the activities like art-integrated, toy-based learning, storytelling method, and feedback techniques that should be used to develop students' interests. This article gives some suggestions for preventing incivility in online classrooms. During pre-service and in-service courses, members should go through the incivility policies and strategies, provide manuals of civil and uncivil behaviour in the virtual classroom, facilitate workshops and seminars to develop their social skills, for example, communication skills, interpersonal skills, including the parents in the incivility policy members. Thus, further research is necessary to reveal more gaps over time.

Conclusion

Incivility in a virtual classroom is a shift from face-to-face classroom incivility in this digital world. However, advanced technology brings both advantages and disadvantages to the learning environment. Therefore, incivility is a challenge in the online classroom, which creates an environment problematic to work within. Also, the students and faculty both agree that incivility is a bigger problem in the online classroom which should be noticeable. If incivility is not appropriately managed in educational settings, it can ruin the learning experience of an individual and endanger the entire learning atmosphere. Therefore, it is imperative to preserve civility in virtual classrooms and eliminate uncivil behaviour. It would be desirable to have a policy and strategy to deal with the incivility in virtual classrooms. Additionally, a procedure for developing incivility policies is also presented by Hopkins & et al. (2017).

This study contributes to our understanding of ending incivility in a virtual classroom to establish a conducive learning environment. Therefore, the study proposes best practices and measures required for all stakeholders related

to education, including educators, students, and authorities. Also, colleges and universities should recognize the culture of incivility within their institutions and adopt the most effective method to target the problem. Thus, the problem can be tackled and encourage civility in our society. So, as technology keeps evolving and its use increases with time, there is a need for more research in this field to create a positive and collaborative learning environment.

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IRREGULAR ATTENDANCE OF SCHOOL STUDENTS AT CLASS AND ITS RELATION TO THEIR ACADEMIC ACHIEVEMENT

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ABSTRACT

The paper intends to examine the irregular attendance of students in their class and its relation to their academic achievement in five central campuses of Mid- Western School. This study followed descriptive study based on quantitative and qualitative data. Quantitative data were obtained from 172 students selected by non-proportional stratified sampling. Qualitative data were obtained from the campus chiefs, heads of instruction committees and teachers of the central campuses selected purposively. A mixed questionnaire was employed for quantitative data and open ended questionnaire was used to collect qualitative data. The study showed that near about half portion of respondents responded that they were sometimes irregular in their class. Few students (4.45%) who were never irregular belonged to the category of having knowledge of irregular attendance. Higher portion (29.57%) of the male students were always irregular than the female students. The high portion of Master's level students were always irregular than the Bachelor's level students. Chhetri students were always irregular than other castes. The higher percentage (23.07%) of 20 to 25 years' age group students were always irregular than other age groups. The percentage of irregular students seemed higher in central campus of Humanities and Social Science, Education and Management. Majority of the participants pointed out that the School related factors are main reasons for their irregular attendance. The study showed that there is a positive significant relationship between class attendance of students and their academic achievement.

Keywords: Irregular Attendance, Frequency, Reasons, Academic Achievement

INTRODUCTION AND OBJECTIVE

Regular attendance is one of the primary reasons for students' success in education. Attendance at class is not merely being bodily present but including actual participation in the work and activities of the class (Fagbenle & Elegbeleye 2014). It is defined as an absence for an entire college day, a major portion of the class day, or the major portion of any class, study hall for which the student is scheduled (Belvin 2009). It jeopardizes chances of achieving their educational goals. Its consequences often lead to increased costs (Iheanyi & Ikechi 2012). It is the act of deliberately missing one or more classes. Irregularity is any intended, and illegal absence from compulsory class. It also refers to students who attend campus but do not go to the classes. It is an act of staying off class which is one of the several types of disruptive behaviors (Okwakpam & Okwakpam 2012).

Academic performance is the outcome of the education the degree to which a student, teacher and institute have achieved educational goal. It is commonly measured by examination or continuous assessment. Regular class attendance precedes learning achievement. In order to be benefited for students from the educational program they must have good attendance. Irregular students have less opportunities to study. Thus, their academic potential is hindered. Therefore, regular class attendance is a high priority in semester systems.

The irregularity of the students in School has been a recurrent issue. In most cases, many of these students come late in the morning. They leave class before closing hours for other unofficial actions and in some cases too (DeKallb 1999). The problem of students' irregular attendance in their class is also spreading around the globe and different levels of education. If this problem is not addressed, it may have devastating consequences on the excellence of graduates from the Universities.

Cause of irregularity of School students around the globe is categorized and linked student with factors, School factors, economic and family factors (Fayombo et al. 2012). Higher education institutions sometimes follow different attendance policies and practices: some make it compulsory and many institutions believe in its positive effect in academic performance (Guleker and Keci, 2014). Oghuvbu (2010) found a positive correlation between attendance and academic performance. The findings by Andrietti et al. (2008) are supported by (Chishima 2016) who hypothesized that regular present of students in class positively affects the learning outcomes (Chishima 2016).

As a teacher, teaching at the School where semester system is

running, I have observed the irregularity of students in the class. So, I am very interested and concerned in this issue. From the above reviewed literatures, and my experiences, it is marked that absenteeism from class is a main issue among the School students. However, the reasons of poor attendance are not studied properly. Students are absent in classes for a variety of reasons. So, irregularity of the students in their class is taken as a problem that either directly or indirectly affects all educational stakeholders. Irregular attendance is not only moral to School; it is a great educational issue to be addressed in current time. It is an educational and social problem. Students' non-attendance to class is a problem that spreads much in the School. It affects the students, the family and the society on very high levels. So, it should be taken as the most powerful predictor of misbehavior and disruptiveness among students. It determines the student's achievement and their potentiality. This leads to increase poor academic performance that will cause students' drop out from their study. Upon this context, the paper aims to examine the situation of irregular attendance of students at class and its relation to their academic achievement in Mid- Western School. Similarly, I have formulated a hypothesis that there is significance relationship between attendance of the students of the class and their academic performance.

THEORETICAL FRAMEWORK

This study followed the Engeström's Activity Theory which assumes that human action takes place within specific social and historical contexts that are inseparable from the action. Furthermore, Engeström, 1993 (Scheckle 2014) holds that an activity system integrates the subject, object and the instruments into a unified whole (Scheckle 2014). In Activity Theory, the relationship between subject and object forms the core of an activity (Hasan & Kazlauskas 2014). Scheckle (2014) presents the key argument of this model that are presented below.

The School community of lecturers, tutors, supplemental instruction leaders, language and writing consultants, student, counselors and librarians depicted as facilitating students' learning. The community is depicted as providing support and encouragement to its children who are studying. The tools and rules defined by the School and aligned with institutional standards. tools include texts, lectures, tutorials, lecturers, peers, finance (for food, medical needs, stationery, transport) and programs which all mediate the learning experience. The community would be the stakeholders such as the School community, that of the home and that of the city, they are not the primary subjects but they share

the object of the activity (p. 611-612).

MATERIALS AND METHOD

This study followed descriptive cross-sectional study designed based on quantitative and qualitative data which was carried out in Mid-Western School, Surkhet. All (2,299) students who were studying in all five central campuses of Mid-Western School and their campus chiefs, head of the instruction committees and the teachers were the study population for the study. Out of total, 172 (7.48%) students from central campuses of MU (43 students from Central campus of Education, 46 from Central Campus of Humanities and Social sciences, 50 from Central Campus of Management, 19 from Central Campus of Science and Technology, and 14 students from Central Campus of Engineering) were selected as participants for quantitative data using non proportional stratified sampling. On the basis of central campuses, five strata were made. The students in each central campus were further listed using a list provided by the central office of the School. Random sampling (lottery) was used to pick the respondents in each stratum.

The study also used qualitative data obtained from 15 participants, the campus chiefs (5), heads of instruction committees (5) and teachers of the central campuses (5) were selected purposively. A mixed type of questionnaire was employed for quantitative data and open ended questionnaire was used to collect qualitative data. The collected data were checked, ordered, edited and coded. Then, they were analyzed manually. Chi-square test was used to find out the relationship between attendance of students and their academic achievement. For the computation of chi-square test, the Karl Pearson's method was used.

RESULT AND DISCUSSION

This section addresses three subheadings like situation of irregular attendance, reasons to irregular attendance of the students and relationship between attendance of the students and their academic achievement.

Situation of irregular attendance

Situation of irregular attendance of the students is examined on the basis of its frequency, students' knowledge and students' profile including sex, age, cast, level and faculties.

Frequency of students' irregular attendance

The students' classroom attendance rate differs. The frequency of students' attendance is not similar. The frequency of attendance has identified in

the study which is presented in following Table 1.

Table 1: Frequency of students' irregularity

Description		Number	Percent
Frequency	Always	37	21.51
	Sometimes	79	45.93
	Rare	49	28.49
	Never	7	4.06
Total		172	100.00

Source: Field Study (2017)

Table 1 shows that about half of 79 students (45.93%) responded that they were irregular in their class sometimes. Likewise, 49 (28.49%) said that they were always irregular in their class, 21.5 percent said that they were rarely irregular and only 7 (4.06%) students were never irregular in the classes.

On pooling up the data of Mid-Western School, the students were more irregular sometime and always. This data indicates in overall that students' irregularity in the School is high. Semester system focuses on the regular attendance of the students. So, according to this finding, it may raise a question about the implementation of semester system in the School.

Students' personal characteristics and their irregular attendance

Students' personal characteristics such as sex, age, caste, level and faculty are determinants of students' irregular attendance in their classes. Table 2 shows the situation of irregular attendance of the students' in the class on the basis of students above-mentioned personal characteristics.

According to Table 3, higher portion (29.57%) of the male students were always irregular than the female students (15.84%). But nearly half (47.52%) of the female students were sometimes irregular than the male students (43.66%). The percentage of female students in rare and never irregular was also higher than the percentage of male students where female were 31.68 percent and 4.95 percent and male were 23.94 percent and 2.81 percent respectively.

On the basis of age, the high percentage of (23.07%) 20 to 25 years' students were always irregular than other age group students. Similarly, the higher percentage of 30 years above (53.33%) students' irregularity was sometime. Below 20 years, 32% were rarely irregular. This table 2 shows that the percentage of students below 20 years (8%) was never irregular which is higher than the other age groups.

Table 2: Situation of irregular attendance of the students' on the basis of students' personal characteristics

Students' personal characteristics		Always		Sometime		Rare		Never		Total	
		No*	P#.	No*	P#	No*	P#	No*	P#	No*	P#
Sex	Male	21	29.57	31	43.66	17	23.94	2	2.81	71	41.27
	Female	16	15.84	48	47.52	32	31.68	5	4.95	101	58.72
Age (years)	Below 20	5	20	10	40	8	32	2	8	25	14.53
	20-25	21	23.07	42	46.15	25	27.47	3	3.29	91	52.90
	26-30	9	21.95	19	46.34	12	29.26	1	2.43	41	23.83
	30 above	2	13.33	8	53.33	4	26.66	1	6.66	15	8.72
Caste	Chhetri	16	23.88	30	44.77	19	28.35	2	2.98	67	38.95
	Brahmins	8	16.66	21	43.75	15	31.25	4	8.33	48	27.90
	Janajati	8	23.52	16	47.05	9	26.47	1	2.94	34	19.76
	Dalit	5	21.73	12	52.17	6	26.08	-	-	23	13.37
Level	Bachelor's	22	17.05	61	47.28	40	31.00	5	3.87	129	75
	Master's	15	34.88	17	39.53	9	20.93	2	4.65	43	25
Faculty	Education	10	23.25	24	55.81	9	20.93	-	-	43	25
	Humanities	12	26.08	26	56.52	8	17.39	-	-	46	26.74
	Management	13	26	28	56	9	18	-	-	50	29.06
	Science and technology	2	10.52	1	5.26	13	68.42	3	15.78	19	11.04
	Engineering	-	-	-	-	10	71.42	4	28.57	14	8.13

Source: *Field Study (2017) No*, Number P*: Percent*

On the basis of cast, the Chhetri students were always irregular more than other castes. Half of the Dalit students (52%) were sometimes irregular than others. The high percentage (31.25%) Brahmins were rare irregular in the class.

On the basis of level, always irregularity of Master's level students was higher than the Bachelor's level. But irregularity sometimes of Bachelor's level students' percentage was higher in than the master's level.

Students of Bachelor's level (31%) were rarely irregular than the Master level (20.9%). The high percentage of never irregular students was Master's level (4.65%) than the Bachelor's level (3.87%).

On the basis of faculty, the percentage of always irregular students is higher in Faculty of Humanities and Social Science where 26.08 percent students were always irregular. Similarly, sometimes irregular students' percentage is higher in humanities rather than other faculties'. Most of the students (71.42%) of engineering faculty were rarely irregular in comparison to other faculties. At last, the higher percentage students of engineering (28.57%) were

never irregular in the class.

The finding from Table 2 shows that there is difference in the frequency of irregular attendance between the students according to their sex, age, caste level and faculty. The study examined that overall situation of the School students' attendance situation is low. The attendance situation of the girls was a little higher than that of boys. There was not much difference between attendance situations of students of different caste butcher was a little less than that of students of other castes. The attendance situation of students at Masters Level was low than the Bachelor's level student. Students of engineering faculty were rarely irregular in comparison to other faculties. In semester system, almost regular attendance is necessary. The students who are not regular attended they are not allowed in the examination. There must be 80% attendance of the students in the classes. Instead of this, the students are attended irregularly in all faculties. So, irregular attendance of the students is one of the challenging and emerging problems in whole faculties of the School.

The magnitude of irregular attendance at classes does not only affect the students' academic aspect but also impacts on teachers' ability to articulate the curriculum requirements, to plan and present instructional activities in an organized and meaningful way.

Reasons to irregular attendance of the students

It is found that there are several factors leads to irregular attendance of students in their classes of Mid-Western School. The reasons behind student's irregular attendance are mainly categorized into four major clusters. The analysis of these reasons using all the various sources of information collected during the study is presented in the Figure 1.

Figure 1 shows the causes of irregular attendance of students. Study participants were asked to identify what were the reasons for the student's irregular attendance of their class. Majority (58.18%) of respondents pointed out the School/ faculty/campus related factors as main reasons. Likewise, about half (49.09%) percent students responded that students themselves related factors are the reasons of student's irregular attendance. Similarly, Figure 1 showed that 32.12 percent indicated they missed class due to home and few (11.51%) responded community related factors irregularity. This data from Figure 1 also reveals that the School related reasons to students' irregular attendance is multi-factorial. Majority said the reasons of students missing class due to School related factors and near about half (49.09%) were due to students themselves related factors.

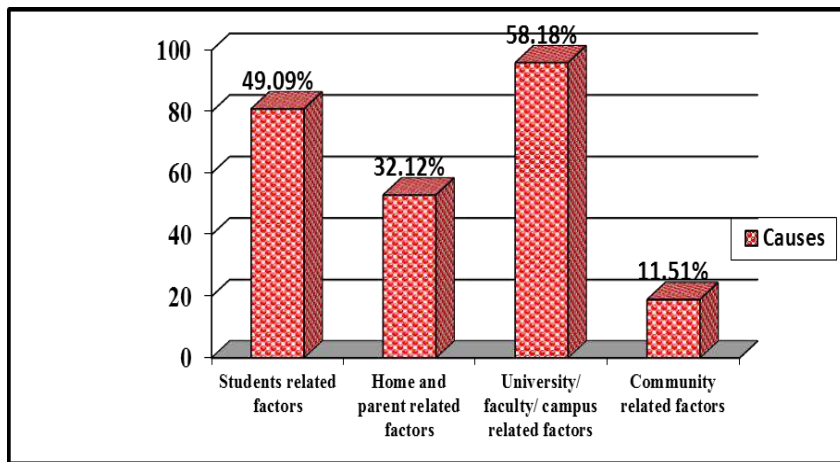


Figure 1: Reasons to irregular attendance of the students of the School

All participants of Open Ended Questionnaire (OEQ) (campus chiefs, heads of instruction committee and teachers) reported, School related factors and students themselves related factors as the main reasons of their irregular attendance. All participants of OEQ accepted that lack of sufficient number of classrooms; appropriate library, School cafeteria, and well managed toilet are main School related reasons for the irregular attendance. Few study participants of OEQ reported, *wanting to miss particular subject was common*. A small number of participants suggested, *physical and psychological problems, learning difficulties, behavioral problems, and low self-esteem of the students as the reasons of irregular attendance*. Some teachers reported that *there is no strong administrative mechanism and evaluation system*. Some participants of faculty of education and humanities argued, *some of the teachers do not maintain the proper class attendance*. Few heads of instruction committee and teachers noted that *the campus also admits those students who told I cannot be regular in the daily class*. A campus chief (out of 5) told, *that irregular students are admitted due to the problem of proper number of students*.

Most participants of OEQ argued that the students are lazy, and ignore their study. Some students drop out a class after gaining a job. They give priority to their job than their education. Some of them are employed at boarding schools and other organizations. So, they become irregular in their class. A small number of participants of OEQ suggested, *physical and psychological problems, learning difficulties, behavioral problems, and low self-esteem as the reasons of irregular attendance*. Few claimed, *they become irregular at class simply to be with friends*. Some students were influenced to stay away by friends

and classmates or to demonstrate their toughness to their peers. About half participants indicated, *they have a concept of being passed without attending the classes. Students have low desire to be a competent and to choose interested subject.* Minority (3 out of 15) noted *they do not want to get out of bed at the morning.* Some campus chiefs, heads of the instruction committee and teachers stated that *parents involve them in agricultural activities such as cultivation of harvest and their newly harvested corn.*

This study concluded that School related factors are a main reason to students' irregular attendance of their classes. (MU 2016) also stated that Mid-Western School lacks motivating program to empower faculty members. Regularly faculty programs are not developed. HRM mobilization is less effective. It reflects that the important should be given in physical facilities and mental environment as well as teaching learning of School to make the students regular. The main reasons that the students do not like attending regularly to class specified by them was School lacks physical facilities and mental environment. This means students can't learn as much as they can when the teaching learning could not meet their wants and wishes.

Relationship between attendance of students' and their academic achievement

Irregular attendance impacts on pupil attainment. Interconnected effects of irregular attendance on students who miss class are academic underachievement difficulty. It breaks the continuity of learning etc. Some previous researches concluded that there is positive relationship between students' attendance and their academic performance. Table 4 shows the relationship between attendance and academic achievement of the School Students.

Table 3: Relationship between attendance and academic achievement of the School Students

Variable	χ^2_{cal}	Df	χ^2_{tab}	Sig.
Relationship between attendance and academic performance	63	12.50	21.03 (0.05) 26.33 (0.01)	S*

Source: Field Study (2017)

Table 3 shows that the Tabulated value 63 is greater than calculated value for 0.05 and 0.01 level of significance of df 12. So, Null Hypothesis is rejected. The results showed that the calculated Chi-square value ($\chi^2_{cal} = 63$) is quite higher than the tabulated value ($\chi^2_{tab} = 21.03 (0.05)$ and $26.33 (0.01)$), hence the result is significant. This, therefore, supports the alternative hypothesis that a

significant relationship exists between class attendance and academic achievement of the School/ higher level students. It is proved that there is a positive relationship between class attendance of students and their academic achievement. It is also revealed that academic achievement is influenced by students' attendance of higher level in the study area.

Studies have also showed that higher attendance is related to higher achievement for students of all backgrounds. A study by the U.S. Department of Education conducted in 2005 concluded that students who attend school regularly score higher on achievement tests than their students who are frequently absent (Bradly 2015). Duflo and Hanna's (2006) found fundamental relationship between teacher absenteeism and student outcomes.

CONCLUSION

The study concluded that there is difference in the situation of irregular attendance of the students according to their age, caste, faculty, level and sex. The attendance situation of the girls was a little higher than that of the boys. There was not much difference between attendances of students of different castes. Master's level students' irregularity is higher than the Bachelor's level students. Girls from 20 to 25 years were always irregular than other age groups. Students of Engineering faculty were rarely irregular in comparison to other faculties. Behind the students' irregularity, there is not only one reason but many and multi-factorials. Engestrom's Activity theory also highlights that School, lecturers, home, peer, community, rule, tools etc are stakeholders to act of regular attendance. The study revealed that the School students, parents and community related factors are the four most significant reasons of irregular attendance among the School students. The study concluded that there is a significance relationship between class attendance of students and their academic performance. So, these four key reasons need to work in an integrated way in solving the problems of irregular attendance of students in the universities.

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PROFESSIONAL DEVELOPMENT OF TEACHER AS EXPERT FOR MULTIPLE STRATEGIES ACCESS DURING DISTANCE LEARNING

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ABSTRACT

An educational institution performs a significant function of providing learning experiences to lead their students from the darkness of ignorance to the light of knowledge. The key personnel in the institutions who play an important role to bring about this transformation are teachers. The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage. This shows that it is imperative to invest in the preparation of teachers so that the future of a nation is secure. Then nation places demands and expectations on the teacher which need to be addressed by both initial and continuing teacher education. The recent study proposed that higher education faculty adoption of learning management systems is depend on how faculty feels about changes caused by technology and the educational climate. The research demonstrates that modeling of pedagogies in technology use is essential for pre-service teachers learning to teach with technologies. The rural and high school used a multiple access point strategy to focused on building level to develop as teacher experts for internal professional support for the equitable implementation of distance learning during the covid-19 school period. The early results indicate the use of building level teacher experts as a professional development strategy has increased teacher comfort levels with using various technology devices and platforms during distance learning. These results may be used by leaders to inform and formalize targeted professional development opportunities for in service teachers as the possibility of distance learning in the future.

Key words: Professional Development, Teacher, Expert, Multiple Strategies.

INTRODUCTION

There are so many demands placed on our mental capacities during a time of crisis that it can be hard to juggle our focus from one task to the next. What is often over looked is the amount of time that can be unlocked if we consider activities that we habitually do without considering the time commitment such as surfing scrolling or exploring social networks. This concept is best explained by clay who calls it cognitive surplus. To capitalize on teachers' cognitive surplus group was established with the intent to create a community of learners bound by a common goal of developing their teaching skills for distance learning (Hall and Hord, 1987). Teachers are already overwhelmed with responsibility so adding constant professional development responsibilities to their schedules is not appreciated or effective. However by taking advantage of cognitive professional development does not have to be a burden. School closures and a national movement towards distance learning during the covid-19 pandemic surfaced the need for in-service teacher professional development targeting the equitable implementation of educational technology (Steele *et al.*, 2017; Tawfik, *et al.*, 2016) based on research as teachers integrate new technology into their classrooms especially when they lack experience and confidence with the tools targeted professional development based on a clear vision is necessary for overcoming challenges (Phirangee, 2013; Ramadan, 2017; Vrasidas, 2015). Hence for a high school the use of building level for teacher experts served as a catalyst for addressing equity issues by providing targeted professional development on multiple access points to educational technology for in-service teachers. This organically developed strategy may be replicated in other districts by building level networks and professional learning communities focused on targeted professional development and mentorship. While in service teachers implemented distance learning they relied on pre-existing relationships with building level teacher as experts for full time classroom teachers with a passion for technology as professional support for implementing educational technology (Qaisur, 2021). These teacher experts served informally in a dual capacity as embedded professional learning community leaders and as a coach. In professional learning community building level teacher as experts led informal professional development for in-service teachers on implementing a multiple access point strategy to meet students' diverse need to access and experiential needs. With the district strongly recommending the use of the online platform for distance teaching the teacher experts identified gaps in teacher understanding of the platform by informally

polling teachers during their weekly meetings. Via these conversations the teacher experts identified priority needs for implementing the functionality of the program (Bendici, 2020), like how to use online meets to hold a synchronous class meeting and then provided targeted learning opportunities during professional learning community and one-on-one meetings to address those needs. The part of these focused professional learning opportunities educators were able to participate in and run their own meets using chrome extensions like grid view and meet attendance. Teachers also learned how to successfully incorporate highly engaging instructional tools like into this synchronous digital space. The teachers were comfortable with these integrations as experts shifted conversations to the multiple access point strategy by focusing on the equitable facilitation of learning via the online platform on devices beyond laptops like cellphones tablets. This priority shift allowed teachers for further meet students' diverse device access and experiential needs. In this informal leadership capacity the use of teacher experts allowed for targeted distance learning support while addressing equity issues through the multiple access point's strategy (Richman *et al.*, 2019). Teacher experts also served informally as a coach for in service teachers implementing educational technology. As the instructional coaches' capacity to support struggling teachers decreased teachers turned to teacher experts for support with implementing technology. In the coach on call role teacher experts provided on demand support for teachers via phone text email and google meets. Although initial questions from teachers were technical in nature develop existing relationships with teachers to coach them beyond technical skills and to begin using multiple access points for distance learning. In this informal capacity teacher experts filled a gap in professional support for educational technology due to the accelerated implementation time line of distance learning. To effectively prepare for e-learning teachers must have a thorough understanding of their instructional context and the challenges and opportunities available in the online environment. We call for more courses field placements and practical for online instruction within teacher education programs (Archambault *et al.*, 2016; Kennedy and Archambault, 2012). Within traditional teacher education courses e.g., special educational and educational technology second language learning courses the teacher education faculty can sensitize professional learning community to potential e-learning challenges and opportunities through problem centered methods such as simulations (Dalinger *et al.*, 2020) and case based learning (Goeze *et al.*, 2014). For instance, case based learning affords opportunities to deeply consider the complexities

involved in educational environments from a variety of contexts and gain professional experience vicariously in a safe place (Gravett *et al.*, 2017). Using rich and poor structured cases can participate in intentional discussions and activities that prompt the consideration of potential challenges in the teaching profession before being guided to articulate reasonable solutions (Koehler *et al.*, 2019) including consideration of situations focused on navigating abrupt shifts in learning environments caused by instructional disruptions.

DEVELOPMENT OF TEACHER AS EXPERT

To build a deeper understanding of the access needs of students the educators should conduct technology surveys and use data to determine the functionality of technological tools and platforms across multiple devices and band width (Bacos and Grove, 2019; Bendici, 2020). In this school district once they had formal survey data and held informal conversations with students around technology access the teachers found it easier to identify professional development and needs to better utilize building level expertise for support with technology implementation. Many exemplar technology usage surveys are available for adaptation by districts interested in gathering data on the technology needs of the learning community.

PROFESSIONAL NETWORKING OF TEACHER

Hence (Krutka and Carpenter, 2016) documented evidence that educators should expand their informal professional communities to include the ongoing conversations with the variety of technology users social media platforms are an efficient form of informal mentoring and professional development for both pre-service and in-service educators (Cinkara and Arslan, 2017). in this school district informal opportunities for organic conversations included content and grade level meetings by administrators for teacher experts into discussions during virtual faculty meetings and on demand sharing of new technology platforms and updates through asynchronous methods like district as building level teacher experts provide ideas for using multiple access points to distance learning it is important to share not only the techniques and technology as tools but to serve as a liaison between teachers and external professional learning networks. The building level teacher expert can show how they created a virtual classroom mentor teachers in designing their own and connect teachers to help them learn from others and expand their professional learning network (Qaisur, 2021). Another group networking opportunity was the teachers using google for education in virtual group since it gave teachers in access to other teachers who were using applications to share best practices and get fresh ideas.

MULTIPLE STRATEGIES FOR DISTANCE LEARNING

In service teachers should seek targeted support (Jonker *et al.*, 2018; Margolis *et al.*, 2017) and collaborative opportunities for implementing technology in equitable ways (Francom, 2016). In this school the organic movement toward teachers seeking building level teacher as experts for on demand support opened up opportunities for two way learning. For example one novice teacher shared that he was grateful for the opportunity to have building level teacher as experts available for advice and consultation on various technology platforms as she worked to overcome his intimidation. As he asked questions for teacher expert he was able to help him and learn something new. Not only did teachers receive support but building level teacher experts new understandings from the teachers they supported during these interactions. Moving forward districts should consider how initial implementations of professional support like building-level teacher experts can be scaled as they plan for future distance learning.

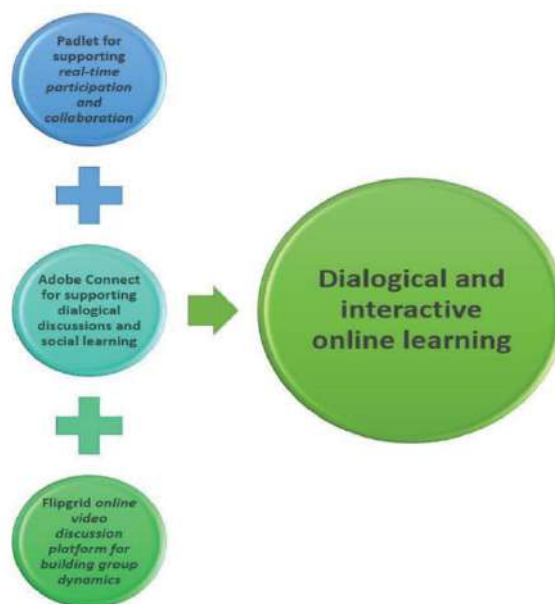


Figure 1: Professional development of teacher as expert for multiple distance learning

PROFESSIONAL DEVELOPMENT OF TEACHER

The recommendations for further research are based on the initial study results. In this current model of professional development is not formalized as

the movement to utilizing building level teacher experts for distance learning support was organic. As districts prepare for future distance learning we recommend leaders include building level teacher experts as an avenue for providing targeted support by creating guidelines and informal teacher leadership roles like teachers on special assignments. Additionally leaders should consider providing professional development opportunities on multiple access points to educational technology particularly focusing on growing the skills of teacher experts since previous research has indicated that this type of targeted professional learning may help to address equity issues (Steele *et al.*, 2017; Tawfik *et al.*, 2016). The leaders should work with instructional coaches and teacher experts to formalize a variety of professional support opportunities and establish a clear vision for teacher-experts for distance learning support (Ramadan, 2017).

RESULT

Within this high school based on voluntary phone survey results indicating 25% of families did not have internet access available to them there was a need for targeted professional support on multiple access points to educational technology. Currently no quantitative data is available surfacing the number of teachers who have taken advantage of their building level teacher experts to provide targeted professional support during the school closure. However many of the teachers who have indicated a higher comfort level with using educational technology during pre-covid 19 have reported being called upon as a resource for their peers. They have acted as informal professional support during faculty meetings and via asynchronous and synchronous platforms like google meets. One early adopter of technology described how team members have asked more questions about the use of multiple devices and internet accessibility and was more receptive to the concept of using a cellphone application than they had been previously. In the past classroom had served to asynchronously disseminate content within the district. Recently the district has seen an increase in the number of teachers who feel confident using this platform. The pre-service teachers need to learn to deliver distance education that connects theory with practice in a meaningful and motivational way. The chosen tools worked well and could be used in a range of educational contexts to support dialogical and interactive learning. In this study the solutions complemented each other as none of them could in isolation provide a social learning experience with the kind of discussion interaction and collaboration that we wanted to provide our students.

DISCUSSION

When teacher and students have to work under so many constraints then the practice of co- operative or collaborative teaching is always a good option. learning process is a team work where members support and rely on each other to achieve an agreed upon goal. The co-operative learning is a successful teaching strategy in which small teams each with students of different levels of ability use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates to learn thus creating an atmosphere of achievement. Students work through the assignment until all groups members successfully understand and complete it. From this we learned that e-learning presents significant challenges for parent's teachers and administrators. To prepare effective e-learning instruction due to covid-19 or similar school disruptions teachers should first proactively address concerns with e-learning. In order to be prepared to create meaningful digital learning plans need field placements for online settings and course work focused on teaching and learning in diverse contexts including e-learning. At the same time digital learning plans can facilitate conversations with school leaders and inform goals for professional development for in service teachers related to e-learning during trying times (Farmer and West, 2019). The additional research is needed to fully realize the impact of a thoughtful digital learning plan to establish best practices for developing and implementing these plans to support e-learning and to determine how pre service teacher and in service teacher can best be supported when developing these plans. Specifically to improve upon our initial conceptualization of digital learning plans we plan to explore the concerns of educational stakeholder groups by completing a deeper investigation into their experiences offer professional development on the creation of digital learning plans for e-learning settings and investigate the impact of our training and the use of digital learning plans (Basham *et al.*, 2016). From these investigations we offer insight into how to prepare and support pre service teacher and in service teacher to create e-learning. The steps outlined here provide teachers with a flexible frame work for investigating and planning for challenges unique to their classroom school and community which informed by student characteristics resources and state and local policy these digital learning plans can establish procedures and expectations for all stake holders e.g., students guardians teachers and administrators to allow instruction to continue during disruptive circumstances (Graham *et al.*, 2019; Qaisur, 2021). The steps provided here can

be adapted to create an effective plan that fits within unique learning contexts. With a clearly established digital learning procedure distractions and confusion can be eliminated and teachers and students can shift their focus to integrating innovative methods and technologies that can provide engaging e-learning experiences (Fuller, 1969) respectively. The initial results suggest that the majority of the immediate challenges facing by teachers' in e-learning efforts include issues with preparing students and parents for this shift in context issues that can be mitigated with proactive and intentional planning. Respondents' descriptions of effective e-learning practices highlighted the need for clearly articulated expectations and procedures (Rakes and Dunn, 2015). To prepare for effective learning we suggest that teachers create a digital learning plan prior to implementing e-learning. Much like the procedures and expectations that regulate practices and activities in a face to face learning environment a digital learning plan structures the learning space by establishing expectations and procedures regarding how where and when students will engage in learning and how content and technological support will be provided. The detail specific steps and strategies for creating a digital learning plan (Qaisur, 2021). Creating a digital learning plan assists teachers in preparing for and facilitating technology mediated instruction in learning blended or hybrid learning and remote instruction. Digital learning plans require teachers to consider unique in student for school and community factors that will impact online instruction and plan ways to overcome any potential barriers caused by these factors. When communicated to parents and guardians these plans inform appropriate expectations towards e-learning and outline how successful learning experiences can be achieved. We offer implications for pre service teachers and in service teachers (Quiroz *et al.*, 2016). India has reached the threshold of the development of new technologies and innovative methods to trained teachers which are likely to revolutionize the classroom teaching. Unless capable and committed are teachers in service, the education system cannot become a suitable and potential instrument of national development. It is common knowledge that the academic and professional standards of teachers constitute a critical component of the essential learning conditions for achieving the educational goals of a nation. The focus of teacher preparation had to shift from training to education if it had to make a positive influence on the quality of curriculum transaction in classrooms and there by pupil learning and the larger social transformation (Qaisur, 2021) respectively.

CONCLUSION

As a result the imperatives of new times new demands and new visions assign more challenging role and responsibility to the teacher. Now a day's advanced technology has effectively revolutionized human society. The districts continue to plan for disruptions to face to face instruction in-service educators should develop professional networks and mentorship for implementing multiple access points to make equitable instructional decisions. When enacted at the lowest entry point building level teacher as experts as strategy that may help educators to identify and implement multiple access points across a variety of devices and technology plat forms. As other seek to replicate the impact that teacher experts have on addressing equity issues during distance learning and there are several implications for the use of this innovation.

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DEVELOPMENT OF COMPETENCY BASED INTERGRATED LEARNING FRAMEWORK TO FACILITATE TRAINING IN ENGINEERING AND INDUSTRIAL TECHNOLOGY

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ABSTRACT

This study provides a framework for the development of a model that can be used to enhance Competency Based Education and Training (CBET). This framework can be called the employability skills framework based on course competencies and key actions. Competency based training and education is an important roadmap to produce technocrats with an innovative mindset who are relevant and can find practical and authentic solutions to engineering problems in industry. The current competitive advantage achieved through technology, new products and information is shortly lived and vastly evaporating especially in developing countries like Zimbabwe. The only distinguishing feature from the competition which remains are the skills and contribution from the employees. A well-defined and uniform competency framework is the first step towards an organized approach to the human resource management of the organization. It is imperative that a more scientific approach like competencies can be used to define and understand the knowledge, skills and attitudes required to perform a job effectively. This study generated what the researchers called a Hybrid Competency Based Framework which is one that has a set of criteria that the person (learner) can use to prepare for their performance and allows the assessor to make that judgment of ability, skills or knowledge based on observed evidence. A desktop methodology was used which resulted in a scan of exemplary industrial technology training models in a number of countries specializing in Manufacturing Engineering and Technology. The researchers blended the desktop results with

the experience gained through the current program at a polytechnic in Zimbabwe where competencies in the design and manufacture industry projects are the emphasis of the assessment.

KEYWORDS: Competency Based Assessment, Engineering, Technology, Employment Skills Framework

INTRODUCTION

Developing countries especially Zimbabwe are experiencing a flight of technology (Khan, 2004) where individuals with transportable skills are leaving the workplace or their country. This tendency denudes the immediate competency base of industry and commerce, creating a latent technology drag, scenario, where vacancies are not filled or are filled by competently immature replacements. It is a common fact that currently most companies in the country are down due to the withdrawal of foreign investments coupled with stringent economic embargo from once reliable developed countries. Zimbabwe as a developing country calls for dedicated political will and the re-nurturing of competencies in engineering and technology for economic growth. As a developing country, subject to the flight of technology, we need to recognize the national ability to develop social ingenuity which can translate into technical ingenuity. The latter arising out of what is social ingenuity being termed by (Homer-Dixon, 1995) as the capacity of a nation to generate incentives that create the institutional environment in which technical ingenuity could be generated. The prevalent diminished level of graduate engineers and their competencies which are entering industry and their ability to support an existing and rapidly expanding societal infrastructure is problematic and this is supported by the engineering press in related articles (Engineering Council of South Africa, 2009). Having identified the challenges, the authors seek to translate these and resultant diminished capacities of the engineering graduates where the necessity of technical competency is required.

The National Association of Manufacturers (NAM) (2012) identified the basic or core competencies necessary for workers to succeed in virtually all entry-level jobs. NAM believes that a system of industry-recognized skills credentials is necessary to reform higher education and training for 21st century and manufacturing by providing skills assessments, standardized curriculum requirements, and portable credentials that validate the attainment of critical competencies required by industry. The college students who enter industry

should have adopted the values, skills, attitudes, norms, and knowledge needed for employment in a given organization (Merton, 1957). Student development has been described as “the ways that a student grows, progresses, or increases his or her development skills as the result of enrollment in an institution of higher education” (Rodgers, 1990, p. 27) and is about becoming a more complex individual (McEwen, 2005).

PURPOSE OF STUDY

The goal of this study is to develop a framework for competency-based teaching, learning and assessment for higher education environments. Specifically, the end purpose is to provide a framework that can be used for teaching in engineering which is competency-based.

LITERATURE REVIEW

Training models suitable for Industrial Technology

During the course of this research project, a number of themes specific to training within industrial technology were identified (Hatton, M. J., 1995).

- These include commitment to hands on training "learn by doing" using the same tools that trainees use in industry. Exemplified by the Precision Engineering Institute (Singapore) and the Plastics Industry Training Centre (Hong Kong), Bonnet, P (2009) defines this under competency-based work integrated learning program as work- based where the learning is in context, with the student spending an appropriate time period in the work environment.
- The second theme in the model is the provision of instruction by those who are continuing to work in the industry, either full-time or part-time. Exemplified in high-tech areas such as the semiconductor training and robotics. Bonnet, P (2009) defines this under competency-based work integrated learning program that has to be structured with formal (academic and employer) supervision and assessment.
- Production units and workshop practice in Zimbabwe Polytechnics and Industrial Training Centers and the Industrial Centre at the Hong Kong Polytechnic University prides itself on the "model factory". This taste of the "real industrial world" helps ensure that the students are prepared for and readily adjust to work following program completion. At the Nanyang Polytechnic (Singapore), the organizational structure is geared to industrial standards, and students and faculty are required to be present for 44 hours per week. At the Southern Vocational Training

Centre (Chinese Taipei), trainees in the Mechanical Turning Program attend eight hours per day for five and a half days per week. Again Bonnet, P (2009) supports this under competency-based work integrated learning program that the program has to be productive where the student does real work that has economic value or a definable benefit to the employer.

- Competency based learning to minimize the time spent in training and ensure that the learner receives the training that is required only. Bonnet, P (2009) further defines this under competency based integrated learning program that the program has to be relevant to the student's area of study, that is, with clear linkages onto the knowledge/skill base of the qualification.
- Training or re-training workers while they continue working at their regular jobs, time is not lost and updated skills can be immediately applied on the job. For example, the Bachelor of Technology degree program at a polytechnic in Zimbabwe, which collaborates with industry for its one-year industry-based project and The National 'Taipei Institute of Technology (Chinese Taipei) offers a collaborative program with Teco Electric and Machinery that illustrates this approach, as does King Mongkuts Institute of Technology North Bangkok (Thailand) in its cooperative program with the Federation of Thai Industry. Other examples include the National Kaohsiung Institute of Technology (Chinese Taipei) in cooperation with China-American Petrochemical, and BlackHawk College (U.S.A.) in collaboration with Deere Harvester.
- The involvement of private sector organizations directly in the training process, at the request of colleges and technical institutes. For example, industrial attachment of polytechnic students in industry. The Southern Alberta Institute of Technology (Canada) for example, relies on private sector partners to assist with the delivery of training in Thailand and Mexico.
- On-site training, underscores the theme of bringing training to the workers and not the other way around.
- Regional training resources are shared and students gain access to international staff
- Applied projects or capstone courses are another feature that is typical of exceptional programming.

Competence based learning and Assessment

According to Biggs J. (1996), two key components of competency-based training are:

- skill – a task or group of tasks performed to a specified level of proficiency which typically involves the manipulation of tools and equipment, or expertise that is knowledge or attitude based
- competency – a skill performed to a specified standard under specific conditions

Competency-based models enjoy an obvious connection to aspirational student learning statements, because they shift the focus from instructional delivery to student performance (A. Voorhees, 2001). Competency-based learning (CBL) involves redefining program, classroom, and experiential education objectives as competencies or skills and focusing coursework on competency development (Brumm, Mickelson, Steward, & Kaleita, 2006). Hence CBL can be presented as a model with a structure below,

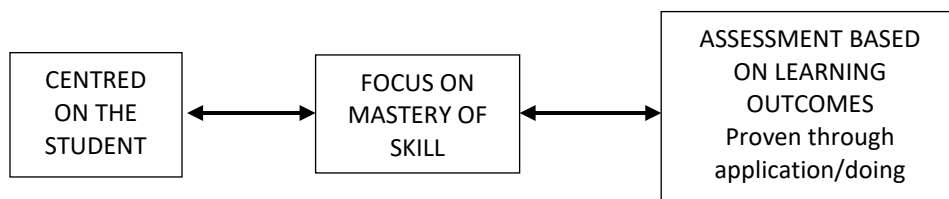


Figure 1: Model for Competence-Based Learning (Courtesy of Brumm et al, 2006)

The above model differs from the traditional education and training model whose focus is a year or syllabus or unit planned in advance and progression is automatic whether a student mastered/understood the skill/subject or not. Further, traditional education assesses through memorization and recall of content and the goal is to pass the tests whereas the goal in CBL is mastery of skill.

For Engineering and Technology, the definition of workplace competencies is the application of knowledge, skills, attitudes and values, and behaviors (Ewell, 1984). These competencies are directly measurable through actions or demonstrations of the existence of those competencies in the individual. Since the 1990s, competencies have become code words for the human resources and strategic management practices of recruiting, selecting, placing, leading, and training employees and evaluating employee performance.

Competency-based assessment and feedback has become a predominant workplace reality which is commonly used as an organizational development tool for the learner (McCarthy & Garavan, 2001).

As espoused by (R. Voorhees, 2001) in Baughman J (2012) competencies are the results of integrative learning experiences in which skills, abilities, and knowledge interact to form learning bundles that have a currency related to the task for which they are assembled.

According to Gardner (2009), post-secondary education has become progressively responsive to the needs of business and industry, where learning is closely tied to competencies and performance-based assessment of those competencies. Building a bridge between the Traditional Educational paradigm that depends on credit hour measures of student achievement and the learning revolution can be found in competency-based approaches (Voorhees R, 2001)

In a 2002 report, the U.S. National Post-Secondary Education Cooperative Working Group on Competency-Based Initiatives determined three reasons for implementing competency-based initiatives in higher education (colleges and universities):

- One main reason is that specific articulations of competencies inform and guide the basis of subsequent assessments at the course, program, and institutional levels.
- Secondly, specific competencies help faculty and students across campus, as well as other stakeholders such as employers and policymakers, to have a common understanding about specific skills and knowledge that undergraduates should master as a result of their learning experiences. Assuming that faculty use a formal process to get feedback about what the competencies should be, stakeholders are more likely to accept and value them.
- Third, specific competencies provide directions for designing learning experiences and assignments that help students gain practice in using and applying these competencies in different contexts. (NCES, 2002, p. vii)

Competence based frameworks

The following show the competency-based frameworks that can be used and to be assessed so that candidates can gain a nationally recognized qualification. Table 1 shows framework from Baughman, J (2012). It highlights the competencies needed, key actions for each competency and the necessary definitions.

Table 1: Employability Skills Framework (Adapted from Baughman J. 2012)

Competency	Key Actions	Definitions
Analysis and Judgment	KA1 Identifies issues, problems and opportunities. KA2 Gathers information. KA3 Interprets information. KA4 Generates alternatives. KA5 Chooses appropriate action. KA6 Commits to action. KA7 Involves others. KA8 Values diversity.	Identifying and understanding issues, problems and opportunities; developing relevant criteria and comparing data from different sources to draw conclusions: using effective approaches for choosing courses of action or developing appropriate solutions; taking actions that are consistent with available facts, constraints, and probably consequences
Communication	KA1 Organizes the communication. KA2 Maintains audience attention. KA3 Adjusts to audience. KA4 Ensures understanding. KA5 Adheres to accepted conventions. KA6 Comprehends communication from others.	Clearly conveying information and ideas through a variety of media to individuals or groups.
Initiative	KA1 Goes above and beyond. KA2 Responds quickly. KA3 Takes independent action	Taking prompt action to accomplish objectives; taking action to achieve goals beyond what is required; being proactive.
Continuous Learning	KA1 Targets learning needs. KA2 Seeks learning activities. KA3 Maximizes learning.	Actively identifying new areas for learning; regularly creating and taking advantage of

	KA4 Applies knowledge or skill. KA5 Takes risks in learning.	learning opportunities: using newly gained knowledge and skill on the job, and learning through applications.
Teamwork	KA1 Facilitates goal accomplishment. KA2 Informs others on team. KA3 Involves others. KA4 Models commitment.	Effectively participating as a member of a team to move the team towards completion of goals.
Engineering/Technical Knowledge	KA1 Knowledge of mathematics. KA2 Knowledge of science. KA3 Knowledge of experimental analysis. KA4 Knowledge of current engineering/technology tools* KA5 Knowledge of technology.	

The second framework from Jackson and Chapman (2002) is about an employability skill (framework) which comprises of the following parameters/coded words:

Table 2 Jackson and Chapman Framework

• Working effectively with others	• Communicating effectively
• Self-awareness	• Thinking critically
• Analyzing data & using technology	• Problem solving
• Developing initiative & enterprise	• Self-management
• Social responsibility & accountability	• Developing professionalism

These employability skills are characterized by a particular behavior name followed by the description of the expected traits of that behavior.

Thirdly, Gerstein (2015), developed the 21st Century Skills and Attributes- Educator Self-assessment shown below.

21 st Century Skills & Attributes - Educator Self-Assessment		
 Oral & written communication <ul style="list-style-type: none"> ✓ Do you provide learners with lots of opportunities to speak and write using their own unique and genuine voices? ✓ Do you help learners create focus, energy, passion around the oral & written communications they want to make? 	 Critical thinking problem-solving <ul style="list-style-type: none"> ✓ Do you promote and reinforce doing things that haven't been done before, where you and your learners have to rethink or think anew? ✓ Do you ask learners to generate & ask their own unique essential questions? 	 Collaboration across networks <ul style="list-style-type: none"> ✓ Do you facilitate global communication and collaboration with your learners? ✓ Do you give learners opportunities to collaborate face-to-face and virtually? ✓ Do you assist your learners in developing their own personal learning networks?
 Curiosity and imagination <ul style="list-style-type: none"> ✓ Do you promote, encourage, and reinforce inquisitiveness? ✓ Do you encourage your learners to add their own "personal touches" to their learning experiences? 	 Initiative & entrepreneurialism <ul style="list-style-type: none"> ✓ Do you assist learners in becoming involved in meaningful work? ✓ Do you provide opportunities for learners to take risks, take their own initiative to do things? 	 Agility & adaptability <ul style="list-style-type: none"> ✓ Do you accept change as normal & natural, and assist your learners in doing so, too? ✓ Are you and your learners flexible? ✓ Do you and your learners use a variety of tools to solve new problems?
 Hope & Optimism <ul style="list-style-type: none"> ✓ Do you model, teach, reinforce positive self-talk? A Can Do attitude? ✓ Do you assist learners in enhancing their personal agency thinking? ✓ Do you expose learners to stories that portray how others have succeeded or overcome adversity? 	 Self-Regulation <ul style="list-style-type: none"> ✓ Do you model and assist learners in developing and understanding their own metacognitive processes? ✓ Do you help learners develop their own ability to self-motivate? ✓ Do you assist learners in reflecting on and evaluating their learning experiences? 	 Empathy & Global Stewardship <ul style="list-style-type: none"> ✓ Do you provide learners with opportunities for perspective taking? ✓ Do you assist learners in understanding the interdependence of all living systems? ✓ Do you create opportunities for learners to put empathy into action; engage in pro-social behavior intended to benefit others?
 Resilience <ul style="list-style-type: none"> ✓ Do you help learners see failures as opportunities for growth? ✓ Do encourage and reinforce learners' own innate resiliency? ✓ Do you insure that each and every learner knows "You Matter"? 	 Grit <ul style="list-style-type: none"> ✓ Do you give learners opportunities to work on long-term, complex projects? ✓ Do you assist learners in identifying and acknowledging the rewards of persevering through tough times? 	 Vision for the Future <ul style="list-style-type: none"> ✓ Do you give learners the time, resources, opportunity to identify and pursue their dreams? ✓ Do you assist learners in developing the steps and strategies needed to achieve their dreams?

The above assessment contains questions to assist the educator in evaluating if and how s/he is facilitating these skills and attributes in the learning environment.

Furthermore, the UNESCO International Bureau of Education (2017), and the Kenya government through the Kenya Institute of Curriculum Development (KICD) undertook to develop a competency based educational curriculum and concluded a framework which has seven key competencies:

Table 3 Kenya Institute of Curriculum Development Competency Framework

• Communication and collaboration	• Critical thinking and problem solving
• Creativity and imagination	• Citizenship
• Self-efficacy	• Digital literacy
• Learning to learn	

According to the report, from the core competencies this is followed by,

- Developing competency descriptors for all the seven core competencies;
- Developing level competency descriptors for all the levels of education. For example, a competency indicator for a grade six learner for critical thinking and problem solving would be, '*Critically analyse statements made by adults and peers*';

METHODOLOGY

A Desktop Analysis of survey reports of descriptions of exemplary industrial technology training models in Australia, Brunei, Canada, Chinese Taipei, Hong Kong, Malaysia, New Zealand, the Philippines, the People's Republic of China, Singapore, Thailand, and the United States. The authors engaged in a multi-stage group process with the aim of reviewing the scholarly literature of competency-based education and training in engineering and industrial technology, identifying controversies in need of clarification, proposing definitions and concepts that could be useful to educators across many jurisdictions, and exploring future directions for this approach to preparing research and innovation technocrats. Thus in this research, the authors explore some of their experience in this domain using the Consensus Oriented Decision Making model (CODM) to prioritise core competencies which are internationally applicable but still accommodate local requirements.

RESULTS

From the competencies reviewed, a hybrid competency-based framework was developed. This framework was designed to bring together various factors that contribute to current standards as required by industry and the learning environment. Thus, it suits well with hybrid or blended learning in terms of time, space and technology.

Table 4 Developed Hybrid Competency Framework

Competency	Key Actions	Definitions
Analysis, Problem Solving and Judgment	KA1 Identifies issues, problems and opportunities. KA2 Gathers information. KA3 Interprets information. KA4 Generates alternatives.	Identifying and understanding issues, problems and opportunities; developing the relevant criteria and comparing data from different sources to draw conclusions: using effective approaches for

	<p>KA5 Chooses appropriate action.</p> <p>KA6 Commits to action.</p> <p>KA7 Involves others.</p> <p>KA8 Values diversity.</p> <p>KA9 Evaluates and iterates</p>	<p>choosing courses of action or developing appropriate solutions;</p> <p>taking actions that are consistent with available facts, constraints, and probably consequences</p> <p>Evaluating progress and doing the necessary corrections.</p>
Oral and Written Communication	<p>KA1 Organizes the communication.</p> <p>KA2 Maintains audience attention.</p> <p>KA3 Adjusts to audience.</p> <p>KA4 Ensures understanding.</p> <p>KA5 Adheres to accepted conventions.</p> <p>KA6 Comprehends communication from others.</p>	<p>Clearly conveying information and ideas through a variety of media to individuals or groups in a manner that engages the audience and helps them understand and retain the message.</p>
Initiative and Entrepreneurial	<p>KA1 Goes above and beyond.</p> <p>KA2 Responds quickly.</p> <p>KA3 Takes independent action</p> <p>KA4 Generate new questions</p> <p>KA5 Interest in doing meaningful work</p> <p>KA6 Takes risks and strives for success</p>	<p>Taking prompt action to accomplish objectives;</p> <p>taking action to achieve goals beyond what is required; being proactive.</p> <p>Starting own venture</p>
Curiosity, Imagination and Continuous Learning	<p>KA1 Targets learning needs.</p> <p>KA2 Seeks learning activities.</p> <p>KA3 Maximizes learning.</p> <p>KA4 Applies knowledge or skill.</p> <p>KA5 Takes risks in</p>	<p>Actively identifying new areas for learning;</p> <p>regularly creating and taking advantage of learning opportunities:</p> <p>using newly gained knowledge and skill on the job, and learning through</p>

	learning. KA6 View learning as lifelong activity	applications.
Collaboration, Teamwork and Citizenship	KA1 Facilitates goal accomplishment. KA2 Informs others on team face to face or virtually KA3 Involves others by developing personal learning networks. KA4 Models commitment. KA1 Learner understanding of interdependency of all living systems KA2 Learner involved in pro-social activities intended to benefit others	Effectively participating as a member of a team to move the team towards completion of goals. Advocating cooperative learning
Engineering/Technical Knowledge	KA1 Knowledge of mathematics. KA2 Knowledge of science. KA3 Knowledge of experimental analysis. KA4 Knowledge of current engineering/technology tools* KA5 Knowledge of design and technology.	Effective application of science, mathematics and technology in designing new products and processes.

DISCUSSIONS

Competency based learning succeeds where there are good partnerships between all stakeholders, including local businesses and community organizations because it has the ability to provide significant benefits. The argument being that industry provides the competencies as demanded by specific job tasks and higher education defines the content or curriculum to match the specific competencies. By using such frameworks, a number of benefits can be derived for employers, higher education institutes, academics and students.

Benefits for employers

- Developing links with higher education institutions and feeding into teaching practices and methodologies
- Staff development opportunities that arise from employees mentoring students.

Benefits for Students

- Working in a setting in which they put theory into practice
- Developing an awareness of work-place culture, values and expectations

Benefits for Academics

- The opportunity to see their subject area in practice
- The ability to integrate student learning experiences into curriculum development

Benefits for Higher Education Institutions

- Recognize the significant research opportunities associated with competence-based learning activities
- Ensure university-wide procedures and regulations to enable a more flexible incorporation of work experience opportunities into programs of study.
- Development of nationally recognized qualifications

CONCLUSION AND RECOMENDATION**CONCLUSION**

The overarching goal of this research was to examine competency-based development and assessment as a measure of student professional development. This study provides an inkling of the possibilities to not only improve our approach to student development and assessment, but also in curricular improvement efforts that better prepare students for their professional endeavors. The link between educational experiences and employer expectations is critical for student success in future employment endeavors. Competency-based professional development and assessment provides a direct link between educational experiences and industry expectations. Competency based learning and assessment has the capacity to revive the Zimbabwean industry because as high-lighted, competency-based learning has to be productive where the student does 'real work' that has economic value or definable benefit to the employer. With competence-based learning and assessment model, the institutes of higher

education can determine what services customers wish to receive rather than simply considering what courses it wishes to deliver. Competency based learning and assessment model can provide institutes with written competencies for every position in the company. This facilitates easy grading and promotion of employees. The paper presented in terms of competency development, has further implications in that the program presented here could be adapted to suite most academic programs to facilitate competency-based outcomes that are measurable against a known standard. It is the authors' firm belief that the system as presented in this paper supports the notion that engineering competency can be developed locally through innovative cooperative education programs. Each competency was defined clearly, concisely, and independently. Specific to each definition, a set of observable and measurable key actions were developed. By closely tying competencies with performance-based assessment of those competencies, a bridge is built between traditional measures of student achievement and competency-based approaches.

RECOMENDATION

Development of competence-based learning and assessment model can be used as a basis for accreditation and award of national qualifications. The researchers recommend to adopt the competency framework that is a hybrid from the four presented frameworks. Furthermore, future studies can be carried to investigate the hypothesis that use of industrial-based assessment tools increase student competency development more than typical educational tools.

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HIGHER EDUCATION IN INDIA TODAY SOME CHALLENGES AND RESOLUTIONS

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“The past is our foundation. The present is our material. The future is our aim and summit. Each must have its due and natural place in national system of education.”

(Aurobindo)

ABSTRACT

At the outset, the paper has examined the role of higher education for developments. It then dwells upon the issue of subsidies and financing of education. It explained how inequality is perpetuated. The issues of Brain Drain and privatization have been clearly examined. The scholar has also demonstrated the role of Border less' universities. The paper has also explained the features of new Education policy in short.

Keywords: Brain Drain, Corporatization, Externality, Borderless University, marketable commodity, Rabindra Nath Tagore, Exclusion.

At the outset it would be appropriate to enumerate the key points regarding the role of higher education in an economy like India. They are as follows. It is an essential input for meeting the manpower requirement of the economy. It is a critical input, It helps to ensure social justice and equity in order to provide upward mobility and access to higher level of economic and social activities of the weaker sections and finally it also acts as an important input for improving the quality of life by making higher levels of knowledge available to a wider base of population and for preserving our cultural heritage. It should be recognized also as a means to bridge the different divides of many dimensions-like between the rich and the poor, the rural and the urban, between different states, gender divide. Education, precisely higher education, is supposed to address all these legitimate issues and concerns.

Higher education simultaneously improves individual lives and existence in wider society. It is true that without highly educated people, it is

difficult to get good governance, strong institutions and a sound infra-structure. It provides an open and meritocratic democratic society and values and hence and embodies norms of social interactions and a society that helps to build or maintain pluralistic accountable democracy. Without improved human capital, countries will inevitably fall behind and experience intellectual and economic marginalization and isolation. (Misra, 2010). Higher education facilitates nation building by promoting greater social institutions, democratic participation and open debate and appreciation of diversity in gender, ethnicity, religion and social class.

There is no doubt that the modern higher education system in India is quite young, only about 175 years old when the first three universities were set up in 1957 under the British rule. The thrust of development was mainly liberal Arts education. The rate of development was slow. In a period of 90 years, only 18 universities were set up in the country. India had only twenty universities at the time when India became independent. Of course, India witnessed an explosive rate of growth of universities in the Post - Independence period. The number of universities has gone up from 20 in 1947 to about 350 in 2010-11. At the same time, the number of colleges has also increased from 351 in 1947 to around 12,500 in 2010-11.

In this context, it is pertinent to maintain that primary education is a fundamental pre-requisite to the nation's development. Higher education at the same time delivers the total overall economic and technological progress. At the same time, it is to be noted that it is essential that the nation should achieve universal elementary education and at the same time, it cannot afford to neglect and relegate to the background our quest for achieving our global standard in higher education. At the same time, human resource development, quantitative and qualitative, through Higher education system is centered to India's ambitions. But unfortunately in recent years with regard to higher education one certain issues that agitated our minds is as follows. They are generally related to financing and governance, subsidization brain- drain, corporatization, globalization, introduction of cyber-university or borderless university education system. Infact, these issues have posed threat to the sustainability today in a country like India. Higher education as a powerful instrument for building a knowledge - based society. But the challenge before the country is to become a developed society which requires not only a vibrant economy driven by knowledge, but also a new society where " Justice and human values prevail.

Challenges in higher education today are not nation centric. They have already attained global dimension.

Today, the institutes of higher education have to explore alternative sources of funding in order to reduce their dependence on public funds. Incentives are given to different agencies to advise them to provide funds to institutes of higher learning. Again unfortunately most institutes have failed to attract new sponsors to this end. Necessarily, the institutes have to operate with small budgets. The University Grants Commission (UGC), one of the enterprises in this area has been suffering, to the best possible extent. The problem of allocation of funds is as difficult as it is complex. It involves a consideration of various areas of concerns like the availability of funds distribution of funds between states and centre, co-ordination of standard, role of non-university bodies concerned with manpower planning etc.

Challenges:

It is important to note that the most compelling argument in favour of State financing of education is that education is a "public good". It generates externalities. So it benefits society at large. For now, it is believed by many demographer that the most cost- effective method of lowering. Fertility rate is through improvements in levels of female education (Misra, 2010). The spread of basic education also leads to improvements in personnel hygiene and adaption of simple preventive measures against many common diseases. These lead to a healthier society and reduce pressures on an over-burdened public health care system.

It is generally argued that subsidized education, precisely higher education should not be completely funded by the state as it is observed that in certain cases, the student fees are so low that they cover only a minor portion of the actual cost. It is argued that an important principle of government spending on any social welfare program should be human welfare oriented. The facility should percolate to the really needy. It is difficult to deny that subsidized education aggravates social inequalities, even some recent empirical studies reveal that the large majority of beneficiaries of higher education in India belong to the higher class. (Misra 2010). In sum, there is no justification for financing and subsidizing higher education out of public resources. The withdrawal of subsidy may be a gradual process. "Brain drain" is another area of darkness. Today the Indian diaspora all over the world estimated at more than 40 million are NRI. The overflow of the Indians with talent, training and technical skills- the outward migration pattern is really a point of serious concern.

It should be noted that higher education in India has undergone a remarkable change in its operational behavior. Privatization is one important area of concern. Privatization may provide some financial relief to the government. But in the long run, it is argued that it would cost more to the society. It is fair to say firstly, that privatization may 'perpetuate' inequality in the system. Economic inequality would accentuate the inequality in the access to higher education. This would, in turn, contribute to inequality in occupational achievements in earning and hence in socio-economic sphere as a whole, it may become, in the ultimate analysis, a privilege to the rich because of poor accessibility because of low capabilities of the poor to receive the benefits from the provision.

Different reasons are often advanced to explain the massive erosion in the quality and standard of higher education. The higher education system provides access to a small section of population. A society without the knowledge of the past, which has built in, would be lacking in 'depth and dignity'. Again, a society without scientific discoveries and technical innovations will not flourish and it will remain practically stagnant forever. It is really important to see to what extent the privatization would take care of this spirit. The impact of privatization and consequent market orientation in education may not have appropriate effective research programme.

Today, we witness a gradual fall in the out-run of scientists, philosophers, and social scientists. Creativity and originality all these have been relegated to the background. Expansion of higher education through privatized system, has led to a decline in the quality of education or pure science or liberal Arts Group. This may ultimately lead to a society of engineers and technicians. They may roll in prosperity and develop materialistic outlook and eventually become insensitive to society challenges, aspirations and problems. Higher education should be understood not only as institutions that higher education in practical fields of knowledge, but also as Central cultural institutions of the society. Only in the nineteenth century, aside from liberal Arts and humanities, science and arts were added in the academic mission. Maintaining loyalty to traditional academic values will not be easy but the costs of growing commercialization are much greater and ultimately painful.

Another serious challenge that higher education has been facing today is the new form 'the market forces' not exactly from the lower, state or federal, private interests of dominant segments of the society. Apart from drainage of

resources to receiving country, it may well result in generating cultural and economic influence by one set of countries on the others.

The Concluding Observations are in order:

- The globalization of knowledge and education appears to be a serious threat before the conventional system of education. In the emerging international knowledge market, the entire system will have to complete with foreign players very often. They have to abandon the tradition in making compromise in different areas.
- Designing education with relevance in the future is pertinent. A paradigm shift has to be introduced in higher education from native to global perspective.
- There should be proper planning in every field. A balance is required to be maintained between demand and supply.
- Substantial downsizing of funds for the higher education will not create space for projected alternative form of education such as international cyber universities, threatened by foreign universities etc. all of which will operate within purely commercial basis, but will also generate the necessity of importing knowledge that is increasing under IPR report.
- As far as governance of higher education is concerned, care should be taken to see that there are restrictions in certain key areas, which must have to be taken care of.
- In point of fact, it may be noted that Rabindra Nath Tagore-a poet per se- a romantic poet per excellence urged upon building a 'national system of education.'- Tagore's essay- 'Swadeshi Samaj'- is a reflection for a necessity for regenerating the self- sufficient self-reliant village society. He emphasized 'Atma Shakti' as the ethical essence of human life. The kernel of his educational concept is the spiritual union between man and nature. Of course, Tagore had drawn a philosophy of education and the principle of curriculum construction in different form.

Notes:

01. Extensive insufficiencies in resources, in general are reinforced by particular inequities. Professor Amartya Sen suggested emphatically rigorous discipline in introducing operation and management procedure in schools (primary) is a major challenge for the Indian society and economy today. Professor Sen has unequivocally maintained that the overarching need is to

overcome the rigid barriers of class divisions basic rights of children from economically and socially disadvantaged backgrounds. Secondly, free education has to be recognized as a right of all children, particularly because of the artificially generated need for privatization. Again, increasing efficiency as well as equity in the use of resources in primary education as important as the need for expanding the overall resource allocation in favour of primary education. On top of all these, enhanced set of skilled and committed primary teachers are pre-requisite who no longer receive exploitative wages. Sen has clearly pointed out in his 'Pratichi Report' the strong approach to be adopted to address the central issues for the delivery of education (primary) perfectly.

02. Sugata Bose in his article 'The NEP is a recipe for unenlightened over-centralization' stated that the New Education Policy as has been introduced in recent years stated that the new education policy bears all the over centralizing impulse in the policy. Again, the spectre of privatization inherent in the New Education Policy has raised widespread concern and for good reason. The policy offers nothing to stem the rot of commercialization of education that has been damaging both quality and equity. Another social scientist, Professor Prabhat Patternayak, has clearly emphasized how the removal of exclusiveness has occupied a dominant place in the New Education Policy. And Palas Deb in his 'Chinks in the NEP armour' article explained how bureaucracy and role of faculty members have been thoroughly examined which, it appears, has not perfectly evaluated.

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A STUDY OF ACADEMIC ACHIEVEMENT AMONG TRIBAL AND NON-TRIBAL ADOLESCENTS OF WEST BENGAL

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ABSTRACT

This paper explored the academic achievement of tribal and non-tribal adolescent students' in secondary schools of West Bengal division. Sample was comprised of 564 students randomly selected from three secondary schools. Academic achievement was obtained from the school records of the sample students. Gender wise and category wise comparisons were done using mean, S.D. and independent samples t-test. Results showed that tribal and non-tribal adolescents differ significantly on the measure of academic achievement at 0.001 level. Non-tribal adolescents were found to have a higher level of academic achievement than tribal students. The study also revealed that there is no significant difference between male and female adolescents on the measure of academic achievement.

Key words: Academic achievement, tribal, non-tribal

Introduction

Indian society is highly stratified on the basis of caste hierarchy, religious affiliation, linguistic diversity and regional loyalty. The Scheduled Tribe population represents one of the most economically impoverished and marginalized groups in India. Although Scheduled Tribes are a minority, they constitute 8.6 % of the total population in India (Census of India, 2011). In the state of Jammu and West Bengal tribal population, comprise of 12 unique Scheduled Tribes (ST) whose livelihoods are also varied. The Scheduled Tribes are not discriminated against in the same way by the mainstream Hindu population as the Scheduled Caste population in India. While the latter group belongs to the lowest hierarchy of social order and is often considered impure or

unclean, the Scheduled Tribes have, for the most part, been socially distanced and living outside the mainstream Hindu society. The areas inhabited by the tribal population constitute a significant part of the underdeveloped areas of the country. Scheduled Tribe population represents one of the most economically impoverished and marginalized groups in India. Though the Indian government has been making concerted efforts since independence to bridge the socio-economic gap between the advantaged and disadvantaged groups, STs have remained socially, economically, culturally and educationally backward because of their specific occupational and geographical conditions.

Education has been recognised as a powerful tool for upward social mobility, which can help to build an inclusive society by reducing socio-economic imbalances. Several attempts have been made to empower weaker sections of the society, including: provision of constitutional safeguards, scholarships and “free-ships” (fees are waived and free books, stationery and midday meals are provided); reservation of seats in government jobs and educational institutions; and special coaching classes to prepare students for competitive tests. Available data indicate that even after 60 years of affirmative action, participation of the STs in higher education still does not match their share in the total population.

The state policies and attitudes towards scheduled tribes could, however, be discerned from the kind of provisions laid down for tribes in the Indian Constitution. The special provisions for scheduled tribes among other things included the provision of statutory recognition, proportionate representation in legislatures, right to use their own language for education and other purposes, the right to profess the faith of one's choice or freedom of faith and development-economic and social-according to their own abilities. The Constitution had also clauses that enabled the state to make a provision for reservations of jobs and appointments in favour of tribal communities. Alongside such provisions, the directive principles of the Constitution required that the educational and economic interests of the weaker sections in society, including tribals, be especially promoted. Besides, there were provisions in the Constitution that empowered the state to bring areas inhabited by tribes under the fifth or the sixth schedule for purposes of special treatment in respect of the administration of tribal people (Xaxa, 2005).

National Policy of Education (1986 and revised Policy in 1992) suggested the following programmes for education of tribal people.

- I. Opening primary schools in Tribal Areas
- II. Need to develop curricula of their language
- III. Promoting schedule tribes youth to work as teachers
- IV. Ashram schools, Residential schools should be established in large scale in Tribal areas.
- V. Incentives to encourage their life style through education.

To promote education in tribals two types of problems are there. Internal problems like school system, content, curricula, medium, pedagogy, academic supervision etc., and external problems like education policy, planning, implementation and administration etc are influencing education in tribal areas.

Academic achievement is the ability to learn and incorporate in behaviour at respective levels of the standard. It also denotes the knowledge attained and skill developed in the school curriculum. A reliable indicator of achievement and learning outcomes is a child is learning effectively, acquiring knowledge and skills, and growing socially and morally (Aggarwal, 2000; Govinda, 2002). According to Li (2007) in most countries males had significantly higher average marks than females in both mathematical literacy and in advanced mathematics in the final years of secondary school. The analysis of the Progress in International Reading Literacy Study (PIRLS) confirms the findings on skill-related gender differences for younger students (Mullis, 2007). Moreover, recent studies show that gender disparities in education have been changing in favour of girls, both in terms of participation and performance (Jha and Kelleher, 2006). Vijayalaxmi and Natesan (1992) studied factors influencing academic achievement and their findings showed that girls had a higher mean academic achievement compared to boys. Among various empirical studies conducted regarding academic achievement of tribals, research by Sujatha (1987) and Govinda (2002) suggests that tribal children do possess the basic cognitive abilities and psychological dispositions for successful participation in schools. In a study conducted by Jabbi and Rajalakshmi (2001), it was found that most of the tribal children have cognitive abilities desirable for educational development irrespective of age and sex. In spite of this, studies on learning achievements of tribal children, both girls and boys at primary classes have shown lower levels of achievements as compared to non-tribals (Singh 1996). The objectives of the study were: to study the academic achievement of tribal and non-tribal adolescent students of West Bengal, to study the academic achievement gender and category wise and to suggest appropriate strategies for improvement in academic achievement.

Objectives of the study

The following objectives were formulated for the purpose of proposed investigations.

- 1 To compare the academic achievement of tribal and non-tribal adolescents of West Bengal.
- 2 To compare the academic achievement of male and female adolescents of West Bengal.
- 3 To compare the academic achievement of tribal male and tribal female adolescents of West Bengal.
- 4 To compare the academic achievement of non-tribal male and non-tribal female adolescents of West Bengal.

Hypotheses

1. There is no significant mean difference between tribal and non-tribal adolescents of West Bengal on academic achievement.
2. There is no significant mean difference between male and female adolescents of West Bengal on academic achievement.
3. There is no significant mean difference between tribal male and tribal female adolescents of West Bengal on academic achievement.
4. There is no significant mean difference between non-tribal male and non-tribal female adolescents of West Bengal on academic achievement.

Method of Research

The sample of the research study included tribal and non-tribal adolescent (male/female) students of 9th class in Government schools of Nadia and Murshidabad Districts of West Bengal India, during the academic year of 2013-14. The investigator visited the educational institutions of district Nadia and Murshidabad and collected the data through stratified random sampling technique. The total number of 564 students was selected out of which 286 adolescents belonged to tribal and 278 belonged to non-tribal communities. The sample was collected by using stratified random sampling technique. The academic achievement in this research study was percentage of final annual marks. In order to analyze the data in the light of the objectives and hypotheses framed for this study the mean, SD and independent samples t-tests, were applied.

Analysis and Interpretation

Table 1: Comparison of Academic achievement of tribal and non-tribal adolescents of West Bengal

Variable	Category	Mean	S D	T	df
Academic Achievement	Non-Tribal	48.28	13.64	3.569***	541
	Tribal	44.48	11.54		

***significant at 0.001 level; $p < 0.001$

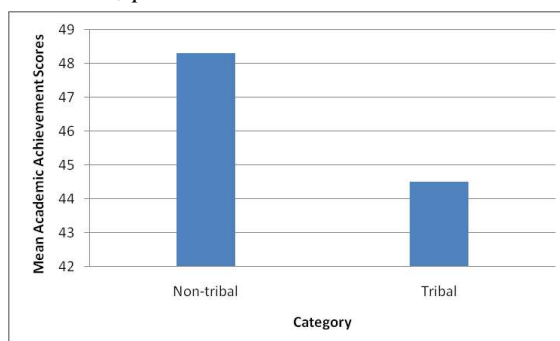


Figure1: Comparison of mean academic achievement scores of tribal and non-tribal adolescents of West Bengal

It is clear from table 1 that Non-tribal adolescents had higher (48.28) mean score in academic achievement scale compared to (44.48) tribal adolescents, which was found to be statistically significant using independent samples t-test ($t = 3.569$, 541 df, $p < 0.001$). It indicates that non-tribal students possessed high academic achievement as compared to tribal students. Therefore, the null hypothesis 1 stands rejected.

Table 2: Academic achievement of male and female adolescents of West Bengal

Variable	Category	Mean	S. D	t	Df
Academic Achievement	Male	47.10	13.94	1.501	556
	Female	45.51	11.24		

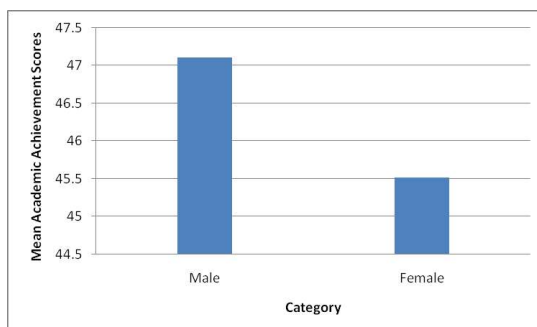


Figure 2: Comparison of mean academic achievement scores of male and female adolescents of West Bengal

It is clear from table 2 that male adolescents had almost same (47.10) mean score in academic achievement scale compared to (45.51) female adolescents, which was found to be statistically insignificant using independent samples t-test ($t = 1.501$, 556 df, $p < 0.05$). It can be said that there exists no significant difference between the male and female adolescents under study on academic achievement measure. Here the null hypothesis 2 is accepted.

Table 3: Comparison of Academic achievement of tribal male and tribal female adolescents of West Bengal

Variable	Category	Mean	S. D	t	Df
Academic Achievement	Male	40.04	3.32	1.52	242
	Female	39.35	4.16		

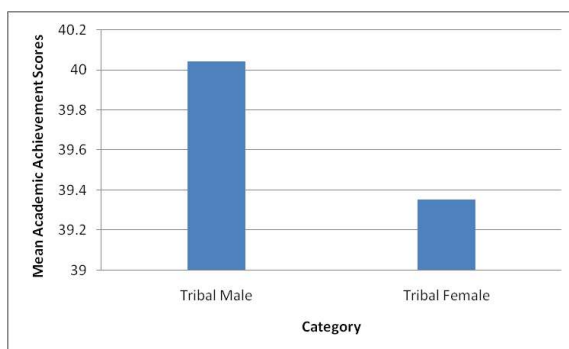


Figure 3: Comparison of mean academic achievement scores of tribal male and tribal female adolescents of West Bengal

It is clear from table 3 that tribal male adolescents had almost same (40.04) mean score in academic achievement scale compared to (39.35) tribal female adolescents, which was found to be statistically insignificant using independent samples t-test ($t = 1.52$, 242 df, $p < 0.05$). It can be said that there exists no significant difference between the tribal male and tribal female under study on academic achievement measure. Here the null hypothesis 3 is accepted.

Table 4 : Comparison of Academic achievement of non-tribal male and non-tribal female adolescents of West Bengal

Variable	Category	Mean	S. D	t	Df
Academic Achievement	Male	50.61	15.16	2.933	260
	Female	45.88	11.46		

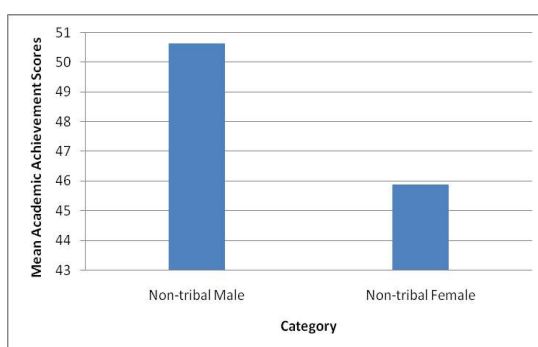


Figure 4: Comparison of mean academic achievement scores of non-tribal male and non-tribal female adolescents of West Bengal

It is clear from table 4 that non-tribal male adolescents had almost same (50.61) mean score in academic achievement scale compared to (45.87) non-tribal female adolescents, which was found to be statistically insignificant using independent samples t-test ($t = 2.933$, 260 df, $p < 0.05$). It can be said that there exists no significant difference between the non-tribal male students and non-tribal female students under study on academic achievement measure. Here we fail to reject null hypothesis 4.

Conclusion

The Government of India has repeatedly acknowledged the disadvantaged status of the tribal communities in education and recognized the need to address it. Several initiatives like Madhyamik Siksha Kendra, Siksha Bondhu, School Inspectors, Village Education Communities, etc., have been implemented to make Universal Elementary Education a success. This study has examined the academic achievement of tribal and non-tribal adolescents of West

Bengal. It has been found that the tribal and non-tribal adolescents differ significantly on the measure of academic achievement. Non-tribal adolescents showed a higher level of academic achievement than tribal students. There was no significant mean difference between male and female students. Further the study revealed that there existed no significant difference between the tribal male/female and non-tribal male/female adolescent students. In order to enhance academic achievement of tribal there is urgent need of construction more primary schools. Involving tribal parents in the monitoring processes. In the process of mainstreaming the tribal children in society, tribal dialect may be used as a medium for tribal children for the first few years and gradually introducing the state language. Community awareness and community mobilization, which are its core elements, should receive adequate attention.

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WOMEN RIGHTS VIOLATION IN JAIL CUSTODY IN WEST BENGAL: A STUDY

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ABSTRACT

Right to life and liberty is the precious element of an individual's survival. Every individual has to depend on the state to realize such rights. United Nations has adopted and enforced a series of declarations and covenants for materialization of such rights. Most of the countries in the World place such International provisions in the laws of the land. India being the party of the most International Declarations and Covenants has either adopted such provisions in the Constitution or domestic laws enacted by the legislatures. Police, as the organ of the Government, is entrusted with the maintenance of security of life and liberty of the people. Owing to the dictums of the International provisions, the police are supposed to ensure the human rights of the people as manifested in the constitution and other laws of the country. 1993 Human Rights Protection Act explicitly assigns the duty in a more effective manner. But like other parts of the country people of West Bengal are faced with police atrocities and ineffectiveness during the post-independence period. The colonial menace of the people has not been withered from the minds of the people. Police atrocities are designed towards vulnerable sections of the society, workers of the democratic movement and human rights activists. Police have been directed by the part-in- power to buttress the democratic rights of the people. From the dawn of independence, people of our state are faced with severe atrocities of police like-

custodial torture, custodial death, lathi- charge and police firing on peaceful demonstrations, false charge, encounter death, extra- judicial killing, and custodial rape etc. Even an innocent child and women are the prey of police. Every regime left or right did not hesitate to use police for their narrow political ends. Excessive control of the ruling party over police does not allow them to perform their duty in an independent and effective manner.

The security of life and liberty is the most important and precious right for which human being aspires for his/her survival. A person should be assumed that he cannot be deprived of his life and liberty arbitrarily. No one has the right to take anyone's life or personal liberty. It is the prime responsibility of the state to ensure life and liberty of the persons residing in the state. Article 3 of the Universal Declaration of Human Rights states that "Everyone has the right to life, liberty, and security of persons." Article 6(1) of the International Covenant on Civil and Political Rights, 1966 declares that "Every Human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life." Article 21 of the Indian Constitution echoes the above rhythm when it codifies that "No person shall be deprived of his life or personal liberty except according to procedure established by law." Right to life as per Art.21 of our Constitution does not mean mere sustenance of life like animals. Right to life would mean right to a decent life, life with human dignity, otherwise there is nothing to guarantee. Right to life would include the following rights- Basic necessities of life, life with human dignity, freedom from police or other atrocities and freedom from torture.

The right to life would mean to live in a peaceful atmosphere. There is no charm of life without being it peaceful. People of the developing countries are always faced with poverty, illiteracy, hunger, malnutrition, and lack of shelter. These types of distressed conditions always keep them in a vulnerable position to be exploited by anyone. The law-enforcing agencies being assigned with the maintenance of law take the opportunity of poverty and ignorance of the vast majority of Indians. They harass those people and implicate on false charges. Article 5 of the Universal Declaration of Human Rights prohibits cruel, inhuman or degrading treatment. It is reaffirmed by Article 7 of the International Covenant on Civil and Political Rights which became effective in 1976 and which was ratified by the Government of India in 1979. It is prohibited under the European and Inter-American Convention on Human Rights.

There is no specific prohibition of degrading treatment under the Constitution; Article 21 has been interpreted to include immunity from cruel, inhuman and degrading treatment. The Supreme Court has held in Mullin's case that any form of torture or degrading treatment would be offensive to human dignity and would, therefore, violate Article 21.

Police is the custodian of law and order. Police as the main law-enforcing agency is the watch-dog of safety and security of common people. In every democratic state including India Police has to comply with some standard principles by which people are aware of the accountability of the police. Police is the competent agency of the Government to protect and promote human rights of the people. Since human rights cannot be measured within a national boundary International Human Rights Agency has prescribed some guiding principles for law enforcing agencies-especially police in enforcing human rights.

International Guidelines regarding Responsibility of the Police

The Office of the United Nations High Commission for Human Rights has prescribed some of the guiding principles for police in their document "Pocket Book on Human Rights for the Police". Basic principles to be followed by the police personnel are the followings:

1. Adopt a comprehensive human rights policy for their organization;.
2. Incorporate human rights standard into standing orders for the police;.
3. Provide human rights training to all police, at recruitment and periodically;.
4. Police officials shall at all times fulfill the duty imposed on them by law, by serving the community and by protecting all persons against illegal acts, consistent with the high degree of responsibility required by their profession;.
5. Law enforcement officials shall not commit any act of corruption. They shall rigorously oppose and combat all such acts;.
6. Law enforcement officials shall respect and protect human dignity and maintain and uphold the human rights of all persons;.
7. All police action shall respect the principles of legality, necessity, non-discrimination, proportionality, and humanity;.
8. Ensure that all police policy and strategy, and orders to the subordinates, take into account the requirements to protect and promote human rights;.
9. Ensure that all reports and complaints of human rights violations are fully

and properly investigated;

10. Develop and enforce standing orders incorporating international human rights standard;.
11. The police shall be an independent organ of the Executive and shall be subject to the direction of the courts and bound by their orders;.
12. All police officials shall maintain political independence and impartiality at all times;.
13. Police officials shall carry out all duties impartially and without discrimination on grounds of religion, race, colour, sex, language, religion or politics;.
14. All police personnel shall maintain and preserve social order so that democratic political processes can be conducted constitutionally and legally. (UNHCHR,2004).

The United Nations High Commission for Human Rights prescribed some basic guidelines regarding investigations of police. During the period of investigations, the interviewing of witness and suspects, personal searches, searches of vehicles and premises, and the interception of correspondence and communications: Everyone has the right to security of the person; Everyone has the right to a free trial; Everyone is to be presumed innocent until proven guilty in a fair trial;

No one shall be subjected to arbitrary interference with his or her privacy, family, home or correspondence; No one shall be subjected to unlawful attacks on his or her honor or reputation; pressure, physical or mental, shall be exerted on suspects, witnesses or victims in attempting to obtain information;

Torture and other inhuman or degrading treatment is absolutely prohibited; Victims and witnesses are to be treated with compassion and consideration; Confidentiality and care in the handling of sensitive information are to be exercised at all times. (ibid.).

The United Nations High Commission for Human Rights prescribed some safeguards for the arrestee. Police personnel should adhere to the following principles regarding arrest:

No one shall be subjected to arbitrary arrest or detention; No one shall be deprived of his or her liberty except on such grounds and in accordance with such procedures as established by law; Anyone who is arrested shall be promptly informed of any charges against him or her; Anyone who is arrested shall be

brought promptly before a judicial authority; Anyone who is arrested has the right to appear before a judicial authority for the purpose of having the legality of his or her arrest or detention reviewed without delay, and shall be released if the detention is found to be unlawful; Anyone who is arrested has the right to trial within a reasonable time, or to release; Detention of pending trial shall be the exception rather than the rule; All arrested or detained person persons shall have access to a lawyer or other legal representatives and adequate opportunity to communicate with that representative; A record of every arrest must be made and shall include: the reason of arrest; the time of arrest; the time the arrested person is transferred to a place of custody; the time of appearance before a judicial authority; the identity of involved officer; precise information on the place of custody and details of interrogation; The arrest record shall be communicated to the detainee or his/her legal counsel; The family of the arrested person shall be notified promptly of his or her arrest and place of detention; No one shall be compelled to confess or to testify against himself or herself; Where necessary, an interpreter shall be provided during interrogation. (ibid.2004).

India, being the important signatory of most of the international Human rights treaties and covenants, is supposed to implement the human rights practice in implementing the duties of the police. India is the late runner in introducing human rights regime in the country. In 1993 the National Human Rights Commission has been set up by the Human Rights Protection Act. But prior to that, fundamental rights, especially Article 21 and Article 22 of our Constitution ensure some of the safeguards as stated above. Still, no Human Rights Court like the European Court of Human Rights and Inter-American Court of Human Rights has been introduced in our country. Even recommendations of the National Human Rights Commission and State Human Rights Commission are not binding upon the Government. As a result National Human Rights Commission and State Human Rights Commission bring the incidents of human rights violation and intentional and unintentional lapses of law-enforcing agencies before the Government and the people. In most of the cases, the Government is indifferent to implement the recommendations of the Human Rights Commission.

Human Rights Violation and Police Atrocities: Post-Independence Congress Phase : Declaration of Independence of India raised the hopes of toiling masses that justice would have prevailed under the new ruler. But their hopes were demolished when they observed that British rulers had gone but new rulers

remained the same with identical exploitative nature. Their rays of hopes and aspirations withered away within a couple of years. As a result, grievances of the people led them to be in conflict with new nationalist rulers of the country. West Bengal, as a part of the country, faced several incidences of conflicts and brutal torture of police as ordered by the Government. Sarojkumar Dutta, in an article *Swadhinata*, a daily paper published by the undivided C.P.I: "In 1947, the Congress Government used bullets to silence the widespread mass movements that had begun in West Bengal against this black Act (Internal Security Act). The young social worker Sisir Mandal was the first to lay his life before their bullets. After that, a regime of naked terror was brought about in West Bengal from 1948 by the indiscriminate application of this hated Act." (Dutta, *Collected Works*, Vol. I. 1985). But such an attack was not designed against the only political person; common people were also victims of State terror. In July 1948, slum dwellers of Kashipur who were demonstrating for water supply were heavily teargassed. None was allowed to run out from the gas-filled congested slum, and a nine-month-old child died from suffocation (Dutta, 85). On 18th January 1949 police unhesitatingly fired on a student rally organized in protest against lathi-charge on a rally of the refugees. Nine students were killed in the police firing. Next day they demanded the dead bodies in the morgue but police again fired on them and Dilip Dwivedi was killed (*ibid*). On 16th February 1954 notorious mounted police was let loose on the secondary school teachers who were squatting of Esplanade to press for a wage rise and other demands. Gyan Chandra Ray, a sixty-year-old teacher of Naktala School was killed (*ibid*). On 31st August 1959, three hundred thousand strong historic marchers went to Esplanade to meet the Chief Minister and they were brutally lath charged. Between 31st August and 4th September, 80 dead bodies were counted, although, according to Government sources, the figure of death was 39. Men and women aged from 19 to 75 were killed and thousands were injured. A massive protest March, led by Satyajit Roy and other noted intellectuals, was taken out in Calcutta against the police violence (*Sadhinata*, Calcutta, 1975 & Dutta, *op.cit*). The period between 1958 and 1961 witnessed a strong movement of peasants demanding bargadars' rights over the share of harvest as stated in Sec.5 (A) of the West Bengal Sharecroppers Act. These movements were faced with bullets of police and musclemen of landlords (interview with Biswanath Mukherjee cited in Dutta, *op.cit*).

Violation of Democratic Rights: 1967 onwards- On March 2, 1967, the United Front Government was sworn and people of West Bengal expected a lot

from this Government in upholding the rights of the peasants and downtrodden. But seven women and two children were killed in police firing in Naxalbari in North Bengal on 25 May (Banerjee, 1980). The C.P.I. (M) leadership blamed on the Chief Minister Ajoy Mukherjee for depending on excessive police measures to maintain law and order. The U.F. ministry had been short-lived. A new ministry under P.C. Ghosh was sworn in with 17 defectors of the United Front ministry. Subsequently, restrictive orders under section 144 were imposed on Calcutta and several districts. The U.F. supporters gathered at the Brigade Parade Ground and senior U.F. leaders including Biswanath Mukherjee, Amar Chakrabarty, Sukumar Roy, and others were injured and arrested. 17000 people courted arrest in one week. Thousands including children, women and sick were beaten up and brutally tortured. The police brutality at Raja Pyari Mohan College, Uttarpara, Hooghly was a terrific example on 16 December 1967. A non-official Enquiry Commission report brought out that without provocation, the police had entered the College and mercilessly assaulted the professors, students, and clerks causing profuse bloodshed, head injuries and fractures of limbs one gun-shot injury to one student (Non-official Enquiry Report, 1967 cited in Dutta, op.cit).

The United Front of the opposition parties returned to power in the 1969 election. The conspiracy had begun to dismiss the Government within one month from the date of the oath. At the behest of the Congress Government at the Centre, 81 C.P. I. (M) workers were killed (Desh Hitaishree, Autumn No. 1977, p.78). It was not the Central Government; the State Government also did not hesitate to crush democratic movement. The then Home Minister Jyoti Basu called the Eastern Frontier Rifles in December 1969 to buttress agrarian struggles in Debra, Gopiballavpur (Banerjee, op.cit). Another gross violation of democratic rights was witnessed by Durgapur Regional Engineering College on June 2, 1969. There had been a scuffle between some policemen and students when the latter objected to the practice of taking bribes from the truck drivers. The next morning a heavy contingent entered the college campus, showered lathi blows and bullets on everybody they could find there, resulting in the death of a student. Several persons were injured and the college property and building were extremely damaged. A Judicial Enquiry Commission under T.P. Mukherjee held that it was a case of gross indiscipline on the part of the police (Mukherji Enquiry Report, 1969).

The United Front Government was toppled on March 16, 1970. During this period West Bengal faced all-round repression of the left in West Bengal.

The operation began to start with two draconian laws- the Bengal Suppression of Terrorist Outrages Act of 1956 and the West Bengal Prevention of Violent Activities Act, 1970. The first Act provided for detention of persons and confiscation of any property or literature suspected to have some links with terrorist activities. The second Act empowered the police to arrest without warrant and does virtually whatever they feel like to the extremist. During this time Mr. Ranjit Gupta, the Commissioner of Police, Calcutta had drawn up the famous plan of “counter violation” modeled after the measures suggested tackling a communist insurgency by Sir Robert Thompson, head of the British Advisory Mission in Vietnam from 1961 to 1965. Jyoti Basu claimed that about 263 C.P.I. (M) followers were killed between 17 March 1970 and 24 April 1971. But the special design was chalked against Naxalites. According to official sources, from March 1970 to August 1971, 1783 Naxalites were killed in greater Calcutta alone (Frontier Weekly, April 17, 1971). Not only the political leaders, but other sections of public were also attacked. Either they had to totally submit before the will of the representatives of the ruling party, or they found every aspect of their democratic life-the freedom of association, expression and movement, and even the right to life in peril. In the early seventies, another experiment in State violence was carried out on such a scale that would place the Indian Government at a position of merit among all repressive governments of the world. It is a massacre of unarmed and helpless prisoners in Jails. An incomplete list of the Jail incidents in West Bengal during the period December 1970 to June 1972 prepared by Amnesty International is given below:

Name of Jail and Date	Source	Prisoners killed (official estimate)
Midnapore Jail, 16 December,1970	Statesman,17 December,1970	10
Midnapore Central Jail, 6 February,1971	Statesman,6 February,1971	01
Berhampore Jail, 24 February,1971	Jugantar,25 February,1971	10
Dum Dum Central Jail, 14 May,1971	Statesman, 15 May,1971	16
Alipor Special Jail, 12 July, 1971	Times of India, 12 July,1971	06
26 November,1971	Jugantar,27 November,1971	06

Assansol Special Jail, 5 August,1971	Times of India,6 August,1971	09
Hoogly Jail, 7 February,1972	Statesman, 8 February,1972	01
Burdwan Jail,28 May,	Statesman,29 May,1972	02
Total	61

- Cited in Nilanjan Dutta, Violation of Democratic Rights in West Bengal Since Independence.

On 25 June 1975 proclamation of emergency again threatened the democratic environment of the State. During this phase, intellectual freedom and individual freedom had lost its meaning. Police was instructed not only to suppress the voices of left but to demolish any sort of democratic voices. Even members and supporters of non-Communist opposition parties were arrested on 15 August and 2 October when they went to garland the statue of Gandhi in Calcutta. Along with many other songs and plays, 'Rabindra Sangeet' also became a prey to the claws of censorship. At least 26 songs of Rabindra sangeet were banned in the All India Radio, Calcutta.

Left Front Regime: Myth of Democratic Rights and Reality

In June 1977 Assembly election the Left Front headed by C.P.I. (M).came into power with an absolute majority. People thought that a democratic environment would be restored and realization of democratic rights in the truest sense will be possible under the new Government. After coming into power the Left Front adopted several programmes to extend the opportunity of rural people so that they become self-assertive and self- dependent. Introduction of Panchayati Raj and implementation of Land Reform are the remarkable steps of the new Government. But the intention of the sugar-coating Government became naked when the Maichjhapi incident came into the forefront. Refugees settled at Marichjhapi, through their own efforts established a viable fishing industry, salt pans, a health center, and school. The State Government was not disposed to tolerate such settlement, stating that the refugees were in unauthorized occupation of Marichjhapi which is a part of the Sunderbans Government Reserve Forest violating thereby Forest Acts (Refugee Relief and Rehabilitation Department 1979). It is debatable whether Left Front Government placed primacy on ecology or merely feared this might be a precedent for an

unmanageable refugee influx with consequent loss of political support. When persuasion failed to make the refugees abandon their settlement, the West Bengal government started on January 26, 1979, an economic blockade of the settlement with thirty police launches. The community was tear-gassed, huts were razed, and fisheries and tube-wells were destroyed, in an attempt to deprive refugees of food and water (Ross Mallik, 1999). Press coverage was also restricted. In order to ensure press coverage after the blockade, a refugee, Saphalalananda Haldar, evaded police patrols and swam to the mainland where he informed the Calcutta press of police firing at Kumirmari. The press reported police tear-gassing of refugees, the sinking of their boats which they needed to obtain rice and drinking water, and arrest of people attempting to work on the mainland or sell firewood from the reserve forest. With starvation deaths occurring among the squatters the situation was taking a desperate turn. On January 27, 1979, the government prohibited all movements into and out of Marichjhapi under the Forest Preservation Act and also promulgated Section 144 of the Criminal Penal Code, making it illegal for five or more persons to come together at any given time. The Calcutta High Court, on the basis of the appeal of the refugees, ruled against interferences in the refugees' movements and in their access to food and water. The government denied that refugees were subject to any kind of blockade and they continued blockade in defiance of Calcutta High Court. When police actions failed to persuade the refugees to leave, the State Government ordered the forcible evacuation of the refugees, which took place from May 14 to May 16, 1979. Muslim gangs were hired to assist the police, as it was thought Muslims would be less sympathetic to refugees from Muslim- ruled Bangladesh. The men were first separated from the women. Most of the young men were arrested and sent to Jails and the police began to rape the helpless young women at random (Sikdar, 1982). At least several hundred men, women, and children were said to have been killed in the operation and their bodies dumped in the river. Prime Minister Morarjee Deshai, wishing to maintain the support of the communist for his government, decided not to pursue the matter. The Central Government's Scheduled Caste and Scheduled Tribe Commission, which was aware of the massacre, said in its annual report that there was no atrocities against untouchables in West Bengal, even though their Marichjhapi file contained newspaper clippings, petitions, and a list with the names and ages of 236 men, women and children killed by police at Marichjhapi prior to massacre, including some who drowned when their boats were sunk by police (ibid.). The refugees themselves complained to visiting members of Parliament that 1000

had died of disease and starvation during the occupation and blockade (Sikdar, 1982.23). Out of the 14,388 families who deserted (for West Bengal), 10260 families returned to their previous places... and the remaining 4128 families perished in transit, died of starvation, exhaustion, and many were killed in Kashipur, Kumirmari, and Marichjhapi by police firings (Biswas, 1982.19).

The Congress Government used the police force to buttress the democratic movements of different organizations in the state. The Left Front Government despite their critical attitude towards Congress regime followed the same path. On 21 July 1993 the then Calcutta Police opened fire and killed 13 hapless party workers at a rally organized by Mamata Banerjee, the then Youth Congress leader. The Youth Congress supporters who were rallying refused to stop and walked ahead. Many rounds of teargas shells were fired but the supporters kept moving forward. Banerjee tried to pacify the supporters but the police went berserk in a spate of revenge and did not spare her. The supporters approaching from Brabourne Road, B.B. Ganguly Street, Mission Row, Mayo Road and heading towards Writers' Building were stopped as the gathering was prohibited under Section 144. The place transformed into a battle zone. People started running across Curzon Park. The police opened fire killing 13 supporters and leaving hundreds injured (The Millennium Post, New Delhi, 21 July 2012). Incidentally, the Human Rights Protection Act came into force in the same year in our country.

Ruling parties in the state used to exploit police forces to serve their political interest. Every political party while in power cannot escape them from using police forces to sustain their power. Police become subservient to the party in power instead of exhibiting their impartial role. On many occasion, they are inspired to harass and torture common people because of their loyalty to the ruling party. Accordingly hyper- activism along with Police cruelty led to an increasing number of custodial death, torture, and encounter death. Needless to say, such police atrocities are mostly designed against common and innocent people. A selective list of torture, encounter death and custodial death by police under the left front regime is given below:

Date	Location	Victim	Classification
9 April 1997	Alipore	Babi Biswas	Custodial death
23 August 1997	Jorhat	Bhupen Sharma	Custodial death
10 May 2001	Subhas Sarobor	Rabindranath Das	Custodial death
5 September 2001	Ketugram	Tapas Thander	Custodial death

Date	Location	Victim	Classification
16 March 2002	Nadia	Ratan Sil	Custodial torture
April 2002	Cooch Behar	60 people	Custodial torture
25 May 2002	Unknown	Arshad Sheikh	Custodial death
11 July 2002	Midnapore	150 Naxalite prisoners	Custodial torture
1 August 2002	Maldah	Anesh Das & Nimai Chandra Ghosh	Custodial death
27 September 2002	Kulti	Ananda Barui	Custodial death
5 October 2002	Khusnagar Village	Unknown Khusnagar Villager	Police Violence
January 2003	Indo-Bangladesh Border	Husband & daughter of Joyeetabala Das	Extra-judicial killing
6 January 2003	Kolkata	Bapi Sen	Encounter death
14 February 2003	Berhampore	Nargis Biwi	Custodial rape/sexual harassment
16 February 2003	Berhampore	Debashis Banerjee	Custodial torture
8 June 2003	Siliguri	Unknown individual	Police firing
15 July 2003	Berhampore	Mayarani Ghosh	Police Violence
27 September 2003	Debipur village	Safikul Sheikh	Extrajudicial killing
October 2013	Kakdwip	Mousumi Ari	Police Inaction
10 December 2013	Unknown	Salahuddin Sheikh	Custodial torture
10 April 2004	Srirampur	Israfil Mandal, Sabyasachi Goswami, Mantu Banerjee, Jalai Sk. & Asok Sarkar	Custodial torture
6 May 2004	Berhampore	Sushil Sharma	Custodial torture

Date	Location	Victim	Classification
7 July 2004	Kharagpur	Soumyendu Mondal	Custodial Death
21 August 2004	Hoogly	Sujato Bhadra & 11 others	Police Inaction
12 September 2004	Haroa	Woman Raped	Custodial rape/Sexual harassment
27 - 28 September 2004	Kolkata	Barun Chattopadhyay & Abdul Latif	Custodial death
30 October 2004	Howrah	Azizul Mollah & 18 others	Police Inaction
5 January	Howrah	Kartik Ghosh	Custodial torture
February 2005	Murshidabad	Gopen Sharma	Police Violence
20 May 2005	Maheswari Vidyalaya	Rajiv	Custodial torture
24 August 2005	Uttar Dinajpur	Ashutosh Roy	Encounter death
12 October 2005	Kanyangarh Kalitala	Samir Dutta	Custodial torture
7 December 2005	Salanpur	Rape of a tribal woman	Police Inaction
18 January 2006	Serampore	Kiriti Roy & Alok Chakrabarty	Police violence
17 April 2006	Murshidabad	Abhilas Mandal	Encounter death
1 June 2006	Katlamari post	Saifuddin Sheikh	Encounter death
23 August	Howrah	Deepak Mahish & Sannyasi Mahish	Custodial torture
8 December 2006	Hoogly	Protestors & Journalists	Police violence
19 January 2007	Bagdubi	Mittan Tudu & Kanchan Mahato	Extrajudicial killing
14 March 2007	Nandigram	Eleven individuals	Police firing
16 March 2007	Nandigram	Unknown people	Police firing

Source: National Project on Preventing Torture in India: From Public Awareness to State Accountability, Peoples Watch, Madurai, 2007.

Barbaric attack on agitators and poor cultivators of Singur and Nandigram was the blatant example of police atrocities sponsored by the State machinery. Singur and adjoining areas of Howrah district became furious by the agitation of local cultivators against the forcible acquisition of cultivable land for Nanomotors of Tata Company. Opposition parties like Trinmul Congress, Congress and other parties including Human Rights Groups and members of Civil Society joined hands with peasants. As the movement against land acquisition became intensified police became more and crueler. On 5 February police mercilessly lathicharged against Amithavababu of Majdur Kranti Parishad and Anuradha Talwar. Both of them along with fellow agitators were arrested and Anuradha Talwar observed fasting in the police lock-up (Ananda Bazar Patrika, 6.3.2007). Incidentally, Mr. Buddhadev Bhattacharya awarded the Seva medal to Mr. Asit Paul, former additional Superintendent of (Headquarters), Hoogly, who has been accused of assaulting women farmers and Mrs. Anuradha Talwar, a human rights activist near the car project at Singur for protesting against land acquisition.

Police along with C.P.I. (M) activists fired on villagers who resisted acquisition of their land for industry. According to official sources, 100 round firing took place along with the use of tear gas, the gas grenade and smoke rocket on that day. Fourteen people were killed in the firing of which five were women. Sixty-three people were severely injured. The then Governor Gopal Krishna Gandhi remarked that 'My bones have become cooled in the incidence of police firing at Nandigram'. He added that demonstration of power against anti-national, terrorists and secessionists are different things but the people of Nandigram are not the same (Ananda Bazar Patrika, 15.3.2007). Even US external affairs ministry referring to some Human Rights Organization mentioned the police firing at Nandigram in their Human Rights Report of 2007 (Ananda Bazar Patrika, 15.3.2008).

Another terrific incident took place at Netai village, West Midnapore on 7 January 2011. It was alleged that nine persons were killed by C.P.I. (M) goons when the common villagers denied taking arms training to resist Maoist upsurge in the locality. Family members of those killed or injured in the firing vented their grief and anger before the Governor when M.K. Narayanan visited the place and met the relatives of victims. Victims also expressed dissatisfaction with the role played by police. Mr. Nayan Sen, who was shot in the leg, said: "The Governor asked me to explain what happened that day. When I told him that CPI(M) 'harmads' had fired at us, he wanted to know if there was any other

group, especially Maoists, present at the scene at that time. I said that there was no one except common villagers who had gathered in front of the house to request the C.P.I. (M) leaders not to force the villagers into undertaking arms training" (The Hindu, January 19, 2011). In the name of repressing Maoist upsurge common villagers in West Midnapore were harassed and humiliated by police. Subhendu Adhikary, the Trinamul Youth Congress President said that the 'barmad' camp in Netai had been set up with 100-150 gunmen. They were forcing the villagers to join them in obtaining arms training to take on the Maoists. He alleged that police and administration are not taking positive steps (The Statesman, 8th January 2011). A few years back villagers of Girulia of Belpahari complained that police falsely charged of Maoist accommodation in the village. Police arrested Jugal Mahato, a common villager on Maoist suspicion and opened 20 round of fire in the village (Anandabazar Patrika, 4th February 2007). It was a common feature of the humiliation of common people by police in the concluding years of the Left Front regime.

Trinamul Congress Regime and Human Rights: Rays of Hopes but Frustration

Peoples' resentment against the left-front government began to increase from 2007 onward especially after the policy of land acquisition policy of the government. Not only Congress, Trinamul and other opposition parties but members of civil society including intelligentsia raised dissatisfaction against the left front government. As a result, people of West Bengal gave their spontaneous verdict against the left front government. Trinamul Congress under the leadership of Mamata Banerjee came into power. People thought that they will get democratic space for exercising their democratic rights. But within a year people's aspiration was visited with frustration and breathing space for democratic rights began to wither away. Violation of human rights by police during the nascent phase of Trinamul Government is sometimes politically designed and sometimes spontaneous. Like all other regimes, police does not hesitate to take the opportunity to harass and humiliate common people capitalizing the support of political leaders. Asian Human Rights Commission in a letter complained the National Human Rights Commission about the incident of torture and custodial rape within the Hariharpara Police Station of Murshidabad district on 29 and 30 November 2011. At about 12 midnight, 29 November a group of police officers from the Hariharpara police station entered the victim's house illegally. According to victim's statement, police were verbally abusive, physically assaulted her and destroyed many household articles. They

then dragged her to a police vehicle in which they continued to beat her. She was then taken to the police station where they raped her. On 30 November the victim was taken to Hariharpara Block Primary Health-Center and she was threatened by police to keep silent. At around 11.30 p.m she was taken back to her house. As her condition worsened as a result of torture and rape she was admitted to Berhampore New General Hospital on 2 December 2011. She made a complaint to the Superintendent of Police and District Magistrate, Murshidabad about the torture and rape by the policemen. But she was not sent to Government Hospital for medical examination and the higher authority tried to protect their fellow policemen (Asian Human Rights Commission, February 2012). A fact- finding undertaken by Manabadhikar Suraksha Mancha (MASUM) reveals that 16 police officers of Basirhat police station raided the house of Firoj Ahmed and assaulted him with their rifle butt and wooden batons. Achma Bibi, wife of Firoj when tried to save her husband from the brutality of the police, they assaulted her as well. The officers did not offer any reason whatsoever for the search or arrest. The police complied with no mandatory procedures at the time of the search and arrest, and no memo of arrest was issued. The officers did not inform the victims where the Firoj is taken. On the next day, Achma Bibi and relatives went to the local police station to meet Firoj expecting that he would be at Basirhat police station. They were experienced with filthy language by police and ultimately on repeated request the police allowed them to meet Firoj. Firoj had suffered fractures on his fingers and left hand from torture but denied any medical treatment. Later they came to know that the police had accused Firoj of having committed offenses under the Narcotic Drugs and Psychotropic Substances Act, 1985. Seeking the legal action against the incident on 20 February 2012, Achma Bibi lodged a written complaint before the Additional Superintendent of Police; North 24 Parganas district. But the action is yet to be taken (<http://www.humanrights.asia/news>).

West Bengal Human Rights Commission (WBHRC) is the first Human rights Commission in the country. However, the State Human Rights Commission is also a recommending authority like the National Human Rights Commission. Their recommendation is not binding on Government. The government in most cases does not accept the recommendations of the Human Rights Commission. In our state, the recent case of prof. Ambikesh Mahapatra may be mentioned here. It was alleged that Prof. Mahapatra sent an e- mail to the members of the housing society at Garia by exhibiting a cartoon of the Hon'ble Chief-Minister and the then Railway Minister Mr. Mukul Roy on 23

March, 2012 but having received some objections he sent further e-mail on 4 April and 6 April expressing his regrets that he should not have sent such e-mail. Amit Das lodged an FIR against Subrata Sengupta and Prof. Mahapatra on 12 April 2012 at 11.35 p.m. On 16.4.2012 the WBHCR took suo motu cognizance of the manner in which Prof. Mahapatra and Sri Subrata Sengupta were arrested from their residence at the dead of night on certain charges. The Commission directed the Police Commissioner to cause an inquiry by a senior official and furnish the said report with his specific comments within a period of two weeks. The Commissioner of Police, Additional Commissioner of Police, Addl. O.C of Jadavpur Purba Police Station Milon Kumar Das and S.I Sanjoy Biswas deposed before the Commission. The officials involving in the incident tried to justify that the persons were taken in 'protective custody' but at the same time, they affirmed that there is nothing known as 'protective custody' in law. Protective custody by the police can be only resorted to in case of a minor or a lady who is trafficked or a person who is insane. The concept of protective custody is wholly misplaced in this case. Being reported by all concerned the Commission recommended that State Government shall initiate departmental proceedings against Sri Milan Kumar Das, Addl.O.C. Purba Jadavpur Police Station and Sri Sanjoy Biswas, S.I of the same Police Station within six weeks. The Commission further recommended that two arrestees will be compensated Rs. 50000/ each within six weeks. But the State Government did not comply with the recommendations. On 3 April 2013 Sudipta Gupta, a 22-year-old student of Rabindra Bharati University and the only son of a pensioner died in police custody after being detained at Esplanade East during a law-breaking programme organized by S.F.I to protest against postponement of college election (Times of India, April 3, 2013). The police as designed by the ruling party play its role either as a hyper-active or mere spectator. The police stood as mere spectators to the vandalizing of Presidency University and Baker Laboratory on 10 April 2013. At least four policemen including three officers were inside the college gates, watching a mob threaten girl students and dean of students' welfare Debashruti Roychowdhury with rape.

The Officer-in-Charge of Jorasanko police Station Siddhartha Datta was standing at the gate all the while. Registrar Prabir Dasgupta said that he called the O.C on his cell phone at least 7/8 times but all the calls went unanswered. He added, "When I pleaded with the four policemen on campus for help, they curtly told me that they had no instructions to intervene" (Times of India, April 12, 2013). Amal Mukhopadhyay, the former Presidency College Principal who was

asked by the state human rights commission to probe the incident observed on the basis of a statement of the policemen posted in the university that outsiders carrying Trinamul flags had entered the premises. They were raising slogans in support of the Trinamul. The Committee also took the police to task for not restraining the vandals. "It's bizarre that the police did nothing to disperse the crowd that climbed the gate and entered the campus. The Trinamul leadership instigated its student supporters and workers to barge into the campus," the report says (The Telegraph, 28 May 2013). The academic circle and people consider it not only attacks on the academic institution but also on democracy and police failed to maintain its impartial role as a law-enforcing agency.

Conclusion

In a democratic setup Government should ensure that people of the country are entitled to enjoy democratic rights. These democratic rights include not only voting right but also freedom of speech and expression without which right to life and liberty is meaningless. Framing fathers of the Constitution have guaranteed us the right to life and liberty as a fundamental right. However, in the name of safety and security of the country, this right is violated on many occasions. The ruling party takes the opportunity to repress democratic voices through police and military force by enacting Preventive Detention Act, Maintenance of Internal Security Act, Prevention of Terrorist Activities Act and many others.

The police and para- military forces are the best subservient machinery of the government to serve their political purposes. They had become weapons in the hands of the state and were pitted against those who speak up for their rights, the poor and the downtrodden. West Bengal is not the exception to this picture. While in power every political party does not hesitate to use police force to repress democratic movements and voices of protest of common people. State Human Rights Commission from its inception has recommended several measures to ensure human rights on many occasions. But government and police forces did not comply with such recommendations. Police in our state, on many occasions, are helpless and cannot exhibit their impartial role but to bow down to the whims of the ruling party.

These limitations have been recognized by the police in their document- 'West Bengal Police Vision 2020'. The document in its weaknesses points out Excessive politicization, poor police image, and low self-image, corruption,

authoritarian organizational ethos, lack of driving ideology, organized crime fuelled by crores of black money generated by the economy and many others. Our democracy is claimed as the biggest democracy in the World. But democratic rulers of the country due to lack democratic tolerance and constructive criticism cannot raise themselves above narrow political radius. If Government exerts mounting political pressure on police then who will police the police?

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REVIEW OF DATAVEILLANCE PRACTICES IN EDUCATIONAL INSTITUTIONS AND REFLECTIONS FROM THE FEMINIST PERSPECTIVE

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ABSTRACT

This paper offers a critical understanding of datafication and dataveillance practices in educational institutions. The review of related literature progresses to find the probable answers to the question - what is dataveillance? How do dataveillance practices take place in educational institutions? And what are the challenges of data-driven technologies in the academic spaces? Feminist scholarship opens new paths for ways of knowing and dismantling inequalities. Therefore, this study draws educational implications from the feminist scholarship of datafication studies.

Keywords: dataveillance, datafication, dataveillance practices in educational institutions, feminist perspective of datafication

Introduction

Educational institutions are rapidly moving towards digitisation of the environment. The use of technology is accorded chiefly to the development and learning of the students. This technological advancement in educational institutions coincides with the increase in surveillance technologies. The rationale for using surveillance technologies in educational spaces ranges from care to control (Chattopadhyay,2020). Some often-cited reasons are deterrence of crime, monitoring crowded areas, reducing queues, tackling smoking, bullying, and truancy, monitoring staff, and teachers' performance, and encouraging parents' decisions in students' school habits (Taylor,2012).

Differences in individuality and social relations have changed with increasing data-driven surveillance technologies. Educational spaces can now

track, identify, categorise, and verify teachers and students in ways never before realisable. The physical or online realm currently encompasses sensors to detect activities and movements, facial recognition systems, iris scanners, radio-frequency identification (RFID) microchips, webcams, learning analytics software, and networked databases. As a result of interaction with these technologies, a large amount of data emerges. The monitoring, collection, and processing of the produced data on a group or personal level are known as dataveillance (Clavell, 2018).

The Covid-19 pandemic has seen an unparalleled acceleration in the dataveillance practices in educational spaces worldwide. India has also lately seen a rise in government-sponsored education projects that can become a site for future dataveillance. There is an immediate need to understand dataveillance practices and their implications in educational institutions to combat the limitations of data-driven technologies. Therefore, this paper progresses to understand-What is dataveillance? How do dataveillance practices take place in educational institutions? And what are the challenges of data-driven technologies? Further, drawing from the feminist scholarship, this study attempts to give educational implications.

Dataveillance

Clavell (2018) notes that dataveillance originated from Roger Clarke's work on surveillance. Dataveillance can be defined as a type of surveillance where the information is collected and processed to manipulate the subject's behaviour. Data in the raw format is of no use, but the same data can become informative when processed and aggregated. The aggregated data can create the 'data-double' of an individual, which can be controlled and manipulated by the data controller. This systematised electronic data tracks individuals' actions or communications (Hope, 2015; Lee, 2019; Clavell, 2018).

Esposti (2014) categorised dataveillance into four categories: recorded observation, tracking and identification, analytical intervention, and behavioural manipulation. Recorded observation can be done through CCTV, motion, or temperature sensors. Identification and tracking mechanisms include biometric technologies or RFID. Analytics focuses on analysing raw data obtained from technologies to search for patterns. The last step is behavioural manipulation which is achieved by converting insights to action.

Dataveillance assumes that digital data provides a neutral window to individuals' behaviour patterns, ignoring the human mind behind organising and

structuring the dataveillance services (Williamson, 2016). Both the private sector and government uses dataveillance services. The private sector employs dataveillance for profiling clients for monetary gains. Clavell (2018) points that selling data has become an efficient business model. Companies also generate revenue from selling devices that lead to self-surveillance like fitness trackers, sleep trackers, heart rate monitoring devices, etc. The government uses dataveillance for security reasons and control over its territory.

The notion of establishing control over other individuals is an essential feature of dataveillance. The private sector uses practices like using biometrics for team member attendance, thus, reinforcing power. On the other hand, the government heads citizens by controlling data like tax analysis, biometric information, or tracking citizens without obtaining their consent on the premise of security reasons (Clavell, 2018).

Mechanisms of Dataveillance in Classrooms

Datafied educational institutions are growing beyond traditional surveillance institutions that were rigged with metal detectors, pupil-identification systems, and CCTV. Now, the State-teachers-parents-companies and child relationship is marked and constituted by the data collected in datafied educational institutions. These institutions are responsible for the sustenance of the dataveillance practices by creating metadata of the surveilled individual and the subsequent reintegration of the metadata sets in the education system (Chattopadhyay, 2020).

Williamson (2016) has detailed the most popular dataveillance techniques in schools: personal analytics (that monitor, track, and evaluate students' body function), learning analytics (that monitor and track students' educational activities), and emotional analytics (which track and monitor students' moods and attitudes). He further deliberates upon the function of each as follows:

- Learning analytics has become more ubiquitous and extensive than standardised tests like the Program for International Student Assessment (PISA). It collects students' learning graphs, links them to behavioural models, and finally predicts future actions, outcomes, and progress. Examples of learning analytics include Knewton, which combines students' educational attainment data with psychometric information and creates a data cloud for every student. This cloud of data can be used to inspect students and teachers. Learning analytics results from

machine learning developments and is guided by algorithms. These algorithms function by learning of example data sets. The taught data sets generate limited options for students from which they can choose. Therefore, these analytics are often accused of limiting students' range of educational opportunities and taming them at a young age.

- Personal analytics are targeted towards educational institutions using wearable self-surveillance devices. Examples include Sqord and Zamzee, designed and manufactured for schools' physical education. Lupton (2016) classifies self-tracking in schools as 'pushed' self-tracking, where data controllers are interested in viewing the personal data of others for their benefit. Surveilled individuals might not have the control to choose whether they want to share their information with others. Parents might be pressured to purchase such devices for children.
- Emotion analytics include facial recognition software, computer vision algorithms used to check engagement through facial expressions and eye-tracking. It can also be done through wearable bracelets equipped with sensors to detect stress, boredom, relaxation, excitement. This technology enables the data controller to penetrate beneath the skin and attempt to surveil the child psychologically.

Datafication and Dataveillance of Educational Institutions

We have come a long way from early developments in large-scale datafication of education in the form of PISA tests. There has been a significant development in datafication technologies like artificial intelligence, adaptive learning, and learning analytics. In this section, some of the current practices of datafication and dataveillance in educational institutions are highlighted.

Williamson (2019) detailed the data capturing techniques employed in higher education, particularly in the U.K., where efforts are being made to make data interoperable across platforms like electronic reading lists, learning analytics, and institutions' learning management systems. Moreover, several school analytic are getting designed to capture noncognitive categories like grit, growth mindset, etc. Teachers are expected to adjust their pedagogy, teach, and undertake extensive data collection with this. Also, the extensive data collection by the government about the students' performance on these platforms makes it easier for the government to rank and target under-performing institutions. The researcher notes that education has lately seen a rise in philanthropic donations

and funding from wealthy entrepreneurs and capital firms. These powerful actors aim to change public education to reflect the business objectives of the technology sector. For example, Mark Zuckerberg, through his Chan-Zuckerberg initiative, is partnering with Gates Foundation to develop the neuroscientific and psychological measurement of the learning process. Even global organisations like OECD (Organisation for Economic Co-operation and Development), UNESCO (United Nations Educational, Scientific and Cultural Organization) are planning to produce new measures to capture educational data from developing countries and enforce the standardised western gaze. It negatively affects teaching as a profession as teachers are expected to work according to the objective calculations performed by the machine rather than use their professional judgment, expertise, and experience. Thus, the data power in education is increasingly being shifted towards commercial organisations.

Lupton (2016) notes that educational software such as Google Scholar and Web of Science automatically collects publication and citation details of authors, thus generating diverse matrices about them. Authors don't have the option to hide these details on public platforms, therefore have 'imposed' self-tracking.

Crooks (2019), through his research in South Los Angeles public high school, focused upon dataveillance practices experienced by teachers and students on the implementation of the one-to-one tablet computer program that took place from 2013 to 2015. The administrators believed that the digital data would provide evidence for teacher quality, and subsequently, they could be rewarded based on the data. The researcher tried to understand how data is generated and circulated by tablets. He also took extensive interviews of teachers and students on how they deal with the technology. The findings revealed that although the subjects were under dataveillance but the authority could not confer total control. Resistance through means of parental opinion, dubious data filling by students, and tolerance by the school provided a respite to the subjects of dataveillance from disciplinary coercion. It was concluded that omniscient surveillance is a myth, and even highly automated data surveillance depends upon interpretation. There was a gap between authority and subjects on surveillance. The school authority considered technology as predictive and inescapable, but data attenuated found that it is dynamic and often negotiated.

Banville and Sugg (2021), drawing from the survey of college instructors across the colleges of the U.S.A., analysed the relationship between students and instructors. The central theme that emerged was the normalisation of

educational technologies like Learning Management Systems (L.M.S.) for dataveillance. It was assumed that if a student wants education, they must agree to use the L.M.S. Instructors used management systems to surveil every moment of the student to manipulate their behaviour. It was achieved by recording data about students' activities, monitoring I.P. address, locking browsers, checking the login time, cameras, mouse clicks, etc. Observation or watching over students was disguised as positive. Sometimes students were unaware of the extent of monitoring. At the same time, it must be noted that instructors were occasionally not aware of the size of dataveillance themselves or did not realise their agency in collecting data about students. Researchers concluded the need to develop critical literacy among students to protect themselves. Instructors and data controllers must open the ground for communication, transparency, and accountability.

Chattopadhyay (2020) looked at the institutions from the Deleuzian lens. She noted that surveillance as a technique depends upon data collection about the subjects of surveillance, but technological advancement has made the task easier. ClassDojo is an example of such progress, making behavior tracking and management more accessible than before. It collects information about the students through response-time, answers, key-strokes, etc., and provides positive or negative reinforcement. It sends the weekly update to parents about the progress of the students. The points collected through activities of ClassDojo can be redeemed for grades in classrooms. The philosophy of student-centric education is increasingly getting changed to data-centric education. Students' learning processes and behaviour are increasingly transformed into quantifiable data. Over time, this data is standardised to predict students' future learning abilities. Schools practicing dataveillance target to introduce learning analytics for individuals with various learning needs, but the results attained are quite contradictory. The intention is to cater to individual learning needs. These technologies gather data for each student and compile patterns that emerge out of the quantitative data. The intent of individualised learning ends up being generic in nature. Data-driven actions leave very little space for human reflection and action. Through learning analytics, the government with Ed-tech companies create a data-double for the students, which various actors can easily control. They create an environment of compliance where students are not viewed as an active participant in the teaching-learning process. Deleuzian lens sums up the phenomenon of dataveillance school where the increased connectivity from school to various external actors allows the real-time control from many remote

locations. The gaze of the authority is both physical and virtual. This exercise takes away the fun of learning and making mistakes leaving no room for independent reasoning and reflection. Over reliance on data in place of self-reporting can make students question their independent thinking. The researcher notes that education requires thinking, and privacy of space provides an appropriate environment for quality thinking.

Hope (2015) tracks the schools of the U.K and U.S. for dataveillance evidence. He noted a spread of online technologies in scope, size, and function. The technology allows parents to check students' grades with GradeSpeed, check what they eat from the cafeteria with munchmonitor, etc. The government also collects students' data to create a database example, 'Youth Risk Behaviour Surveillance System' in the U.S., which tracks the youth's health-risk behaviour and raises the issue of predictive dataveillance systems. Lupton and Williamson (2017) also note that in the U.K., students' learning is routinely and extensively monitored by software, CCTV, RFID chips in school uniforms or badges, fingerprint scanning, retina scanning, or their purchase at the cafeteria. Students are watched over by commercial companies when they login to their software. The government keeps a record from early childhood about health, well-being, and educational details. Hope (2015) marks that these dataveillance technologies are designed to impose market principles of competition to education. The schools are made a competitive site focusing on standardisation and performance league tables. The schools are expected to collect an array of data to be protected, managed, and stored. Therefore, the space has opened as a lucrative site for business opportunities.

Case of India

In India, some recent government-sponsored projects aim to collect students' and teachers' data to ensure regularity in the schools. These data-driven projects have received backlash from activists as these data can give both government and corporations access to personal and digital lives for some future purpose. A few noteworthy examples are:

- South Delhi Municipal Corporation (SDMC) ordered teachers to mark their attendance on the application available on the corporation's website. Teachers failing to keep their attendance were not eligible for the salary. Rights activists pointed out the privacy issue with the project. The application to be downloaded on the teachers' mobile phones required access to the location and storage of the phone's data. Further, the state pointed out no rationale for collecting the teachers' personal

data at all times, even if the teachers were on leave. Additionally, there was no clarity on where the data is stored, how the data is processed, and whom to approach if misuse of the data is noticed. Also, formal consent was not taken from the teachers; instead, they were to abide by the state rules.

- Similarly, the Odisha government introduced 'E-Upasthan' to track the attendance of teachers and students. The application has started to process and analyse the digital learning status of the students and take necessary corrective measures to check drop-out rates.
- The move from the Uttar Pradesh government to introduce the 'Prerna' application for attendance of the teachers received similar flak. The application required teachers to upload the selfie three times daily with students. It has received criticism for the possible misuse of pictures of female teachers. Moreover, it is not practical to click a selfie with students with fluctuating internet connections. In addition, these tools claim to offer an easy solution to the very complex problem of absenteeism.
- Assam government has appointed RailTel, a central public sector enterprise, to take students' attendance through Artificial Intelligence based system. The enterprise will be responsible for the management and attendance of SDMIS (Student Database Management Information System). However, it is noteworthy that the state had not revealed the security involved in storing the data. The questions regarding the storage of data should be given high priority, especially when the highly sensitive Aadhar card database is also prone to breaches. World Economic Forum (2019) states this breach of personal information affected 1.1 billion registered citizens in India.
- Delhi government has planned to use Artificial Intelligence (A.I.) and game-based techniques to assess its students and help them move ahead in the learning graph. It has drawn scepticism as using a prescriptive form of analytics based on human algorithms can reduce students' range of options or solutions.
- Delhi government in its schools have started to install facial recognition technology. It, too, has raised several privacy issues. The main criticism comes from child rights activists as the subject under surveillance are minors, and they might not realise the capacity to which they are

monitored and where their data is stored. They might become a tool for mass surveillance in the hands of the government, especially when the government has the potential to create a holistic profile of the individual. The right to freedom and expression and the power to protest will be severely compromised. The pictures of the minors can become vulnerable to criminals if proper data protection systems are not in place. Other concerns have also crept up, like, as facial recognition technology is not foolproof accurate; thus, cases of misidentification can occur. Students, especially disadvantaged groups, might get punished for minor misconduct. The parallels can be drawn to the 'school-to-prison pipeline' of the United States, where the marginalised students were disproportionately targeted for the slightest mistake leading them to be put behind bars. Facial recognition technology can also monitor students' expressions and determine whether they are paying attention in class. Students can get labelled and hence excluded from social groups. Social interactions can become fragmented and forced.

Challenges of Datafication in Education

There is no doubt that educational technologies support students in self-organising their learning, reducing teachers' workload, and making administrative tasks more manageable. Teachers have always complained of the student-teacher ratio and not giving enough attention to individual students. Hence, educational technologies could be a probable solution for the age-old dilemma of not serving enough students (Jornitz & Engel, 2021). According to Finn (2016, as cited in Lupton & Willaimson, 2017), dataveillance can also positively contribute to the well-being of the students and assist in caring strategies. In addition, it can be an essential medium to formulate idealised neoliberal identities of loving parents, teachers, or caregivers. However, critics and researchers have extensively pointed out the loopholes in introducing the technology in the classrooms.

Let us sum up some negative ramifications of relying blindly on data-driven educational techniques:

- Personalised learning digital systems require a large amount of data like achievement records, incorrectly solved tasks, correctly solved tasks, and personal information like parents' occupation, age, profession, siblings, etc. Though these data promote personalised learning, it also leads to dataveillance by various actors (Jornitz & Engel, 2021).

- It draws out the concerns of increased centralisation and privacy issues (Krueger & Moore, 2015). Making datadoubles would expose the individual to the state and different institutions. The subject of the dataveillance, rather than treated as individual thinking beings, is reduced to an assemblage of datapoints collected overtly and covertly.
- The introduction of personalised learning is often linked to equality and treating individuals more fairly. However, it is argued that analytics categorise the subjects of individuals in indisputable categories. Subjects of dataveillance practices have almost no opportunity to challenge the prescriptive predictions made by algorithms.
- The inherent bias of the society creeping in the algorithms maintains the inequality in the data set. Incorrect subject appraisal and not taking individual cases often incorrectly assess the subject or the situation.
- The individuals are constantly compared to norms derived algorithmically from the masses, thus capturing individuals into fixed data sets. The ability of the individuals to act rationally and critically in the diverse situation is not taken into consideration.
- The subjects of dataveillance are made to comply with the behavioural analysis of dataveillance practices. The professional and humane judgment of the teacher is displaced by technology.
- Exemplar violations of privacy rights take place with dataveillance practices. There is no transparency in data collection procedures. Consent of the subjects is hardly taken, and no accountability exists of the controllers.

Visualisation from Feminist Perspective

Given the challenges of data-driven technologies, the feminist scholarship can come to the rescue. Feminist scholarship has been credited to offer newways of knowing by demanding accountability and transparency. It also aims to dismantle the inequality present in the traditional methods of epistemology. Thus, offering anti-oppressive ways to carry data-driven projects.

Thylstrup & Veel (2017) note that data has become a powerful currency centralised mainly in the hands of corporations and the government. Data which humans generate is susceptible to systemic bias. Analytics can reinforce the bias or produce discrimination based on the values held by the developers and users. As a result, it can push the marginalised more to the

fringes of society. But, the question arises- Why have the data collection laws and applications not attracted widespread concern among the masses?

The answer lies in the conceptualisation of 'data as a resource' instead of the feminist conceptualisation of 'data as a body.' Popularly, data produced by masses is seen as a 'resource' ready to be used and processed. However, feminist discourse points out that since the data is captured from intimate life, the gap between physical bodies and datafied bodies must be negligible.

Recognising data as a 'resource' or a 'body' determines how to look for consent in dataveillance practices. Matthan (2018) seemingly view data as a resource. He notes that consent may not be a feasible means to safeguard privacy as data is collected and processed in many ways. The sheer number of contracts we will have to sign can give consent fatigue. He proposed the accountability model to combat issues of privacy. Instead of punishing data controllers for the data breach, the emphasis should be on encouraging the data controller to remediate it in a timely fashion. Feminist scholarship believes that consent for the datafied bodies should be the same as the physical bodies. Kovacs and Jain (2020) point that consent should be free, specific, and easy to withdraw. Therefore, consent once sought should not be applied for a blanket of data-processing events. Consent must be continuously sought and communicated in affirmative. This practice will shift the pressure from the marginalised to prove that they expressed dissent; instead, it would put the accountability on the data controller to prove they sought consent. Data should be seen as the property of the individual. Individuals, when giving consent, should not be imagined as autonomous beings free of socio-cultural context. In most cases, the individual cannot negotiate, and thus take-it or leave-it arrangement exists. For consent to hold the meaningful place, the individual must say no to any practice unrelated to the provided service and negotiate the terms and conditions.

Feminist studies question the authorities to expose how marginalised perspectives are not considered in the making of objective truth through datafication. D'Ignazio and Klein (2016) note that the feminist field of study does not disregard technologies or quantitative ways of knowing; rather, it questions how the knowledge is situated, how the multiple realities can exist, and who are excluded from the current regimes of knowledge production. It advocates for a two-way relationship between the creator and the object of knowledge. It proposes to empower the end-user with data visualisation.

Educational Implications

Based on the understanding of datafication from the feminist scholarship, some of the practices foreducation are drawn below:

- In the heart of the feminist scholarship lies the tradition to question back to the authority. Stakeholders of the education must be empowered to ask questions to the data controller. Critical issues should be discussed regardless of the actors collecting data.
- Data-driven practices that dehumanise individuals, discriminate against them, undermine bodily integrity, autonomy, dignity, privacy, and hamper the progress of the individuals should be prohibited. Particular attention should be given while introducing A.I.-enabled technologies or dataveillance practices concerning children.
- Schools must notify the employers, parents, and the student on what type of data is being collected, who will process it, and how it will be processed. Chair (2020) notes data subjects must be notified when personal data is accessed and processed. They should have the right to object. Personal information (with exception) must not be kept for an indefinable period.
- Teachers must realise their strategic position in education. They should continuously reflect on the data being collected by the authorities with their help or of them. They should understand the fallibility of the process.
- Teachers should enable students to track down the collected data, why it is being collected, who is collecting it, how it is stored, and who it impacts.
- Pre-service and in-service education should also make the teachers question the authority and reflect on the data collection procedures.
- The data-driven technologies can be used for informed decision-making by the teachers but not as the sole authority. The technologies must be under constant vigilance.
- Trained professionals who are well versed in understanding tricky consent laws and data policies must be placed in each educational institution. They can be made accountable for handling privacy issues, data, and systems in the institutions.

- All the staff, parents, and students must have regular training and discussions on dataveillance practices. They should be sensitised for the educational dataveillance practices and surveillance at large.

Conclusion

Surveillance with its ever-spreading branches in the educational spaces must be critically reflected. This paper critically understands dataveillance practices as part of surveillance studies. Surveillance means to watch over (Lyon, 2007 as cited in, Esposti, 2014). The concept of surveillance is not new and has been practised in many forms in educational institutions. Examples include bolting the desks to the floor to control student movement; large-scale practising of theories of B.F. Skinner, where teachers would collect every small amount of data from students to administer reinforcement, etc. (Sweeny, 2006). With the increase in data-driven technologies, surveillance practices have become more ubiquitous and pervasive. Thus, giving rise to dataveillance practices. Dataveillance focuses on collecting, processing, and analysing data of the subject to manipulate and control their behaviour. The dataveillance practices in educational institutions have increased manifold around the world.

Foucault (1977, as cited in Sweeny, 2006) notes that there always existed a relationship between control and education. The dataveillance practices in the educational spaces helped maintain the power relationships, discriminated and measured children against each other, generated inequality, hampered human rights, dignity, and privacy. In comparison, when the classrooms revolved around centralised power, introducing technologies seemed to decentralise control. In due course, this introduction of decentralised technologies in the educational spaces acted as a site for increased centralised power or reinforced centralised control by various actors. Dataveillance is thus contributing to the demand for standardisation (Esposti, 2014).

Dataveillance practices idealise the neoliberal notion of accountability where individuals must prove themselves as loving parents, teachers, or caregivers. Crooks (2019) notes that accountability can be doubly articulated, first, as the responsibility of the individuals involved in education. Second, as a measure of surveillance to police norms of behaviour of the subjects. Teachers caught in the nexus often comply with accountability requirements based on surveillance. Professional autonomy and judgement of the teachers are severely compromised. The teachers are made not to question the authority for the purpose and use of data. With dataveillance, they often become docile subjects in the hands of government and corporations.

Datafication of the subjects presumes a meritocratic world where human prejudice like gender, racism, class, caste, etc., are not considered. In this paper, the solution to the challenges raised by the dataveillance practices is looked up in the feminist scholarship. The feminist perspective raised the importance of looking at the data as a body and applying consent rules. The visualisation of data should empower the end-user and not exclude them. It provided a lens of transparency, fairness, accountability, and the need for professional humane judgment in visualising data.

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PERCEPTION OF STUDENTS TOWARDS THE INCLUSION OF TRANSGENDER IN HIGHER EDUCATION

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ABSTRACT

The present research examined the perception of cisgender students towards the inclusion of transgender students in higher education. The study used the survey method to collect data from forty six respondents pursuing a post graduate degree in education. From the findings of the research it may be concluded that the cisgender students understand the need and relevance of creating gender inclusive spaces in higher education. The students raised their concerns with respect to the lack of gender sensitisation programmes specially targeted towards the inclusion of transgender in higher education, lack of infrastructure such as separate washrooms for transgender, lack of an inclusion policy in higher education institutions and above all need for empathy and care towards addressing the concerns and challenges of the transgender students. The students advocated that special drives need to be conducted to bring the transgender students in the purview of education and scholarships may be instituted in order to inspire students towards pursuing higher education in order for them to be gainfully employed.

Keywords: Policy, Practice, Inclusion, Transgender, Higher Education.

Background of the Study:

It will not be an exaggeration to point out that being a transgender is a difficult journey in India like in most countries. The obsession of most people with respect to viewing the world in terms of the two gender binaries i.e male and female only often complicates things for transgender. Looking at the studies undertaken on the lives of transgender who do enter higher education after a lot of struggle it was found that most of the transgender students face discrimination, harassment and abuse in campuses. The common issues and

concerns being reported by most transgender students has been that the washrooms are often sex segregated in higher education institutions making it difficult for them to exercise choice, secondly most of the forms that are to be filled have only two options with respect to gender, thirdly they are hardly given any choice to use their gender affirmed names with which they identify, fourthly there are no clubs or common rooms in particular for transgender students to discuss their issues with each other and lastly there are no separate boarding facilities making their residential stay comfortable in campuses. Apart from the above a major issue faced by transgender students is that there is no platform that addresses their mental and emotional well being in terms of providing counselling services.

The first step for a campus to be a gender inclusive space is that all stakeholders perceive the inclusion of transgender in Education as a much needed step. In order to make sure of this it is important to examine the perception of the most important stakeholders that is students. This study was an attempt in this direction in order to find the perception of cisgender students in higher education with respect to inclusion of transgender in education. The findings and educational implications of study shall support teachers and administrators in conceiving workshops and awareness programmes in sync with the focus of creating gender inclusive academic spaces in future.

Need and Rationale of the Study:

The present study is significant looking at the dismally low number of transgender in Higher Education in any campus space in India. Unless the ground is prepared for their inclusion in Higher Education the numbers with respect to their admission and retention is not going to see any change in future too. The transgender are viewed as aliens in comparison to their cisgender peers. The fact remains that neither the curriculum developers nor the faculty, staff and students have ever been sensitised to the concerns and problems of the transgender community on campuses with respect to separate restrooms, being addressed irrespective of gender binaries, availability of separate housing and above all counselling facility on board to address their mental and emotional well being. It is also seen that even if there is an inclusion policy for implementation on campus there is hardly any representation of the transgender in framing that policy in order to look at it from the transgender perspective. Lastly there is hardly any support for transgender students with respect to grievance redressal where in their specific problems and challenges are heard and addressed sensitively. The present study is a small step in the direction of

gauging the perception of cisgender students towards the inclusion of transgender students in Higher Education in order to plan for gender inclusive campuses in future.

Review of Related Literature

Roop (2014) conducted an interpretive phenomenological analysis of the experiences of transgender students in Higher Education Institutions located in an urban setting .The data was collected using interviews. The key findings that emerged from the study were firstly the colleges are not prepared fully to provide support to transgender students and as a result trans people are vulnerable to discriminatory practices including harassment. Secondly lack of institutional readiness to make changes for transgender students is attributed to their numbers being low which itself is problematic. The study also found that the dominance of cisgender students led to the identities of transgender students being completely overshadowed and not being any expression in the campus spaces. It was also observed that in order to feel comfortable with their faculty advisors, mentors and cisgender peers ,the transgender students changed their language ,presentation etc in order to feel in sync with the large majority. Lastly most of the institutional policies and practices were focussed on providing the support services to the cisgender students who conform to the popular gender binary identities leading to higher education institutions being far from being inclusive spaces.

Divan et.al (2016) This paper builds a case for social inclusion of trans people from the lens of Human Rights. It highlights the complexities of living the life of a transgender where in you are subjected constantly to ridicule, abuse ,isolation and discrimination not only at work places but also in the safe confines of home .It was also seen that due to poor access to education and health both, the transgender population was more vulnerable to diseases such as HIV .The change has to begin by the transgender themselves affirming their identities beyond the gender binaries. The next step is providing access to quality health services, education, housing and employment such that trans rights are respected and furthered both. The paper also asserts that the key to achieving sustainable development goals is to ensure that policies, laws and practices are all aligned to work towards creation of a society that is inclusive and just at all levels of existence.

Kurt and Chenault (2017) conducted a study on a sample of three school superintendents and one school principal in order to gauge their experience in

areas of identity expression by transgender students and the policies at school. Face to Face semi-structured interviews were used to collect data. Analysis of data revealed that most of the resistance offered to transgender students came from parents and community members as compared to students and faculty. The administrators felt that transgender students in schools should not only feel safe but they also need to ensure that they are not bullied. The policy against anti bullying in schools must not only be for physical spaces in institutions but also for interactions of students outside such as on social networking sites etc. One major limitation of the study was that all the interviewees identified as cisgender and therefore their opinions are coming from a site of privilege. The major conclusion drawn from the study was that the administrators expressed the need to understand and deliberate upon the needs and qualities of transgender students in order to foster a safe and happy learning environment that is conducive to their growth.

Freitas (2017) conducted a study on the inclusion of transgender students in Women's colleges. The sample comprised of 184 participants drawn purposively keeping in mind their willingness to participate in the survey. The survey conducted online reported that in comparison to the cisgender students the transgender students received less support from both faculty and students. Secondly in comparison to co-educational institutions the women's colleges were found to be more supportive to transgender in terms of experiences. However it is also important for Women's colleges to welcome transgender students who identify as female irrespective of the sex assigned at birth. It is thus important to celebrate transgender identities and also deconstruct and challenge the established binaries of gender.

Renn (2017) in an article highlighted the issues and challenges transgender students face in college campuses in United States. The study focussed on three core issues namely development of identity, climate in campuses and the policy in institutions. The author reinforced that in the last fifteen years the campus climate with respect to the safety and inclusion of transgender students has shown improvement but it is not consistent if you look across all institutions. A major issue is the harassment the LGBTQ students face in teaching-learning contexts especially in terms of cyber bullying. The author exerted that it is important for campuses to have a strong gender inclusive policy in place that ensures no discrimination in matters of admission, teaching-learning environments, housing, restrooms, health insurance etc. It is important to get an external gender audit done in order to look at the implications of implementation

of policy on ground zero. It is also important that counsellors who are recruited are trained in dealing with transgender issues and are sensitive to their needs .A large scale awareness drive through engagement of all students in co-curricular activities needs to be conducted in order to sensitise students to the lives and concerns of transgender students. Lastly it is important that the curriculum and pedagogy both reflect the inclusion of transgender students in order to create inclusive teaching-learning environments.

Weekley (2017) conducted a research on four college campuses to document the effects of inclusion of transgender in areas such as policy administration, housing, health insurance etc with respect to the well being of transgender students on campuses. The sample consisted of fifty one transgender students who attended college for at least one semester. The findings of the study indicated that the transgender students do not perceive their campuses to be inclusive spaces and this has an adverse effect on their physical and mental well being. It has been observed that despite the rising visibility of transgender students their educational needs still remain unaddressed. The study concluded that inclusion of transgender in matters pertaining to housing and counselling for personal health and well being was positively correlated to their well being.

Das (2019) in a review article detailed the challenges and opportunities that the transgender have in the Indian Higher Education landscape. The census of 2011 found that literacy levels among transgender are dismally low .The national average of literacy stands at 74% while the literacy rate of transgender community in India stands at 46%.The challenges that the transgender face in Higher Education include not having access separate toilet facilities ,being addressed by insensitive gender pronouns ,sexual and physical abuse, dismally low access to social and political rights, no support services to take care of their mental health issues. Therefore it was concluded that at all levels i.e individual, policy and community we need to provide an inclusive environment to take care of the interests of the transgender community.

Balu (2020) reviewed articles and studies with respect to the challenges and problems of education of transgender in India. With respect to the status of education of transgender in India the paper pointed out that the transgender community remains deprived of education on account of being disowned by families in childhood itself, stigma and discrimination they face in schools leading to their drop out before the secondary /senior secondary stage. On account of being abandoned either they resort to begging or to sex work. Due to lack of any employment opportunities they become vulnerable and are often

forced to take up sex work leading to their contracting HIV. Even if they get admitted in educational institutions they face a lot of challenges such as due to non availability of separate washrooms for their use and being subjected to physical and sexual abuse in shared washroom facilities .Lack of recognition of proper nouns and pronouns in addressing transgender students also poses to be a big challenge in their inclusion. Lastly the lack of a proper platform to address the mental and emotional concerns of transgender students through counselling also makes their inclusion in institutions a distant reality.

Harpin et.al (2020) provides a set of guidelines for teachers in order to teach effectively in an inclusive classroom that is beyond the structured gender binaries .The paper begins by providing a detailed account of the challenges of teaching in a gender inclusive classroom along-with plausible solutions towards the end. In order to create a classroom space that is gender inclusive the first step is to acquaint the students and faculty about the nouns and pronouns used to address transgender. The second step is to raise the awareness about the concerns and issues faced by the transgender students including issues in using restrooms, anxiety in dealing with mis-gendering, the harassment and discrimination they are subjected to etc. On the other hand with respect to pedagogical practices that support the creation of a gender inclusive classroom it includes firstly the use of language that is gender neutral, using nouns and pronouns preferred by students to address them by collecting this information from students themselves through non-invasive means such as a google form. Faculty members need to be careful that they create gender inclusive environments from their first introductory class itself where in you either spell out the expectations of treating each other with respect or handover a handout with clearly listed do's and don'ts .It is important that the curriculum also reflects experiences in terms of examples etc in text which are gender inclusive .Lastly attempts need to be made to listen to all diverse voices in a given classroom irrespective of their gender identities.

Omercajic and Martino (2020) conducted a case study in order to undertake a critical policy analysis with respect to the extent of gender diversity and transgender inclusion present in two school boards of Ontario. On analysis of the trans-affirmative policies it was found that policy alone is not enough and it is important to educate teachers with respect to the knowledge and attitudes needed in order to deal sensitively with gender diversity. The focus in schools at present was on accommodation rather than inclusion of transgender in the ambit of education which is problematic. Secondly a system of accountability needs to be built in school boards in order to hold them accountable on account of their

failure to be responsive to the needs and issues of transgender students in schools. Lastly it is important to take the cognizance of the cisgender forces that make it difficult for transgender students to navigate the school system on a day to day basis .In other words attempts need to be made to make transgender students comfortable about their visibility in schools rather than invisibility.

Research Questions

The study tried to find answers to the following research questions:

- Q.1 What is the perception of students with respect to reasons of exclusion of transgender in higher education?
- Q.2 How prepared are students to accept transgender students in the academic spaces?
- Q.3 How prepared are Universities with respect to inclusion of transgender students in Higher Education?
- Q.4 How do students perceive the inclusion of transgender students in Higher Education?

Research Objective:

The study focussed on the achievement of the following research objective:

- To examine the perception of students towards the inclusion of transgender in Higher Education

Research Design: The present study falls in the realm of descriptive research. The data was collected using the google form from fifty students pursuing M.Ed from a state university in Delhi. The data was analysed using frequency and percentage analysis to deduce and articulate findings and educational implications respectively.

Delimitation of the Study: The study was delimited to 46 students of a state university in Delhi due to the time frame of the study.

Analysis of Data: The data was collected by administering a structured questionnaire through a google form and was subjected to frequency and percentage analysis The question wise analysis is presented below:

Q.1 Are you aware of the term transgender?

S.No	Response Categories	Frequency	Percentage
1.	Yes	46	100%
2.	No	0	0

Q.2 Do you think transgender students should be included in Higher Education?

S.No	Response Categories	Frequency	Percentage
1.	Yes	45	97.8%
2.	No	0	0
3.	May be	1	2.2%

Q.3 Do you think there is a need for Higher Education Institutions to have an Inclusion Policy in place?

S.No	Response Categories	Frequency	Percentage
1.	Yes	46	100%
2.	No	0	0

Q.4 Would you be comfortable in a class comprising of transgender students?

S.No	Response Categories	Frequency	Percentage
1.	Yes	38	82.6%
2.	No	0	0
3.	May be	8	17.4%

Q.5. How would you feel in the company of transgender students?

S.No	Response Categories	Frequency	Percentage
1.	Strange	1	2.2%
2.	Comfortable	29	63%
3.	Uneasy	1	2.2%
4.	Do not know	15	32.6%

Q.6 Do you think Higher Education Institutions are an inclusive space for transgender students?

S.No	Response Categories	Frequency	Percentage
1.	Yes	18	39.1%
2.	No	19	41.3%
3.	May be	9	19.6%

Q.7. What are the reasons for exclusion of transgender students from Higher Education?

S. No	Response Categories	Frequency	Percentage
1.	Discrimination and Stigma faced by transgender	5	10.8%
2.	Transgender being considered abnormal and aliens	5	10.8%
3.	No Sensitisation given to cisgender faculty and students to understand transgender	6	13.04%
4.	Stereotypes associated with transgender	6	13.04%
5.	Lack of feeling protected in Higher Education Institutions	5	10.8%
6.	Fear of being bullied and abused	7	15.2%
7.	Lack of any inclusion policy in institutions	2	4.3%
8.	Lack of acceptance and empathy in different stakeholders	8	17.4%
9.	No Support for transgender in campuses	2	4.3%

Q.8 How can Higher Education Institutions prepare for Inclusion of Transgender students?

S. No	Response Categories	Frequency	Percentage
1.	Include Gender Sensitisation Programmes in all Curricula	7	15.2%
2.	Create Community Awareness through mass media	7	15.2%
3.	Institutions should have a Gender Inclusive Policy strictly implemented	2	4.3%
4.	Sensitise faculty and staff towards Gender Inclusive Policy	6	13.04%
5.	Reserve seats for Transgender in Higher Education	3	6.5%
6.	Create Infrastructure that supports Inclusion of Transgender	10	21.7%
7.	Provide scholarships to transgender to motivate them towards Higher Education	3	6.5%
8.	Have counsellors in HEIs to support transgender students	6	13.04%
9.	Deal with transgender students with empathy and care	2	4.3%

Q.9 How will inclusion of transgender students in Higher Education change the environment of the institution?

S. No	Response Categories	Frequency	Percentage
1.	No change in the environment of the institution	3	6.5%
2.	The Institution shall become more comfortable for all after some time.	4	8.7%
3.	The institution shall be more gender inclusive.	15	32.6%
4.	The environment shall become more equal and equitable for all.	3	6.5%
5.	It will increase the acceptance of transgender by all.	10	21.7%
6	Transgender will no longer be viewed as abnormal as myths will be shattered	6	13.04%
7.	The Institutions will be forced to make changes in infrastructure for inclusion of transgender.	5	10.8%

Findings:

- All the surveyed students were aware of the term transgender.
- Almost all the students were in favour of inclusion of transgender students in Higher Education.
- All the students were of the opinion that higher education institutions should have an inclusion policy in place.
- Around four fifths of the respondents felt that they would be comfortable in a class with transgender students however one fifth of the respondents were not sure of their comfort levels around transgender students in classrooms.
- 63% of the respondents felt that they would be comfortable in the company of transgender students while around 32% felt unsure of their comfort levels in the company of transgender. 2.2% respondents each reported that they would feel strange and uneasy respectively in the company of transgender students.
- 41% of the respondents felt that Higher Education Institutions are not inclusive spaces for transgender students while 20% were unsure whether they are inclusive spaces for transgender or not. On the other hand 39% of the respondents felt that higher education institutions are inclusive spaces for transgender students.

- 17% of the respondents felt that reason for exclusion of transgender from Higher Education is due to lack of acceptance and empathy on part of different stakeholders.15% respondents felt that fear of being bullied and subjected to abuse is the reason for their exclusion.13% of the respondents each felt that due to the cisgender students and faculty not been sensitised and stereotypes associated with transgender they are excluded.10% of the respondents each felt that reasons for exclusion of transgender are that they are considered abnormal and aliens and the discriminatory practices and stigmatisation associated with being a transgender respectively .A miniscule minority of students around 2% each felt that lack of inclusion policy in higher education campuses and no support for transgender in campuses contributed to their exclusion.
- The way forward according to the respondents with respect to preparedness of Higher Education Institutions for inclusion of transgender students is: 21% of them felt that infrastructure is needed to be created to facilitate transgender students in campuses, 15% respondents each felt that gender sensitisation programmes should be a part of all curricula and awareness should be created through mass media advocating for inclusion of transgender in all spheres of life respectively,13% of the respondents each felt the need to sensitise faculty and students towards a gender inclusive policy and provide a counselling service for transgender students to support them.3% of respondents each felt that there is a need to institute scholarships for transgender students exclusively in order to motivate them towards higher education and also reserve seats for them in HEIs respectively. Lastly 2% of the respondents each felt that the gender inclusive policy should be strictly implemented and the transgender students should be treated with empathy and care.
- According to the respondents the inclusion of transgender students shall change the environment of Higher Education Institutions in the following ways: Around 22% felt it will increase the acceptance of transgender students in campuses, Around 33% felt that it shall make the HEIs more gender inclusive,13% felt that transgender associated myths will be dispelled and they will not be perceived as abnormal, Around 11% felt institutions will be forced to make changes in their infrastructure to facilitate inclusion of transgender, Around 9% felt the institutions will become more comfortable for all, 6.5% felt it would be

a step towards equality and equity in higher education and lastly 6.5% of the respondents also felt that the environment of the higher education institutions shall not change at all by the inclusion of transgender .

Educational Implications:

- It is heartening to note that students perceive the inclusion of transgender in Higher Education as a welcome step however one third of them are not sure whether they would be comfortable with transgender students around them .In order to increase their comfort levels gender inclusive sensitisation programmes need to be held with the transgender community on board.
- Only 39% of the respondents felt that their University was a gender inclusive space .Attempts need to be made in terms of provisioning infrastructure, changing attitudes and practices such that the campus is perceived as a gender inclusive space by all.
- Every higher education institution needs to have a Inclusion Policy in place in order to implement the programmes to include all marginalised communities in the ambit of education.
- A special drive needs to be conducted regularly involving the transgender students on campuses in order to dispel the myths and misconceptions in the minds of cisgender students.
- A special counselling unit needs to be created to specifically address the mental and emotional well being of transgender students.
- In order to motivate the transgender students in Higher Education scholarships and freeships may be instituted for them and some seats may be reserved for their admission in all the courses.

Conclusion:

It may be concluded from this study that students perceive the inclusion of transgender in education positively and it is high time that attempts are made to include them in the ambit of education .A few steps in this direction for higher education institutions may be to first institute an Inclusion policy which guides the action on ground, secondly create the requisite infrastructure with respect to housing ,rest-rooms, clubs and counselling support in institutions .Most importantly it is crucial to sensitise all the stakeholders i.e students, faculty and staff towards the issues and concerns of transgender on priority including the need to be empathetic and caring towards them.

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A CASE STUDY OF DEVELOPING RELATIONSHIP AMONG STUDENTS AND TEACHER ON LEARNING AND THINKING STYLE

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ABSTRACT

Thus learning can be broadly defined as all the changes and modifications in the behavior of the individual which he undergoes during his lifetime. Learning plays an important role in the process of education. All the efforts of the teachers are devoted to the learning of the children. It is the teacher's responsibility to understand the learning behavior of the students and help them in improving their learning capacities. Thus a teacher should understand what is learning nature and process of learning are so that he can be a good teacher to the students to improve their learning capacities. The study explored the affective domain of teacher student relationships using a single case study design. This single case study produced a synthesis of information that guides a classroom teacher in the development and maintenance of his relationships with the students. The analysis and interpretation provided the description of major themes that developed strong bond by teacher student relationships as well as specific components to the interactions considered essential for the student's learning environment. The outcome of this study is an account of experiences and procedures that guide the development and maintenance of relationships between teacher and students. Based on the findings four primary categories emerged with supporting elements that were critical components of each category. These four primary categories represent an interpersonal frame work for the learning environment. The qualitative method in this study is derived from a constructivist view point with a focus on deeply understanding this specific case of teacher student relationships. The goal was to provide more specific examples of

empirical findings for how teacher student relationships are created. Identifying specific factors associated with teacher student interactions could provide valuable information to an educational learning community. The success of a student depends on the teacher and the innovative methods which they incorporate in teaching. The purpose of this paper is to suggest the innovative teaching and learning methods that can be used in imparting the knowledge to the students.

Key words: Developing Relationship, Students, Teacher, Learning, Thinking Style.

INTRODUCTION

Education is a lifelong process. Man becomes a man 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 that which makes a man self-reliant and self-less. Education means to achieve the goal (Bruner, 1977). 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 his universal self as the final end. The style literature contains different style labels such as learning styles cognitive styles 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 (Danielson, 2007). The students' learning and knowledge acquisition are seen as a consequence of the teacher's behaviors and aims. Learning is regarded as equal to teaching instruction and the same as construction. This does not mean that the students are regarded as of no interest in the teaching learning process but reflects research approaches and research designs where instruction and construction on teaching and learning are considered as more or less identical processes in learning (Qaisur, 2021). Styles are not abilities the research shows difference in the way of thinking of individuals resulted in the formation of theories of thinking style. Thinking style is 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 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 (Fosnot, 2005). The awareness of style of thinking is useful in perceiving the students as he is. 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 (Skinner and Belmont, 1993). There is a great deal of literature that provides substantial evidence that strong relationships between teachers and students are essential components to the healthy academic development of all students in schools (Birch and Ladd, 1998; Hamre and Pianta, 2001; Pianta, 1999; Eccles and Wigfield, 2002). This literature involves several genres of research that have been conducted over the past decades investigating the interactions between teachers and their students and what effect those interactions have on learning. There is credible evidence that the nature and quality of teachers' interactions with children has a significant effect on their learning (Brophy-Herb *et al.*, 2007; Curby *et al.*, 2009; Dickinson and Brady, 2006; Guo, *et al.*, 2010; Howes, *et al.*, 2008; Jackson, *et al.*, 2006; Mashburn, *et al.*, 2008; McCartney, *et al.*, 2007; Pianta, *et al.*, 2009). Educator's psychologist's social constructivists and sociologists have all contributed to the growing interest in targeting interventions toward improvements in the quality of teachers' interactions with children. Hamre, *et al.*, (2012) suggest that teachers need to be actively engaged in interactions with children in order for learning to occur. However, in (2001) the law *No Child Left Behind Act* (NCLB) that began the intense focus on standardized testing as the measure of not only student success but teacher performance as well. It mandated that every child would perform at grade level and achieve high academic standards (U.S. Department of Education, 2007). The NCLB was intended as a means of supervision for public schools in the States with the guarantee of success for all students regardless of race gender or ability. High stakes testing is the vehicle through which student achievement is measured according to NCLB and does not take into account any other means for measuring student or teacher success. As a result the current educational climate emphasizes school accountability through standardized test scores as the primary method for determining an effective learning environment (Horvat *et al.*, 2003). The state and local educational policy requires that schools and classrooms should be held more responsible for the outcomes they produce the student achievement. However the process for ensuring accountability rests on standardized testing of children typically starting in third grade (La Paro, *et al.*, 2004). The focus on accountability and standardized testing should not confuse the contribution that the social quality of teacher and student relationships has on academic development. This contend that strong student teacher relationships provide a unique entry point for educators working to improve the social and learning environments of schools and classrooms

(Wubbels and Brekelmans, 2005). This believes that there is an important role that the quality of teacher and student interactions plays regarding student learning. Hamre *et al.*, (2012) hypothesized that it was not sufficient for teachers to be able to gain knowledge about effective teacher student interactions and they need actual skills involving identification of effective interactions with a high degree of specificity in order to be most likely to transfer the course work into changes in their practice. While the effects of teachers have on student learning Good *et al.*, (1976) determined that teachers do make a difference. A large contribution to what brought about that difference was the affective component to teaching that the teachers used. It found that students who held a sense of poorest toward school had the worst achievement record. These students need teachers who believed in them and were willing to work with them. This demonstrate the importance of teachers' affective behavior and found was that teachers who showed an interest in their students by indicating they were listening to them and understood students' need completely and accurately had students who obtained higher scores on a standardized test of learning the evidence was impressive. The current research base focuses broadly on teacher student relationships (Jackson, 1968). This will describe purposeful affective strategies and interactions with students that a teacher uses to effectively engage students in the learning process. This will contribute to the field of education by providing teachers and administrators with guidance on relationship building strategies that a highly effective teacher utilizes in a real world authentic setting the classroom. After completing the study on teacher child relationships and behavior problems, O'Connor *et al.*, (2011) reports that in regard to teacher education their study demonstrates the importance of fostering elementary school teachers' awareness of the role of their relationship with students and provides teachers with information as how to support high quality relationships with their students.

DEVELOPING RELATIONSHIP AMONG STUDENTS

Race to the Top (RttT) initiatives have strongly focused on measuring the teacher effectiveness primarily using standardized test scores. However there is a large body of research that examines the value of a teacher's effectiveness when it comes to a teacher's effectiveness as an educator (Brophy, 1974; Baker, 1999; Crosnoe, *et al.*, 2004; Grant and Rothenberg, 1986; Hamre, *et al.*, 2012; Leder, 1987). An approach to accountability that includes a broader range of measurement of effective classroom instructional practices should include the relationships the teacher builds with his students. Marzano and Marzano (2003)

studied the practices of effective teachers and determined that an effective teacher student relationship may be the key factor that allows the other aspects to work well. The relationships that teachers develop with their students have an important role in a student's academic growth. Hallinan (2008) reported that learning is a process that involves cognitive and social psychological dimensions and both processes should be considered if academic achievement is to be maximized. The unbalanced reliance on test scores to determine success does not provide an accurate accounting of all that goes into creating an effective learning environment. Rothstein *et al.*, (2008) agreed saying it is surprising that so many education policy makers have been revealed into thinking that simple quantitative measures like test scores can be used to hold schools accountable for achieving complex educational outcome. Meyer and Turner (2002) discussed their findings illustrating the importance of students' and teachers' emotions during instructional interactions. They determined that through studying student teacher interactions our conceptualization of what constitutes motivation to learn increasingly has involved emotions as essential to learning and teaching. This provides support for further study of the inclusion of interpersonal relationships in the instructional setting and to what degree those relationships affect the students' learning environment. The quality of the relationship between a student and the teacher will result in a greater degree of learning in the classroom according to Downey (2008). Mohrman, *et al.*, (2003) assert last change does not result from plans blue prints and events a rather change occurs through interaction of participants. Strong teacher student relationships may be one of the most important environmental factors in changing a child's educational path (Baker, 2006). This case study will explore the environmental factors that are deliberately created by the study of participant as he interacts with the student on their educational path. As Cazden (2001) asserts the establishment of social relationships can seriously impact effective teaching and accurate evaluation in a classroom.

STUDENT LEARNING STYLE

The field of education recognizes the importance of the relationships that teachers develop with their students that result in positive academic outcomes. The purpose was to conduct a case study of the strategies used in one information rich classroom that demonstrates teacher student interactions in an authentic instructional environment. Responsive interviewing procedures will allow the researcher to identify the thought process of the teacher as he is developing student relationships and delivering instruction (Bartlett, 2005). The

teachers need to know how their daily works in classrooms can be infused with interactions and instructional strategies that research has shown can make a positive difference in the lives of students who are at risk of academic failure. The results are practical in nature and will include a common affective characteristics and strategies employed by the teacher that influences the students' learning environment and learning experiences (Martin *et al.*, 1980). Teachers can also use case study method for innovative teaching because case method is a powerful student-centered teaching strategy that can impart students with critical thinking, communication, and interpersonal skills. Teaching with sense of humor is also considered as an innovative method which makes students listen actively.

SIGNIFICANCE OF LEARNING THINKING STYLE

The literature provides evidence that strong relationships between students and their teachers are essential for the development of all students in school (Birch and Ladd, 1998). It reported that positive student teacher relationships are a valuable resource for students. They suggest that having a positive relationship with a teacher allows students to be able to work on their own because they know they can count on their teacher if problems arise that the teacher will recognize and respond to the problem. As children enter formal school settings relationships with teachers provide the foundation for successful adjustment to the social and academic environment (Vygotsky, 1978). They recommend that talking with a teacher and conducting observations in the classroom will provide important and unique information for designing interventions (Cohen, 1972). These researchers conclude that forming strong and supportive relationships with teachers allows students to feel safer and more secure in the school setting feel more competent and make more positive connections with peers and make greater academic gain. Although research is growing in this area more empirical evidence is needed on aspects of student teacher relationships in order to better effectively integrate this skill into existing teacher programs (Sarason, 1999; Crosnoe, Johnson, and Elder (2004).

Research on factors related to quality in classrooms suggests that teachers' attitudes and beliefs about children are very important components into predicting the quality of children's education (Pianta *et al.*, 2002). The teacher's personal interactions with his students can make a significant difference for students. The importance of teachers' relationships with their students cannot be over stated according to Downey (2008). As Darling-Hammond (2006) explains it teaching is in the service of students which creates the expectation that

teachers will be able to come to understand how students learn and what students need if they are to learn effectively and that they will incorporate that into their teaching. This idea of determining what needs to be incorporated into instruction for effective learning would like to be investigated by using an authentic learning environment through an illuminative case study.

METHOD AND DESIGN OF THE STUDY

The research is to explore the affective domain of teacher effectiveness using a single case study design. Case study research is a qualitative approach in which the investigator explores a real life contemporary bounded system a case over time through detailed in-depth data collection (Creswell, 2013). Yin (2009) reports that the case study's unique strength is its ability to deal with a full variety of evidence sources such as documents artifacts interviews and observations beyond what might be available in other types of qualitative methods. He declares that use of the case study strategy has a distinct advantage when a how or why question is being investigated about a contemporary event over which the investigator has little or no control. The case study method allows investigators to retain the holistic and meaningful characteristics of real life events and the case study research involves the study in a real life context or setting ones. Stake (1995) reported that qualitative researches seek to understand a case to appreciate the uniqueness and complexity of it as its embedded ness and interaction with its contexts. It contends that the real business of case study is particularization not generalization we take a particular case and come to know it well. He says qualitative study capitalizes on ordinary ways of making a sense. According to cases seldom exist alone if there are phenomena in one there is probably more somewhere else. Creswell (1998) says often the distinction between qualitative and quantitative research is framed in terms of using words qualitative rather than numbers quantitative. That being the case of use of the qualitative research method to determine a teacher's affective as opposed to evaluating his students' test scores would seem like a best fit.

DISCUSION

Effective communication skills are really important for teacher in transmitting of education, classroom 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 (Qaisur, 2021). In this research the interview statements and observation data using protocols reflects the components of effective teacher student relationships as described in the literature review. The data have been sorted coded categorized and reviewed for relevance. The analysis of the process used is a hybrid of case study analysis methods guided by Stake (1995, 2010), Yin (2003, 2009) and Rubin and Rubin (2005). This single case study produced a synthesis of information that guides the classroom teacher in the development and maintenance of his relationships with the students. The resulting analysis and interpretation provides a description of major themes that developed regarding strong teacher student relationships as well as specific components to the interactions considered as essential for the students' learning environment. Stake (1995) says there are two strategic ways that researchers gain meaning about cases. One is through direct interpretation and the other through aggregation of instances until something can be said about them as a class. He suggests that both of these strategies are necessary with case study analysis with the most important meanings coming from reappearance over and over. Elmore (1996) writing for the Harvard Educational Review asks the question How can good educational practice move beyond pockets of excellence to reach a much greater proportion of students and educators. He analyzes how organizations can replicate the accomplishments of successful teachers in order for school reform to occur by adopting their successful practices. It looks at the core of educational practice in particular student and teacher relations. Elmore's focus is on changes are connected in the way of knowledge is constructed that directly challenge the fundamental relationships among student teacher and knowledge. He writes about change as it applies to the teachers' and students' role in constructing knowledge as well as the role of the classroom structure in effective change in the learning process. As we share it will show evidence to support the importance of the teacher and student relationship as it applies to constructing knowledge. Evidence was also found to support the importance of the structure of the classroom environment as it applies to learning process (Qaisur, 2021) respectively. Evidence to support Elmore's interest in classroom structure is affected by the learning environment was encapsulated within the findings of contextual category and the classroom climate and contextual category of the layout with purposeful design (Langer, 1997). In both categories the structure of the physical space within the participant's classroom and how he formulates the culture of respect and responsibility in his room are purposefully designed to

enhance the learning environment and learning capacity of his students affording them the optimum setting for acquiring knowledge. These findings are supported by Dewey (1938) who recommended that teachers use their physical and social surroundings to extract from them all they have to contribute to building up worth-while educational experiences. For participant the purposeful design of the classroom gave an opportunity to utilize learning environment to its highest and best use. Stake (1995) writes that the case study report is just one person's perspective and encourages the researcher to include their own personal perspectives in the interpretation. In keeping with guidance this will include the perspectives and actions of the research participant as well as our own personal perspective which has influenced the interpretation throughout this study. The findings are supported by the literature that currently exists in the field regarding teacher student relationships. This result interest in how teachers' relationships with their students affect the learning environment for those students. It is a topic of interest in the field of education that has been broadly researched for decades (Brophy, 1974; Evertson *et al.*, 1980; Grant and Rothenberg, 1986; Leder, 1987; Baker, 1999; Crosnoe *et al.*, 2004; Hamre *et al.*, 2012) respectively. However in the present day scenario it has become very important for a person to excel in these skills to be successful in his life. The individual through learning acquires all these aspects. Learning occupies a very important place in everybody's life. Mostly learning influences one's actions. It is an important factor for his personality and behavior. Education system plays an important role in inculcating such kind of learning in the students. An individual starts learning immediately after his birth or from experiences directly or indirectly plays an important role in the process of learning (Qaisur, 2021). The central idea in any educational process is learning. Teachers have to provide suitable atmosphere for children in which they can learn with ease and retain it longer and employ it as an effective means for their proper development.

CONCLUSION

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 recent developments within the research field of subject specific and classroom studies combined with emergences in technologies able to document learning processes at the level provide for opportunities to study how different thematic patterns are linked to instructional activities and interaction formats in

classrooms. We have to move from general to specified context and practice based studies that take into account how students' are operational in learning interactions with both content coverage and specific teaching activities.

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FACTORS AFFECTING THE ACADEMIC PERFORMANCE OF STUDENTS AT HIGHER SECONDARY SCHOOL LEVEL IN NADIA DISTRICT

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Abstract

This study examines the factors affecting the students' academic performance at the Nadia district's higher secondary school level employing linear statistical modeling. Many predictors of the individual, parental/household, and institutional characteristics have been experimented. The stepwise regression identified the best subset of the covariates in each category. The model fit results show that past academic performance, study at home, and gender was the best subset of predictors and significantly affect the students' academic performance. Further, the models testify that if a student could not perform well, the school should have attained the School level's tuition facility. Similarly, regarding parental/family and School characteristics, education (especially father), separate room, house-size, labs/library, electricity, and moderately small class size significantly affect the School students' academic performance in the Nadia district, West Bengal.

Keywords: Education; Statistical Modeling; Academic Performance; Students.

INTRODUCTION

Education is a process through which a desirable change in the citizens' overall personality is acquired to contribute to the country's socioeconomics development and their families. In other terms, education is a force that can develop the cognitive, affective, and psychomotor domains of an individual. Education may be divided into various subcategories, such as child education, adult education, technical education, health education, and physical education. In West Bengal, the issue is a low literacy rate and a high dropout from the educational institute. One of the main causes of dropout is poor academic

performance. Academic performance is the result of education, and it refers to a student's fulfillment in meeting short or long-term objectives in education. The students' academic performance plays a vital role in delivering the best quality graduates who end up in remarkable pioneers and workforce for the nation (Ali et al., 2009).

The social and economic development of the country is directly related to student academic performance. Students are the future workforce of the nation and responsible for the future development of a country. It is the students' responsibility to strengthen and make their skills perfect throughout the whole academic career.

This paper presents an investigation and analysis of the factors affecting the students' academic performance. Academic achievement represents performance outcomes that indicate the extent to which an individual has achieved particular objectives that have been the focus of activities in instructional conditions, particularly in school and School. On the premise of high academic performance, students get selected to good universities, better courses of study, and inevitably get higher-paying jobs. We measure a student's performance by his/her percentage marks obtained in the Higher Secondary examination organized by WBCHSE, run by the government authorities.

The outcome of this study provides valuable information to assist government authorities, policymakers, and parents to develop strategies and identify those factors that would enhance students' academic performance. The study draws the School administration's attention to implement those policies that facilitate the teaching and learning process to improve students' performance. Similarly, the study outcomes may also help parents solve the students' problems. Further, it helps the teachers recognize the students' issues with the teaching and learning process.

LITERATURE REVIEW

The performance of students may be affected by several factors. These factors may be classified into two main categories inside the educational institution and outside of an educational institution: the faculty, commitment, motivation, facilities, curriculum, management, and discipline. Similarly, outside of the institute, the factors are associated with family, parents, and individual student characteristics.

Raychuaduri et al. (2010) showed that attendance, financial stability, parents' education, teacher- student ratios, teachers' qualification, gender, and

distance-to-schools significantly affect the students' performance. Similarly, various empirical studies such as Dayiyal et al. (2011), Hijazi & Naqvi (2006), Iqbal & Pervaiz (2014), Mushtaq & Khan (2012), Remali et al. (2013), and Suleman et al. (2012) reported the intrinsic and extrinsic motivation, self-efficacy, student attitude, time management, parent's age, and education, institutional facilities, faculty attitude, guidance, family stress and other social factors such as social media: Facebooking., computer factors, utilization of smartphones, university environment, teachers' personality, personal activities, peer relationship, parent's motivation, and co-curricular activities are important factors that affect students academic performance.

Considine & Zappala (2002) showed that school environment and teachers' characteristics strongly influence students' performance. Likewise, Jabbar et al. (2011) identified some demographic factors on the students' performance. The study reports that students living in rural perform poorly compared to the students in the urban area. Ganyaupfu (2013) investigated that student-teacher interaction during the teaching and learning process is the most effective. Krashen (2013) identified that parents' education played a vital role and argued that students whose parents were educated relatively perform better than those who had illiterate parents.

Moreover, Carbonaro (2005) investigated that three types of effort could significantly affect the students' performance. These are rule-oriented efforts, procedural efforts, and intellectual efforts. Goga et al. (2015) quantitatively found family background and previous academic performance as the most predictive signs of the students' academic performance. Likewise, Haider & Hussain (2014) investigated how teachers' characteristics affect the students' performance. They argued that a teacher's evaluation method, communication skills, and attitude greatly affected students' English, Chemistry, and Mathematics performance. In addition, Le et al. (2020) concluded that students' motivation, lecturer pedagogy, course organization, learning conditions, and lecturers' knowledge of the content were the factors that affected the students' performance immensely. Santos & Celis (2020), analyzing the institutional factors, argued that the people and infrastructure had a moderate effect. Further, the method of lecture delivery had the highest influence on the students' academic performance. Fajar et al. (2019) suggested that the most contributing factors affecting nursing students' academic performance were teacher factor, student factor, home factor, and school factor. Studies, such as Curcio et al. (2006), Veldi et al. (2005), investigated quality rest on the performance. These

research studies show that rest reduction and discontinuity influence learning ability and ultimately decrease academic success. Further, it was exhibited that resting quality, aroused due to tumult, aroused because of the awful dream, feeling tired in the morning, aroused at a youthful hour in the morning, and day-time laziness, all these were affiliated with academic progress. Mulyadi et al. (2016) argued that self-esteem, academic self-efficacy, and better relationships between parents and children played a significant role in the students' learning process. Moreover, they also argued that those parents who teach their children at home or provide tutors result in their children's best academic success.

In literature, the data mining technique is extensively used in educational fields to explore knowledge and predict students' performance. For instance, Hamsa et al. (2016) applied two different approaches in their study: Decision Tree and Fuzzy Algorithm models by using different sets of parameters to predict the students' performance in Bachelor's and Master's Degrees Program. Likewise, Shahiri et al. (2015) used multiple data mining techniques and indicated the important attributes to predict the student's performance.

METHODS AND MATERIALS

The Model

The Linear Regression Model is a statistical technique for investigating and modeling the relationship between a variable of interest, also referred to as the dependent variable, and one or more predictors or explanatory variables (independent variables). Let Y is the response variable (Student's percentage score), and X denotes a vector of predictors (the inputs X_1, X_2, \dots, X_k) that could influence the percentage score. The mathematical form of the model is given by:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + \epsilon \quad (1)$$

where $\beta_0, \beta_1, \beta_2, \dots, \beta_k$ are the model parameters known as regression coefficient and ϵ is error term also known as disturbance term that is assumed to be normally and independently distributed with constant mean and variance.

Researchers normally collect data for many variables in social science research but desire to build a parsimonious model. The parsimony of the model refers to keep the balance between a too complex and a simple model. In literature, the commonly used method for model selection is the Akaike Information Criterion (AIC) of Sakamoto et al. 1986). The coefficient of determination (R^2) is used to measure the model goodness-of-fit to the data. It measures how the data are close to the fitted regression line. The R^2 is

interpreted as the variation explained in the response variable by a linear model.

The Data

Primary data was collected through a questionnaire from a random sample of 476 regular students (Higher Secondary School Level) of Nadia district. A total of thirty-two (Public and Private) educational institutes were available for HSS level students. The sample was collected using a Stratified Random Sampling scheme with a proportional allocation method. The majority of students were registered in the Government Schools (GCs), 57.4%, followed by the Private Schools (PCs), 25.4%, and only 17.2% students were from the Government Higher Secondary Schools (GHSS).

In the sample data, most of the students were in the Pre-Medical group (46%) followed by the Pre- Engineering group (21%). Both genders participated; however, the proportion of male students (62%) was higher than that of female students (38%). Table 1 provides the count summary of the different groups (discipline, gender). An approximately 30% of students were living in the joint family system. The average associated family size was 7. The mean age of the father and mother was approximately 50 and 41 years, respectively. In the data, most of the parents were illiterate. For example, only 34% of fathers, while 20% of mothers had completed at least middle (8th Class) qualification. The majority of students had parents with lower financial stability. Most of their parents had a monthly income lower than Rs. 30,000/.

Table 1 Respondent according to gender and discipline wise

Discipline	Count		Percentage	
	Male	Female	Male	Female
<i>Pre- Medical</i>	123	96	25.8%	20.2%
<i>Pre- Engineering</i>	90	11	18.9%	2.3%
<i>General Science</i>	26	6	5.6%	1.3%
<i>Humanities</i>	58	67	12.2%	13.9%
Total	297	180		

RESULTS AND DISCUSSION

Preliminary Analysis

The average performance score was approximately 60% in the data, with a standard deviation (SD) of 11.1. The results show that, on average, the overall students' performance significantly declined in the School compared to the school. For instance, the associated students' matric (Grade-10) average score

was 69.2% with $SD=10.1$. Various factors relevant to the institution, for example, the mode-of-study, may cause such decline; however, examining these factors is beyond this research project's scope. However, future research might be of interest in this regard.

Further, the students' mean age in our sample data was approximately 19 years. About half of the students were using public transportation to access the School/school. Further details regarding the data description of the students' characteristics are provided in Table 2. The t-test results show strong evidence that female students perform significantly better than male students ($t=3.612$, $p=0.000$). Further, those students who had tuition facility had statistically significant ($t=4.177$, $p=0.000$) better performance. Interestingly, the religious tendency of the student also significantly affects academic performance. For example, the mean score of the Hafiz-e-Quran is significantly ($t=2.841$, $p=0.006$) lower by approximately 5% marks. However, there is insufficient evidence to conclude that those studying (part-time) in Madrassa affect their academic study.

Regarding the parental/household characteristics, the preliminary analysis results show that the education of both father and mother of a student play a vital role in the performance of his/her School education. For example, the mean score of the student whose parents were educated is statistically significantly higher than the mean score of the students whose parents are illiterate. Further, the results show that a student's performance is declined substantially if the father has more than one marriage. Moreover, a student having a separate room at home performed better than those who do not have such a facility at home. The mean value, standard error of the mean, the test statistic's value, and p-value for all those predictors whom effects were significant in the preliminary analysis are provided in Table 3.

The preliminary analysis results show that PCs students performed better than the other students. For example, the students' mean performance score from the PCs is approximately 68%, significantly greater than the GCs (56%) and HSSs (57%). The results further show that there is strong evidence in support of the significant effect of the class size. A student in a class with fewer than 45 students is expected to show better performance ($p=0.003$).

Table 2 Descriptive statistics of students' individual characteristics

S. No	Variables	n	Mean	Std. Deviation
1	HSSC Part-I score (%)	476	59.5	11.1
2	Matric Score (%)	476	69.2	10.1
3.	Age	476	18.8	0.92
4.	Gender			
	<i>Female</i>	182	61.8	10.6
	<i>Male</i>	294	58	11.1
5.	Sleeping hours	476	8.04	1.37
6.	Tuition facility			
	<i>Yes (=1)</i>	82	64.0	10.81
	<i>No (=0)</i>	394	58.5	10.92
7.	Distance time from home/hostel to School	476	29.61	19.38
8.	Hafiz-e-Quran			
	<i>Yes (=1)</i>	54	55.6	10.48
	<i>No (=0)</i>	422	59.9	11.08
Sample size		476		

Table 3 Results of the preliminary analysis, testing the significance of mean differentials

Variable	Description	Mean	Std. Dev	t-value	P-value
1. Father education	Upto middle = 0 (314) Above middle = 1(162)	57.3 63.5	10.7 10.6	-5.987	0.000
2. Father's marriages	Only one = 0 (449) More than one =1(27)	59.7 54.8	0.525 9.362	2.273	0.023
3. Mother education	Upto Middle = 0 (382) Above middle = 1(94)	58.4 63.6	10.89 10.95	-4.070	0.000
4. Separate room for study	No = 0 (243) Yes = 1(233)	57.11 61.9	10.57 11.11	-4.815	0.000

The Model fit results

The effect of Individual characteristics

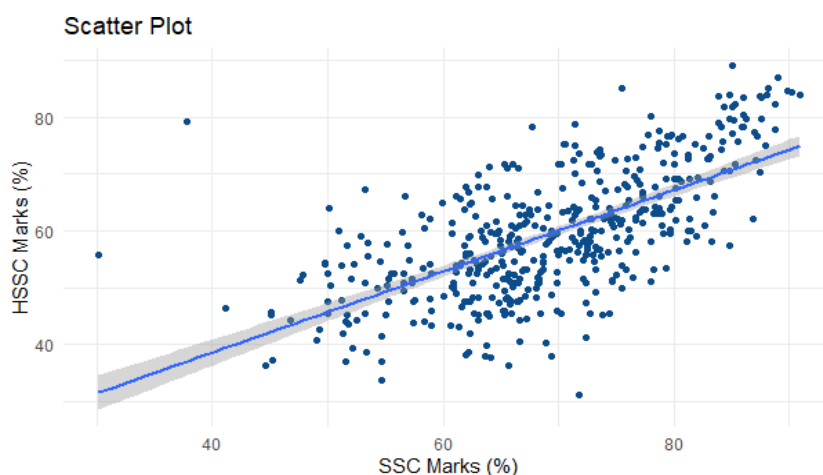
The full model consisted of the eleven predictors associated with the students' individual characteristics, while in the final best-selected model, there were only three covariates. The descriptions of the predictors are provided in Table 8 (Appendix). The best subset of predictors or covariates were past performance score, *PPS* (measured as the percentage marks in the SSC examination), *study-hours* (daily average hours study), and *gender* (male=1, female=0). The summary of the model, estimated parameters, and goodness of fit are provided in Table 4.

Table 4 Model fit result summary for covariates associated with the students' individual characteristics

Covariate	Estimates (B)	t-value	p-value
Constant	14.173	5.233	.000
Pps	.638	15.985	.000
Study-hours	.968	4.564	.000
Gender	-2.760	-3.570	.000

*R-Square = 0.463**Adjusted R-Square =0.459**Significant at $P < 0.05$*

The most important predictor in the final model was the previous academic performance (Pps) that was found significant and was positively related to current student's performance. Therefore, it was highly recommended that students should work hard during school. The relationship between academic performance in the school and School is depicted in Figure 1. From visual inspection, it can be seen that there exists a positive high degree linear relationship between past and current academic performance. The correlation coefficient was determined as 0.6532

**Figure 1 Scatter plot of the HSSC part-I score and SSC percentage score**

However, what if a student could not perform well in the SSC examination? We dropped the covariate *PPS* from the full model to identify another predictor and repeat the stepwise regression. Interestingly the *PPS* covariate was replaced by *tuition-facility* and *age*. It is recommended that those students who performed poorly in the SSC examination were suggested to have the tuition-facility. The summary of the alternative best-selected model is provided in Table 5.

Table 5 Summary of the best-selected model after dropping the Pps covariate

Variables	Estimates (B)	t-value	p-value
(Constant)	84.523	8.788	.000
Study hours	1.966	7.925	.000
Gender	-4.082	-4.180	.000
Age	-1.540	-3.014	.003
Tuition facility	3.710	2.888	.004

*R-Square = 0.206,**Adjusted R- Square = 0.199**Significant at P<0.05***The Effect of Parental/Household characteristics**

The stepwise regression results show that *Father-education, separate-room, house-type, and house- size* are the best subset of the covariates among the class of the independent variables, as described in Table 9 (Appendix). Further, the model fit summary is provided in Table 6.

Table 6 Summary of the model with the best subset of covariates (parental characteristics)

Variables	Estimates (B)	t-value	p-value
Constant	52.151	45.638	.000
Father education	4.401	4.331	.000
Separate study room	2.811	2.745	.006
House structure	2.518	2.208	.028
House size	.100	2.275	.023

*R-Square = 0.111**Adjusted R-Square = 0.103**Significant at P<0.05***The effect of Institution Characteristics**

The model fit results show the library's facilities, electricity, playgrounds, and class size significantly affect the students' performance as these covariates are included in the Stepwise Regression's final step. The results further show that the *library* and *electricity* are positively related to the School students' academic performance while the *playgrounds* and *class size* negatively affect the performance. The summary of the model, including the estimates, goodness of fit, and p-values are provided in Table 7.

Table 7The summary of the best-selected model using AIC

Variables	Estimates (B)	t-value	p-value
Constant	58.122	31.872	.000
Library	.965	2.487	.013
Electricity	1.386	3.469	.001
Playground	-1.480	-4.504	.000
Class size	-2.250	-2.123	.034

*R-Square = 0.084**Adjusted R-Square = 0.076**Significant at $P < 0.05$* **CONCLUSION**

This paper focuses on identifying and investigating those factors that contribute to the academic performance at the higher secondary school level in the Nadia district. The study addresses several socio-demographic factors affecting the student's performance. The predictors were related to the students' individual, parental/household, and institutional characteristics. Separate models were fitted for using covariates associated with each distinct category. The best subset of the predictors was determined using the stepwise regression.

Regarding the effect of covariates related to individual characteristics, past-performance-score (*PPS*), average daily study hours, and gender found significant predictors. The results show that a student will be expected to perform well in School if his/her past academic performance at school was good. Further, also those giving more time at home to study may get better results. Interestingly, female students' performance was significantly better than male students' academic performance. Moreover, suppose a student did not perform well at school. In that case, it is suggested to have the tuition facility as the tuition-facility (binary variable) was among the best-selected covariates after dropping the variable *PPS* from the class of the potential predictors.

Similarly, parental/family characteristics, parents' education (especially father), separate room for study, and house-size were significantly affecting the students' performance at the School level. Finally, the factors associated with the School characteristics were examined. The results show that School students with all facilities, such as labs/library, electricity, and moderately small class size, performed better.

As past performance scores significantly affect student's performance, so it is recommended that parents should support their children in education from an early age for their successful future. Parents should take care of their children

and make them habitual of study at home. Extra responsibility at home should be avoided. The availability of a separate room at home significantly affects students' performance. It is recommended that parents should provide a separate room and a peaceful environment for study. The availability of learning facilities at School plays a vital role in students' performance, so it is recommended that the Government should provide an effective learning environment. An overcrowded class badly affects students' performance, so the Government should provide accommodation, physical resources, and teaching staff for improving the teaching and learning process.

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IMPACT OF HOME ENVIRONMENT ON ACADEMIC ACHIEVEMENT OF TRIBAL REGION SECONDARY SCHOOL STUDENTS - A STUDY

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ABSTRACT

Academic achievement is assuming greater importance day by day, one reason for this is the tremendous growth of student's population and competition. It forms the main basis of admission, promotion in a class, obtaining degree and getting job. For that there is a tremendous pressure on students to earn good grades. Home environment has a very important role in this regards. So far as the education of the child is concerned home is the first agency and parents act as a first educator. It is what parents do in the home that counts for learning development of children. The main objectives of the topic are to find out the significant impact of home environment on academic achievement of tribal region secondary school students. A sample size of 300 Boys and 300 Girls total 600 Class-IX Students were selected and taken up for the study. Purposive and Simple random sampling method has been used by the researcher for selecting the samples. Home Environment Inventory developed by Dr. Karuna Shankar Mishra and Classroom Achievement Test developed by Dr. P. K Naik was used for the study. It has been found that, there is a significant impact of home environment on academic achievement of tribal region secondary school students, but no significant mean difference of academic achievement among tribal region boys and girls secondary school students is found.

Key words- *Home Environment, academic achievement, tribal region secondary school students.*

Introduction:-

Home environment refers to all sorts of moral, ethical, emotional, social and intellectual climate set up by the family members to contribute to the wholesome development of an individual. The home has always occupied an important place in any organised social living. So far as the education of the child is concerned home is the first agency and parents act as a first educator. It is what parents do in the home that counts for learning development of children. Academic achievement of student is the ability of the student to study and remember facts and being able to communicate his knowledge orally or in written form in an examination condition. It plays a very significant role in the attainment of the harmonious development of the students. In our society academic achievement is considered as a key criterion to judge student's total potentialities and capacities, whether that students are from tribal region or urban region. It forms the main basis of admission, promotion in a class, obtaining degree and getting job. It is also more valuable for a student to bring personal satisfaction and social recognition Therefore it is more pressing for the students to have good academic achievement. Several researchers have found relationships between home environment and academic achievement of students. Students coming from good and positive home environment can academically perform well. So to keep the student academically good, home plays an important role.

Significance of the study:-

It is a fact that a nation's progress depends upon its students' academic achievement and development. That's why every nation emphasizes students' academic achievements. Academic achievement is a paramount importance particularly in the present socio economic and cultural contexts. Obviously in the school and college great emphasis is placed on academic achievement right from the beginning of formal educational system in India so far as admission in higher education and employment is concerned. Achievement can be said to be the outcome of instruction. Osokoya (1998) also stated that achievement is the end product of learning experience. Attaining a high level of academic performance is what every parent or guardian as well as teacher wishes for their children and students. Academic achievement is assuming greater importance day by day, one reason for this is the tremendous growth of student's population and competition. For that there is a tremendous pressure on students to earn good grades. From review of literature the investigator learns that there is significant relation between home environment and academic achievement of the students.

It means home environment is one of the factors which affect the academic achievement of the students.

The home is regarded as the best environment for the young child. The home should produce and provide affectionate and happy life in which the fundamental needs of the children and adults are given due consideration and in which desirable behavioural patterns of the childrens are designed and inculcated. In this rapidly changing world and with the growing advancement good academic achievement helps pupils for their proper development. The world is becoming more and more competitive. Quality of performance has become the key factor for personal progress. So for good academic performance of student, healthy and positive home environment is essential. But on the other hand it has been found that generally the home environment of students belongs to tribal region are not so good as the home environment is influenced by their socio economic status and traditional belief. This logic implies that home environment and academic achievement are interlinked and complementary to each other. While reviewing the related literature the investigator could not found such studies which explored the impact of home environment on academic achievement of secondary school students belongs to tribal region. Therefore following problem statement was specifically framed for this study. This study will provide sufficient material to know the impact of home environment on academic achievement of tribal region secondary school students.

Operational definition:-

Home Environment- The home environment is the social environment comprises all the blood relation and members present in the family. It refers to the climate prevailing in the home, which varies from culture to culture, society to society and family to family. It is well known that home is most important place where a child gets the love, care and sympathy through playful learning activities. Home environment is giving appropriate atmosphere which is helpful in child's proper development and forming has far reaching affect in helping the children to achieve their goals of life.

Academic Achievement- Academic achievement of student is the ability of the student to study and remember facts and being able to communicate his knowledge orally or in written form even in an examination condition. Academic achievement is the outcome of the instruction provided to the students in school which is determined by the grades, or marks secured by the students in the examination. It plays a very significant role in the attainment of the harmonious

development of the students.

Tribal Region- The word tribal refer to a group of people living in primitive conditions. According to Indian constitution, the tribal people of India are called Scheduled Tribes. India has the largest concentration of tribal population in the world. With a population of more than 10.43 crores as per 2011 census, the Scheduled Tribe population represents one of the most economically and socially backward and marginalized groups in India. In this study tribal region indicates that where more scheduled tribes people are found.

Objectives of the study:-

1. To study the significant impact of home environment on academic achievement of tribal region secondary school students.
2. To study the significant mean difference of academic achievement among tribal region boys and girls secondary school students.
3. To study the interactional effect of home environment and gender on academic achievement of tribal region secondary school students.

Hypotheses of the study:-

1. There is no significant impact of home environment on academic achievement of tribal region secondary school students.
2. There is no significant mean difference of academic achievement among tribal region boys and girls secondary school students.
3. There is no interactional effect of home environment and gender on academic achievement of tribal region secondary school students.

Sampling:-

In this study, all the Class-IX students belong to government and private secondary schools from Nadia and Murshidabad district of West Bengal formed the population of the study. In order to collect the data for the present study 20 secondary schools were selected through purposive sampling techniques. Out of 20 secondary schools 10 are government and 10 are private schools. Again 300 Boys and 300 Girls total 600 Class-IX students have taken randomly as the subjects of the present investigation from the selected government and private secondary schools of Nadia and Murshidabad district of West Bengal. Purposive and Simple random sampling method has been used by the researcher for selecting the samples.

Tools used:-

The researcher has used the

1. Home Environment Inventory developed by Dr. Karuna Shankar Mishra..
2. Classroom Achievement Test by Dr. P. K Naik.

Statistical techniques used:-

With the help of statistical software package (**SPSS**) all the analysis were performed, Mean, Standard Deviation, t- test, ANOVA were calculated and interpretations were made. The result so obtained are interpreted and discussed in the light of problem factors to make the result meaningful.

Findings:-

HO-1 There is no significant impact of home environment on academic achievement among tribal region secondary school students.

Table – 1
ANOVA^a

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2210.920	1	2210.920	6.841	.009 ^b
	Residual	193279.279	598	323.209		
	Total	195490.198	599			

a. Dependent Variable: Academic Achievement

b. Predictors: (Constant), Home Environment

Coefficients^a

Unstandardized Coefficients				Standardized Coefficients Beta	t	Sig.
Model			Std. Error			
1	(Constant)	46.103	2.498		18.455	.000
	Home Environment	.029	.011	.106	2.615	.009

a. Dependent Variable: Academic Achievement

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.106 ^a	.011	.010	17.978	1.305

a. Predictors: (Constant), Home Environment

b. Dependent Variable: Academic Achievement

Interpretation

A linear regression was run to determine the impact of home environment on academic achievement among tribal region secondary school students (both boys and girls). The Durbin-Watson statistic for data is 1.305 which indicates that there is no correlation between residuals and there is independence of errors. Result of ANOVA concludes that home environment could statistically significantly predict the academic achievement, $F(1, 598) = 6.841$, $P < 0.05$ and the home environment accounted for 1.1 % of the explained variability in academic achievement. The regression equation is: Predicted academic achievement = $46.103 + 0.029 \times (\text{home environment})$. Thus the **HO-1** —There is no significant impact of home environment on academic achievement among tribal region secondary school students is **rejected**.

Result

It has been found that, there is significant impact of home environment on academic achievement among tribal region secondary school students.

HO-2 There is no significant mean difference of academic achievement among tribal region boys and girls secondary school students.

Table – 2

Group Statistics

	Sex of the Respondents	N	Mean	Std. Deviation	Std. Error Mean
Academic Achievement	Boys	300	51.34	18.540	1.070
	Girls	300	53.36	17.551	1.013

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	5% Confidence Interval of the Difference	
									Lower	Upper
Academic Achievement	Equal variances assumed	0.693	0.405*	-1.373	598	0.170*	-2.023	1.474	-4.918	0.871
	Equal variances not assumed									
	Equal variances assumed									
	Equal variances not assumed			-1.373	596.213	0.170	-2.023	1.474	-4.918	0.871

Interpretation

The size of the sample was 600. Bifurcation of group includes 300 boys and 300 girls of tribal region secondary school students on academic achievement. An independent sample 't' test was run to determine if there was difference in academic achievement score for boys and girls. The data was free from outliers and stress score for each level was normally distributed as assessed by Shapiro- Wilk's test ($P > 0.05$). There was homogeneity of variance ($H_A: \sigma_1^2 = \sigma_2^2$) for academic achievement score for boys and girls on academic achievement score as assessed by Levene's Test for equality of variance ($P = 0.405$). There was no statistically significant difference in the mean score of boys and girls on academic achievement, $t(598) = 1.373$, $p = 0.170^*$. Thus the **HO-2** —There is no significant mean difference of academic achievement among tribal region boys and girls secondary school students is **accepted**.

Result

It has been found that, there is no significant mean difference of academic achievement among tribal region boys and girls secondary school students.

HO-3 There is no interactional effect of home environment and gender on academic achievement of tribal region secondary school students.

Table – 3
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2218.406	1	2218.406	6.864	.009 ^b
	Residual	193271.792	598	323.197		
	Total	195490.198	599			

a. Dependent Variable: Academic Achievement

b. Predictors: (Constant), Gender HENV

Coefficients^a

Unstandardized Coefficients				Standardized Coefficients Beta	t	Sig.
Model			Std. Error			
1	(Constant)	48.200	1.745		27.618	.000
	Gender_HENV	.013	.005	.107	2.620	.009

a. Dependent Variable: Academic Achievement

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.107 ^a	.011	.010	17.978	1.302

a. Predictors: (Constant), HmEn_Gender

b. Dependent Variable: Academic Achievement

Interpretation

A linear regression was run to determine the impact of home environment and gender on academic achievement among tribal region secondary school students (both boys and girls). The Durbin-Watson statistic for data is 1.302 which indicates that there is no correlation between residuals and there is independence of errors. Result of ANOVA concludes that home environment could statistically significantly predict the academic achievement, $F(1, 598) = 6.864$, $P < 0.05$ and the home environment accounted for 1.1 % of the explained variability in academic achievement. The regression equation is: Predicted academic achievement dimension = $48.20 + 0.013 \times$ (home environment and gender). Thus the **HO-3** —There is no interactional effect of home environment and gender on academic achievement of tribal region secondary school students is **rejected**.

Result

It has been found that, there is significant interactional effect of home environment and gender on academic achievement of tribal region secondary school students.

Conclusion:-

The finding of the study shows that though no significant mean difference of academic achievement among tribal region boys and girls secondary school students is found but there is a significant impact of home environment on academic achievement among tribal region secondary school students. The researcher feels that it happens due to traditional culture of tribal region prevails at home and their socio economic status. Anyway home environment plays vital role in the life of student. Students can attain maximum achievement only when home environment become healthy, as the students spend maximum time at home. The brain of the child develops according to the quality and quantity of the stimuli the children receive from their parents at home. Home is the primary place of education. Many of the values transmitted by the school were first inculcated in the child at home. So the home

environment definitely influences the academic achievement of the students. Thus, a broad study is encompassing the social, culture and economic conditions of the student of tribal region. This, in turn, helps formulating appropriate policies in different regions of India in order to facilitate higher education to students of tribal region. There is a need to frame such an educational policy which is conducive to the academic performance of the students of tribal region. The findings of the study may be helpful for parents and students to be sensitive to the factors that enhance their academic achievement and keep the home environment healthy.

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WOMEN & CUSTODIAL PROBLEMS IN INDIA: A STUDY

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ABSTRACT

Women play a vital role in society. The important role she plays is the ability of mother, sister, wife and other social relations as mother-in-law etc. The constitution which is also called the mother of Indian Judicial system, legislature and administration has given out equality to women in India irrespective of caste, race, religion etc and had imposed various obligations to conserve women's right and to follow and adopt the requirement of international conventions on women's and their rights. There are two sides of coin and the darker side of this is in reality, women in custody faces a series of problems even their basic rights are ignored despite of the Apex and High courts as well as guidelines of various commission's recommendations for reformation of female prisoners i.e. women in conflict with law. There are very few circumstances where the custody of the women is important. The present paper is based on the conditions and problems faced by women and their children in custody either as Under trails prisoner or as Convicted prisoners.

Keywords: *Women in prison, Custodial problems, Violence in prisons, Custodial rape, Feminine Hygiene.*

I. Introduction

Punishing the law breaker is the main function of all civil societies. The Penal institutions are in existence and have a long history of existence. Existence of prisons can be found in pre-historic period. The concept of rigorous segregation and custodial measures were adopted in belief that offenders can be

reformed to live in society but it was mere a myth or mere a belief as imprisonment shave the negative effects and has nothing to do with the reformation of offenders. There is no contact between the prisoner and their family and friends and it also curtails the freedom which is otherwise a fundamental right. The concept of re-habilitation of law breakers and preparing them for normal life by keeping them imprisoned is like building a Rome in one day.

The changing scenario of society includes the socio-economic changes and with this change the crime ratios has also change and the society has seen a rapid growth in crime ratio sand involvement of women's have also increased. The crimes like murders, theft, cheating, economic offences etc have seen a big growth due to socio-economic changes and so as the ratio of women offenders. The growth in women offenders have also increased the problems faced by them like heath issues, pre-natal and post-natal issues with other major concerns. The basic human rights of women in conflict in law and facing custodies i.e. as under trial prisoner or as convicted prisoner are also ignored despite various guidelines from the Apex Court, High Courts etc. The difficulties faced by them are required to be eliminated so that they can live alive of human dignity even in custody.

As per the data released in NCRB, the Prison Statics India Report for year 2019 there are 1350 prisons in India with actual capacity for keeping prisoners is 4,03,739 but astonishing fact is that 4,78,600 inmates are lodged in these jails surpassing its 100 percent capacity to 18.5%. and only 31 women Jails.¹ It is also a dark side of our Prisons system and failure on part of Governments that having 31 women Jails are in existence since independence and only few UT's and State have privilege to have women jails but that too with non-existent amenities. Although as per NCRB's data no of women inmates in women jails are 3652 and total capacity is 6511. Most female inmates are held in other kinds of jails due to the insufficient space of women's jail. Around 83.12 % of all female inmates in India were sent in custody other than women's jails.

II. Meaning of Custody

Custody is the state of physically holding or controlling a person or piece of property, or of having the right to do so. A person who has custody over property or another person often has affirmative duties to protect and care for those in their charge. In criminal law, a person is in custody when—after being arrested or convicted of a crime—they are held in jail or prison. Such persons

are under state control until they are acquitted of their alleged crime or the conclusion of their prison sentence. Persons in state custody are limited in their liberties, and dependent upon officers to meet their needs. As such, officers owe a duty of care to anyone in custody, to ensure their health, wellness, and safety.²

III. Aims & Objectives of the study

- To study the rights available to women in custody in India.
- To study the position of women during the custody and problems faced by them in India.
- To study the role of Judiciary and the problems behind implementation of the guidelines of the Courts regarding to take the custody of women in India.
- To examine whether the implementation & enforcement mechanism is sufficient enough to safeguard the rights of women in custody.

IV. Problems faced by women in custody

Even after 73 years of Independence the society is still dominated by males and in this male dominating societies the weaker ones i.e. females has suffered injustice on a regular basis. The women i.e. our mothers, sisters, wives, daughters etc have faced and still facing various kinds of abuses at various levels even in custody. The custodial abuses can be termed as draconian unfairness towards women in custody either in police or in judicial or as convicted prisoners. The situation of the women in custody is still reprehensible despite various inefficacious efforts done by lazy institutional and governments processes as they face oppressions and punishments which are otherwise not a part of their incarcerations or custody. In terms of dehumanizing under trial women and violating their residuary rights there are many jails as example in India and despite various alarming incidents the Governments which also include state and center are slept over their own recommendations? The number of women's prisons in India is insufficient.

i. Scaring state of Affairs of Women in custody

The women facing trails, convicted for offences or awaiting releases from prisons faces the higher risk of problems during the custody. The problems like health, nutrition, hygiene, depressions, sanitization and violence in custody with other issues like lack of child care system, gynecologists, lack of staff and specially dedicated rooms or barracks to keep their children where no one is alive to take care of them are the major issues faced by the women prisoners.

The article Women prisoner recount Jail Horror Stories: “ Rape and Torture Common In Jail” published on 24.01.2019 by Teesta Stevalvad says “Over the past 15 years, India’s jails have seen a rise in women inmates by 61 per cent, even though they constitute only 48.18% of the national population (according to the World Bank, 2017). Moreover, the Indian prison system has failed to respect their rights. From custodial torture, rape, denial of health services, lack of clean food and water and sheer ignorance on behalf of the state, women inmates languish amidst inhuman conditions in Indian jails.³

ii. Accommodation

National Prison Manual has some specific instructions for barracks etc. Jail Barracks can accommodate ideally 20 prisoners and dormitories for four to six prisoners. The single occupancy rooms are to be given to prisoners in need of privacy for the purpose of Study etc. as well as segregated cells where prisoners may be kept due to concerns of violence or contagious disease. Adequate HVAC facilities in barracks as well as washrooms and laundries are to be provided. Inmates are also meant to have individual secure storage compartments for their personal belongings. However, overcrowding is one of the key problems plaguing Indian prisons.

Overcrowding directly relates to a lack of space for prisoners and increase pressure on already limited facilities available in jails. The effects of overcrowding often become even more pronounced in the case of women, as they are usually restricted to a smaller enclosure of the jail due to lack of proper infrastructure for them. Overcrowding can worsen hygiene conditions and health problems with even minor infections spreading quickly the disproportionality equal number for toilets and bathrooms exacerbates the situation. Overcrowding also has severe psychological effects on prisoners forced to live in such close quarters with one another. The National Prison Manual prescribes that in the case of overcrowding the excess numbers of prisoners are to be transferred to another institution /camp.

iii. Health and diet are the major issues

“Women’s health needs, covering mental, physical, sexual and reproductive health, require particular attention.”

The Jails accommodate a large number of prisoners and even Jail staff etc but the medical services in Jails are in very poor state of position. The Strength of the prisoners is increasing day by day but the medical services inside Jails have not been improved and no significant steps have ever been taken by

the Government to improve medical facilities inside prison rather makeovers have been done. The Medical facilities such as specialty doctors and inside hospitals having modern basic life support systems, pathological labs etc must be there so that prisoners can get better medical facilities. The Inside Hospitals and Clinics of prisons requires improvements such as appointment of more doctors and other medical staff as per lodging capacity of jails especially Gynecologists, psychiatrists, Child specialist and orthopedics etc so that better medical facilities inside prison can be provided to women prisoners. The weekly or fortnightly medical camps should be organized in routine manner to overcome the health issues of every prisoner. The right to health includes providing healthcare that is available, accessible, and acceptable and of good quality. The National Prison Manual provides for a hospital in every prison with separate wards for men and women with comprehensive health screening for women prisoners to determine presence of STD or other diseases, psychological disorder, drug abuse or dependency, etc. Special care is to be taken for prisoners with medical conditions, elderly prisoners and needs of prisoners addicted to drugs⁴. The owing to the lack of awareness many of women enter prison with pre-existing physical and psychological conditions which requires immediate medical help. The right to health includes providing healthcare that is available, accessible, acceptable and of good quality. “Women’s health needs, covering mental, physical, sexual and reproductive health, require particular attention.” The Chief Medical Officer/Medical Officer (in charge) is meant to visit the prison every day and make a full inspection of all prisoners once a month. Lady Medical Officers are to be appointed for care of women prisoners. There are provisions in the National Prison Manual for inspecting the mental health of inmates and providing appropriate counseling and psychotherapy or recommending transfer to appropriate institutions. Female prisoners needing treatment for mental diseases should not be admitted in prison but kept in separate enclosures of mental health hospitals. The quality of food served in prisons are not of good quality and have not prepared in neat and clean manner and in most prisoners the food served to prisoners lacks basic daily requirements of nutrients. Food deprivation is a form of torture used across the world. However, *pingla diet* (*Thin diet served so that neither human being can survive nor can die*) is used to describe a practice where the inmate is kept hungry but not starved – she is provided with just enough food to keep her from dying. Article-11 of ICESC⁵, recognizes the right of everyone to an adequate food and drinking water. Right to food means nutritional food is an integral part of right to life mentioned in

Article 21 of the Constitution of India. Every prisoner shall be provided by the administration at the usual hours with food of nutritional value adequate for health and strength, of wholesome quality and well prepared and served. On average, adult women need between 1,600 and 2,400 calories a day. Women who are more physically active may need more calories along with other nutrients like Calcium, iron, and folic acid are particularly important for women. The women requires different nutritional needs during different stages of life, such as during pregnancy and breastfeeding or after menopause and due to insufficient nutrition women are more likely to have some health problems related to nutrition, such as celiac disease, lactose intolerance, vitamin and mineral deficiencies, such as iron-deficiency anaemia etc and It is of great importance that the dietary should be varied as much as possible. However, the prison administration and management have been subjected to criticism by courts, prisoners and public for not maintaining the basic minimum standards of human dignity, and for the poor living condition of inmates in place of human confinement like prison.

iv. Prison staff

The NMPM 2016 specifies that there must be one guarding staff for every six prisoners. Further, each prison is meant to have executive, medical, welfare, educational and other personnel staff to ensure proper functioning of the institution and for reformation of the prisoners. There is a paucity of female staff at every level. The Manual also stipulates that one lady DIG must be attached to the Prison Headquarters to look after women prisons, staff and prisoners in the state. There shortfall of staff in almost every jail of the country. The Hon'ble Supreme Court in Writ Petition (Civil) No. 406 of 2013 noted that there is a huge shortage of staff in almost every jail of the country. It directed all State Governments/UTs to take necessary steps on an urgent basis to fill up these vacancies by 31st December 2017⁶. Visits by NHRC to over 100 jails have revealed a woeful, lack of staff, particularly in small district Prisons. There is a growing need for exclusive women prisons, skilled female prison officers, Fulltime lady doctors, and pediatricians etc.

v. Sanitation & Hygiene

“There are usually a small number of bathrooms and toilets catering to a disproportionately large prison population”

The basic facilities of sanitation and hygiene are in bad conditions in almost every Jail. The unhygienic and poor sanitation leads to ill health,

psychological disorders and human to human communicable diseases as diarrhea, head and pubic lice's, lymphatic filariasis, ringworm tinea and trachoma etc. The Manual prescribes 1 Cubicle for every 10 prisoners, but there are usually a small number of bathrooms and toilets for numerous prisoners creating unhygienic and sanitization problems. The women's toilet should be separated in safe and secure way from any one's intervention, therefore the risk of sexual harassment can be prevented. There is a lack of sufficient water, which exacerbates the low levels of sanitation and hygiene. There have been reports of prisoners not being able to bath for multiple days due to non-availability of water. The National Prison Manual prescribes that thorough cleaning, disinfection and pest control of the inmates' accommodation must be done but due to small number of bathrooms and toilets, catering large prison population is a major concern. Every state's prison manual provides for a minimum number of clothes and undergarments to be provided to women prisoners as per climatic conditions and corresponding to basic hygiene standards but situation is otherwise. It is essential to note that a large majority of female prisoners fall in the menstruating age group of 18-50 years, increasing their need for proper sanitation facilities as well as access to adequate menstrual hygiene products like sanitary pads, intimate washes etc. but this is largely missing. Women are reportedly charged for sanitary napkins in some prisons or are only provided a set monthly number irrespective of need and usage. This leads them to use unhygienic materials such as cloths, pieces of old mattresses, newspapers etc. In order to improve the state of sanitation in prisons, strict implementation of state prison manuals is required along with regular and genuine inspections. Prison administrations can consider construction of more toilets & repairs as per accepted hygiene standards.

vi. Education

“Basic education is not universally available to women prisoners. Access to higher levels of education is almost entirely missing.”

The Manual provides for educational facilities for inmates, depending on their capability & previous qualification. The educating illiterate young offenders (18-21 Y) is considered as mandate. The NHRC reports that basic education is not universally available to women prisoners & higher levels of education are almost entirely missing. Even in cases where libraries exist in jails, they are many times not accessible to women inmates. Education is an important factor to help women re-integrate successfully in society after release. Every prison should provide educational facilities to women inmates & NGOs & local

schools & colleges can be roped in to run programmes in prison for education women prisoners. In case there are some educated inmates in the prison, they can be encouraged to hold lessons for other inmates. Governments must work to link prison education with main stream education systems, so learning may be continued after release.

vii. Violence

“All staff assigned to work with women prisoners is to receive training on gender-specific needs and human rights of women”

The women's outside prison and inside prison are dominated by the men and are subjected to cruelty of every kind like verbal abuse, physical abuse, emotional abuse, mental abuse etc. The National Prison Manual, specify that no male should be allowed to enter the female ward of the prison unless with a legitimate duty, after which he should record the reason for his visit in his record book. There is to be round the clock duty of female head wardens and female wardens. Women prisoners should not be made to leave their enclosure under any circumstances other than release, transfer, and attendance at court or under order of the Superintendent for any other legitimate purpose. Incidents of violence including sexual violence by inmates and authorities has been reported from across the country but official reports remain silent due to fear in prisoners of retaliation as they are forced to stay in the same place where their perpetrators are staying. As per the National Prison Manual, if a case of sexual abuse or other forms of violence faced by a prisoner is brought to light, she must be guided to seek legal recourse and lodge a complaint to the prison officials and in writing in the complaint box. Prisoners may also file complaints under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 but it has been seen that despite making the complaints no stringent action has been taken in many case and the complainant prisoner are subjected to torture by the jail staff or another inmates for making complaints. Despite these protections, the Hon'ble Supreme Court acknowledged widespread incidence of torture and abuse in prison by both prisoners and authorities most recently in 2015⁷, directing States to install CCTVs in all prisons with some other directions. Prison administrations should be extremely strict in dealing with cases of violence against women prisoners.

viii. Contact with the outside world

“The social stigma attached to women living in prison is often so severe that female inmates do not receive visits or phone calls very frequently.”

The Apex Court has re-affirmed the rights of prisoners to maintain contact with the outside world. As early as 1979, it stated, “*visits to prisoners by family and friends are a solace in insulation, and only a dehumanized system can derive vicarious delight in depriving prison inmates of this humane amenity*”⁸. The Prison Manual makes provisions for inmates to interact with family members, relatives and friends on a fortnightly basis. Inmates are allowed to write and receive letters, meet with people and take phone calls under stipulated guidelines. The number of interviews is to be liberalized for women prisoners and there should further be no limit on incoming letters. Illiterate/semi-literate women should be provided help in writing letters. Despite these provisions, their implementation is affected by many factors. The social stigma attached to women living in prison is often so severe that female inmates do not receive visits or phone calls very frequently. The large numbers of male prisoners dominate the general waiting rooms, where female inmates often feel vulnerable. Moreover, the whole rehabilitative purpose of sentencing is to soften, not to harden, and this will be promoted by more such meetings. Sheldon Krantz rightly remarks “A sullen, forlorn prisoner is a dangerous criminal in the making and the prison is the factory.”⁹

ix. Children

“Spending their formative years in prison can have a severe negative impact on the entire lives of children”

Children to the age of 6 years are allowed to live with their mothers in prison if no other arrangements for their care can be made. This age limit varies from State to State. As on last count, a total of 1,597 women inmates are living in prison with their 1,866 children. The Hon’ble Supreme Court issued guidelines in 2006¹⁰ under which children in jail are entitled to food, shelter, medical care, clothing, education and recreational facilities as a matter of right. Before sending a pregnant woman to jail, the concerned authorities must ensure that the jail has the basic minimum facilities for child delivery, pre-natal and post-natal care. Pregnant and lactating women are to be provided with a better diet as well as facilities to boil water and milk. Gynecological examinations of prisoners are to be performed in District Government Hospitals. As far as possible, except in the case of high-risk prisoners, arrangements for temporary release are to be made to enable delivery of children in a hospital outside the prison. Suspension of sentence may also be considered in the case of casual offenders. Further, the birth certificate of the child should not mention the prison as place of birth to protect them against social stigma. As per a BPR&D report

in 2009, proper facilities for biological, psychological and social growth of the child, crèche and recreational facilities are not available in every prison. In many cases, other than a glass of milk, an adequate special diet for children is not always provided. Spending their formative years in prison can have a severe negative impact on the entire lives of children, if not taken care of well. Prison administration should ensure that their facilities are tailored towards children living under their care, and these children should not be made to feel like offenders.

x. Re-integration in society after release

“Family ties are often lost and economic independence is a major hurdle”

The psychological and physical effect of spending time in jail, coupled with the social stigma attached to women prisoners makes it hard for female inmates to re-integrate themselves in society after release, as family ties are often lost and economic independence is a major hurdle. The Manual specifies that sufficient advance notice is to be given to family/friends on release of female prisoners. The Mulla Committee recommends that to avoid the stigma of imprisonment, the female escort accompanying the woman must be dressed in ordinary clothes. The Manual provides for after-care responsibilities of jail authorities to help released inmates integrate into society and includes utilizing options of home leave, open prisons, halfway houses, community-based programmes etc. to ease transition. In some States, a grant is sanctioned for rehabilitation of released convict prisoners. In the case of released under trials it is a way to help compensate for the trials inflicted on often- innocent persons while living in prison.

Methods for resolution

Despite a number of provisions given on paper for the welfare of women in prison, the reality of a jail is very different. The objective of re-formation is often forgotten in favor of discipline & uncalled for violence. The full implementation, in letter & spirit, of existing provisions & adoption of innovative methods will go a long way in improving the prison system. Some recommendations in this regard are detailed under.

A. Adoption & implementation of national model prison manual, 2016 by states

The National Model Prison Manual 2016 is the most recent and contemporarily valid document pertaining to the correctional architecture of our country. It sets out some basic minimum standards for the treatment & welfare

of prisoners, & must be adopted by all States as a minimum guideline. It also provides specific measures such as gender sensitive training for all staff dealing with women inmates, which can go a long way in improving the lives of women in prison. Prison Manuals of States should align with these national standards & be implemented strictly across all jails in the area. In May 2017, the Hon'ble Supreme Court directed the Ministry of Home Affairs and States to work towards the implementation of the National Model Prison Manual 32 and this has been reiterated in later orders. Adherence to prison manuals is currently considered optional in practice, which should not continue. The Ministry of Home Affairs has proposed the setting up of an Integrated Prison Software System that is to contain data relating to prisoners and prisons. This may be taken up across all prisons expeditiously.

B. Establishment of a national commission for prisons

The Mulla Committee recommended that a National Policy on Prisons must be formulated, to reform and re-assimilate offenders within the social milieu. To further this objective, it recommended the setting up of a National Commission for Prisons to function as a specialized advisory body for all prison and allied matters. The functions of proposed Commission may be to monitor the standards and norms of different categories of prisons, enroll individuals and community groups to serve in the prevention of crime and treatment of offenders, review achievements of State correctional institutions and plan their future organizational and personnel structure in consultation with them, coordinate plans for administrative and operational functioning of prisons with the States/UTs and monitor their progress in order to have an all-India perspective on prisons. The Commission may work out and finance pilot projects to serve as models for the development of prison administration. It may also publish an annual statistical report relating to prison data. Such a body would serve as an overarching monitoring and reviewing body, and also an advisory body for the development of prisons. It would lead to better coordination between States and a uniform policy on prisons. This would likely bring consistency in services for women inmates across the country. The setting up of this Commission may thus be considered.

C. Periodical inspection of prisons

The National Policy on Prison Reforms and Correctional Administration states *"Prisons are hitherto a closed world. It is necessary to open them to some kind of positive and constructive public discernment. Selected eminent public-*

men shall be authorized to visit prisons and give independent report on them to appropriate authorities.” It is suggested that a more robust mechanism for inspections be put in place to conduct independent, timely and regular inspections. All official visitors must hold special one-on-one interviews with prisoners away from prison authorities during inspection visits. All reports from official inspection visits by Board of Visitors, DLSAs (District Legal Service Authorities), State Commission for Women etc. must be shared with District Magistrate, District Sessions Judge, State Legal Services Authority, State Human Rights Commission, State Commission for Women and State Department of Women and Child Development/Social Welfare. State Commissions for Women will follow the comprehensive Prison Visit Proforma as developed by NCW and will regularly submit online reports in this format. The recommendations of the inspection report must be mandatorily complied with, or in the event of non-compliance, reasons for such non-compliance must be given in a time-bound manner. Such inspection reports and implementation records should be publicly available. A fair and thorough inspection can itself be a very effective tool in improving conditions of prisons and the lives of women living in jail, and this must be carried out regularly and in its true spirit.

D. Strong resolution system

The Manual prescribes the creation of a Prisoners’ Sabha to organize events and activities for prisoners as well as provide an avenue to represent concerns and seek redress of grievances. Prisoners should also be able to represent their grievances verbally or in writing during visits by Board of Visitors, DLSA, and State Commissions for Women, District Magistrate etc.

E. Special procedure for arrest of women

The CrPC contains certain special provisions for the arrest of women – the arrest of women after sunset and before sunrise (except with the prior permission of Judicial Magistrate First Class) is prohibited and a female arrestee is mandated to only be searched by a female officer with due regard to decency. However, there are additional areas that need to be covered explicitly by the law. The police official arresting the woman should ideally be dressed in plain clothes and not their uniform so as to reduce the stigma associated with incarceration. Provisions should also be made for the custody of minor children of the woman at the time of arrest. She must provide in writing the name and details of the person with whom she wishes her minor children to stay during her

period of incarceration, and this must be complied with strictly. In case where no family/friends are available to care for the child and he/she cannot accompany the mother to prison, the child should be appropriately placed in a Child Care Institution.

F. Pre-natal & post natal concerns

When deciding to which prison the woman is to be sent, regard should be for her caretaking responsibilities if she has a child, and as far as possible, the woman must be given the choice of selecting the prison and her children must be kept in the prison in a manner that they are not made to feel like offenders. Administration should ensure the facilities provided are tailored towards children living under their care. NGOs, schools and pediatricians can be engaged to ensure that children in prisons have access to basic facilities of education, day care, recreation and a healthy lifestyle. So far as practicable or possible prison administration shall strive to create a suitable environment for children's upbringing, which is as close as possible to that of a child outside prison. E.g., airy rooms with adequate natural light, minimum security restrictions, outdoor play area, opportunity to socialize with peers outside prison if not available within prison etc. Women prisoners whose children are in prison with them shall be provided with the maximum possible opportunities to spend time with their children. Children should receive a special diet and be regularly examined by a Lady Medical Officer at least fortnightly to monitor their physical growth and condition of physical and mental health. They should have access to a Lady Medical Officer as per their need. Children, whether living in prison or visiting, should never be treated as prisoners. Body cavity searches should never be applied to children. Ideally, no child shall be admitted into or retained in prison if he/she has attained the age of six years. The best interest of the child should be the determining criteria to determine whether and for how long they should stay with their mothers in prison. Overnight visits for minor children living outside prison to maintain a bond with their mothers must be allowed at least fortnight. A separate area with a positive homely environment must be provided within the prison for purpose of this stay with the mother.

G. Children of women prisoners

Women prisoners whose children are in prison with them should never be treated as prisoners. The prison staff must display sensitivity, respect & dignity when searching children. Ideally, no child shall be admitted into or retained in prison if he/she has attained the age of six years. In case where no

family/friends are available to care for the child & he/she cannot accompany the mother to prison, although the child should be appropriately placed in a Child Care Institution and be ensured that children of the same woman prisoner are housed together in alternative care. The prison administration must ensure that the child be placed in a manner that she/he can interact with the mother regularly at least once a week. Children must be removed from the mother's care with utmost sensitivity & only after making adequate arrangements for his/her stay. Minor children live outside prison from natural love & sentiments of their mother's loves causes slow mental, emotional & physical growth. A separate area with a positive homely environment is deprived to minor children i.e. is very necessary for their betterment & upliftment.

H. Better living arrangements

State prison manuals must be updated and strictly implemented to provide basic entitlements to all women prisoners including appropriate living areas, bedding, toilets, outside area etc. Prisons can be linked to local Swachh Bharat initiatives, if needed, to construct more bathrooms & toilets and carry out repairs for better hygiene. The prison doctor or competent public health body should regularly inspect & advise the Superintendent on the quantity, quality, preparation and service of food; hygiene & cleanliness of the institution and the prisoners; sanitation, temperature, lighting & ventilation of the prison; & suitability and cleanliness of the prisoners' clothing & bedding. The Superintendent should take into consideration the advice & reports provided and take immediate steps to give effect to the same. Women prisoners sentenced to six months imprisonment or below should be issued 3 sets of clothing, 2 towels and 3 sets of customary undergarments. This number will increase to 5 sets of clothing, 3 towels and 5 sets of customary undergarments for women sentenced to over six months. Inmates should be able to choose type of clothing from a set of options as per preference. At a minimum this should include saree with blouse and petticoat, kurta with salwar and dupatta, shirt with trouser/long skirt in light colours, but not necessarily white. Women in their post-natal phase must be given separate accommodation for one year after delivery to maintain a certain standard of hygiene and to protect the child from infections and other diseases. Also, sick women prisoners must be kept isolated for health purposes. Prison rules and practices that treat prisoners in a dehumanized way should be abolished such as rules that require prisoners to abstain from singing or laughing, that consider it an offence to refuse to eat food, or those that allow prisoners to wear sandals only upon the sanction of the Superintendent, all need reconsideration.

I. Improvement of health & nutrition

Comprehensive health screening of women must be done on admission, with due regard to their right to privacy, dignity and confidentiality, including their right to refuse screening. This will help in identifying health issues, providing adequate treatment and in preparing an individualized health and diet plan for the inmate. Telemedicine and jail collection of samples for routine testing may be done or constructing jail pathology labs, clinics and hospitals with specialty doctors etc must be there for better health management of prisoners. There should be comprehensive medical check-ups on an annual basis, regular medical check-ups on a monthly basis and access to a lady medical officer at all times for check-up, testing, treatment etc. as needed by the inmate. Papanicolaou tests and screening for breast and gynecological cancer should be done for women on a regular basis. In case lady medical officer is not available, prisoner will be transferred to the nearest medical facility where a lady doctor is available. Physicians should have daily access to prisoners who are sick, injured or suffering from other mental or physical health issues. Coverage of jails by interns or final-year medical students may also be done once a week to ensure medical services to women prisoners. Women with mental health issues must be transferred to appropriate institutions rather than keeping them in prisons. Inmates should have access to female counselors/psychologists at least on a weekly basis or as frequently as needed by them. First-time offenders must especially be counseled on admission, to prevent recidivism. Sterilized sanitary pads should be issued free of cost to women prisoners as per their requirements with no maximum limit. In case a prisoner falls seriously ill, her family/legal representative should be informed about her illness and must be shifted to Hospitals with better Medical facilities for treatment. Medical support must be extended to women inmates even after release to ensure continuity of care. Every prisoner who is not employed in outdoor work shall have at least one hour of suitable exercise in the open air daily if the weather permits. Adequate equipment and space should be provided for this purpose. Information about preventive measures for HIV, STDs or other gender-specific diseases must be provided. This could also be done through peer-based education. The prison staff must undergo mandatory training in gender-specific needs of women, first aid and basic medicine to tackle emergencies and minor issues effectively.

J. Addressing violence

Body searches must be conducted as per clearly formulated guidelines. While searching women prisoners, the least intrusive mode should be adopted as

considered appropriate in the situation. The type of search to be conducted should be communicated clearly to the inmate and reason for the same should be explained. In case of strip searches, they should be conducted in two distinct steps with upper body and lower body examined one after the other to avoid complete nudity at a given time. Body cavity searches should be avoided, as far as possible. CCTV cameras must be used with due regard to the dignity and privacy of women prisoners. Alternatives to physical and invasive search procedures, such as body screeners and metal detectors can be considered for use with due regard to safety and health of inmates. Written record should be kept of the type and frequency of searches for all inmates, which should be available for examination by official visitors. All staff involved in the custody, interrogation and treatment of prisoner must be sensitized on gender-issues, human rights and sexual misconduct. Adequate female staff must be appointed to tackle incidents of violence. Prison administration must deal with cases of violence with strictness and taking into account the risk of retaliation. Under trials and convicts must be housed separately to prevent violent episodes between inmates.

K. Legal aid & awareness

District and State Legal Service Authorities must be linked to prisons. All legal rights of the prisoner must be explained to them on admission in a language they can understand. Continuous awareness must be provided to inmates about their rights and remedies under the law through workshops and adequate linkages with NGOs, State Commissions for Women, law colleges etc. They must be encouraged to visit legal aid cells. Legal aid work must be incentivized to encourage more lawyers to take it up. Some women inmates may also be trained as Para Legal Volunteers to help other inmates in knowing their rights and providing them with legal support. Inmates must be given adequate opportunity, time and facilities to be visited by and to communicate and consult with a legal adviser of their own choice or a legal aid provider, without delay, interception or censorship and in full confidentiality. Video-conferencing with lawyers may be provided with proper monitoring mechanisms in place, to ensure that the prisoner does not feel alienated from the system. States must curb the malpractice of legal aid lawyers demanding money from inmates for taking up their cases with stern action.

L. Conclusion

The number of women in prison in India is steadily growing and number of issues plagues the lives of women in prison, many of whom are under trials.

Prisons are not effectively serving their reformatory purpose. There is an urgent need to understand the issues of women in prison recognize their rights and ensure these rights are fulfilled to give them status of human beings. While there are a number of progressive rules laid down for the welfare and fair treatment of prisoners, particularly women, this does not always translate into practice. Women face issues related to lack of female staff, inadequate and cramped accommodation, low levels of sanitation and hygiene, insufficient services to address physical and mental health needs, deficient nutrition, negligible educational opportunities and often unusable skill and vocational training. Many women who live with their children do not receive appropriate educational, health and recreational services to raise them well. These issues coupled with a lack of legal aid in prison, limited contact with the outside world and high incidence of violence by inmates and authorities further exacerbate the situation for women. Their re-integration in society after release is thus also a huge challenge. They must also be sensitive towards the needs of women belonging to minority communities, disabled women and foreign nationals so as not to discriminate against them in any manner. A genuine and responsive grievance redressal mechanism should be put in place to help address the violation of rights in prison and give inmates a method to have a dialogue with the administration. This study has been an attempt to build understanding on the areas for improvement within the prison system. The reader will likely agree that there is a definitive need to reform the largely male-centric prison system so as to make it effective to house and reform women prisoners.

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¹ *Prison Statistics India–2019 a report by NCRB*

² <https://www.law.cornell.edu/wex/custody>

³ <https://cjp.org.in/women-prisoners-recount-jail-horror-stories/>

⁴ *Model prison manual 2016*

⁵ *International convention on economic, social and cultural rights United Nations 1967*

⁶ (2017) 4 RCR(Criminal) 416

⁷ (2015) 3 RCR(Criminal) 848

⁸ (1980) AIR(SC) 1579

⁹ *Sheldon Krantz, Corrections and Prisoners Rights pp. 129-130*

¹⁰ (2006) AIR(SC) 1946

AN INTERPRETATION ON DIGITAL TECHNOLOGIES AND ITS RELATIONSHIP WITH INNOVATION IN EDUCATION

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ABSTRACT

Innovation implies implementation of improved ideas, knowledge and practices. It implies novelty and brings benefits. Innovation in education as art of innovation in economies and societies. Skilled people generate knowledge that can be used to create and implement innovations. Human capital does have a pivotal role in order to promote innovation. Innovation and ideas with knowledge do have enough potential to change the world. Reflective thinking can create a better future. Digital technologies transform learning experiences and promote access to information. In this connection present paper has undertaken to focus on An Interpretation on Digital Technologies and Its Relationship with Innovation in Education. The study shows that innovation in education is largely influenced by digital technologies and Knowledge Economy.

Key words: Innovation, Education, Knowledge Economy, Human Capital, Digital Technologies, Learning Experiences

Introduction:

A central component of the economic development policies of most countries has been investment in the human capital of society. Human capital does have a pivotal role in order to promote innovation. Innovation is different from reform or change which do not necessarily mean the application of something new, nor do they imply the application of improved ideas or knowledge (King and Anderson, 2002). Skilled people generate knowledge that can be used to create and implement innovations. Having more skills raise the capacity to absorb innovations. Skills interact collaboratively with other inputs to the innovation process, including capital investment. Skills enable entrepreneurship. Entrepreneurship is often a carrier of innovation and structural

change. Skills and experience are crucial to enterprise growth and survival. Skilled users and consumers of products and services often provide supplies with valuable ideas for improvement (OECD, 2015a). Innovation implies implementation of improved ideas, knowledge and practices. It implies novelty and brings benefits. Innovation in education as art of innovation in economies and societies. Most of the literature defines innovation as the implementation not just of new ideas, knowledge and practices but also of improved ideas, knowledge and practices (Kostoff, 2003). The Oslo Manual (OECD/Eurostat, 2005) defined innovation as “the implementation of a new or significantly improved product (goods or services) or processes, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations” Innovation in the public sector in general and in education in particular is conceived as a substantial instrument for significant welfare gains. Governments render a large number of services in OECD countries and these services measure for a considerable share of national income Education. In 2012, Education is a major component of government services, public expenditure on educational institutions estimated as 5.3 % of national income on average for OCED countries (OECD, 2015b).Teacher educators’ attitude make an important role in effective integration of ICT into effective teaching –learning which has statistically significant. Higher educated teacher educators have statistically significant interest to apply ICT resources in teaching learning process (Mandal, 2019).Digital technologies prepare students for their future careers and help to support different learning styles. Digital technology focuses on the use of digital information and communication technologies to promote the processes of teaching and learning. Innovation in education does have a pivotal role in promoting knowledge based economy and digital economy. The knowledge economy is considered as an economic system in which the production of goods and services is based basically on knowledge-intensive activities that contribute to advancement in technical and scientific innovation. The digital economy/Internet Economy/New Economy/Web Economy is conceived as an economy system that is based on digital computing technologies in order to carry out business through market based on the internet and the World Wide Web. In this connection present paper has undertaken to focus on An Interpretation on Digital Technologies and Its Relationship with Innovation in Education.

Objectives of the Study:

- To explain the urgency of innovation of education and its process.

- To find out relationships among innovation of education with digital technology, knowledge economy and digital economy.

Methodology:

The study has been conducted on the basis of secondary data available from various Reports, Journals and available related literatures and opinions and observation have been conducted on the secondary data

Discussion and Results:

Some Identified Innovation in Education and Results (OECD, 2016, P.17):

Three types of innovation identified in the Oslo Manual (OECD/Eurostat, 2005) - (i) products or services (such as new syllabuses, textbooks or educational resources), (ii) technology, tools or instruments (new processes for delivering services such as use of ICT in e-learning services, new learning-management systems, new online courses, or new pedagogic tools, such as maps, anatomy models, e-labs) and (iii) Knowledge or methods (such as new pedagogies, new administrative management systems for admissions or other formalities, or the use of ICT to communicate with students and parents). The results suggest that there is fair level of innovation in education sector, both in absolute terms and relative to other sectors. On average, more than two-thirds of tertiary graduate (69 %) across all sectors received their workplace to be highly innovative for at least one type of innovation. About the same % of tertiary graduates employed in the education sector (70 %) both public and private taking into account their workplace to be highly innovative for at least one type of innovation. The most common innovation observed in the education sector was in knowledge and methods: 59 % of tertiary graduates employed in the education sector considered their workplace to be highly innovative in that respect compared to 49 %, on average, across all sectors. In contrast, 38 % took into account of their workplace to be highly innovative regarding products or services (Compared with 47 % on average) and 36 % considered their workplace as highly innovative about technology tools or instruments (compared with 41 % on average)

Needs for Innovation in Education (OECD, 2016)

The problem of education is mainly one of the productivity and efficiency. Here, efficiency means the balance between resources invested and outcomes in terms of students' performance and equity. Social change largely depends on educational change, change in base of economics and mode of production. Positives changes in mode of production and culture of society must

be inevitable for accelerating modernization and innovation in education with skills. The needs for innovation in education can be explained in the following reasons.

- ❑ First of all educational innovations can improve learning outcomes and the quality of educational Provision. For example, changes in the educational system or in the teaching methods can help customize the education process. New trends in the personalised learning rely heavily on new ways of organizing educational institutions and the use of ICT.
- (i) Second, education is perceived in most countries as a means of enhancing equity and equality. Innovations could help enhance equity in the access to and use of education as well as equality in learning outcomes.
- (ii) Third, public organizations are often under as much pressure to improve efficient, minimize costs and maximize the “bang for the buck”.
- (iii) Finally, education should remain relevant in the face of rapid changes to society and the national economy (Barret, 1998). So, education sector should introduce the changes it needs to adapt to societal needs.
- (iv) For examples, education systems need to adopt teaching, learning or organizational practices that have been identified as helping to foster skills innovation (Dumont et al.)
- (v) Innovation of education attempts to enhance Gross Enrolment Ratio (GER), GDP, and economic growth and creates employment opportunities with faster and inclusive growth.

Types of Innovation:

The Oslo Manual focuses four types of innovation (OECD-Eurostat, 2005 and OECD, 2016)

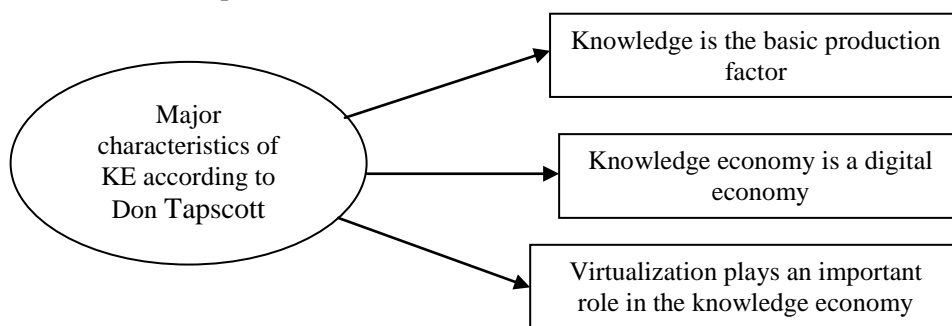
- (i) **Product innovation:** The introduction of a good or service that is new or significantly improved.
- (ii) **Process Innovation:** The implementation of a new or significantly improved production or delivered method.
- (iii) **Marketing Innovation:** The implementation of a new marketing method involving significant changes in product design or packing, product, Placement, product promotion or pricing.

- (iv) **Organizational innovation:** The implementation of a new organisational method in firm's business Practices, Workplace organisation or external relations.

Following this educational organization could introduce as

- ❑ New Products and services such as new syllabus, textbooks or educational resources.
- ❑ New processes for delivering their services such as the use of ICT in e-Learning services,
- ❑ New ways of organising their activities such as ICT to commutative with students and Parents.
- ❑ New marketing techniques e.g. differential pricing of postgraduate courses.

Figure-1: Major Characteristics of Knowledge Economy (KE) according to Don Tapscott (2014) in connection with innovation in Education



Don Tapscott (2014) viewed that : Today's digital networks enable all citizens to be aware of what is going on in the city and be able to contribute their ideas to the ways they are governed. To attain social cohesion, good government and shared norms, the new realities demand a second wave of democracy based on a culture of public deliberation and active citizenship. This is not direct democracy: it is about a new model of citizen engagement and politics appropriate for the 21st century.

Knowledge is the basic production factor- Knowledge has become a key factor of production and largely affects the returns of Capital, labour , Land and Entrepreneurship. Knowledge promotes human capital for skills and ability of workers. Some schools of economics think the state of technology development to be a factor of production in connection with innovation of education. Knowledge and ideas have the power to change the world where human affairs are carried out by management. New thinking can make better future.

Knowledge Economy is a Digital Economy-Don Tapscott has good understanding about economic development, public safety, transportation, energy, clean air and water, human service, education, food security and democracy. The knowledge based economy with information and knowledge as factors of production passes through a digital transformation that widens the opportunities of new knowledge to be developed and used. The components of digital economy namely infrastructure, e-business and e-commerce. In the digital economy, people can more cheaply access products and services from any location.

Virtualization plays an important role in the knowledge economy-Virtualization can enhance IT agility, flexibility and scalability while creating significant cost savings. Greater workload mobility, increased performance and availability of resources, automated operations are all benefits of virtualization that makes IT simpler to conduct and less costly to own and operate.

Don Tapscott viewed that : Today's digital networks enable all citizens to be aware of what is going on in the city and be able to contribute their ideas to the ways they are governed. To attain social cohesion, good government and shared norms, the new realities demand a second wave of democracy based on a culture of public deliberation and active citizenship. This is not direct democracy: it is about a new model of citizen engagement and politics appropriate for the 21st century.

The determinants of Knowledge based economy developed at national level:

The following determinants of knowledge based economy can be focused as follows

1. Characteristics of a knowledge –based economy –(i)high adaption capacity, (ii) technology utilization, (iii) heterogeneity, iv) specialized knowledge, (v) knowledge management productivity efficiency, vi) collaboration and connectivity(departmental, sectoral, local, regional and international network).
2. The Country position- (i) Economic settings, (ii) political settings, (iii) legal settings, (iv) institutional settings, (v) infrastructural settings and (vi) social settings.
3. Knowledge process- (i) development of competencies bloc, (ii) knowledge allocation and utilization, (iii) belief and intention management, (iv) maintaining connectivity and networking

Innovation in Education in the Light of NEP-2020 and NETF:

The NEP-2020 envisages the establishment of the National Educational Technology Forum (NETF) which will operate as a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning and administration for school and higher education. The NETF will aim at to facilitate decisions making on the induction deployment, and use of technology, by providing the leadership of educational institutions, state and Central governments, and other stakeholders, the latest knowledge and research as well as the opportunity to consult and share best practices. As NEP-2020, the NETF will have the following important functions:

- (i) Provide independent evidence-based advice to Central and State Government agencies on technology based interventions.
- (ii) Build intellectual and institutional capacities in educational technology.
- (iii) Envision strategic thrust areas in this domain.
- (iv) Articulate new directions for research and innovation.

The NEP-2020 has set out to produce e-content in eight regional languages to encourage digital content and technology comes as there is a digital push for education in times of COVID-19 induced lockdown. In online learning, most of the time the focus is given on English or Hindi. However, the NEP-2020 envisages developing e-content in eight regional languages- Tamil, Telegu, Kannada, Malayalam, Gujarati, Marati, Bengali, Oriya. In response to MHRD's formal recognition of a new disruptive technology, the **National Research Foundation(NRF)** will initiative or expand research efforts in the technology such as (i) Advancing core AI research, (ii) Advancing international research efforts to address global challenges(Healthcare, Agriculture, climate change), (iii) Developing and deploying application based research.

Thrust of Technological Interventions-(NEP-2020 and NETF):

- (i) Teaching learning and evaluation processes, (ii) Supporting teacher preparation and professional development, (iii) Enhancing educational access, (iv) Streamlining educational management and administration, (v) Removing language barriers, (vi) Access to Divyang Students, (vii) Disruptive technology-Artificial Intelligence, (viii) Extensive research is needed in new technologies and (ix) The use of integration of technology

Development Aspect: Technology Use and Integration (NETF):

- (i) Teacher's professional development in DIKSHA platform, (ii) DIKSHA/SWAYAM will be better integrated across school and higher education, (iii) Promote and expand DIKSHA as well as other educational technology initiatives, (iv) Rich variety of educational software in all India languages and will also be accessible to Divyang students, (v) Teaching-learning e-content and uploaded on the DIKSHA platform, (vi) suitable equipment for suitable integrate e-contents into teaching-learning practices.

Online and Digital Education - Challenges:

- (i) Digital competencies of teachers to meet further need, (ii) inability of open and public digital resources in infrastructure, (iii) Limitation in delivering certain types of courses /subjects in online /digital space, (iv) Online assessment on scale, (v) Becoming screen based education and (vi) Bridging digital divide.

Implementation Plan:

- (i) Carry out research on disruptive technology and current status of ICT implementation in schools and teacher education institutes and development of e-contents, strategies, training modules on content-ICT- pedagogy integration as per the new Pedagogical and curricular structure recommended in NEP-2020.
- (ii) Continuous Customization of architecture of digital education platforms at national level including portals, Apps, labs as per the arising educational needs.
- (iii) Design, development and roll –out MOOCs for students and teachers with appropriate policy evaluation, certification and credit transfer.
- (iv) Dissemination of Digital contents through multiple multiple modes.
- (v) Collaboration and coordination with national and state level institutes for converge of efforts.

Blended learning and Innovation in Education (Commonwealth of Learning: Guide to Blended Learning-2018)

- (i) **The term blended learning** is the use of the traditional classroom teaching methods together with the use of online learning for the same students studying the same content in the same course. It is a “thoughtful fusion of face to face and online experiences” (Garrison & Vaughan, 2008).

- (ii) There are also blended programmes in which students study some course in face –to-face classroom and other courses are delivered fully.
- (iii) In other words, blended learning is a term applied to the practice of providing instruction and learning experiences through some combination of both face to face and technology –mediated learning.
- (iv) Blended learning covers one or more of the following three situations: (i) Combining instrumental modalities (or delivery media), (ii) combining instructional methods, (iii) combining online and face to face instruction.

Table-1: How much delivered Online (India Report Digital Education, 2020)

SL. No	How much delivered online	Course classification	Typical Description
1.	0 %	Traditional	Course where no online technology used content delivered orally or by writing
2.	1-29 %	Web facilitated	Courses that use web-based technology to facilitate what is essentially a face to face course, many use a learning management system(LMS) or web to post syllabus and assignments.
3.	30-79 %	Blended/Hybrid	Course that blends online and face to face delivery. Substantial proportion of the content is delivered, typically uses online discussion and has a reduced number of face to face meetings.
4.	80 + %	Online	A course where most of all the content is delivered online. Typically has no face to face meetings.
5.	NA	Distance	Overlaps with online but usually encompasses earlier technologically such as correspondence courses, educational television and video conference.

Table-2: National Career portal:

Service National Guide to free, e-learning resources of Govt. India. Learn anytime, anywhere from high quality e- learning resources designed and developed by National Coordinators like UGC, NIOS etc.

SL No	Initiated by	Resources	URL
1.	MHRD	SWAYAM	https://swayam.gov.in/
2.	Seven India Institutes of Technology (IITs) and Indian Institute of Science (IISc).	NTEL(National programme on Technology Enhanced Learning)	https://nptel.ac.in/
3	CEC-UGC	Curriculum Classes	https://cec.nic.in/curriculum class
4.	MHRD	DIKSHA	https://diksha.gov.in/
5.	National skill Development Corporation	e-skill India	https://www.eskillindia.org/
6.	MHRD	National Digital Library of India	https://ndl.iitkgpac.in/
7.	NCERT	e-Pthshala	https://epathshala.nic.in
8.	MHRD	e-PG Pathshala	https://epgp.inflibnet.ac.in
9.	MHRD	e-kalpa	www.dsources.in/

Conclusion:

The Concept of Innovation has been deeply used to the private sector and can also be deployed to education with small changes. Educational organisations such as schools, universities, training centres, or education publishers could commence (i) new products and services, such as a new syllabus, textbooks or educational resources, (ii) new processes for delivering their services such as the use of ICT in e-learning services, (iii) new ways of organising their activities such as ICT to communicate with students and parents, or (iv) new marketing techniques, e.g. differential pricing of postgraduate courses(OECD, 2016) .Despite the many challenges involved in integrating technology in teaching and learning, digital technology offers great opportunities for education. In many classrooms around the world technology is used to support quality teaching and student engagement, through collaborative workspace, remote and virtual labs, or through many ICT tools that help connect learning to authentic, real life challenges. India is a global leader in ICT and other cutting edge domains, such as space (NEP-2020).Digital India Campaign is

helping to transform the entire nation into digitally empowered society, vibrant knowledge based society, knowledge based economy and digital economy. Educational technology will play an important role in the improvement of educational processes and outcomes. Relationship between technology and education at all levels is bi-directional. Educational planning and management should be taken towards extensive use of technology in teaching and learning, removing language barriers increasing access for Divyang students, carrying out Vibrant knowledge based society, knowledge based economy and Digital economy. The main benefits of digital education as (i) enhance learning 26 %, (ii) equip learners with the digital skills needed for the workforce 24 %, (iii) access information/content-23 %, assist to better demonstrate a concept-14 %, improve efficiency -13 % (Source: e-learning Infographics). The reasons behind students' preference for digital content as (i) 97 % students found adaptive learning technology is conducive to retention, (ii) 45 % students would like to learn on personal device, (iii) 79 % students prefer online quiz, adaptive learning and e-Test books in learning, (iv) 78 % college students confess that digital learning attempts to help in promoting them computer science, mathematics and other technical skills, (v) 84 % students avow that digital learning do have an important role to increase knowledge.

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HIGHER SECONDARY SCHOOLS TEACHERS COMMITMENT AWARENESS ON ORGANISATIONAL EFFECTIVENESS

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ABSTRACT

The purpose of the study is to find out the organisational effectiveness of higher secondary schools in Chennai and its suburban areas. Participants were 812 post graduate teachers in Chennai, Kancheepuram and Thiruvallor Districts. In this research survey method was adopted. The data were gathered via organisational effectiveness questionnaire. Statistics, t-test and ANOVA was used for analysis of data. The t-value revealed that the Organisational Effectiveness with respect to Gender of the Male and Female teachers did not differ significantly at 0.05 level. The t-value revealed that on Organisational Effectiveness with respect to marital status of the Married and unmarried teachers did not differ significantly at 0.05 level. The F-ratio revealed that the teachers belonging from State Board schools differed significantly from those belonging to Matriculation schools at 0.01 level. Matriculation schools mean value is more than state board school teachers. Anglo Indian school teachers mean value showed that less than state board and matriculation school teachers. The F-ratio revealed that there is no significant different among teachers age and different type of Management of schools teachers on organisational effectiveness.

Introduction

Organizational effectiveness plays an important role in quality education and development of the nation. Cameron (1978) pointed out that organizational effectiveness is the proficiency of the organization at having access to the essential resources. The criterion of the organization's successful fulfilment of their purposes through core strategies. It is illustrated that organizational effectiveness should focus on human resources and organizations and help individuals to achieve skills and self-esteem in order to control the new

environment and find security and support. Educational institution organisation and its effectiveness are depends upon performance of principal or headmaster, teachers, active learners and parents involvement. Effective performance of organisation create active administration, teaching and learning it will create meaningful function of institution and appropriate achievements in acquiring knowledge, skills, as well as behaviour modification of learners. This effectiveness predict future performance of a learner in a job. In this research the researcher found higher secondary schools teachers commitment awareness on organisational effectiveness.

Research Reviews

The following research reviews of organisational effectiveness are briefly explained to show the importance of organisational effectiveness in awareness performance of the teachers. **Sarid and Ariel (2022)** examined the educational effectiveness has become increasingly complex. Alongside methodological advancements in the investigation and measurement of educational effectiveness, meta-analyses conducted by leading researchers have shown that the field has been suffering from a significant lack of theory or from a weak theoretical basis. The seeks to address this gap by connecting the four models of organisational effectiveness incorporated in Quinn and Rohrbaugh's framework of competing values to the four dualities of educational design that appear in Wenger's theory of communities of practice. Based on the theoretical insights offered here, effective educational organisations are those that are able to address successfully and on an ongoing basis paradoxical tensions and incorporate interrelated and yet contradictory elements of the educational process and school organisation. **D Dormann, Markus; Hinz, Stefan; Wittmann, and Eveline, (2019).** Examined digital media and digital data processing have substantially influenced public institutions in recent years and changed their efficiency, effectiveness and organisational set-up (nature of organisations). Based on Fountain's Technology Enactment Framework (TEF), **this paper** argues that, firstly, in a circular process, digital requirements transform the bureaucratic features of school organisation, and that the effects of digital technologies on the performance and efficiency of schools as bureaucratic organisations are ambivalent. They found that efficiency or reductions of losses in efficiency caused by digitalisation are mostly caused by the concrete use of digital technology within the respective school organisation. **Jahanian and Noori (2013)** examined the concept of describing the dimension and elements of the effective schools. This research found that the organizations need effective

management, in order to reach up to their specified objectives. Therefore, effectiveness of the schools is one of the most important tasks with the first degree priority of country's training and education, that its realization, almost, depend on the rate of the fulfilment of the objectives that are considered for that organization. The schools will be effective if they have effective and impressive management. **Panigrahi (2007)** investigated the relationship of School Effectiveness with regard to Community Participation at primary level of education. A Total number of 27 more-effective and 35 less-effective primary schools were included in the sample of this research. The findings of the study revealed that the schools having better Physical facilities, HM and teachers' performance and Students' performance were identified as more-effective schools. One of the significant findings of the present study is the higher community participation is associated with greater school effectiveness. **Iordanides et al. (2003)** conducted a study on "What can school principals do to foster school effectiveness". The study investigated opinions of Greek high school teachers about what principals could/should do to increase the effectiveness of their schools. In general it was found that participants thought principals could improve school effectiveness most by engaging in activities that develop a good climate and ensure appropriate resources are available for instruction.

Significance of the study

Organisational Effectiveness is nothing but the degree to which predetermined goals are achieved. It centres more on human side of organizational values and activities. It is generally influenced by the culture prevailing in an organization, which in turn affects the way the managerial functions of planning, organizing, staffing and controlling are carried out. The Educational system of today is far from the ancient one. Instead of teacher centered education, child centred education is gaining more importance now a days. The school authorities, teachers, parents, students and other members of the society are equally held responsible for the effective functioning of the school. Educational administration may be considered as influencing one group of human beings namely, the pupils, to grow towards well defined objectives, utilizing the second group of human beings namely, the teachers, as agent and operating in a setting of a third group of human beings namely, the public, variously concerned both with objectives and means used to achieve them.

Today, the School Headmaster is expected to play a large number of role like:. Punctuality of the headmaster. Maintaining appropriate staff members,

awareness about all staff members and students maintaining discipline of teachers and students, proper examination and evaluation system, maintaining relationships with parents teachers, students and society. He is an instrument in influencing the task, goal setting and goal achieving as an administrator, more than a head teacher. With a view in improving the situation, the condition should be changed and the education field should be reformed and refreshed with new blood of better human relations, based on co-operation, confidence, good will, sympathy and understanding.

A teacher's role is also equally important for the effective functioning of the school. A teacher's role is central, vital and pivotal in shaping knowledge and personality of children. Performance of a teacher depends on his/her commitments towards profession. Commitment in turn depends on motivation. Based on the activity and performance of teachers, the knowledge gained by the students varies, which in turn is reflected in the effectiveness of school atmosphere.

Therefore, teachers have to be actually very effective and involved in their profession with lots of devotion and zeal to cope with the changing situations. Unless a teacher is really committed to her work, they cannot compete with this rapidly developing and quite challenging world. In order to perform the role as a teacher more effectively, he/she should put forth a great deal of effort and should realize the responsibilities over the achievement of the organizational goals in order to make the organization function effectively.

In this research the researcher to find higher secondary schools teachers commitment awareness on organisational effectiveness in the dimensions of management ability of headmaster or principal, various effective performance of a teacher and cooperation of the parents, and adaptation and implantation of government rules and regulations for effective performance and utilisation of resources of the organisation. This research provide the present conditions regarding teachers awareness on organisational effectiveness.

Objectives

1. To find out the difference between male and female teachers in their awareness on organisational effectiveness
2. To find out the difference between married and unmarried teachers in their awareness on organisational effectiveness
3. To find out whether there is difference among age below 40 years, 41 - 50 years and above 50 years teachers in their awareness on organisational effectiveness

4. To find out whether there is difference among State Board, Matriculation and Anglo Indian schools teachers in their awareness on organisational effectiveness
5. To find out whether there is difference among Government, Corporation, Private Aided and Private Unaided schools teachers in their awareness on organisational effectiveness

Hypotheses

1. There is no significant difference between male and female teachers in their awareness on organisational effectiveness
2. There is no significant difference between married and unmarried teachers in their awareness on organisational effectiveness
3. There is no significant difference among age below 40 years, 41 - 50 years and above 50 years teachers in their awareness on organisational effectiveness
4. There is no significant difference among State Board, Matriculation and Anglo Indian schools teachers in their awareness on organisational effectiveness
5. There is no significant difference among Government, Corporation, Private Aided and Private Unaided schools teachers in their awareness on organisational effectiveness

Method

The investigator adopted the normative survey method to find out the organisational effectiveness of higher secondary schools in Chennai and its suburban areas. The population for the present study consisted of PG teachers at Chennai, Tiruvalloor and Kanchipuram District in Tamil Nadu.

Sample

The investigator used stratified random sampling techniques. 89 higher secondary schools were selected randomly to collect the data..Totally the sample consisted of 812 post graduate teachers in Chennai, Kanchipuram and Thiruvallur District in Tamil Nadu.

Tool

The occupational Commitment scale, developed by Ladewig and White (1984). The tool consists of 30 items. The researcher modified some of the item and again established validity and reliability of the tool with help of the supervisor. Each item has answered by choosing any one of the following options. A score of 3 was given to “Fully Agree”, 2 to “Agree”, 1 to “Disagree” and 0 to “Fully Disagree” for positive statements. For the Negative statements, the scoring procedure was reversed.

Validity

The researcher established content validity every items with help of the subject expert.

Reliability

The reliability of the organisational effectiveness scale has been revalidated for the present study by calculating the Cronbach Alpha coefficient ($r = 0.901$).

Statistical Techniques Applied

The investigator has applied the following statistical techniques to analyse the collected data.

- i. Differential Analysis
- ii. ANOVA

Table 1: Independent sample ‘t’ test between the Mean scores of Male and Female Teachers on Organisational Effectiveness

Variable	Male (N=346)		Female(N=466)		t- value
	Mean	S.D	Mean	S.D	
Organisational Effectiveness	63.74	10.068	63.73	9.964	0.016**

**Not significant at 0.05 level

The t-value revealed that there is no significant different between male and female teachers on organisational effectiveness at 0.05 level.

Table 2: Independent sample ‘t’ test between the Mean scores of Married and Unmarried Teachers on Organisational Effectiveness

Variable	Married(N=742)		Unmarried (N=70)		t-value
	Mean	S.D	Mean	S.D	
Organisational Effectiveness	63.61	10.078	65.06	9.124	1.261**

*Not significant at 0.05 level.

The t-value revealed that there is no significant different between married and unmarried teachers on organisational effectiveness at 0.05 level.

Table 3: ‘F’ test on organisational effectiveness with respect to the Age of the Teachers

Variable	<40 years (N=358) (1)		41-50 years (N=339) (2)		>50 years (N=115) (3)		F-ratio
	Mean	S.D	Mean	S.D	Mean	S.D	
Organisational Effectiveness	64.00	9.765	64.02	9.656	62.04	11.547	1.910**

**Not significant at 0.05 level.

The F-ratio revealed that analysis of differences tested through Tukey-HSD for the scores on Organisational Effectiveness with respect to Age group of teachers did not differ significantly at 0.05 level.

Table 4: 'F' test on organisational effectiveness with respect to different Board of Schools teachers

Variable	State Board (N=548) (1)		Matriculation (N=233) (2)		Anglo Indian (N=31) (3)		F-ratio	Group differed significantly
	Mean	S.D	Mean	S.D	Mean	S.D		
Organisational Effectiveness	63.18	10.457	65.29	9.018	61.81	7.332	4.291	[1&2] *

* Significant at 0.01 level.

The F-ratio revealed that the analysis of differences between the different Board of Schools teachers tested through Tukey-HSD showed that the teachers belonging from State Board schools differed significantly from those belonging to Matriculation schools at 0.01 level..Matriculation schools mean value is more than state board school teachers. Anglo Indian school teachers mean value showed that less than state board and matriculation school teachers.

Table 5: 'F' test on organisational effectiveness with respect to different types of management of Schools teachers

Variable	Government (N=253) (1)		Corporation (N=20) (2)		Private Aided (N=247) (3)		Private Unaided (N=292) (4)		F-ratio
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	
Organisational Effectiveness	63.14	10.408	60.90	10.862	63.07	10.335	65.00	9.175	2.767**

**Not significant at 0.05 level.

The F-ratio revealed that the analysis of differences tested through Tukey-HSD for the Scores on Organisational effectiveness with respect to different type of Management of schools showed that the teachers did not differ significantly at 0.05 level.

Findings

- 1) Male and Female Teachers did not differ significantly on Organisational Effectiveness.
- 2) Married and Unmarried Teachers did not differ significantly on Organisational Effectiveness.
- 3) Teachers belonging to the different Age Group did not differ significantly on Organisational Effectiveness.
- 4) State Board Schools teachers differed significantly from Matriculation Schools Teachers in Organisational Effectiveness, favouring Matriculation

School Teachers. Matriculation schools mean value is more than state board schools teachers. Anglo Indian schools teachers mean value showed that less than state board and matriculation schools teachers.

- 5) Teachers belonging to different Management did not differ significantly on Organisational Effectiveness.

Discussion

In this research it is found that there is significant difference among board of schools of teachers in their commitment awareness on organisational effectiveness. Matriculation board of school teachers have high commitment awareness on organisational effectiveness than state and Anglo Indian boards. this research concerned with other research findings. Iordanides et al. (2003) they found that participants thought principals could improve school effectiveness most by engaging in activities that develop a good climate and ensure appropriate resources are available for instruction. D Dormann, Markus, Hinz, Stefan, Wittmann, and Eveline, (2019). found that that gains in efficiency or reductions of losses in efficiency caused by digitalisation are mostly caused by the concrete use of digital technology within the respective school organisation. This research findings correlated with my research findings.

The researcher also found in his research most of the higher secondary school teachers strongly agreed the following statements headmaster should ahead of time in planning and scheduling work in this organization, If ever a discussion is sought by head master regarding an issue it is genuine in all its respects, The communications received from are well intended and well thought off, The actions of head master are always guided by the department rules and regulations.

Conclusion

Higher secondary school teachers commitment awareness on organisational effectiveness based on gender, marital status, age, and types of schools did not show any difference. Only board of schools that is state board, matriculation and Anglo Indian schools showed that difference among themselves. Here matriculation board of schools showed that more commitment organisational effectiveness than state board and Anglo Indian schools teachers. So organisational effectiveness revealed that this research found that board of schools showed difference among organisational effectiveness. Higher secondary school teachers also strongly agreed performance of a headmaster, teachers, and cooperation of the parents playing important role on organisational effectiveness,

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STUDY INVOLVEMENT OF IX STANDARD STUDENTS IN KANCHIPURAM DISTRICT: A SURVEY

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ABSTRACT

Study involvement plays an important role in students' academic performance and success. It is necessary to know every students behaviour of in their study involvement. The objective of the study is to find out the study involvement of IX standard students. The researcher adopted survey method. The investigator has adopted random sampling techniques to collect the data. The sample consists of 300 IX standard students at Kanchipuram district in Tamil Nadu. The collected data were analysed through using descriptive, 't' test and ANNOVA statistical techniques. The descriptive analysis showed that moderate level of study involvement among IX standard students. The 't' test showed that there is a significant difference between rural and urban as well as boys and girls IX standard students in their study involvement. Rural students have more study involvement than urban. Girls have more study involvement than boys. ANNOVA results revealed that there is no significance difference among IX standard students study involvement with respect to mother's income and it also showed that there is no significance difference among IX standard students study involvement with respect to father's educational qualification.

Introduction

In every individual achievement of goal depends on their involvement. In learning process learner required study involvement to learn their learning with their own interest and effective performance in their learning. Students involvement refers to the degree of attention, curiosity, interest, optimism, and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their

education. There is a strong belief in study involvement has a strong positive effect on students academic performance. Involvement has been conceived in different ways by different authors the concept of involvement which is detained as an identification with the task to be accomplished the degree of involvement is determined by the (i) number of needs satisfied, and (ii) the extent of their satisfaction through the performance of the task. Study involvement in view of Morse and Wingo (1970) implies keen interest in the task, working with persistence and imagination and sharing the responsibility for own learning. Yan Off (1973) defined study involvement as a degree of affect or feeling of being actively involved in one's own learning process. Involvement in studies not only makes the learning a pleasant activity but also yields enhancement in learning outcomes of higher order thinking, develops positive attitudes towards learning and facilitates creative productivity.

Research Reviews

The following research reviews of study involvement are briefly explained to show the importance of study involvement in learning and achievements of the learners. Zedan, Raed (2021) found that Parental Involvement as a Predictor of Classroom Climate, Motivation for Learning, and Learning Achievements The findings indicate that the more learners include their parents in the school day and believe that they support them and believe in the importance of education, and the more the parents participate in school activities and maintain contact with teachers and become involved when a problem arises, their children's motivation and achievement level will be higher. Liu, Yanhui, Sulaimani, Mona F and Henning, John E.(2020) conducted a study on “The Significance of Parental Involvement in the Development in Infancy”. This study recommends that parental involvement should be considered as an affluent resource and a useful tool because it could provide rich information about infants' individual needs and positively help infant teachers to improve their instructional skills. Van Houtte, Mieke (2017) researched gender differences in context: the impact of track position on study involvement in flemish secondary education. They found that boys are, generally, less involved in studying than girls, and boys are more affected by track position than girls are, enlarging the gender gap in the lower tracks. Naik, Sapna, Wawrzynski, Matthew R., Brown and Joelle (2017) conducted a study on international students' co-curricular involvement at a university in South Africa. They found that the differences in the continuous learning outcome variables for those international students who were involved in

co-curricular experiences to those who held leadership positions within the curricular experiences.

Significance the of the study

Study involvement has been found to be positively related to students' achievement. It is necessary to teachers should understand their learners study involvement to guide them for better performance and success. This process makes teaching and learning process in meaningful way. In each and every students they have their own nature of involvement. Individual difference are there in involvement they have creative involvement, gaming involvement and extra - curricular involvement. Here the study involvement satisfy the learners involvement in their subject. To create study involvement behaviour among learners the teacher has to apply various strategies in their teaching and students learning it create high level of study involvement. The researcher analyse IX standard students study involvement behaviour to understand.

Objectives of the study:

1. To find out the level of study involvement among IX standard students in Kanchipuram district
2. To find out the level of study involvement among IX standard students with respect to gender
3. To find out the level of study involvement among IX standard students with respect to locality of school
4. To find out the difference between boys and girls among IX standard students in their study involvement
5. To find out the difference between rural and urban IX standard students in their study involvement
6. To find out whether there is difference among IX standard students with respect to their mother's income in their study involvement
7. To find out whether there is difference among IX standard students with respect to their father's education in their study involvement

Hypotheses

1. The level of the study involvement of IX standard students is high
2. There is no significant difference between boys and girls IX standard students in their study involvement

3. There is no significant difference between rural and urban IX standard students in their study involvement
4. There is no significant difference among IX standard students with respect to their mother's income in their study involvement
5. There is no significant difference among IX standard students with respect to their father's education in their study involvement

Method of study

The researcher adopted Survey method to collect the data.

Population for the study

The population for the study consisted of selected school students studied in IX standard at Kanchipuram District in Tamil Nadu.

Sample

The investigator has adapted random sampling technique. To collect data, the tool was administered among IX standard students in eight schools at Kanchipuram District, Tamil Nadu. Totally the sample consisted of 300 students.

Tool used in the study

Study Involvement inventory was used in the study. It was constructed by Dr. (Mrs). Asha Bhatnagar. The tool consists of 40 items. Each item measures the study involvement of the respondent. Each item has answered by choosing any one of the following options. 1. Yes 2. Undecided 3. No.

Validity

Initially the tool was in English. The investigator translated each items English into Tamil language, then the translated items were given to subject experts and they were requested to given their suggestion for establishing the validity of the inventory. The experts verified and analysed all the particulars. They expressed their satisfaction regarding the items preparation based on the objectives, theories and concepts related to the topic what it is supposed to measure.

Reliability

Since the tools has been translated from English into Tamil. The investigator established the reliability. The test-retest method was used to find the reliability of the tool. In order to establish reliability, the investigator administered the study involvement inventory to 50 students from Loyola Higher Secondary School, Kuppyanallur. After an interval of 15 days the same tool was

administered to the same set of students and the co-efficient of the reliability was established. The reliability co-efficient is 0.726.

Statistical Techniques Applied

The investigator has applied the following statistical techniques to analyse the collected data.

- i. Descriptive Statistics
- ii. Differential Analysis
- iii. ANOVA

Table 1: Level of Study Involvement IX Standard Students

Variable	Low		Moderate		High	
Study Involvement	No	%	No	%	No	%
	38	12.67	218	72.67	44	14.66

It is inferred from the above table that the IX standard student study involvement level is found that (12.67 %) as low, (72.67%) as moderate and (14.66%) are in high level. It also revealed that most IX standard students have moderate level of study involvement.

Table 2: Study Involvement Level of IX Standard Boys and Girls Students

Variable	Boys						Girls					
	Low		Moderate		High		Low		Moderate		High	
Study involvement	No	%	No	%	No	%	No	%	No	%	No	%
	19	11.7	121	74.2	23	14.1	19	13.9	97	70.8	21	15.3

It is inferred from the above table study involvement 11.7 % of the boys have low 74.2 % of the boys have moderate and 14.1 % of the boys have high level. And girls 13.9 % of the students have low, 70.8 % of the students have moderate and 15.3 % of the students have high level. Therefore it is stated as study involvement is moderate in boys and girls IX standard students.

Table 3: Level of Study Involvement IX Standard Rural and Urban Students

Variable	Rural						Urban					
	Low		Moderate		High		Low		Moderate		High	
Study involvement	No	%	No	%	No	%	No	%	No	%	No	%
	27	17.6	107	69.9	19	12.4	17	11.6	109	74.1	21	14.3

It is inferred from the above table study involvement 17.6 % of the rural students have low, 69.9 % of the rural students have moderate and 12.4 % of the rural students have high level. And urban 11.6 % of the students have low, 74.1 % of the students have moderate and 14.3 % of the students have high level. Therefore it is stated as study involvement is moderate in rural and urban IX standard students.

Table 4: Independent sample ‘t’ test between the Mean scores of Rural and Urban IX Standard Students Study Involvement

Variable	Rural(N= 153)		Urban(N=147)		‘t’ value
	Mean	S.D	Mean	S.D	
Study Involvement	51.36	9.03	48.59	10.77	2.41*

*Significant at 0. 05% level

From table- 4, it is inferred that the ‘t’ value obtained between rural and urban for the Study Involvement (2.41) is significant at 0.05 level. Thus it is showed that there is significant mean difference between the rural and urban IX Standard Students in their Study Involvement. Rural students have more Study Involvement than urban.

Table 5: Independent sample ‘t’ test between the Mean scores of Boys and Girls IX Standard Students Study Involvement

Variable	Boys (N= 163)		Girls (N= 137)		‘t’ value
	Mean	S.D	Mean	S.D	
Study involvement	48.36	10.98	51.94	8.33	3.21*

*Significant at 0. 05% level

From table- 5, it is inferred that the ‘t’ value obtained between boys and girls for the Study Involvement (3.21) is significant at 0.05 level. Thus it is showed that there is significant mean difference between the boys and girls IX Standard Students in their Study Involvement. Girls’ students have more Study Involvement than boys.

Table 6: ‘F’ test among Mother’s income of IX Standard Students Study Involvement

Variable	Source of variation	Sum of Square	Means square variance	df 2	‘F’ value
	Between	306.38	153.19	297	
Study involvement	Within	29593.62	99.64		1.54**

** Not significant at 0.05 level.

From table-6, it is inferred that the 'F' values obtained among mother's income of IX Standard Students in their Study Involvement (0.72)) is not significant at 0.05 level. So it is inferred that there is no significant difference among below 5000, 5001to 10000, 10001 to 15000 and above 15000 to in their Study Involvement.

Table 7: 'F' test among Father's Educational Qualification of IX Standard Students Study Involvement

Variable	Source of variation	Sum of Square	Means square variance	df 2	'F' value
	Between	593.91	197.97	297	2.00**
Study involvement	Within	29306.09	99.01		

** Not significant at 0.05 level.

From table-7, it is inferred that the 'F' values obtained Fathers educational qualifications of IX Standard Students in their Study Involvement (2.00)) is not significant at 0.05 level. So it is inferred that there is no significant difference among illiterate, upto X std, Graduate and professional education to in their Study Involvement.

9. Findings

1. It is found that the IX standard students have moderate level of study involvement.
2. It is found that the IX standard boys and girls students have moderate level of study involvement.
3. It is found that the IX standard rural and urban students have moderate level of study involvement.
4. It is found that there is significant mean difference between the boys and girls IX standard students in their study involvement. Girls' students have more study involvement than boys.
5. It is found that there is significant mean difference between the rural and urban IX Standard Students in their Study Involvement. Rural students have more Study Involvement than urban.
6. The 'F' values obtained among mothers occupation of IX Standard Students in their Study Involvement there is no significant difference among below 5000, 5001to 10000,10001 to 15000 and above 15000 to in their Study Involvement..
7. The 'F' values obtained Fathers educational qualifications of IX Standard Students in their Study Involvement revealed that there is no

significant difference among illiterate, upto X std, Graduate and professional education to in their Study Involvement.

10. Discussion

The purpose of the study was to find out the study involvement among IX standard students. Normative survey method was applied to collect the data on study involvement among IX standard students. The collected data were analyzed based on the gender, locality of the students, difference among mother's income. and Father's Education . The descriptive analysis showed that there is a moderate level of study involvement. The 't' value between boys and girls was found that 3.21 and it shows there is difference in boys and girls study involvement. It is concurred with research findings of Van Houtte, Mieke (2017) who found that boys are, generally, less involved in studying than girls, and boys are more affected by track position than girls are, enlarging the gender gap in the lower tracks. Girl students have conscious awareness on their study to achieve the learning goals. They show more interest to learn new information through innovative learning strategies. These kinds of learning habits differentiate the girls from the boys in their study involvement. This research study showed the temperament of study involvement among IX standard students.

Conclusion

The present study showed that the study involvement behaviour of IX standard students. This research has found that the level of study involvement and significant difference between boys and girls in their study involvement. It also found that there is no significance difference among IX standard students with their respect to mother's income and father's education. The study reveals that study involvement behaviour of IX standard students in their various background and nature. It is helpful to teachers to understand students study behaviour and their circumstances. With this awareness teachers apply various strategies to enhance study involvement behaviour among students those who are have less involvement in their study.

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UPGRADING TEACHING COMPETENCE OF STUDENT TEACHERS THROUGH SUPERVISOR FEEDBACK UNDER MICROTEACHING FRAMEWORK

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ABSTRACT

The success of pre-service education requires the involvement of both supervisors and student teachers. The proper student teacher supervision for development of teaching skills through right type of feedback is necessary to produce competent teachers. This study is an attempt to evaluate the effect of Supervisor Feedback in upgrading teaching competence of student teachers under microteaching framework. The raw teaching competence scores of student teachers were converted into stanine scores to assess the change in the level of performance of the student teachers at pre-test and post-test stages. Twenty percent of the student teachers found to move from average to high performance category on stanine scale. The student teacher trained through supervisor feedback showed significant positive coefficient of correlation of 0.690 between theoretical knowledge acquired and the practical skill developed.

Keywords: Supervisor Feedback; Pre-service education, Teaching Competence; Stanine Scale; Student Teacher

INTRODUCTION

True education is that which draws out and stimulate the spiritual, intellectual and physical facilities of children. It is only possible when there are competent teachers in educational institutions. Teacher education has mainly two aspects i.e. pre-service and in-service. Pre-service education is concerned with the handling over to the would-be teacher a set of skills and knowledge assumed to be useful for him. In-service education is concerned with the improvement of the competence of a working teacher about the skills and knowledge used in his day-to-day teaching.

Ray (1978) concluded that teachers showed a significant change on general teaching competence due to the training in teaching skill using microteaching. George and Anand (1980) studied the development of general teaching competency through use of microteaching. They found that microteaching proved effective in improving the teaching competence of student teachers. Joshi & Kumar (1988) presented a research report on the study of the effect of skill based training in decision making ability on the development of teaching competence. The results of the study showed that training model is effective in developing teaching competence, which pointed out the necessity for having the link practice between the skill based programme.

Singhal (1996) showed that students taught by teachers who received in-service training showed significantly higher achievement mean than students taught by teachers who has not received in-service training as in-service teacher's training brought significant changes in the teachers competence. Boyce (1998) compared the effectiveness of peer, teacher, and video feedback during elementary students' skill development units. Pre-testing and post-testing indicated that teacher-directed feedback was best for younger students. Huang (2001) carried out the investigation of pre-service teachers' reflective practice in the context of their micro-teaching performance and stressed on the need for improvement in reflection contents and reflective thinking on the part of student teachers. Schwillie et al. (2007) stated that training to student teachers provides certain skills; but whether to utilise these skills or not depends on the professional values and the attitude of the concerned teacher.

The student teaching programme helps the student teachers to experience the real classroom situation and develop the set of teaching skills. It also leads to enhancement of self efficacy of student teachers (Knoblauch and Chase, 2015). The cooperating supervisors in teacher preparation programme, generates new way of thinking among student teachers (Clarke et al., 2014). The feedback provided by the supervisors strengthens the links between theoretical knowledge and practical knowledge (Bower and Bennett, 2009, Mesker, et al., 2020). The pre-service teachers learn how teach and develop their identity as teacher during the teacher training programme under the influence of a supervisor (Chou, 2021). This research study is conducted to evaluate effectiveness of supervisor feedback in upgrading the teaching competence of student teachers under microteaching framework. This research study was primarily conducted:

1. To determine the effect of supervisor feedback on upgrading the competence level of student teachers.
2. To assess the effect of theoretical knowledge acquired on the practical skill development among student teachers trained through supervisor feedback.

METHOD

Design & Sample

The study was conducted by using Pre-Test Post-Test design on 10 randomly selected student teachers of D.A.V. College of Education, Hoshiarpur. The sample was consisted of six female & four male student teachers. The dependent variable was teaching competence and the independent variable was Supervisor Feedback. The five teaching skills i.e. Skill of Introducing the Lesson (ITL), Skill of Explanation (E), Skill of Probing Questions (PQ), Skill of Stimulus Variation (SV) & Skill of Blackboard Writing (BW) were developed among the student teachers with the help of Supervisor Feedback.

Tools Used

The tools as described by Chawla & Thukral, 2011 used in this study were: Baroda General Teaching Competence (BGTC) Scale; Observation Schedule cum Rating Scale for the Skill of Introducing the Lesson; Observation Schedule cum Rating Scale for the Skill of Explanation; Observation Schedule cum Rating Scale for the Skill of Probing Questioning; Observation Schedule cum Rating Scale for the Skill of Stimulus Variation; Observation Schedule cum Rating Scale for the Skill of Black Board Writing; Questionnaire for Student Teachers to evaluate the theoretical knowledge acquired by them.

Data Collection and Analysis

The theoretical knowledge acquired by the student teachers was determined by administering the questionnaire. Subsequently BGTC Scale was applied on each student teacher as pre test to obtain initial scores of teach. After this the concept of microteaching, teaching skills, and components of selected teaching skills were taught in detail to all the student teachers. Subsequently each student was asked to prepare the two micro lesson plans each for the two teaching subjects adopted by him/her of about six minutes for each of the selected skill. In this way 20 micro lessons were prepared by each student teacher. Each student teacher was trained by Supervisor Feedback in five selected teaching skills using a micro lesson plan for each skill for each teaching subject by following standard microteaching cycle. The BGTC Scale was reapplied as post-test to determine

teaching competence of each student teacher. The data was analysed by mean & standard deviation to quantify the competence. The effect of Supervisor Feedback on teaching competence of student teachers was evaluated by Stanine Scale and product moment coefficient of correlation.

RESULTS AND DISCUSSION

The first objective of the study is evaluated by converting raw scores of the student teachers were converted into stanine scores to assess the change in the level of performance of the student teachers at pre-test and post-test stages. Table 1 elucidates the level of the performance of student teachers after pre-test and post-test stages on stanine scale. The mean score of student teachers at the pre-test stage have been calculated to be 80.10 with S.D. 11.39 whereas the mean score at post-test stage have been calculated to be 102.30 with S.D. 13.05. It is clear from the above table that at pre-test stage the performance of 20 percent of the student teachers is high whereas 30 percent of the student teachers fall in the category of low performance. It has been also observed that 50 percent of student teachers have shown average performance. On the other hand at the post-test stage the performance of 40 percent student teachers may be termed as superior or high whereas performance of 30 percent student teachers has been found to be low or below average. 30 percent of student teachers fall in the category of average performance. This shows that development of the teaching skills through supervisor feedback has increased the percentage of student teachers in the high category from 20 to 40 percent i.e. 20 percent of the student teachers show an upward tendency. In other words there is a shift of 20 percent of student teachers from average performance category to the high performance category. However there is no change in the percentage of student teachers showing below average performance. Thus it can be stated that with the development of teaching skills among the student teachers through supervisor feedback there is considerable increase in the percentage of the student teachers falling in the high performance category.

Table 1 : Performance scores of student teachers at the pre-test and post-test stage

Pre-Test					Post-Test				
Stanine	Scores	Frequency	%age	Category	Stanine	Scores	Frequency	%age	Category
9	101 +	1	10	-----	9	126 +	0	0	-----
8	95 - 100	1	10	20	8	120 - 125	0	0	40
7	90 - 94	0	0	High	7	113 - 119	4	40	High
6	84 - 89	1	10	-----	6	107 - 112	1	10	-----
5	78 - 83	1	10	50	5	100 - 106	2	20	30
4	73 - 77	3	30	Average	4	94 - 99	0	0	Average
3	67 - 72	3	30	-----	3	87 - 93	1	10	-----
2	61 - 66	0	0	30	2	80 - 86	1	10	30
1	+ 60	0	0	Low	1	+ 79	1	10	Low
Mean = 80.10					Mean = 102.30				
S.D. = 11.39					S.D. = 13.05				

Theoretical knowledge acquired by the student teachers i.e. their cognitive-based-competence (CBC) was measured through standardized questionnaire prepared for this purpose & the practical skill development i.e. their performance-based-competence (PBC) of student teachers was determined through Post-Test BGTC Scores. Table 2 shows the significance of correlation coefficient between cognitive-based-competence and performance-based-competence:

Table 2 : Significance of correlation coefficient between cognitive-based competence and performance-based-competence

Parameter	Mean	SD	r_{cp}	N	df= N-2	S/NS	S*/NS*
Questionnaire Score	230.40	15.75	0.690	10	8	S	NS*
Post-Test BGTC Score	102.30	13.05					

Note : $r_{.05}$ at 8 df = .632; $r_{.01}$ at 8 df = .765; df = degrees of freedom

The coefficient of correlation between cognitive-based-competence and performance-based-competence (r_{cp}) had been found to be 0.690. This shows that there is moderate positive relationship between CBC & PBC for student teachers trained through supervisor feedback. This value of r_{cp} is more than the tabulated value at .05 level of significance for 8 df. This reveals that there is significant relationship between cognitive-based-competence and performance-based-competence at .05 level of significance. Thus supervisor feedback is effective in transforming cognitive-based-competence possessed by the student teachers into the performance-based-competence.

The supervisors due their knowledge and vast experience analyze the strengths and weaknesses of student teachers during microteaching skill development phase critically and provide constructive feedback as desired for development of required skill. The supervisor feedback helped the student teachers to make the required modification in their behaviour for acquisition of particular microteaching skill. This method of skills development under microteaching framework will in the long run contribute towards professional growth of student teachers and building of nation through effective teaching in schools.

CONCLUSIONS

The supervisor feedback under microteaching framework is found to be effective in acquisition of Skill of Introducing the Lesson, Skill of Explanation, Skill of Probing Questioning, Skill of Stimulus Variation & Skill of Blackboard Writing by student teachers using microteaching technique. The supervisor feedback has been found to be effective in improving the level of performance of student teachers in terms of general teaching competence. 20% of the student teachers move from average to high performance category. There is significant positive relationship between cognitive-based-competence and performance-based-competence shown by student teachers trained by supervisor feedback. This means that supervisor feedback uses cognitive-based-competence possessed by student teachers effectively to develop performance-based-competence. The student teachers gain information regarding their class-room performance through acquisition of different micro teaching skills from his supervisor. The supervisor who provides the feedback not only spells out the undesirable behaviours performed by him during his classroom teaching, but also appreciates the desirable behaviours. This helped the student teachers to upgrade their teaching competence.

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CHALLENGES OF TEACHERS IN PRACTICING SUSTAINABILITY AT PRIMARY SCHOOL CLASSROOMS OF KERALA

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ABSTRACT

Sustainability must be embraced for the complete survival of the human race in the future. It is not just a thought or a word, it is what needs to be nurtured throughout life. Primary classrooms are a significant track formation period of life. According to cognitive stages of development, the preoperational stage and concrete operational stage comes in the primary classes (Piaget, 1936). According to Piaget, learning is relating new information to what we already know. To support the teachers should produce a splendid environment for learning. The practices of sustainability should be grown within each individual. The classroom practices are very important to develop the thoughts and actions favoring sustainable lifestyles. The school and classroom environment plays a big role in developing sustainable practices among students, which will go along throughout life.

In this study, the researcher tried to find out the challenges of teachers to bring sustainable living practices into primary classrooms. It also collected the measures taken by the primary school teachers to promote sustainable lifestyle practices in classrooms and the support given by the local self-governments for the same. The population of the study was the lower primary teachers of Kerala. The sample was taken from 300 lower primary teachers from Kasargod, Trissur, and Thiruvananthapuram districts. Questionnaires were prepared for both the teachers and members of local government members. A

checklist was also there to collect the present classroom situations.

“Sustainable Development meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (World Commission on Education and Development, 1987). It is a program of action aimed at the sustainable survival of nature and the environment. Each individual has their own role in it. Children should be aware of its importance from their childhood itself. The researcher believes that the study will help to point out the challenges, the teacher faces in their classrooms to practice sustainability and will help to put forward various possibilities that will help teachers to face the challenges.

INTRODUCTION

Sustainable development is about protecting and conserving the planet's natural environment and promoting social inquiry and a degree of economic equality within and between nations (Grainger, 2004). At the summit of Rio 2012 an immediate task for the future, a set of 17 goals were put forward called Sustainable development goals, which in effect supersede Millennium Development Goals. These goals were action-oriented, easy to convey, and applicable to all countries. They are actual guidelines for living in the present with concern for the future of the earth and coming generations.

The challenges to practicing sustainability can be manifold. It can vary from time to time and country to country. The UN Decade for Education for Sustainable Development (DSED), which ran from 2005 to the end of 2014, applied to all areas of the education-formal and informal sector, schools, colleges and universities, adult and work-based learning, learning throughout life, from cradle to grave and in effect beyond. The UN Decade clearly identified the main ESD tasks as;

- Act as the primary agent of transformation towards sustainable development, increasing people's capacity to transform their vision for society into reality.
- Foster the values, behavior, and lifestyles required for a sustainable future;
- Become a learning process, facilitating decision-making that considers the long-term future of the equity, economy, and ecology of all communities;
- Build the capacity for such future-oriented thinking.

With climate change, environmental degradation, and species extinction, a great deal of that on which our future health, livelihood, and prosperity depend, is under serious threat. Significantly this is not the work of ignorant people but of the highly educated ones, often holding highly desirable and well-respected qualifications. (Orr,1994). So there are some problems that still exist in the field of education. To address these problems one must know the actual challenges faced by teachers who are the drivers of this journey. Rethinking the present strategies and outlook is an essential thing. The new way of thinking must offer a combination of humility, reflexivity, creativity, and renewal.

NEED AND SIGNIFICANCE

Education needs to reconnect people with their environments, with experiences, and with themselves. It needs to recover the importance and value of the senses and students' interrelationships, of their feelings and intuitions, seeking to embody an engagement with the world of which we are all a part (Abraham, 1996). Primary education is the initial stage of formal education where the child starts to think about the world around them. The experiences obtained in their classrooms can do much for the students. Piaget's cognitive stages of development explain the four stages of development, in which the preoperational stage and the concrete operational stage come in the primary classes. Children become much more skilled at pretend play during this stage of development, yet continue to think very concretely about the world around them (Ansorge, 2020).

According to Lombardordier.com(2021), the main eight challenges are zero waste, regenerative nature, dematerialization, resource efficiency, a fair society, a secure society, zero-emission, and adaptation and resilience. These terms can be connected with our day-to-day practices also. A culture must be developed in children to practice lifestyles that will enhance the ability of each child to live in harmony with sustainable practices. To bring them into a style of living with sustainable practices the teachers should have thorough knowledge about the importance of sustainable living, its importance, and its significance in the present and future. Making aware of the teachers the aspects of sustainable development, its need, and its significance is one of the responsibilities of the governments also. For this proper orientation programs and training programs should be planned. To plan the related programs proper understanding on the problems laid under must be cleared to them.

This study tried to know the challenges faced by the lower primary teachers to develop and practice sustainable lifestyles among their children. The

researcher tried to collect the support given by the local government bodies also. These searches helped the researcher to manage the areas in which the schools need more support in enhancing sustainable practices.

OBJECTIVES

1. To identify the challenges faced by the primary school teachers of Kerala in practicing Sustainability in the classroom
2. To know the measures taken by the primary school teachers of Kerala for practicing Sustainability in the classroom.
3. To know the support given by the local self-government for promoting sustainability practices at schools.

METHODOLOGY

The mixed method which includes both qualitative and quantitative approaches were used for the study. The qualitative method involves interviews with local self-governing body members of three districts and the implementing officers of the different villages. The implementing officers are the head teachers of different government schools in Kerala. The researcher prepared interview questions and the interview was done directly as well as using google forms. 10 questions were prepared for the interview. The interview questions involved areas such as the projects put forward to develop sustainability by local governments, training programs conducted for schools and society, and innovative activities conducted by the local governments. The local self-governing bodies involve Grama Panchayath, Block panchayath, and District panchayath. The questions involved the areas like what are the support given by panchayaths in developing sustainability in schools, whether they ask for any help related to sustainable practices, whether any training programs planned now regarding sustainability, and whether they got any training regarding sustainable development goals, and challenges they felt when they tried to implement some activities which favor sustainability in classrooms.

The researcher prepared a checklist containing 10 questions. The questions enquired about the simple practices of teachers regarding sustainability. The areas were the use of clean energy, use of solar and wind during the day time, the gender parity, biodiversity,

The challenges faced in the primary classes can be concluded under eight areas such as zero waste 'regenerative nature, dematerialization, resource efficiency, a fair society, a secure society, zero-emission, adaptation, and

resilience. Under zero waste the researcher enquired about the resources of wastes, their management, and the difficulties faced in their disposal.

The regenerative nature is the process in which the restoring, renewing, or revitalization of the sources of energy and materials occurs. It has been checked by the researcher whether the school premises are properly utilized. Also, the teachers can interfere with the students and their families in making proper use of places around them. Protection of soil, improving water efficiency, minimizing air pollution, developing biodiversity, crop diversity, minimizing the use of non-renewable energy, etc came under consideration.

Dematerialization is the reduction of materials in day-to-day use and replacing them with electronic data. The researcher investigated whether there is proper planning and implementation according to instructions from the authorities to create a situation in the school setting.

Resource efficiency is the area where the maximum use of manpower and material resources is considered. It stimulates innovation, creation, and economic competency for the environment, in areas like agriculture, construction, food, transportation, industry, communication, sanitation, waste management, etc. The researcher inquired about the spaces of reuse, reduce, recycle and remanufacture in the school situation. The research also included the area where how to increase the practicality of electricity consumption, scientific use of water, and ensure high productivity through less land use, etc.

A fair society explains the state of living, the variation in lifestyles of students according to the difference in the regions to them belongs, and the opportunities they get in different skill developments. The tool prepared by the researcher tried to collect data regarding the style of living and the support given by the teachers and the Local Self-Governing bodies.

Another area of challenge was a secure society, in which the deviant behavior of a particular individual is less important than general attempts to offset risk and reduce harm. In this vision of thought, the society attains its goals through group work, with a social ordering by themselves. To reach a secure society, with sustainable outlooks, the practices must be started from the primary classes. In this study, the researcher also enquired about the challenges a teacher faces when tryouts related to these areas were done.

Adaptation and resilience focus on protecting people and ecosystems from the changes that are brought by changing climate. Resilience is the ability of a system to absorb, withstand and bounce back after an adverse event.

(eesi.org). Resilience supports sustainable development, considering the areas, and providing continuous access to essential services like energy, food, water, shelter, healthcare, and transportation. Improved emergency preparedness and strong communication between relevant agencies and first –responders are needed. The researcher in this study tried to find out the challenges that are faced by the teachers when they try to address these problems in their classrooms.

POPULATION

Lower primary teachers of Kerala

SAMPLE

300 Lower primary teachers, 100 each from Kasargod, Thrissur, and Thiruvananthapuram.

ANALYSIS AND INTERPRETATIONS

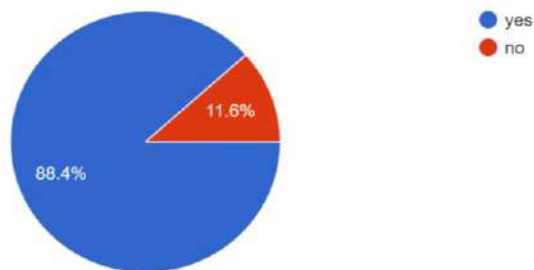
The three-level Panchatath representatives opinioned that in Kerala, through different central and state government programs like the Integrated rural development program, Jawahar Rozgar Yojana, Rural housing, Food for work program, National urban livelihood mission, Mahathma Gandhi National Rural Employment Guarantee Act 2006, Asraya project, have addressed the problem of poverty. The Mid-day meal program in Kerala also helped to face the problem of poverty. According to teachers, the money set aside for mid-day meals is not enough to go with the program.

In the area of zero waste, some Panchayaths had contributed money to purchase waste management systems for schools. All the schools are collecting bio-degradable and non-degradable wastes separately. But schools do not have a proper management system for inorganic wastes like plastic bottles and hard plastic utensils like plastic toys. Even the District, Block, and grama panchayaths have no such programs. But all panchayaths had made arrangements to collect plastic covers from schools and the public which were mostly used for road tarring purposes.

The regenerative nature is the process of restoring, renewing, or revitalizing the sources of energy and materials. According to the opinion of local panchayath members, in the nearest time period only they have got classes regarding Sustainable Development Goals2030. And this made them more aware of the role to be played to handle the waste management system.

From the responses of primary school teachers, even though they know about the importance of sustainable lifestyles to be followed in life, among the respondents, 88.4% try to follow sustainable practices in their life.

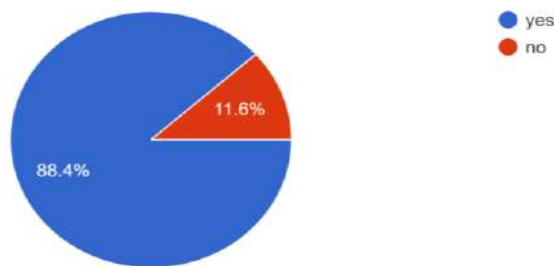
Do you believe in following sustainable lifestyles in your life?



It will be more effective when the teachers try to convey the ideals they follow in life to their children. So it is necessary for teachers to apply the views of sustainable living in their lives.

Keeping the optimized use of renewable energy sources like solar and wind is possible in daily classroom practices. Practicing open-air classrooms, keeping doors and windows during class hours, etc can maximize the use of renewable energy sources and minimize the use of renewable energy.

Do you take classes outside the classrooms usually?



88.4 % of teachers prefer to take classes outside the classrooms. The schools in town and schools with the minimum compound can not adopt this. Each year with the help of Forestry, department saplings are distributed among the students of primary classes. Schools are undertaking activities to plant and conserve them under different activities such as Eco-club, Science club, Environment club, etc. According to the opinion of the Panchayath members, the attitude of the authority of the school and the teachers had a great role in the successful continuation of projects. Educational agencies like Samagra Siksha Kerala and the Department of general education have given financial support to develop bio-diversity gardens in schools. The lack of people who know how to maintain the biodiversity parks and the multiplicity of activities in primary classes for the teachers affected the proper maintenance of the park. A

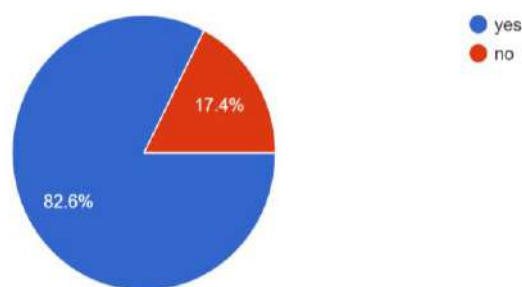
biodiversity park protects the ecosystem, protect the soil, prevent soil erosion, plays a role in the reduction of greenhouse gas emission, etc.

In the area of dematerialization, there is still a need for systems to collect and store data using electronic methods where paper is used, and practical training for those who use it. Reducing the consumption of paper as much as possible helps in saving the trees and thus the forests.

Maximum uses of resources come under resource efficiency. Local Governments have helped in developing sustainable food systems in schools by providing agricultural facilities in schools along with classes regarding organic farming. The scarcity of space and persons to handle these are the main challenges faced by primary schools. Only 2% of teachers responded that they use scientific methods to recycle the water they have used in school. But 80% uses used water from washbasins etc to watering the kitchen garden is the only way of water reuse.

A fair society is the sum total of the state of living of the common people, the regional characteristics which affect the economical and social life of people, equality in opportunities for all, etc. According to the Panchayath representative's opinion, there are training programs addressing gender parity. But there are no such programs have been arranged for primary teachers in the last three years. In the checklist given to primary teachers, there was a question about whether they allow boys and girls to sit together during class hours.

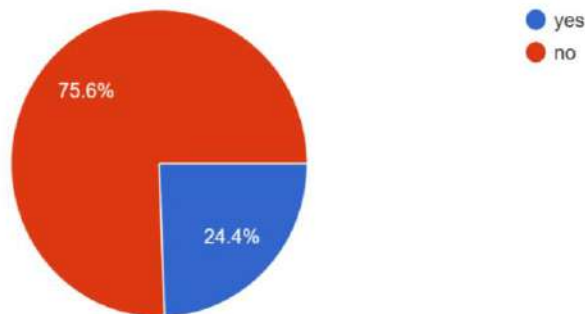
Whether you promote boys and girls to sit together in class hours



Among 296 lower primary teachers, 246 try the boys and girls students to sit together. In the primary classes, according to Piaget's cognitive theory, the child thinks more logically and organized, but still very concrete. This is the best stage to introduce the importance of gender parity unknowingly to them through their daily experiences. So the classroom activities must be well planned by the teachers to cross the barrier of gender disparity.

To a question, about whether you allow the boys and girls to play mixed, 75.6% of teachers responded positively and 24.4% were not ready to allow them to play together.

You never allow boys and girls to play together



FINDINGS

- Different Projects by the central and state Governments have addressed poverty in Kerala.
- Mid-day meal project is successful but the funding for it must be revisited. Mid-day meal programs of some schools are sponsored by some local supporting groups like old students associations, youth clubs, eminent personalities, etc.
- New strategies must be introduced to collect and dispose non-biodegradable waste. The waste materials have to be selected and separated and can be used as raw material for tiles and road tarring.
- Trainings on Sustainable Development Goals are organised for local government members by Kerala Institute for Local Administration. (KILA). But trainings for teachers in this area is rare.
- Above 80 % of teachers try to utilize energy sources such as sunlight and wind as much as possible during class hours, by taking classes outside the classrooms and keeping the doors and windows open during the class hours.
- 88.4% of teachers prefer to take classes outside the classrooms.
- Educational agencies like Samagra Siksha Kerala and the General education department have produced financial support for the schools to set up and save biodiversity parks.
- Due to the lack of caretakers, the maintenance of biodiversity gardens is not properly done in primary schools. This situation can be handled by creating new care taker posts in lower primary schools.

- Availability of electronic devices to minimize paper use is not yet possible in Primary schools
- Local Governments have projects to help schools in sustainable farming, but lack of manpower and scarcity of land withdraw Schools from it.
- In the training programs for teachers areas like, gender parity, importance of clean energy usage, waste management strategies etc must be included. Also practical sessions and their shairings must be included in teacher training programs.
- 82.6% of teachers allow boys and girls students to sit together in classrooms.
- No pre-planned activities or games are practiced in classrooms to address gender parity

CONCLUSION

This is a time when Sustainable Development Goals and their related areas are very important. The lessons of sustainable living should start instilled in children at an early age it. The child should get maximum chances to practice sustainability unknowingly so that it becomes a part of their behavior.

The major challenge in practicing sustainability is the lack of classroom physical facilities. The classrooms especially in the town areas are so crowded, so that not allow for to use of natural light and air properly. The scientific methods to address pollution must be practiced in their primary classes. The chances for non degradable materials uses must be minimised. The chances for reusability must be practiced. The need and significance of sustainability or sustainable life styles should be thoroughly understood by each student from their own experiences.

Gender parity should be addressed by the primary classes itself. The textbooks and the learning activities must have areas to deal with the problems. The children must get an healthy outlook from their own experiences. The school system altogether must have a plan of action to address gender equality. Awareness programmes must be planned for teachers and parents. The remedial measures must start from our own houses and classrooms. The three-layer Panchayath systems do much to address the sustainable Development Goals through different actions and projects. So with the joined work of the school, Local panchayaths and Government, the challenges of practicing Sustainability in primary classes can be addressed.

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DISPARITIES AMONG HINDUS IN INFANT MORTALITY RATES AND THEIR MAJOR DETERMINANTS IN WEST BENGAL

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ABSTRACT

This paper tried to examine the interdistrict disparities of infant mortality rate(IMR) and their major determinants in West Bengal among Hindus where the study based on cross sectional data in latest census,2011.In the present study, twenty seven Districts out of twenty eight Districts in West Bengal among Hindus has taken as a cross sectional units. The choice of Districts and socioeconomic as well as demographic variables are partly guided by availability of data. The IMR has been considered as most important indicators of health for the construction of human development index (UNDP, 1995) and it is taken as a proxy variable of the life expectancy at birth. In this paper we tried to capture inter district disparities of IMR by vertical bar diagram approach and next to explain the major determinants of IMR. We have run a robust multiple regression models by applying OLS technique. Before, running multiple regression the pair wide correlation coefficient between IMR and all explanatory variables separately as well as pair wide inter correlation among explanatory variables have been calculated. It is seen from bar diagram there is clear evidence of interdistrict disparities of IMR in West Bengal among Hindus in 2011.The findings of correlation coefficient indicates that the nature and degree of association between paired variables to be satisfying the a priori theoretical expectation in every case. It is found from robust multiple regression model the female literacy rate, net state domestic product at factor cost at constant prices and constant term are statistically significant at varying level.

Key Words: Health, Infant mortality rate, Census, Socio-economic and Demographic variables.

I. Introduction

While there is hardly any denying proverb „health is wealth“, securing good health requires minimum level of wealth and income. Unfortunately, given a socio-economic characteristics of a developing country like West Bengal among Hindus, there prevails a high degree of sleekness in wealth distribution and hence alarming inequalities in access to and spread of health service. The infant mortality rate (IMR) has been considered as a most important indicators of health for the constriction of human development index (HDI) by united nation development programme (UNDP, 1995) and it is taken as a proxy of life expectancy at birth. Therefore infant mortality reflects a country's level of socio-economic development and quality of life and used for monitoring and evaluating population, health program and politics. It is an outcome rather than cause and have directly measures results of the distribution and use of resources, Haines (1995).

There is a significant decline in infant mortality rate since last three decades which is evident from West Bengal among Hindus census data.

The infant mortality rate declines from 77 per 1000 live births to 44 per 1000 live birth from 2001 to 2011 respectively which is not doubt impressive. But West Bengal among Hindus performance with respect to other countries in Southeast Asia is not impressive. As children are important assets of nation, therefore reduction in infant mortality is likely to be most important objective of Millennium Development Good 4 (MDG 4, 2000). There of the eight MDG are health related, calling for a two-third reduction in a child mortality and three quarter reduction in maternal morality and to spread of HIV/AIDS, malaria and tuberculosis. Although the progress of the decline is impressive but till now West Bengal among Hindus do not able to fulfill the objective of MDG 4. In 2011 census West Bengal among Hindus infant mortality rate is 44 per 1000 live birth instated of 28 per 1000 live births by 2015 as per MDG 4.

Although there is an impressive decline in infant mortality rate in West Bengal among Hindus but there exist statewide disparities of this health indicator. Using census data (2011), this paper attempts to study the existing interdistrict disparity in infant mortality rate of selected twenty seven Districts out of thirty Districts in West Bengal among Hindus and its major socio-economic and demographic determinants. The choices of independent variables and Districts are partly guided by availability of data. The one of the prime objective of this study to see which variables, economics, social and

demographic have greater impact in reducing infant mortality levels

II. Objective of This Article

In keeping with view of infant mortality rate as a most important determinant of health, the objective of the present study may be stated as below.

1. To examine the interstate disparities of infant mortality rates among twenty seven Districts out of twenty eight Districts in West Bengal among Hindus.
2. To examine the factors which are responsible for the inter Districts variation of infant mortality rate in West Bengal among Hindus as a whole?

III. Data, Methodology and Econometric Model

The entire data used in the present study is from secondary sources of data collected through census, 2011, International Institute of population science (IIPS) and ministry of health and family welfare, Integrated Child Development Services (ICDS) published by planning commission, on March 2011, office of the Registrar General, West Bengal among Hindus Health and Family Welfare Statistics in West Bengal among Hindus, 2013 and Directorate of Economics and Statistics of Respective state Government, Central statistical office.

The present study is based on the basic of cross section data in 2011 where twenty seven Districts out of twenty eight in West Bengal among Hindus are considered as a cross sectional units.

To explain the interdistrict disparities of infant mortality rate in West Bengal among Hindus we have presented vertical bar diagrammatic approach and next to explain the determinants infant mortality rate at state level in West Bengal among Hindus we shall use correlation and multiple regression (robust) analysis. The functional relationship (Multiple regression models) is described below.

$$\text{IMR} = f(\text{ID}, \text{VC}, \text{SR}, \text{FLR}, \text{PSC}, \text{PST}, \text{UP}, \text{SP}, \text{NSDP}, \text{U})$$

Where

IMR: Infant mortality rate

ID: Percentage of institutional delivery of child VC: Percentage of vaccination of the child

SR: Sex ratio

FLR: Percentage of female literacy rate

PSC: Percentage of scheduled cast population to total population PST: Percentage of scheduled tribe population to total population UP: Percentage of urban population to total population

SP: Percentage of slum population to total urban population

NSDP: Per capita net state domestic product at constant prices 2004-05 U: Disturbance term

To estimate the model we have applied ordinary least square method (OLS)

IV. Results And Discussion

In the present subsection we shall try to examine the extent of correlation between the dependent variable namely, infant mortality rate and the chosen explanatory variables namely, percentage of institutional delivery of child, sex ratio, percentage of female literacy rate, percentage of scheduled cast population to total population, percentage of scheduled tribe population to total population, percentage of urban population to total population and per capita net state domestic product at factor cost at constant prices (2004-05). Before running robust multiple regression model of infant mortality rate correlation analysis is also done among the explanatory variables to verify whether multicollinearity exists among the explanatory variables which is presented triangular matrix in table 2 in appendixes. The findings indicate the nature and degree of association between paired variables to be satisfying the a priori theoretical expectation in every case, thus ruling out any severe chance of multicollinearity. However, in a few cases, where the correlation coefficient is slightly higher, the problem will overcome by adopting a step wise procedure in the regression estimation. It has help in converging to the most significant variables influencing infant mortality. It is seen that the pair correlation coefficients between IMR and ID, IMR and VC, IMR and FIR, IMR and UP, IMR and NSDP, ID and FLR, ID and UP, ID and NSDP, VC and FIR, SR and FLR, FLR and NSDP and PSC and PST are statistically significant at 5% level.

Results of the multiple regression (Robust) model of Infant mortality Rate

We have attempted step wise robust multiple regression model by experimenting with the explanatory variable adapted. Taking infant mortality rate as a dependent variable the best performing ordinary least square (OLS) was found to be that which included percentage of institutional delivery (ID), percentage of vaccination of children (VC), sex ratio (SR), percentage of female literacy ratio (FLR) and net state domestic product at factor cost at constant prices at 2004-05. In terms of multiple coefficient of determination (R-squared)

the overall goodness-of-fit of the chosen model is quite satisfactory as it is observed to be 0.5972. Hence about 60% of the variations in infant mortality rate can be explained in terms of explanatory variables included in the model. The probability of observed F value also points to an overall high satisfactory performance of the multiple regressions. Further as the average variance inflation factor falls to 2.08, the model also suffers from very low degree of multicollinearity effect.

It is seen that most of the estimated coefficients have satisfied a priori theoretical expectation. It is found that infant mortality is inversely related to the percentage of institution delivery, percentage of vaccination coverage, percentage of female literacy rate and NSDP at constant prices. On the other hand infant mortality is directly related to sex ratio which is divergence from a priori theoretical hypothesis which might have been caused by gender discrimination against women in the country look like West Bengal among Hindus. In our estimated model we seen that FLR (female literacy rate) and NSDP are statistically significant at 5% level of significance where as constant term is statistically significant at 10% level.

From the multiple regression model it is seen that there is a inverse relationship between IMR and VC which is explained by the fact that universal immunization programmed by the government may be successful at grass root level at a long time. Similarly the inverse relationship between IMR and institutional delivery indicates that institutional delivery reduces the IMR since this ID is safe relative to home delivery of infant. The positive relationship between IMR and SR is the indication of presence of gender discriminations in our West Bengal among Hindus society.

It is found that there is a statistically significant inverse relationship between female literacy rate and IMR which is explained by the fact that education, specially the higher education is one of the most important social indicators which has significant influence on the treatment seeking behavior of households' member. The negative and significant degree of association between IMR and NSDP can be explained by the fact that NSDP of any state can reflect the overall economic scenario of the state as a whole which may be the prime determinant of health expenses by the household members. Total expenses of health can positively relate to household's annual income. Hence increase in NSDP leads to a fall in infant mortality rate. However the constant was observed to be statistically significant being positive. This point to the fact that in spite of improvement in health care system and access to health care facilities at macro

level, the existing arrangements and intervention are still short of requirement

V. Conclusion and Policy Suggestions

Over the years, West Bengal among Hindus has attained impressive achievements in child survival. A fast decline in infant mortality rate (IMR) of the country been observed in recent past. The IMR has dropped by an average rate of 4.56% per year over last five years. However in current pace, the country will miss the target to achieve the forth millennium development goal (MDG-4), which aims to reduce under-five mortality rate and IMR by two- third between 1990 and 2015. In West Bengal among Hindus overall decline in child mortality was largely hindered by subdued progress in the area of neonatal deaths, especially within the first week of birth (Kanat, S., 2015).

West Bengal among Hindus MDG 4 target is to reduce IMR by two-thirds between 1990 and 2015, i.e. from 80 infant deaths per 1000 live birth in 1990 to 28 by 2015. S The West Bengal among Hindus and its most of the Districts are far away from achieving the MDG-4 Goal. Active government intervention is needed to eradicate the high level of infant mortality both at national and state level.

Multiple regression results show that it is the socioeconomic as well as demographic variables that have a close association with infant mortality rate. The disparity of these socioeconomic and demographic variables leads to statewide variation of infant mortality rate. Although the government of West Bengal among Hindus has various health policies for treatment of people in the nation but it has not been implemented properly both at national as well as state level. Hence policy implementation by the government is necessary and sufficient condition for “health for all”.

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EDUCATIONAL SCHEMES SERVING PRIMARY STUDENTS: A CASE STUDY OF SCHOOLING OF GIRLS AT GOSABA VILLAGE OF SUNDERBAN

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ABSTRACT

According to Census 2001, in Sunderban almost 50 lakh children in the age group 6-14 years were not attending any educational institution. They constituted 29 per cent of all in the same age group. Against the backdrop of this huge number of out of-school children, the Sarva Shiksha Abhiyan was launched in 2001-02. The overall aim of this centrally sponsored programme was to provide quality elementary education for all children in the age group 6-14 years by 2010.

Until recently Sunderban's progress towards Universal Elementary Education has not been remarkable. According to Census 2011 about 23 per cent of the state's population has remained non-literate, which is only three percentage points less than the all-India average. Even though enrolment at the primary level has almost reached universalization, the schools failed to retain a large number of students in schools after they complete primary education. Even though dropouts at the primary stage have come down significantly, Primary students learning outcome is a serious problem.

Key words: Sunderban, Primary Students, Education, Gosaba

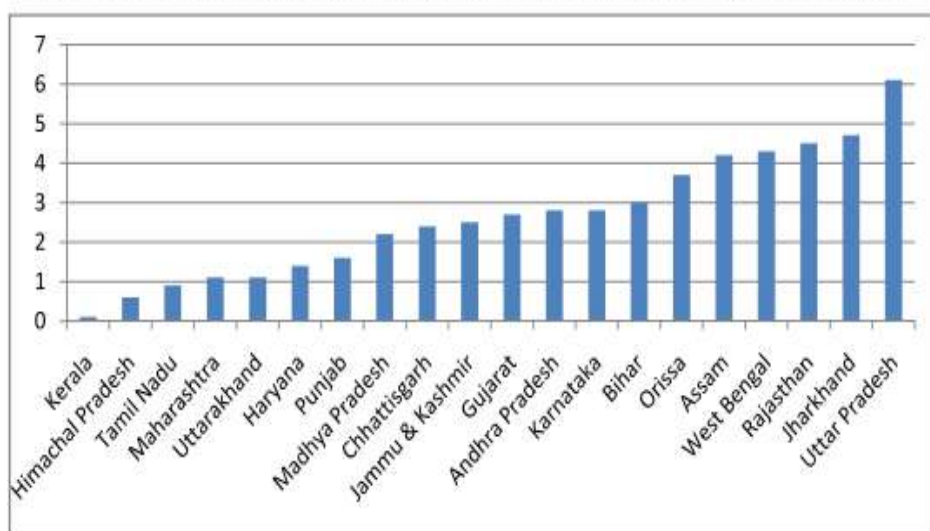
I. INTRODUCTION

It is well-known that the returns from women's education are comparatively high in general. Girls' education is instrumental in reducing fertility and infant and child mortality rates and improving the nutritional status of children and health care practices and in improving children's school enrolment and performances in their respective classes (Filmer 1999). Against this background, it is important to focus on the issues which are specifically connected with girls' school participation and performance, which differ from

region to region, and between different groups of people. It is necessary to identify problems in an area-specific way, so that appropriate intervention programmes may be initiated. Girls' belonging to the disadvantaged social groups face two fold discrimination- first of all due to gender and secondly, due to their caste or community. One of the four goals of Sarva Siksha Abhiyan was bridging this huge gap of gender disparity.

The combined effects of multiple programmes, strategies, prevention methods, by the state, private sectors and NGOs have had a prominent quantitative impact which is visible. Enrolment has increased through the better availability of schooling and greater participation of marginalised communities (ASER 2015, 2016). The Annual Status of Education Report (ASER) 2011, prepared by Pratham, shows that the percentage of out- of-school children in the age-group 6-14 in rural Sunderban has come down from 10.71 in 2006 to 4.3 in 2011. Quantitative enhancement had happened but various studies reveal that regular attendance, retention and satisfactory completion of primary schooling are still visible problems. Data on region, caste, economic status, religion, gender revealed that disparities are still very prominent (Majumdar 2011). A common refrain in India is that statutory welfare rights suffer from weak implementation, monitoring and enforcement. Sunderban is no exception to this trend.

Figure 1.1 Percentage of out-of-school children in major states of India, 2011



Source: Annual Status of Education Report (ASER) 2011

Even though all these numbers cannot be directly compared with the Census 2001 figures, it can be concluded that between 2001 and 2011 significant reduction in the number of out-of-school children has been recorded. However, in relative terms, Sunderban still lags behind the majority of the states in terms of the percentage of out of-school children (Figure 1.1). Among the twenty major states, there are only three states in which the percentages of out-of-school children exceed Sunderban's.

Gosaba village of Sunderban region has been selected as a case study. The village is the basic unit where policies are expected to merge into reality. It is in this unit where the impact of governance or the lack of it is visible. Socio-economic, political and cultural scenario of the area of present study needs to be mentioned briefly as the whole system has indirect impact on the educational status of the girl children. Yet, on poverty eradication, the state is a mediocre performer. The NSSO data 2004-05 show that about 12 per cent of the households in the state remained insecure when it comes to two square meals a day. Most of these households belong to the disadvantaged communities like SCs, STs and Muslims. According to the literacy data, the pattern of literacy achievements coincides with the exclusion of particular communities in general and especially the women in those communities. Literacy deprivation follows a geographical pattern which again goes in line with the geography of hunger where a section of people are adversely affected (NSSO-64th Round).

In this context, a brief discussion needs to be mentioned about Sunderban region. Sunderban, the land of boundless beauty with magnificent landscape is declared as world heritage by UNESCO. Canning is the major town for the people of Sundarbans of South 24 Pargans. Canning port of river Matla is the major entry point in the region of Sundarbans. Sub-Divisional office for the administration is situated in this town. This is the end point of railway connection with the metro city, Kolkata. This town was initially very active as a port. So, it is known to others as Port Canning. This town got its name after Lord Canning.

There is a long history of settlement of Sundarbans with a particular ecology and demography. The cultural history of the lagoon of Sunderban deltas are based on various issues. People, habitation pattern, beliefs on religious norms, folk deities and folklore, myths etc. are the major part of the cultural space (Bera 2010). To survive in the forest area, people came together under a common canopy of syncretism, which borrowed the myths from both the religious beliefs of Hinduism and Islam. With the unique climatic, geographical

and socio economic condition- there flourished a distinct culture in the region. People are using and maintaining every part of the land, every plant and even grasses are utilized. People know the nature of every river, its timings of tides and waves; they know the nature of forest, the man-eater of Sundarbans etc. (Bera 2010). And all these have effects on the school participation of the children, especially on girls.

People of Sundarbans region are of multi-ethnic background with different occupational positions as well as having different religious faiths. They are living in a common ecological atmosphere which has created their own dialects. They are practicing and maintaining their linguistic identity. The people of this region are speaking Bengali language, but the dialect is little bit of different. The origin of the language is also Sanskrit (Jalais 2010)

Due to a huge migration from neighbouring country Bangladesh during post-independence era, a sudden influx of population has occurred in the Sundarban region. As a result of migration, vast lands were occupied by a huge number of people and de-forestation in the region started. A large number of populations, nearly 95 per cent, are basically dependent upon a rain-fed monocropping agricultural production and others on rivers as well as forests for their livelihood (Mukhopadhyay 2015). Honey collection and collecting woods such as *Sundari (Heritiera Fomes)*, *Hental (Phoenix Spp.)*, *Goran (Ceriops Spp.)*, *Geowa (Excoecaria Agallocha)*, *Baen (Avicennia Marina)*, *Dhundul (Xylocarpus Granatum)*, *Garjan (Rhizophora Spp.)*, *Golpata (Nipa Fruiticans)*, are the main source of income for a large section in the area. In the Sundarbans, more than 300 bird species are found which includes 100 migratory birds. There are huge numbers of orchids, ferns, micro fungi and lichens in the region (Mukherjee 2008). Fishing and collection of prawn seeds and crabs in the rivers and creeks is another lucrative source of money for the people living in the coastal part of the region. (Ray Chakraborty, Bhattacharya 2002). This prawn seeds is known as Tiger Prawn Seeds (TPS). This type of cultivation is easier than normal fishing activities in this saline water zone. Women particularly girl children are involved in this activity in the area (Dutta 2010). Another source of income is *zari* work (embroidery). Here again mainly the girl children who are engaged in this type of work, which is expanding in popularity in the villages as a source of income for the Primary students (Ray, Chakraborty, Bhattachaya 2002). These developments stand in the way of regular school participation of girl children.

According to the local myth, these people are living with an interesting

eco-system. Their lives are between risks as literature phrased it “*dangay bagh, jole kumir*” (Tiger on the land and crocodile in the water). People of Sundarban region is denoted as “*bada boner manush*” (Chatterjee Sarkar 2010). A large number of men are entering into the jungle without any proper equipment needed for their safety in the dense forest. Villages near the forest is famous as the ‘village of widows’ where male members of the family have been attacked by the man-eater Royal Bengal tigers during their activities into the forest and never came back. These insecurities definitely affect the girls’ education.

The history of folk life of the villages in Sundarban region is significant in terms of caste, class and religion. This goddess Bonbibi originally emerged in the belief and faith of Muslim community but later merged with Hindu deities and worshipped by both the communities. The devotees are actually socially as well as economically backward. They are living in a place where various risks co-exist. To combat with these situations, they have the only option to choose to worship (Sur 2010).

This region has so many poisonous or semi poisonous snakes. The local belief is on Manasa, the Goddess of snakes. Death records registered in the region where many people have lost their lives due to snake bites. Snake bite is a very common in this region. And it is also observed that people have more belief on Goddess Manasa rather than doctors or hospitals. The community of ‘*Ojhas*’ are very active in this rural Sundarban region. According to the *Puranas* (*Padma Purana*) Manasa is the Goddess of snakes. *Manasa Mangal* or *Manasa Jatra* is also very popular folk-theatre in the villages of Sundarban region. According to various studies, in the month of Shravan of Bengali calendar ‘*Manasa puja*’ have been performed by villagers to satisfy the Goddess for her blessings. The ritual of the worship is to make floating boat (*Nouka*) by Banana stem which can easily float on the river. Basically women and children go to the river or any tidal water body for worship.

A common festival which is being celebrated by rural people of Bengal including the people of the present study is ‘*Nabanna*’. After the harvest of new crops, the villagers celebrate this with their relatives, neighbours and with others. They invite each-other for lunch or dinner together. All the preparation of dishes are being cooked by the women with the help of their daughters. The aim of the festival is sharing happiness with others. Sometimes, this ritual is followed by various village fairs like ‘*Nabanna Mela*’ etc. This is one of the ‘*parbans*’ as the proverb goes in Bengali ‘*Baro Mase Tero Parbon*’. This fair has its own characteristics. The researcher observed that various awareness

programmes relating to trafficking etc. are being organized in this type of fair.

People of Sundarbans organize various village festivals in the name of the folk deities and other Gods of their belief. These festivals are not just a mere gathering of villagers but are also used as the place of increasing awareness among villagers on issues like women and girl child trafficking in the region, importance of girls' education etc. by various Government organization (G.O) and Non- Government organizations (N.G.O). However, due to the rituals, various celebrations, children, especially remain absent from schools.

Political scenario of Sunderban should be mentioned here briefly. Sunderban has a long political history. A long 34 years Left history of ruling in Sunderban came to an end with the emergence of Trinamool Congress (TMC) party. In 2011, TMC won the assembly election with 184 seats and formed the government. Since 2011 to till date TMC is ruling in Bengal under the flagship of Trinamool Congress. In recent times, communal tension is evident in the area with the emergence of a political party with different ideology (Gupta 2010)

Rationale for the study

Gosaba village is an example of remarkable deprivation. Alternative opportunities of jobs (Zari work, catching small prawns from river) are more preferred as additional income. After 'Aila', fishing is encouraged in the saline water by private investors. Although school records show increased enrolment, discontinuation is high among girls above 12 years due, among other factors, to political disturbance in the area. Some parts of the district are facing communal turmoil (South Bengal Herald April 26, 2011). Parents are not ready to send their daughters to go to school due to the communal unrest in the area (interaction with parents). Girl child trafficking through Bangladesh border is another burning issue. As a result early marriage of girl children is a part of social life (Save the Children Annual Report 2010-11, Sanlaap Annual Report 2013-14).

II. METHODOLOGY

For collecting data, the researcher was given authorised letter from the Tata Institute of Social Sciences, Mumbai (one from the Dean of the 'School of Education' and other issued by the office of the 'Doctoral Advisory Committee'-DSO). Before going to the field, the researcher took permission from the office of the District Inspector of Schools (D.I.S) of Department of Education at Alipore, Kolkata to conduct the study in school. After taking permission from D.I.S, the researcher had to visit the office of the South Circle at Ballygunge,

Kolkata and after that Sub-Inspector of Schools (S.I.S) at Kultali of Basanti block. The researcher also visited the office of Deputy Director (Grants-in-Aid), Bikash Bhavan, Salt Lake. The requisite permissions were given which helped her to visit various institutions without much difficulty.

The researcher also visited Block Development Office (BDO) of Basanti where the Digital Section and Department of Fishery provided some data. At Basanti, the researcher visited the Agricultural Department and Police Station to seek some permission as well as to access the secondary data.

On the basis of the authorization letter from TISS, Mumbai and D.I.S of Kolkata, the S.I.S of South Circle, Kultali of Basanti block requested the Head Master of Janapriya Nagar Janapriya Vidyalaya to provide an accommodation to the researcher at the KGBV adjacent to the same school. It is worthy to mention that the Head Master of the school not only arranged a sharing-basis room but also provided food which helped the researcher to stay there for one long year of her field work. The S.I.S of South Circle appointed one '*Shiksha- Bandhu*' (his job is to visit schools in the circle and collect data for S.I.S) who helped the researcher providing school related data.

With the aim to observe girls closely, the researcher took permission from the Department of Education of Sunderban and she was allotted a room in the KGBV centre of the school. Janpriya Nagar Janapriya Vidyalaya of Gosaba village is under the Department of Education of the Government of Sunderban. It is a co- educational institution with science and arts stream and have a separate KGBV hostel for girls. The headmaster and the assistant headmaster of the school attended to all the queries of the researcher and furnished her with necessary inputs. The researcher received much co-operation from them. There is 41 teaching and 4 non- teaching staff in this school. Students from Gosaba and nearby villages use to come to this school.

This school has six separate buildings and two staff rooms (female and male), one library, one laboratory where computers are installed. However, there is no separate teacher appointed for computer classes. One building is allotted for office where Head Master has a separate room. There is also a hostel for boys. It is heartening to note that as per Sunderban government instruction, a building is under construction allotting for Mid-Day-Meal purpose. There is running water facility along with tube-well water. There are two small rooms using for kitchen and another room to store fuel for cooking Mid-Day-Meal.

Apart from classrooms, there are six girls' toilets, six boys' toilets, two

toilets for male teachers and two toilets for female teachers. It is worthy to note that there is one toilet for special children. In spite of the infrastructure facilities, it was observed by the researcher that the size of the classroom is not sufficient for the students. Students' strength is higher in this school. So, students are compelled to stand in the classrooms due to lack of sitting arrangements.

This school has three play grounds, two is their own grounds which are within the campus and one is for all which is situated outside the campus. This ground is bigger than other two grounds. Only school's annual sports held in this ground. This ground is being used for various festivals in the village such as Sundarban Gramin and Krishi Mela, fairs in times of *Eid* celebrations etc.

The objective of this paper is to understand the impact of educational schemes undertaken by both the central and state governments to improve the educational scenario analyzing the implementation of these schemes in this particular school as a case study.

The growth in enrolment in the very recent years has been impressive due to the mid-day meal (cooked) scheme of the government of India and Kanyasree Prakalpa of Government of Sunderban. It would not be irrelevant here to mention briefly the content of the two schemes.

Mid-Day-Meal (MDM)

Mid-Day-Meal (MDM) is officially named as the National Programme of Nutritional Support to Primary Education (NPNSPE). This scheme has been started in Sunderban since 2003.

This scheme was started with the following objectives:

- To improve the nutritional status of children in the classes I-VIII
- To encourage Primary students students who are on the marginal edge of the society, to attend school regularly and
- To promote school participation in general

In the school Janapriya Nagar Janapriya Vidyalaya, it was found that MDM has two types of impacts. Enrolment has increased due to the regularity of the MDM but the classroom attendance was found very irregular. It was observed by the researcher that after serving of Mid-Day-Meal, some students used to leave the school for their home. Headmaster and other teachers pointed out that these young children cannot stand for the entire day in the classroom. When they become tired they left and it was not possible for the teachers to keep constant watch on them. One section of the teachers has different opinions on

leaving the students after Mid- Day-Meal. They said that *“these children are not so serious. They are coming for the Mid-Day-Meal, when they get it they leave. Their parents are least bothered for their education. They are only concerned about the food”*. Children were asked by the researcher about their experience in the classroom and the response was that *“Derite ele bosar jayga pai na. bondhura boste dai na hole pichhone dariye thaki..kono kono din tifer por barite chole jai”* (If we are late in class, we could not find place to sit. Sometimes friends give us to sit otherwise we have to stand at the back for the whole day, so, some of us used to go home after having Mid-Day-Meal). The researcher’s observation also supports the two views.

It was observed that though MDM is served regularly but nutritional value of the food, according to the researcher was not up to the mark. Generally the menu includes rice, dal with either pumpkin or papaya or soya chunks used to serve to the students. One day in a week students get egg meal. It was found that students’ attendance increased on the day when egg meals were served. It was also noticed that sometimes students used to take away the meal at home. The food they collect is being consumed by their other family members. It was found in the school that classrooms were over crowded before the distribution of MDM.

Kanyashree Prakalpa

A grave problem of girls’ education is early marriage. Sunderban District Level Health Survey (DLHS) 3 (2007-08) revealed that 54.7 per cent women are married before the age of 18 years, the legal age for marriage of a girl in India. Sunderban is identified as the 5th highest state in India for the child marriage (Chowdhury 2018). To reduce the rate of child marriage and female school dropout, Kanyashree Prakalpa scheme has been implemented in Sunderban with the initiative of the government of Sunderban.

Kanyashree Prakalpa provides two types of scholarships:

1. K1: Annual Scholarships of Rs. 750/- for the age between 13-18 years which has been increased in the budget of the government of Sunderban of 2018-19.
2. K2: One-time Grant of Rs. 25,000/- for the age between 18-19 years, if the girl is still unmarried

This scheme is a type of Conditional Cash Transfer (CCT). Every girl needs to have an account in mentioned bank and minor girls can open account jointly with their mother or female guardian. Educational institutions will co-

ordinate with local bank to facilitate the opening and operating the account of the student and they have the major responsibility to monitor the whole process of Kanyashree scheme. It is compulsory that girls have to be enrolled themselves in any formal or technical/vocational educational institution. After receiving one-time grant girls can start their journey towards higher studies rather than getting married. For this purpose parental counseling module has been introduced by the authority. Constant awareness programmes are being organized by the administrative bodies of government and schools. 14th of February is declared as Kanyashree Day in Sunderban. This day is being celebrated through cultural programme which includes drawing/painting, recitation, singing, dance, and drama on importance of education. According to the report, more than 40 lakh girls are beneficiaries of Kanyashree Prakalpa (Kanyashree Prakalpa Annual Report 2015-2016).

The scheme attempts to combat early marriages of children in Sunderban. (Department of Women Development and Social Welfare, 2016). The aim of the scheme is to tackle the rate of dropouts from the schools and delay the age of marriage. Another aim is to ensure that girls remain in school, so that they can get knowledge to become economically independent (Kanyashree 2015). Kanyashree Prakalpa targets girls between 13 and 19 years who are in standard 8 to 11. The rate of dropouts is very high in this group (Chowdhury 2018).

Kanyashree Prakalpa is getting popular. The researcher has observed during her stay that guardians are aware about the money of the bank accounts of their respective ward. The annual report of Kanyashree Prakalpa of 2015-16 witnessed the fact that an increasing number of recipients are being encouraged to continue schooling and are targeting the one-time grant of Rs. 25,000/- (Department of Women Development and Social Welfare 2016). A rapid assessment was prepared by government of Sunderban in nine schools in three districts of the state (Purulia, Malda and North 24 Parganas) during April-June 2015; it was found that enrolment of girl children between classes 8 to 12 has increased in 2014-15. It is significantly improved the presence of girls at the secondary and higher secondary levels of schooling which signifies that more students are graduating from secondary to the higher secondary levels (Chowdhury 2018).

However, this positive picture is not supported by the experience of the researcher. The researcher has observed that sometimes the grant has been misused by the family members of the children. The researcher also came across

a student when one time grant of Rs. 25000/- (K2 of Kanyashree for the age between 18-19 years) has been used for dowry in marriage.

Apart from enrolment in school lives of Girls of Gosaba village have not changed much even after the implementation of these schemes. After interacting with 20 day scholars, the researcher found that usually the girls are staying with their families which include parents, grandparents, uncle-aunts, their siblings and cousins. Most of the times, they use to live together as a single unit which is known as 'joint-family'. A big family has variety of household responsibilities. These responsibilities come to the female of the households where girls are not the exception. They are compelled to perform all the shared household responsibilities. After doing all household chores, such as cleaning, cooking, collecting water from the nearest tube-well in the village, they come to the school. From early morning they start working and after finishing their work, they are free to go to school. The families are economically marginal and under such socio-economic condition, girls cannot focus on their studies. They have to lead their lives according to their family condition. Due to other various reasons, these girls are facing extreme level of vulnerability. Poverty in the region is high and it has its impact on girls' lives.

Most of the families of these girls are associated with agricultural activities - mainly seasonal cropping and a section of population is associated with non-agricultural activities. This region has also other type of occupations based on the vast forest area of Sundarbans, such as honey and wood collection from the forest, fish and crabs collection from the rivers and creeks in the Gangetic delta region of Sundarbans (Ghosh 2004). Male members of the families are mainly the sole earner. Due to their occupation, men use to stay away from home for a long period of time- it may be month after month. Apart from this, a sizable section is considered as migrated from the region. Mainly they have to migrate temporarily or seasonally to the other cities in search of jobs. In most of the families, women lead the household. With many children, women are compelled to live and run the household. In this context, girls of these families are the worst sufferers. The issue of their security is considered as grave problem. So, the ultimate solution is to arrange marriage for them as early as possible. In this village of Sundarbans, the age of marriage of girls in most cases is 13-16. During the field work in a case of early marriage the parents of the girl were advised by the researcher that their daughters are still in school and they should wait till the end examination. They have their own views. And their daughters' marriage is more important to them. If they will not arrange it in time

then they will lose a perfect groom for their daughter. In this context, girls are not in a position to protest, not even able to go to others for seeking help. Parents are the ultimate decision maker of the families. While interacting with one female teacher in Gosaba village, it was found that in spite of being much educated than others she also has followed the same norms in the villages regarding marriage. Being a school teacher she knows the problems of early marriage but could not do anything when it came to her daughter's life. She opined that '*amader samaje meyeder besi din abibahito rakha jay na, tahole bhabishyate oke biye deoa mushkil hobe*' (our society does not allow any girl to remain unmarried after puberty. If I could not arrange the marriage earlier I would not be able to do that in future).

The researcher also observed that most of the village girls are still following the same lifestyle of her mother or grandmother gone through in their space and time zone. A girl must know the household chores and then she may go to the primary school. If she is doing well in the school then she will go for the secondary level. But, if by the proposal of marriage comes in the meantime then she must be ready for the marriage. Suparna, Payel, Madhabi, Shabana, Hasina, Reshma, Pinky all have to face the same fate. Schools are there in the villages, parents are admitting their children in the schools and teachers are travelling a long way to teach them. Children are coming regularly or may be irregularly, they are availing stipends, grants etc. as a part of their study-, everything is going on in a systematic way. But, still children are not learning textual knowledge (ASER 2016). A girl, before marriage, will perform her household responsibility, take care of siblings in her parental place and after marriage she has to perform the same duties in her in-laws house. It was found through observation, interaction and interviews that this cycle of lifestyle is continuing. What their mothers and grandmothers have experienced is not very different. They don't even have that urge to change the condition. The basic difference is that their grandmothers were illiterate, mothers were class-IV pass out and today's girls have education up to class-VIII or IX level.

The Annual Status of Education Report (ASER) published in January 2012 notes that in Sunderban 39 per cent students in class III-V would not read a simple text appropriate for class I. The ASER report shows that 65.4% enrolment was in 2015 whereas in 2014 it was 64.9%. The enrolment has been increased. Still students are not able to read and write sentences in their own language properly. They have difficulties to identify the alphabets in the text books which they have already covered in their previous class

Communal tension

Since 2010, the entire region is going through communal tension. One of the respondents of this study is Surupa. **Surupa** completed her elementary level up to class VII. Due to some sudden development in her village she could not continue her study. Since 2010, communal and political tension has emerged in the village. Her family was strongly affected.

Initially the tension developed between the two communities relating to capturing of fishing land near the river side of Bidyadhari and setting up a Mosque. The entire area was disturbed as both the communities were using arms such as guns and bombs.

Surupa's father was an agriculturist and a daily wage labourer in the scheme of MGNREGA. Her mother served as a cook in the nearest lower primary school on contractual basis. As both the parents are busy for earning, Surupa, being the elder daughter of the family has to take the household responsibility including the care of her two siblings.

Apart from taking responsibility she was unable to attend the school regularly due to the tension in her area. To face the situation, the only solution to her parent was looking for a groom for her. And in class IX, she got married in a distant village at the age of 15. While interacting, the mother said "*Jodi amar meyetar kichu hoto tahole amader jibontai noshto hoye jeto...Ishwar amar meyer jonno amon chele pathiyechen*" ("if something had happened with my daughter our lives would have destroyed...God has sent this boy to save my daughter").

Trafficking

Trafficking is a very disturbing feature of the particular region which has its effect on school participation of girl children. Trafficking of women and young girls is rising day by day in Sunderban (The Telegraph, 2017). Women and child trafficking is one of the worst crimes of this particular region of South Bengal. These areas of Sundarbans are increasingly considered a trafficking 'hot spot'.

The researcher, while interacting, one such girl named Nafisa said that everybody seems to be unknown to her after coming back from Delhi. She stated that still she cannot believe that her own sister has done this with her. According to her, after rescue since 2014 to 2016, she was moving from one place to another due to the administrative reasons. Nafisa was lamenting that she could have sit for the Madhyamik examination by 2016 but could not. The

problem faced by the Primary students family is the member's inability to communicate or lodge complaint to the police. Many of them are illiterate. So these young girls are considered as 'missing' (Basanti Police Station data). Nafisa was fortunate that her parents lodged a complaint in the police station. With the initiative of the headmaster of the Janapriya Nagar Janapriya Vidyalaya, this girl is continuing her study after coming back to her village.

Sunderban serves as a source of transit and destination for national and international trafficking of women and children. This is in spite of the fact that the state has evolved positive institutions to achieve gender justice during the last two years. Almost all districts of Sunderban are vulnerable for regular human trafficking (Bhattacharjee, 2012). The district of South 24 Parganas is other vulnerable area prone to trafficking. This region has international borders with Bangladesh.

Trafficking is closely related to the term poverty. Due to the high level of poverty in the area, one person tries to migrate initially. Poverty deters parents from seeking an assurance that their girl children will be safe in the city but after coming to the cities they are compelled to live in a vulnerable condition (Deb 2005). Another interest group can take advantage of this situation and involve with the racket of human trafficking, especially women and girl child trafficking with the purpose of forceful work such as labour work or selling of sex. Forced begging, organ harvesting and other type of work is associated with the bonded labour section (Huda, 2006). The economic condition of Nafisa, the case of this study also was very Primary students. Father of the victim was jobless, brother, a, rickshaw puller. It was very difficult to maintain a family of large number.

Trafficking can be fixed through various techniques. Through marriage or the assurance to give fair jobs in cities-these can be the trap for trafficking of young women and girl children of low family income group. There have been incidents in South 24 Parganas, especially at Gosaba village where the girl has been married off to places like Delhi through mediators from Bihar, Uttar Pradesh and Haryana etc. and these girls have been found to be missing till date. There are numbers of trafficking rackets in various parts of villages in India who are playing the role as supplier of young women and girl children for commercial sex trade and other exploitative slavery purpose (Sanlaap report 2006). Apart from these sections, family sometimes involve with this type of activities. Family rivalries in some cases have been found in rural Sundarban of Sunderban. Nafisa while interacting with the researcher told that she was

brought to Delhi by her own married sister along with her brother-in-law with the promise of offering a job in Delhi. After her rescue, she was sent to a children's home in South 24 Parganas. Her parent sought the help of Headmaster of the school where the girl was enrolled. He took the initiative and contacted with the State Child and Women welfare department who brought back the girl to the school. It is very difficult for a girl to reintegrate into her own community in a dignified way once it is known that she was trafficked. It was found that Nafisa was not comfortable to stay with her family due to unacceptance by the relatives and other villagers. When the situations worsened her parents requested help from the Headmaster. It is heartening to note that the school authority has arranged an accommodation for her in the KGV B hostel so that she can continue her education.

One major problem faced by the Primary students income group families are that the members' inability to communicate with others outside their residence or area due to their illiteracy and lack of awareness. All these limitations not only make them socially and economically vulnerable but also explain why the re-trafficking cases are so rampant in this society. In this context, Nafisa was fortunate enough so that she came back in the village and is continuing her study.

The researcher came across another incident of an attempt of trafficking. It was Friday late night when a group of men who gathered for a special prayer in the Mosque at Gosaba, experienced a horrible situation. A girl of nearest village was forcefully taken away by two young local boys, but in vain. One of them was the 'boyfriend' of the girl who once promised her to marry. But, when the girl was brought from her home she had the instinct and somehow understood that their intension was not good and they were accompanied by someone else who was involved with the trafficking racket in the village. These two young boys took the girl and reached in the market place of Gosaba. The girl knew that some people would be in the Mosque for the late night prayer, so she screamed in front of the Mosque and the people rescued her but those boys managed to escape. Next day, this story was spread over the village. The researcher herself experienced the incident from the varanda of the KGBV hostel where she was staying. The above mentioned 'love trap' trafficking is common in this region of Sundarbans.

All these factors are interrelated. Low income level, low literacy rate of parents, relatively high birth rate – all these have a negative impact on girls' accessibility to educational opportunities. Parental attitude is that the girls' have

attended school – that is enough, and that is necessary for ‘marriage-market’. It seems that, to them, they (girls) have completed the ‘desired’ level of education and as they have attended the age of puberty, therefore, their security becomes the prime concern of the parents, resulting in getting them married off early. Their ultimate goal is not the education but the girl should get married as early as possible (Blanchet 2005).

MDM and Kanyashree Prakalpa have no doubt increased the enrolment rate, but unless the poverty level is reduced, employment opportunities are created, cultural outlook- that the marriage is the ultimate goal is changed- the quality education will remain a distant target.

Ray of Hope: Kasturba Gandhi Balika Vidyalaya (KGBVs)

Kasturba Gandhi Balika Vidyalaya (KGBVs) scheme has been implemented with the aim of more participation of girls in educational process (Balagopalan 2010). In the policy level, the need of an alternative way has been realized and this scheme of residential school has been implemented in various states in India. This scheme was sanctioned to those areas which was already been identified as ‘educationally backward’ zone (Balagopalan 2010). The scheme has been implemented in India in 2004 for the first time and it has been spread out in 2007 onwards. The target of this scheme was to make a perfect future for women in India as well as combat with gender discrimination, early marriage, drop out etc. This scheme also has various limitations. Educationists have also criticized this scheme. They have emphasized on the living condition of girls in the KGBVs and their Primary students learning ambience. They have pointed out that KGBVs are not in a good position than other SC/ST hostels in India (Saxena 2012).

Following were criteria for setting up schools-

- Concentration of tribal population with low female literacy and a large number of girls out of schools
- Concentration of SC, ST, OBC and minority population with low female literacy and a large number of girls’ out of schools
- Areas with low female literacy
- Areas with large number of small scattered habitations that do not qualify for a school Criteria for enrolment of girls’ are-
- Girls aged ten or more are considered for KGBV
- Girls who have no primary schooling facilities within 1 km radius

- Over aged girls from Residential Bridge courses
- Girls who have no upper primary education facility for further studies in their village
- Priority is given to SC/ST/OBC and other minority girls and those belonging to BPL families Also reservation policies to be followed providing special provision for underprivileged groups:
- 75% seats are reserved for SC/ST/OBC and minority girls
- 25% seats are reserved for BPL families
- Priority given to girls with special needs

Under this scheme, following facilities are provided for girls’:

- Boarding and lodging accommodation and food facilities will be provided to all KGBV girls
- Study materials including school dress, school bag, text books, exercise books, pen/pencil, eraser, scale, compass box etc.) will be provided to all KGBV girls’
- Material provided for personal maintenance (two sets of night suits and three pairs of under garments- depending on the household they belong to)
- One pair of foot wear, one towel, one comb, one sweater per girl to be provided
- Stipend of Rs. 50/- per girl
- Library facility
- Other activities (Saxena 2012)

The researcher had the opportunity to interact with the students of KGBV of Janapriya Nagar Janapriya Vidyalaya. It was observed during the stay that total intake of the KGBV in Gosaba school is 100 whereas 50 is the limit according to the KGBV norm. Due to constant demand from the parents of girls in the block, the school administrative body has decided to take 100 girls. This KGBV hostel scheme was sanctioned during 2005-2006 along with the other three centres in the block and started functioning from 2006-2007 sessions. Within nine months they have completed the construction of the hostel and started admission procedure. The popularity of the hostel has increased. Parents are coming from remote villages of *Sundarban* region to get admission of their wards in the KGBV hostel at Gosaba. The researcher observed a sense of

satisfaction among girls when expressing their views about the hostel. The hostel helped them a lot to carry out their studies in upper primary grades of schooling. These girls came from different geographical and economic locations where getting facilities of upper grades of schooling is rare. Girls from class VIII-IX while interacting with the researcher expressed that as a residential centre, KGBV hostel ensures security which they lacked while coming from their residence. For girls, early marriage is child labour in its worse form. Early marriage leads to early pregnancy which increases the chances of infant and maternal mortality. It is a continuous cycle of injustice in which a girl is trapped. KGBV hostel, to some extent now is in position to prevent early marriage by providing security and other facilities to the girls. Parents are also less worried about their girls in the KGBV residential school.

Through the constant observation while staying with these girls, the researcher found that there is an attempt on the part of KGBV authority to identify the talents, merits and other specialties of girl children and training to them are arranging accordingly. Apart from their own local cultural orientation, they are getting in contact with mainstream cultural exposers. Tailoring, gardening, cooking, painting, singing, dancing and computer courses-these are also a major part of their schedule of study at the hostel. They are coming forward and taking part in different competition at the various levels. Apart from studying in the school, they are now able to think of a bright future. These girls are at least to some extent, in a better position than day scholars of Janapriya Nagar Janapriya Vidyalaya.

According to the residential students, teachers of the school encourage them to pursue their studies. As these girls are mostly first generation learner, they need extra care. For this purpose, private tutors have been appointed. The researcher met eight of them during her stay. She interacted regularly with two wardens, four cooks, one sanitation worker (lady) and two night guards of the hostel.

The researcher found that the girls staying in the KGBV hostel and girls coming from their home are in different position in terms of their performances in classrooms. KGBV students are more regular than the day scholars. The researcher undertook several visits to the home of day students and found that the distance of school from the home is key issue of low attendance. As the girls of KGBV hostel are getting regular, nutritious food in time, they are healthier than the day scholars. Records of the school register indicate that the rate of absenteeism among the hosteller is low. Due to good health and regularity in

classes, these girls do well in their studies and it reflected in their annual examinations result. The rate of dropout is also decreasing.

The researcher came across an incident. A private tutor, who came to teach students, once assaulted a girl. This incident had a tremendous effect on the hostellers. However, the tutor was immediately sacked by the hostel authority. The positive aspect of KGBV can be described through a particular incident which the researcher observed during her stay. Deworming drive is an initiative aimed at reducing intestinal worm infections that can stifle children's physical and intellectual growth. It has been proven that worm infestation prevents a child from coming to school. Health workers, child care workers and teachers in schools are expected to give child a single albendazole, the deworming drug either as a tablet or crushed into powder. The programme is in the lining with the World Health Organization's guide lines.

It was Wednesday morning; children came to school as usual to attend their classes. There was a notice issued in the class that there would be a medical check-up followed up by consumption of a tablet. It was declared in the class that they have to stand up in a row and would consume the tablet after medical check-up. As this programme held every year, through their previous experience the children were not willing to swallow the tablet. They used to throw the tablet away. The teachers of the school knew that fact and they were standing nearby. But, as per the programme, there was no health worker and child care worker were present

As to the teachers were present there, the students reluctantly consume the tablet. After swallowing the tablet, within 10 minutes, children felt sick with the headache, nausea and some became senseless. Some started vomiting. Students and teachers were panicked. Some of the students were hospitalized by the teachers. The news spread out within few minutes and villagers started running coming to school to find out what was the condition of their children. There was a rumor that students were given poisonous tablet. Some people went to the hospital and some started damaging the property of the school. Some teachers have been brutally beaten up by the villagers. Sunderban was then heavily charged with the election battle. The news was spread by the media that almost 500 students were hospitalized in Sunderban.

Later, the doctors of the hospitals informed that most of the children were in empty stomach before having the tablet. As a result, they were tugged by severe acidity and due to that reason they felt sick and hospitalized. Due to

lack of awareness, parents of the children gave them tamarind water so that they can vomit the medicine. It had its effects on them soon and the situation became worsen (The Telegraph 2017).

It was observed by the researcher that particular day, that, there was none of girl from KGBV hostel were senseless or either hospitalized or sick. They did consume the tablet. These girls were not in an empty stomach before having the tablet. It is the daily routine of the hostel that lunch would be served to them before going to classes. It was observed that every day, these girls are having plate full of rice and dal or rice and vegetable/fish curry. This was the difference between day scholars and students from KGBV hostel of the particular school. Those students were being hospitalized are coming from their homes. Most of the time they had '*Panta bhaat*' (leftover rice of previous night soaked in water). This form of rice became alcoholic after one night. According to the doctors, some-times it reacted as toxin in the body. The whole programme was failed due to lack of proper execution. On the part of the parents' lack of awareness and proper care of their children's nutrition made situation beyond control. There was a lack of carelessness on the part of the teachers also. It was found that the guardian lost their respect and confidence towards the teachers.

Mid-Day-Meal, Kanyashree Prakalpa, KGBV schemes,-these have a great impact on increasing the number of students. Especially later two schemes are playing an important role on girls' elementary education. Those girls' who were unable to meet their expense for acquiring education at the early grades now interested to come to schools. Awareness in the society is noticeable. Problems of drop out, early marriage, girl child trafficking are reduced partially. Balanced food given to the children from the hostel also helps to improve their health which raises their energy level thus improving actual attendance than day scholar students. Quality education among KGBV girls is also observed. Especially, the Kanyashree Prakalpa is getting popular which aims to reduce drop out and restrict early marriage of girl child in Sunderban. **Conclusion**

During the entire field study, it was observed by the researcher that a sense of insecurity among the parents and children is creating difficulties to attend school regularly which has an impact on quality education. From her field experience, the researcher felt that a sense of security can be instilled through the set-up of more KGBV residential schemes. It can help to reduce many constraints which stand on the way of quality education. Therefore, proper implementation, monitoring, regular funding and intermingling of the schemes are need of the day.

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COVID-19 WORKERS OFFSPRING'S MENTAL HEALTH

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ABSTRACT

The researchers have framed the research title on “Covid-19 workers offspring’s Mental Health”. He has utilized survey method and stratified sampling procedure for the present study. Based on the parent’s professions (Doctor/Nurse/Police/Swachh Bharath) the researchers were gathered data from the samples. The researchers have gathered relevant data from the sample through research tools and utilized Statistical Package for Social Science software (SPSS) for data analysis. The following statistics has utilized in the present study; ie., Descriptive analysis, Differential analysis. From the research output of Covid-19 workers offspring’s of mental health is average. The present study also found that no significant differences in gender.

Key Words: Mental Health, Covid-19 workers offspring’s, Parent’s Professions

Introduction

The 21st century people faced many social problems for one decade. For example, Hurricane Katrina of 2005, Haiti Earthquake of 2010, Tsunami of 2011 and etc., The above said disasters affected only a few corners of the world. On the contrary, the other corners of the people were safe. Many nations tried to help the affected areas or corners and which didn’t impact the world economy and others. But, the deadly Pandemic Covid-19 affected 215 countries in the world very drastically. As per WHO enquiries nearly 250 million peoples were affected by the Corona Viruses and 5 million deaths worldwide it is clear that Covid is not just a disease (The New Indian Express, 2021). Now, all the Nations

have announced complete lock down during Covid-19. But, still the Doctors, Nurses, Police officials, Garbage collectors (Swachh Bharat Peoples) and etc., are working dawn to dusk and protecting the countries from Covid-19. The government gives awareness to all people in one side and other side these workers are highly appreciated for their yoman's service. But, the society people and their relatives would doubt and suspect and have fear for maintaining relationship with the noble servicing people and with their offspring's. The people are scared because these workers are directly in contact with the corona affected patients and they are rendering service to patients the garbage collectors collect the garbage of all the home without themselves not maintaining the lockdown caution. So, now I have proposed the study of Covid-19 workers offspring's reverberation in mental health, as it is the need of the hour.

Mental Health

Mental health means maintain the balance of our mind and brain to work all circumstances or environments. A mentally healthy person makes happy himself, lives peacefully with his neighbours, makes his children healthy citizens and does something for the welfare of society. In 1963 at the request of President John F. Kennedy, congress passed the community Mental Health Centres Act. This law provided for the establishment of one community mental health centre for every 50,000 people. In fact, a mentally healthy person is able to adjust himself with his environment and attempts for the progress of himself, his family and society. A mentally healthy person knows adjustment with environment is the chief characteristic of mental health. He/she knows able to understand every new situation to adapt himself to it or he can make the situation adapt to him. Mentally healthy person welcomes to all situations. K.A. Menninger (1938) has pointed out on his book *The Human Mind* "Let us define mental health as the adjustment of human beings to the world and to each other with a maximum of effectiveness and happiness... It is the ability to maintain an even temper, an alert intelligence, socially considerate behavior and a happy disposition." According to the WHO "Mental Health is a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her own community". All communities have inherent resources that need to be mobilized One Successful model is the community mental health programme 'Navjeevan from Mahasamund district in chhattisgarh. It envisaged bringing down the high rates of suicides that were around three times the national average.

Significance of the Study

The new research always contributes something innovative for policy making of the government. This is done based on the output of social science and on the basis of research carried out. In the current situation the government is trying to protect the people from covid-19 virus attack and impact, which is an unexpected one for the nation to deal with. It is true and it is the prime duty of the government to save the people. But, at the same time the government has to take precautions measure then protection for the workers who work tirelessly by sacrificing their life and time. This study focuses the protection to be extended to the workers and their offspring's so that they will be free from mental agony and they could live with their peer in the society in harmony and peace. For the people, when the normalcy happens after covid-19 there should be awareness programme conducted by government as to inform them how to face the up normal situation exists. This is important because common people will not be panic when unexpected situation occurs like this. For, the teachers are playing a very significant role for giving knowledge and awareness among the students. So, the teachers should be given orientation and awareness programme to handle situation like this. Hence, they in turn they would help their students to face alarming situation. This study indicates the policy makers to provide additional incentives for the covid-19 workers who are doing dedicated service to the humanity at large.

This study highlights the significant role played by government to protect the people by self-quarantine, self-direction and social distancing to overcome the impact of covid-19. This study gives awareness to the society how to handle unexpected situation or some unheard disease like covid-19 spreads in the world. It also gives moral vigour and mental strength to face the new situation prevails in the society by adopting new technique and mental health. Common people should be informed about the herculean task carried out by the noble workers and they should be informed not to inflict their children of these workers rather they should be instructed to be friendly and easy moving, because these workers who move with the affected people directly so people should pay awe and respect to the workers and their offspring's. This study is conducted in Pondicherry region. The output that we get from this study will be spread to other part of our nations also.

Objectives of the Study

- To study the level of Mental Health of covid-19 workers' offspring those who are students of High Schools in Pondicherry.
- To find out whether there is any significant difference in the mental health of covid-19 workers' offspring of gender and parents' profession.

Hypotheses of the Study

- The level of Mental Health of Covid-19 workers offspring's those who are students of High Schools are average.
- There is no significant difference in the mental health of Covid-19 workers' offspring's of gender and Parents Profession.

Tools Used for the Study

The researcher had written fifty statements related of covid-19 and mental health and he has conducted a pilot study in the samples. The researcher has got feedback and suggestions of statements from the psychology experts in our institutions. Then, he has arranged the data of mental health scores on descending order. Finally, he had selected the highest 27% of covid-19 workers offspring's and it has named as upper group and lowest 27% of covid-19 workers offspring's and it has named as lower group. The items with the right responses were noted down and then the difficulty value and discrimination index were found. Finally, 46 statements selected from the 50 statements of Covid-19 mental health. In the same, the researcher has conducted final study of mental health variable in the samples. It has four point scale procedure followed by the researcher. Each item has four response options available in the scale. In case the pupils will be chosen "Never" option we give 1 point, "Sometimes" 2 points, "Often" 3 points, and "Always" 4 points. Variables has checked and identified validity and reliability of the tool.

Method of the Study

The researcher has utilized survey method and stratified sampling procedure for the present study. Based on the parent's professions (Doctor/Nurse/Police/Swachh Bharath) the researcher has gathered data from the samples.

Statistical Analysis

The researcher has gathered relevant data from the sample through research tools. And, the researcher has utilized Statistical Package for Social Science software (SPSS) for data analysis. The following statistics has utilized in the present study; ie., Descriptive analysis, Differential analysis.

Interpretation of the Study

Hypothesis – 1

The level of Mental Health of Covid-19 workers offspring's those who are students of High Schools are average.

Table-1 Mean and Standard Deviation Scores of Mental Health for entire sample

Variable	Entire Sample	Mean	S.D
Mental Health	100	138.82	12.59

Table – 1 indicates that the computed mean and standard deviation of mental Health scores of covid-19 workers offspring's of the total samples are found to be 138.82 and 12.59 respectively and the mean value lies in between 134 –142. Hence, it is concluded that the null hypothesis, "The level of Mental Health of Covid-19 workers offspring's is average" is accepted.

Hypothesis – 2

There is no significant difference in the mental health of Covid-19 workers' offspring's of gender.

Table-2 Mental Health - Mean, Standard Deviation and t-Values for Gender

Background Variables	Category	N	Mean	S.D	t - value	Significant at the 0.05 level
Gender	Male	57	137.01	11.32	1.16	NS
	Female	43	141.20	13.87		

Table-2 clearly indicates that the mental health of Covid-19 workers offspring's of gender mean values, standard deviation values are average and the calculated t-value 1.16 is below 1.96. It indicates that there is no significant difference between the two mean scores at 0.05 levels so, the null hypothesis is accepted.

Hypothesis – 3

There is no significant difference in the mental health of Covid-19 workers' offspring's of Parents profession.

Table-3 Mental Health - One way ANOVA for Students of Parents Profession

Background Variables	Source of variation	Sum of Squares	df	Mean Square	F - ratio	Significant at the 0.05 Level
Parents Profession	Between Groups	366.84	3	122.282	0.765	0.765
	Within Groups	15335.91	96	159.749		
	Total	15702.76	99			

Data with respect to the above hypothesis is analysed using one way ANOVA. The “F” ratio obtained value is 0.76. From the ‘F’ value table it was found that the value required for significance is 2.60. The obtained ‘F’ value is lower than the table value for significance at 0.05 levels so, the null hypothesis is accepted. The opposite result has identified by **De Kock, J.H., Latham, H.A., Leslie, S.J. et al.** (2021) gender (female), concern about family and close contact with COVID-19. Systemic support, adequate knowledge and resilience were identified as factors protecting adverse mental health outcomes.

Discussions

De Kock, J.H., Latham, H.A., Leslie, S.J. et al. (2021); **Gold JA.** (2020). **Nguyen LH, Drew DA, Graham MS, Joshi AD, Guo C, Ma W, et al.**(2020); **Petrie K, Crawford J, Baker STE, Dean K, Robinson J, Veness BJ, et al.**(2019) found that health and social care workers (HSCWs) continue to play a vital role in our response to the COVID-19 pandemic. It is known that HSCWs exhibit high rates of pre-existing mental health (MH) disorders which can negatively impact on the quality of patient care. The present study is found that opposite results on above review studies.

Implications of the Study

In the present study has proved to the society and government that during the pandemic period also the covid-19 workers offspring’s mental health didn’t affect from the worst kind of scenario. The noble workers are saving or protecting our society from the Covid-19. So I was chosen the study. From the research output of Covid-19 workers offspring’s of mental health is average. The present study also found that no significant differences in gender.

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PERSPECTIVES OF SCHOOL EDUCATION IN NEP 2020

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ABSTRACT

An attempt to present a simplified version of the new changes made by NEP 2020 in the Vision, Structure, Curriculum, Methodology, Medium of Instruction and Teacher's Qualification for School Education. It also discusses the merits, challenges and drawbacks of the modified school education system.

Keywords: NEP 2020, School Education, Educational Structure, Challenges, Merits and Drawbacks.

Introduction:

As "Necessity is the mother of Invention", so as , 'the wrong path' to 'change in perception' . Every correct decision taken today could be a dangerous one tomorrow. What's important is to accept the 'process' to reach to a better place compared to yesterday.

Until now 4 NEP's has been introduced which challenged the Indian Educational System with many ups and downs. Many policies had failed and many helped to change the face of India with its INTELLECT. In this paper we will discuss, What is NEP ? What visions and aims it has? and the new changes in school education that NEP 2020 got , to overcome the lacunas and to provide a bigger and better platform to boost the Educational System and its stakeholders.

The National Policy on Education 2020 came after a long duration of 34 years i.e. after NEP 1986. It reshapes the existing system with its new curricular and pedagogical structure. Let us gear up the foot steps of NPE 2020 to assure India with a global knowledge and super power by bridging the gap in education through technology and digitisation with a plan to get 100% Gross Enrollment Ratio in schooling by 2030.

What is National Policy on Education:

It is the policy formulated by the Govt. of India to promote & regulate Education (from Elementary level to Higher Level) in the country.

The 1st NPE was formulated by Prime Minister of India, Smt. Indira Gandhi in 1968, the 2nd NPE by Prime Minister of India, Mr. Rajiv Gandhi in 1986, the 3rd NPE by Prime Minister of India, Mr. Narendra Damodardas Modi.

NEP 2020:

On 29 July 2020, the Union Cabinet chaired by Prime Minister, Narendra Modi approved the NEP 2020.

Aims of NEP 2020:

1. To transform India's Education system.
2. Universalization of Education from Preschool to Secondary school level.
3. It has a target of 100% Gross Enrolment Ratio (GER) in school Education by 2030.
4. To reaffirm bridging the social-gaps in access, participation, learning outcomes in school education will continue to be one of the major goals in education sector development programme.
5. No language will be imposed on any student. Several foreign languages will also be offered at the secondary level.

Fundamental Principles of NEP 2020:

The Union Minister of Education, Mr. Ramesh Pokhriyal said that the fundamental principles of NEP 2020 is "to accord highest priority to achieving Fundamental Literacy & Numeracy by all students by Grade II," which the Govt. is committed to achieving by 2025.

The Vision of NEP 2020:

1. The NEP 2020 envisions an India Centric Education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society by providing high quality education to all.
2. To translate the vision of NEP-2020, a National Initiative for Proficiency in reading with Understanding and Numeracy (NIPUN) is being launched under Atma-nirbhar Bharat mission. This term Atma-nirbhar Bharat and "Self reliant", "Self Sufficient" which is used by Prime Minister Narendra Modi. This is to ensure that all students achieve

Foundational Literacy and Numeracy by Grade 3. To ensure that focus is an learning outcomes, students will be tracked using ‘a 360 degree progress tracking tool called PARAKH [= Performance, Assessment, Review & Analysis of Knowledge for Holistic Development]

3. All students will be assessed in Grades 3, 5 & 8 on foundation learning needs of reach 5 crore children in the age group 3 to 11 years.

School Education:

The 10+2 structure of school curriculum is to be replaced by a 5+3+3+4 curriculum structure corresponding to ages 3-8, 8-11, 11-14 & 14-18 years respectively. This system will have 12 years of schooling with 3 years in pre-school Anganwadi.

The first 5 years of schooling includes:

- i) 3 years in Preschool or Anganwadi.
- ii) Next 2 years in class 1 & 2 in primary school.

School Education System:

Stages	(Stage-1) Foundation stage	(Stage-2) Preparatory stage	(Stage-3) Middle stage	(Stage-4) Secondary stage
No. of years of schooling	5	3	3	4
Classes	1)Pre-school or Anganwadi 3 years 2)Primary School 2 years	Classes 3,4,5 3 Years	Classes 6,7,8 3 Years	Classes 9,10,11,12 4 Years
Age group	3 to 8	8 to 11	11 to 14	14 to 18
Focus of study (Curriculum + Methodology)	Alphabets, Languages, Numbers, Countings, Colors, Shapes, Logical Thinking, Art Craft, Puppetry, Music, Movement, Play, Discovery, Activity based Learning	Cognitive, Affective, Psychomotor abilities along with early Literacy and Numeracy, Art integrated, Sports integrated pedagogy	Abstract concepts in subjects like Mathematics, Science, Social Sciences, Arts, and Humanities, Classical languages, Vocational Studies with experiential Learning Along with Pre-preparation for the access to the Secondary Education	1st phase-class 9 to 10 2nd phase- class 11 to 12. It will introduce multidisciplinary study coupled with depth and critical thinking, multiple options of subjects will be provided. Along with Pre-preparation for access to the

				Higher Secondary Education
Exam	Exam in class 2	Exam in class 5	Exam in class 9	Board Exam in Class 10 and 12. The standard for exam will be established by PARAKH.
Language	Mother tongue	Bilingual (Mother Tongue + Regional Language)	Trilingual (Mother Tongue+Regional Language English)	Trilingual (Mother Tongue+Regional Language English)
Teachers Qualification	Integrated B.Ed +ECCE qualified Teacher	Integrated B.Ed +TET qualified Teacher	Integrated B.Ed +TET qualified Teacher	Integrated B.Ed +TET qualified Teacher

Merits of NEP 2020 relating to school education system:

1. NEP 2020 focuses on Equitable and inclusive education (Learning for all)
2. For children upto 8, a National Curricular & Pedagogical Framework for Early Childhood Care & Education will be designed & developed by NCERT.
3. According to NEP 2020, a National Mission on Foundational Literacy & Numeracy is being set up by the Education ministry. This is called NIPUN (National Institute for Proficiency in reading with Understanding Numeracy)
4. Appropriate Authorities will conduct the school examinations for grades 3,5,7,8. The Board Exams for class 10&11 will continue but the standard for exam will be changed or redesign with development.
5. NEP 2020 focuses on setting up a Gender Inclusion Fund. It also focuses on a list of special Education Zones for disadvantaged regions and groups.
6. NEP 2020 aims at the formation of a National Book promotion policy in India.
7. Special Day time Boarding School, “Bal Bhavans” are to be established in every state/district in India. These boarding school will be used for participation in activities related to play, career, art, etc.

8. Independent “state school standards Authority” (or SSSA) will be set up the states or UTs.
9. NEP 2020 will help the students to develop scientific temper from a young age. It will make easier to set up new quality of higher education.
10. NEP 2020 allows for Multiple Exit and Entry points and Transfer of credits from Credit Banks.
11. Empowers students through Flexibility in Course Choices.
12. It emphasizes Multilingualism and promotes Mother Tongue as a Medium of Instructions.
13. Ensures that Teachers are able to teach with full dedication and with full capacity. No non teaching activities to be done by teachers.
14. Incentives for Teachers being employed in rural schools.
15. Less Frequency of Teacher Transfers.

Major Challenges relating to the implementations of school education:

1. “To accomplish the task of bringing back 2 crore children into school system, who are now not in school and to accomplish within 15 years” requires to set up 50 schools every week. This means it also requires to appoint at least 50 headmaster and about 200 to 500 assistant teachers every week on an ongoing basis.

Here we can say that at present most of the central Govt school and state Govt. schools have vacant posts. That means both Govt. are unable to fulfill the current vacancies and other necessities in schools, let alone create new schools every week and to appoint headmaster and teachers on an ongoing basis simultaneously. Contract teachers are appointed on both type of school.

2. Need to create a large pool of trained teachers on an ongoing basis is a herculean task. In order to Implement the new curriculum (to be framed on the basis of NEP 2020) effectively, teachers who are well understood & well-trained in the pedagogical needs are highly essential.

Major Reforms in School Education brought by NPE- 2020 includes the following:

1. Universalization of Every childhood care Education (ECCE)
2. National Mission to focus on basic literacy & basic numeracy.

3. Removal of separation between vocational & Academic subject; curricular & extra-curricular activities.
4. Open learning for classes 3, 5 & 8 through NIOS(National institution of open schooling)& SIOS (state institute of open schooling)
5. Emphasis is given on mother Tongue /Local language/ Regional language as the medium of Instruction till grade 5, but preferable till grade 8 and beyond.

Major Drawbacks of NEP 2020 relating to school education:

1. Language is a negative factor as the “Teaches” is to “student” ratio in India is a problematic ratio. Due to this ratio, finding a compete language teaches become a problem.
2. English is optional till class 8. The private school will introduce English for students from the very beginning of schooling while the Govt. schools will introduce their Regional Languages: This widens the gap between different sections of the societies.
3. Another problem is to bring study materials in mother languages.

Conclusion:

The NEP 2020 has more advantages than disadvantages. It will bring much benefit than before. It is hoped by most people that by implementing these changes, the education system in India will achieve a greater & faster progress than ever.

However, it is the time in our country to materialize NPE 2020 which will be a beneficiary by providing a flexible and quality school education to launch an innovation in the field of technology, marketing, organization, social knowledge field beginning from pre-primary. So, it is the need of the hour to provide an equitable access to all the learners to achieve the target regardless of their social and economical background in Indian context.

MENTAL HEALTH AND INTERNET USAGE BY STUDENTS

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ABSTRACT

Internet plays central role in the daily routine of our modern lifestyle. From the last couple of years, usage of internet is growing to all the aspects of our society. There are some positive and negative effects of internet usage in our life. The amount of time spent in online has increase among students for the purpose of study, entertainment, e-services, work, communication etc. This kind of things positively and negatively effect in students life. Excessive usage of internet is the cause of addiction disorders. Cyber sexual addiction, online gambling, video game addiction, online shopping, social media addiction and cyber relationship addiction etc are included in internet addiction disorders. It is injurious for our mental health issues like depression, stress, isolation, anxiety, sleeping problem, suicidal tendency etc. In this study, a large number of previous literatures are reviewed. Through the previous study, it is observed that the tendency of internet using among students and the effect of internet usage on mental health issues among students are major concerns for our society. It's also observed that male students are more internet user than female students and among adolescence students using of internet is much more.

Keywords- Internet usage, Internet addiction, Mental health, students.

Introduction:

There was a time when people can't communicate with other people easily. Personal range was too much limited among the society. Then, the

technologies came in our life. Day by day technologies start to grow up. In this digital era, advance technologies have taken place globally. Internet is a part of it. Internet plays an important role in our day to day life. From the last couple of years, it is noticed that internet becomes an integral part of every one's life. It is easily accessible, fast to communicate and to get large number of information from all over the world. However, unlimited internet usage fabricates a problematic society; hampers individuals' living standards and family relationships and is also creating emotional disturbance. Revolution of digital industrial progress takes an important place during covid-19 to till now. Using of internet has increased incredibly which is creating physical, mental, emotional and social problem.

The history of internet users all over the world goes back some decennary to present; it is growing very fast and transforming our world rapidly. "Globally, the users of the internet have increased from 414 million in 2000, 665 million in 2002, and over 4.574 billion by December 31, 2019. The US National Science Foundation specified that the internet users enabled by Smart phones access would increase to 5 billion in 2020" (lebhi et al., 2020). In 2021, estimate the number of internet users worldwide was 4.9 billion (Statista, 2021).

The internet has directly affected human life and it has some positive and negative effects. After covid-19, a large number of students are habituated to study on online platform, online examination and results. Apart of it, a lack of control over the excessive uses of internet for entertainment and social media it's becomes addiction disorder. They don't know the proper use of internet. They feel comfortable to make relation through social media away from physical circumstances. The numbers of students who use internet are increasing incredibly day by day.

Excessive uses of internet among students are becoming internet addiction. Internet addiction disorder is first considered by New York psychiatrist Ivan Goldberg in 1995 (cited as Tao et al., 2010). Internet addiction is a broad term. Even so, mainly five types of internet addictions are observed among students those are cybersex addiction, net compulsions, cyber relationship addiction, compulsive information seeking, and computer or gaming addiction (Hoeg, 2021).

Mental health is one of the major pillars of healthy human life which play an important role to frame a healthy society. Internet addictions have many harmful effects on mental health of a person. A research study on 2016, it found

that internet addicted person had significantly more trouble to deal with their day to day life activities (Hoeg, 2021). Students are our future builders in any country. So, mental health of students is essential for creating healthy aware society. But internet addiction disturbs the balance of students' life. "Research by the Indian council of medical research suggests that 12-13 % of school students in India suffer from mental, emotional and communicative problems. Students all over the world are living with diagnosed mental disorders. However, the situation in India is worse. Most students are undiagnosed or untreated" (Barmi, 2022). World Health Organization (WHO) states that India is the most depressed country in the world. There is one suicide attempt every three seconds and one death by suicide every forty seconds by our youth. These statistics are enough to cognize that mental healths among students are going to be the next crisis (Marker, 2021). Depression, stress, isolation, sleeping problem, suicidal tendency, anxiety etc are occurred for internet addiction (Barmi, 2022).

Internet Usage and Internet Addiction among Students:

Internet usage is inherent in contemporary society and change the way we live our life. An increasing utilization of smart phone has given people the opportunity to use internet for easy access of information and communication. According to Statista report numbers of internet users worldwide have increased, from 1.7 to 1.9 million in 2009-2010, 2.1 to 2.9 million in 2011-2015, 3.2 to 3.7 million in 2016-2018, 4.1 million in 2019, 4.5 million in 2020, 4.9 million in 2021. "In India, there will be 840 million total internet users (60% of population) by 2022, up from 357 million (27% of population) in 2017 and 135 million fixed internet users (excluding mobile only) by 2022, up from 164 million in 2017" (VNI Forecast, 2022). Statistics of internet and mobile user in India in 2022 estimating 0.658 billion active internet users, 0.601 billion mobile internet users, 7h 19m average daily time spent using internet, 4h 05m average daily time spent using internet on mobile devices (The global statistics, 2022). All aspects of internet are very much beneficial for students. Students are getting much more study relevant material, best online educator, reliable communication, and help in their research field through using internet (Herris, 2017). 93% of 17 to 24 age group students access the internet every day and 73% of 17 to 24 age group students use the mobile phone to access the internet, according to a student online behavior reported by HT Digital and IMRB (cited as Khanna, 2014). In 2011, Loan study on 54,191 students of degree colleges of Kashmir Valley to know the internet use of colleges students across disciplines. Finding of this study is that computer science students used internet among other faculties and

they are well versed, well aware, and knowledgeably strong than others. A study on 656 high school students of class 9-12 of Kanyakumari district, it found that male students used internet more than females, urban students and 17 year old students used internet more (Robinson et al., 2016).

Students have easy access to internet because of the advancement of the smart phone. According to Hartney, "Internet addiction is a behavioral addiction in which a person becomes dependent on use of the internet, or other online devices, as a maladaptive way of coping with life's stresses". In 1995, New York psychiatrist Ivan Goldberg first proposed that Internet addiction may be a disorder. Since that time many researchers and psychiatrist have published their study on 'Internet addiction disorder' (cited as Tao et al., 2010). 'Internet Addiction', 'Pathological Internet Use (PIU)', 'Problematic Internet Use' included in the 2012 Diagnostic and Statistical Manual version IV (DSM-V) (Tao et al., 2010). Mainly three types of internet addictions have been identified like video game addiction, cybersex or sex addiction and online gambling addiction (Hoeg, 2021). Apart of it social networking sites such as facebook, instagram, whatsapp, twitter etc and the online shopping are also included in internet addiction behaviors. It was found that 3% of the total population are children (.6.3.1% among boys and .6.1.5% among girls) and 1% among adults are mobile phone addicted (Sahu et al., 2019). "Risk factors for internet addiction have been reported to include age and age of first exposure to internet use, accessing the internet for the purposes of gaming, social factors, having internet access at home, male gender, university level education, and unsatisfactory financial situation" (cited as Tao, 2010). A cross-sectional study on 377 university students of North India, it found that internet addiction among undergraduate college students was high and it associated with depression, anxiety, and stress (Gupta et al., 2018). In 2018, a study was conducted on 300 management students in India and it found that older students were more internet addicted than younger students and also men were more internet addicted than women (Menon et al., 2018). Estimate the prevalence of internet addiction, fifty studies were conducted in 19 states of India. The nationally representative data suggested that about 20% to 40% of college students in India are at risk for Internet addiction (Joseph et al., 2021). A cross sectional study was conducted based on 240 adolescents (age 18 to 20 years). It was concluded that boys were ahead of girls in overall internet addiction (Dhawan et al., 2021). In 2022, a cross sectional study was conducted in Jammu region among 480 undergraduate students of two professional colleges. The prevalence of internet addiction was

found to be 78.7% and male students had higher internet addiction than female students (Kumari et al., 2022).

Effects of Internet Addiction on Mental Health among Students:

Mental health includes our emotional, psychological, and social well being. It affects how we think, feel and act in any situation. It helps us how we handle our stress, relate to others, and make choices. Mental health is important at every stages of life. After cancer, diabetes, or heart disease, mental illnesses are very common among the people. 450 million people worldwide have some mental problem according to evidence. It is predicted that mental illness becomes the leading causes of disease worldwide by 2029. “A World Health Organization (WHO) report estimates the global cost of mental illness at nearly \$2.5 trillion (two-thirds in indirect costs) in 2010, with a projected increase to over \$6 trillion by 2030” (Wikipedia,2022). Internet has several negative outcomes among students health. Excessive internet usage affects human mental health. Many researchers and clinicians have noted that a variety of mental disorders associated with internet addiction. Greater duration of internet use per week and always online status were predicting internet addiction. Depression, anxiety and stress were also causes of internet addiction among college students (Gupta et al., 2018). Contemporary, cyber bullying is one of the personal attacks by some people behind the screen through the social media. Now it is a big hazardous problem in our life. “The experience of online victimization and cyber bullying in particular is associated with a range of emotional and behavioral difficulties normally characteristic of actual peer bullying. For this reason, reported feelings of loneliness, helplessness, depression and anxiety can be viewed as the psychological effect of victimization” (cited as Bezinovic et al., 2015).According to researchers, every day at last one in three teenagers or adolescents are victims of cyber bullying. Mainly six types of cyber bullying are identified that are anger, frustration, self-satisfaction, retaliation, entertainment, be famous (Thakur, 2022). In the past few years internet addiction (IA) and internet gaming disorder (IGD) have become very frequent among people. Leading to many personality and psychiatric disorders including low self-esteem, impulsivity, poor sleep quality, mood disorder, and suicide are arousing among them. (Tripathi, 2018). Online addiction is the cause of mental health issues. ADHD symptoms such as poor time management, planning difficulty, higher than average levels of attention impulsivity are also common among internet addicted person (Hoeg, 2021). Students’ excessive uses of internet affect their academic performance and also mental health like anxiety,

depression, and adverse mental health (Lebni et al., 2020). Low esteem impulsivity, mood disorder, poor sleep quality and suicide are associated with various psychiatric disorders. These types of psychiatric disorders are created by internet addiction among the students (Srivastava et al., 2021). Most teenagers and adolescents have turned them toward virtual world. So, they do not express their feelings, feel lonely, and suffer a lot of frustration (Marker, 2021). A study by Dong et.al, reported that depression, anxiety, hostility, interpersonal sensitivity and psychoticism are highly consequences of internet addiction disorders (cited as casn et al., 2012). Internet addicted person faces psychological difficulties. Social, inter personal problem and academic are the causes of pathological internet users. Little sleep, limited physical activity, failure to eat for a long time as well as depression, anxiety, and low family relationships are also results of the heightened level of psychological problem which is aroused by the internet addiction (Srivastava et al., 2021). In 2021 Rouvinen et al., deeply analysis a scoping review of the literature between 2015 and 2020 on the association between internet use and health in higher education students. They identified two factors that was ‘promoting factors’ and ‘threatening factors’ of mental health in the students of higher education. These factors are affected by internet usage. The factors of internet use and mental health among higher education students according to Rouvinen et al. are described below-

Promoting factors: Enhancement of mental health (IT) Possibilities of treating mental illness (IT) Venues for personal disclosures (IT) Satisfaction with daily routines (SM) Protective use against the increased risk of depression and anxiety (SM,I) Stress management (SM)	Threatening factors: Poor mental health and well being (PLA, IA) Lower psychological quality of life (PIA) Lower life satisfaction (PIA) Psychological distress (PIA) Anxiety (PIA, SM, I) Social anxiety (PIA) Fear of missing out, “FOMO” (IT, SM) Depression (PIA, I, SMA, SM) Stress (PIA, SM, I) Low self-esteem (PIA, SMA) Burnout (PIA) Increase of suicide risk (PIA) Alexithymia (PIA) Externally-oriented thinking (PIA) Absence of active and vigorous feelings (SM) Low happiness (PIA) Loneliness (PIA) Loss of emotional/behavioral control (PIA)
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Fig. 1: Mental health promoting and Mental health threatening internet use. I, Internet use; IT, Internet- enhancement technology use; PIA, problematic or addictive internet use; SMA, social media addiction; SM, social media use (Source: Rouvinen et al., 2021)

Conclusion:

After review some literature from the last decade to presents, it is identified that uses of internet among students are increasing quickly. During covid-19 and after covid-19 using of internet has increased incredibly not only among the adults but also among younger once. There are some positive and negative effects to use internet. Students are getting large numbers of study material, best online educator, online training, fast communication, share of idea among large numbers of students, online examination and result; collaborating research works; online experts' opinion and online laboratory etc are positive side of internet usage. It found that students who are using internet they are very aware, knowledgeable than others. A large number of studies concluded that tendency of internet usage more among male students and also adolescence students. Cyber sexual addiction, net compulsions, cyber relationship addiction, compulsive information seeking, gaming addiction, social media addiction etc are causes of excessive use of internet. These addictions are creating internet addiction disorders. Internet addiction disorders are highly associated with depression, stress, isolation, sleeping problem, anxiety, suicidal tendency, ADHD symptoms, and FOMO etc which are identified by many researchers and clinician

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RELATIONSHIP OF TOTAL FERTILITY RATE, BIRTH RATE, DEATH RATE IN WEST BENGAL AMONG MUSLIMS

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ABSTRACT

Literacy is traditionally defined as the ability to read and write, with understanding, a short, simple statement about one's everyday life (United Nations, 2008). All the states and union territories of West Bengal have not achieved 100 per cent literacy, according to the census 2011. Literacy rate affects development of an economy. The paper aims to find out the correlation between total literacy rate and major demographic variables namely total fertility rate, birth rate, death rate, infant mortality rate and life expectancy at birth in West Bengal. The paper uses secondary data of literacy rate (total) for the year 2011 and total fertility rate, birth rate, death rate, infant mortality rate and life expectancy rate for 2013 to study their correlation with scatter diagram. It is found that literacy rate and total fertility rate are linearly negatively correlated, literacy rate and birth rate are linearly negatively correlated, literacy rate and death rate have a linear moderate negative correlation, literacy rate and life expectancy at birth have a linear moderate positive correlation and, literacy rate and infant mortality rate have a moderate negative correlation in West Bengal among muslims.

Key words: Literacy, correlation, demographic, scatter, muslims, West Bengal

INTRODUCTION

Literacy is traditionally defined as the ability to read and write, with understanding, a short, simple statement about one's everyday life (United Nations, 2008). Beyond the traditional concept, literacy is now understood as a means of identification, understanding, interpretation, creation and communication in an increasingly digital, text-mediated, information rich and

fast- changing world. Literacy has a multiplier effect in that it empowers and enables people to participate fully in society and contribute to improve livelihoods. Literacy improve child and family health and nutrition, enables greater participation in the labour market, reduces poverty and expands life opportunities and therefore is a driver to sustainable development (United Nations Educational, Scientific and Cultural Organisation, n.d.). Although United Nations Educational, Scientific and Cultural Organisation (UNESCO) made efforts since long back for a literate world still not all people of the world are literate. The effect of it is an exclusion of low literate and low skilled youth and adults from full participation in their communities and societies.

Literacy is a key measure and a key skill of a population's education. Gender inequality in literacy rate is an obstacle for the society's development. In the Preamble of the Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal four (Education 2030), the participants committed to ensuring that all youth and adults, especially girls and women, achieve relevant and recognised functional literacy and numeracy proficiency levels and acquire life skills, and that they are provided with adult learning, education and training opportunities (The World Economic Forum, 2015). According to a report by UNESCO, West Bengal had the highest population of illiterate adults at 287 thousands in 2014 (United Nations, 2014). Moreover, according to UNICEF (2014), 6 lakhs children were out of school in West Bengal among muslims in 2014.

Illiteracy retards the development of an individual, society and the country. Literacy can affect development by affecting the total fertility, birth, death, infant mortality and life expectancy. Therefore, the paper aims to find out the correlation between total literacy rate and total fertility rate, total literacy rate and birth rate, total literacy rate and death rate, total literacy rate and infant mortality rate and, total literacy rate and life expectancy at birth in West Bengal among muslims

REVIEW OF RELEVANT LITERATURE

Qureshi (2012) in his study “The Gender Differences in School Enrolment and Returns to Education in Pakistan” revealed that both father’s and mother’s education were found to have significantly positive impact on education of both sons and daughters. He also found that, mother’s education compared to father had much more impact in terms of magnitude at all levels of education and especially the role was more pronounced for daughters.

Janine Eldred (2013) in her paper “ Literacy and Women’s Empowerment- Stories of Success and Inspiration” explored how literacy learning can support women’s empowerment and the development of greater equality, benefitting not only individual women, but families, communities and economies too. In her paper, she mentioned that the stories drawn demonstrate how with imagination and determination, literacy learning was taking place and making a difference.

Venkatanarayana (2015) found that it is impossible to achieve 100% literacy rate in the near future for the country unless there is a policy intervention through adult education programme. He mentioned the need for revitalizing and rejuvenating the National Literacy Mission and revamped adult literacy programmes of Total Literacy Campaign.

Katiyar (2016) found that West Bengal had the dubious distinction of having one of the world’s highest rates of adult illiteracy. He also found that, according to 2011 census, more than one fourth of the country’s population is still illiterate.

Shukla and Mishra (2019), found that literacy deprivation is different across the age cohorts. They also found that group disparity in literacy is highest among the oldest age cohort and lowest for the youngest age cohort.

METHODOLOGY

The paper uses secondary data upon literacy rate (total) for the year 2011 and total fertility rate, birth rate, death rate, infant mortality rate and life expectancy rate for 2018 to study the correlation between literacy rate and total fertility rate, literacy rate and birth rate, literacy rate and death rate, literacy rate and infant mortality rate and, literacy rate and life expectancy at birth in West Bengal among muslims. In the paper scatter diagrams are drawn to examine their correlation

FINDINGS AND CONCLUSION

Diagram 1 shows the correlation between literacy rate and total fertility rate in West Bengal among muslims (see Table 1). As shown in the diagram, the variables i.e., literacy rate and total fertility rate are linearly negatively correlated. It implies that as literacy rate increases, total fertility rate decreases.

Table 1: Total Fertility Rate, Birth Rate, Death Rate, Infant Mortality Rate and Life Expectancy at Birth in 2013 and Literacy Rate in 2011 among muslims in West Bengal and Union Territories

Sl#	States/UTs	TFR 2013	Literacy Rate (total)	BR 2013	DR 2013	IMR 2013	LEB
1	2	3	4	5	6	7	8
1	Andhra Pradesh	1.8	67.0	17.4	7.3	39	65.8
2	Assam	2.3	72.2	22.4	7.8	54	63.9
3	Bihar	3.4	61.8	27.6	6.6	42	68.1
4	Chhattisgarh	2.6	70.3	24.4	7.9	46	64.8
5	Delhi	1.7	86.2	17.2	4.1	24	73.2
6	Gujarat	2.3	70.8	20.8	6.5	36	68.7
7	Haryana	2.2	75.6	21.3	6.3	41	68.6
8	Himachal Pradesh	1.7	82.8	16.0	6.7	35	71.6
9	Jammu & Kashmir	1.9	67.2	17.5	5.3	37	72.6
10	Jharkhand	2.7	66.4	24.6	6.8	37	66.6
11	Karnataka	1.9	75.4	18.3	7.0	31	68.8
12	Kerala	1.8	94.0	14.7	6.9	12	74.9
13	Madhya Pradesh	2.9	69.3	26.3	8.0	54	64.2
14	Maharashtra	1.8	82.3	16.5	6.2	24	71.6
15	Odisha	2.1	72.9	19.6	8.4	51	65.8
16	Punjab	1.7	75.8	15.7	6.7	26	71.6
17	Rajasthan	2.8	66.1	25.6	6.5	47	67.7
18	Tamil Nadu	1.7	80.1	15.6	7.3	21	70.6
19	Uttar Pradesh	3.1	67.7	27.2	7.7	50	64.1
20	West Bengal	1.6	76.3	16.0	6.4	31	70.2

Sources:

- 1 Government of India, *Census report, 2011*.

It is found that literacy rate and total fertility rate are linearly negatively correlated, literacy rate and birth rate are linearly negatively correlated, literacy rate and death rate have a linear moderate negative correlation, literacy rate and life expectancy at birth have a linear moderate positive correlation and, literacy rate and infant mortality rate have a moderate negative correlation in West Bengal among muslims. Thus, it can be said that major demographic variables are affected by total literacy rate in West Bengal among Muslims. Increasing the literacy rate would contribute to the development of the economy by its effects on demographic variables. As all the states and union territories of

the country have not achieved 100 per cent literacy, according to the census 2011, therefore the government need to implement policies to achieve 100 per cent literacy in all the states and union territories of the country. Along with it, motivating the people and bringing awareness amongst the people, about the importance of literacy and lifelong learning are important.

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VIEWS AND CHALLENGES OF E-GOVERNANCE IN HIGHER EDUCATION INSTITUTIONS OF WEST BENGAL

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ABSTRACT

Information Communication Technologies have touched every sphere of our lives. Providing various services through ICTs has become fashionable and it is termed as e-governance. There is a lot of importance given on e-governance by the government of India recently. The public administration is moving towards e-governance from manual system of work practices in our country. The education sector which occupies a pivotal place in the progress of a country, is also implementing various e-governance practices in its institutions. In this backdrop, it is necessary to find out the views of the stakeholders of various educational institutions on e-governance and the challenges faced by them for implementation of the same so that the benefits of e-governance could be realised to an optimum level. For this, 7 universities were chosen as sample from the state of West Bengal. Semi-structured interviews were conducted for the administrators, teachers and students of those institutions. The analysis showed that the stakeholders viewed e-governance as a potential for making the university administration efficient, transparent, accountable, participatory, equitable, paperless, secure and economical. There were a few challenges of e-governance from infrastructural, financial, psychological, technical, manpower related and vendor related point of views.

Key Words: e-Governance, Higher Education Institution.

Introduction

Electronic governance or e-Governance emerged as an agenda for a general reform in the public administration of a country. According to Second

Administrative Reforms Commission (2008) “basically, e-governance is generally understood as the use of Information and communications Technology (ICT) at all levels of the government in order to provide services to the citizens, interaction with business enterprises and communication and exchange of information between different agencies of the Government in a speedy, convenient, efficient and transparent manner.”

The term ‘governance’ refers to the activity of managing a country or controlling a company or organization; the way in which a country is governed or a company or institution is controlled. In the information age, adding an adjective that is ‘electronic’ before the said term had become fashionable. According to Keohane and Nye (2000), “governance implies the processes and institutions, both formal and informal, that guide and restrain the collective activities of a group. Government is the subset that acts with authority and creates formal obligations. Governance need not necessarily be conducted exclusively by governments. Private firms, association of firms, Non-governmental Organizations (NGOs) and associations of NGOs all engage in it, often in association with government bodies, to create governance, sometimes without governmental authority.”

In the existing period, one of the most significant phenomena that the people have experienced in most of the aspects of life is the revolution of Information and Communication Technology (ICT). People could not just ignore the benefits of it. It has made the world into a global village in which with the help one click, one could send a message from one corner of the world to the other, that also without much effort, time and money. Many people have applied its benefits in different aspects like corporate and personal lives. Unlike traditional way, the Government of India has been leaning towards technology friendly and increasing the use of technology for public administration for the governance of our country. The government and the people could have the joy of reaping the fruits of it in terms of transparency, accountability, cost effectiveness and paperless society in the field of public administration. The governance of India is moving towards e-governance in which the government uses electronic media in order to provide services to the public and get feedback from them.

Education sector has been a very important aspect of our country. Due attention must be paid towards this sector. To govern education for the ministry of education in the country or for teachers in the educational institutions is a tough job. There is a lot of problem and issue involved in the process of administration and management of an educational institution or education in the country as such. There are unbelievable inventions in the IT sectors and we have

a great opportunity lying ahead to smoothen or make efficient the administrative works of educational institutions using ICT in our country. There is a lot of serious works going on for implementation of e-governance in higher education institutions and most of them implemented it to some extent. The present study, thus intends to study the views about e-governance in higher education institutes and the challenges faced by them.

Review of Related Literature

Kumar (2011) had found out from his study that implementation of e-governance improved the efficiency of a social system (Panchayat) through increased efficiency and productivity, cost reduction, increased customer satisfaction and speedy and cost-effective service delivery. Pyla (2012) in her paper identified that ICT in administration of educational institutions played a very important role. It simplified the administration tasks by reducing the paper work and replaced the manual maintenance of record keeping to electronic maintenance of records. Mistry & Jalal (2012) have studied the relationship between e-government and corruption in developed and developing countries. The result suggested that as the use of ICT related e-government increased, corruption decreased. Mahajan (2015) has pointed out that e-governments have the potential to provide better service delivery at reduced costs, increase public sector efficiency, minimize corruption and improve the accountability, transparency and responsiveness of the public sector.

Kapoor and Kelkar (2013) had pointed out certain challenges of e-governance in higher education in their paper. These were improper implementation of e-services, many universities implemented e-services but due to lack of computer knowledge, infrastructure and connectivity in rural area, they were not getting quality education. Mittal & Kaur (2013) had identified certain challenges of e-governance in India. These were lack of user friendliness of government websites, lack of integrated services, lack of awareness of benefits of e-governance among people, limited financial resources, lack of privacy and security. Paramashivaiah and Suresh (2016) mentioned in their research some of the challenges of e-governance as poverty, technical illiteracy, language dominance, unawareness and infrastructure. Singh & Singh (2018) indicated in their research that creating infrastructure, framing sound policy and legal framework, employing socially relevant technologies and integration were some of the challenges of e-governance in India.

There are many researches on e-governance in public administration. But very few researches were done on e-governance in education sector specially e-governance in higher education institutions. Need for comprehensive researches are necessary on e-governance in higher education institutions.

Objectives of the Study

1. To know the views of various stakeholders on e-governance in Higher education institutions.
2. To find out the challenges of e-governance in Higher education institutions.

Methodology

All the universities located within the state of West Bengal were the population of this study. The researchers, through stratified random sampling technique had formed a representative sample from the population. The sample consisted of 1 Central University, 4 State Universities, 1 Private University and 1 Deemed-to-be-University from the state of West Bengal.

The data were collected from 5 Administrators from each institution. These administrators included The Registrar, The Finance Officer, The Controller of Examinations, The Senior Programmer or Web Master or In-charge of ICT and The Librarian. The data were also collected from 2 teachers and 5 post-graduate students of the institutions.

In order to collect data, the researcher prepared a semi-structured interview with open-ended items taking help from the related literature. The interview items were shown to 10 experts in the field of educational technology. Minor modification was done on the basis of the suggestions provided. For data collection, the researcher approached the administrators, the teachers and the students.

Views on e-Governance

As a result of extensive interviews with various stakeholders, the views on e-governance could be discussed in the following themes.

Efficiency

Most of the respondents were of the view that e-governance had the potentiality to make the administration system of a Higher Education institution efficient. On asking what efficiency meant to them, the following answers were obtained. These were swiftness or less time taking in the process of administrative service delivery, accuracy or improved quality of the services provided, smooth work or integration among various departments for providing a service and customer satisfaction.

Almost all the respondents were of the view that e-governance had reduced the time taken in the process of doing the administrative tasks. Earlier, the administrative processes were done manually and they took a lot of time to

be done. The works done through e-governance had much more advantage over the works done manually. A post graduate student described, *“when I got admission in the college, I had to waste a lot of time by coming to the institution for taking the admission application form and submitting it. Because everything related to admission was done manually. But now when I got admission in the university, I did not have to waste much time in going to the institution for taking the admission application form. Because, everything related to admission is now governed electronically. I went to a nearby computer café and filled and submitted the admission form.”*

The respondents were of the view that e-Governance had increased the accuracy in the services provided to the stakeholders. To explain this an incident could be cited where an administrator of a university explained that in admission process merit list preparation was quite hectic as it totally depended on the manual calculation and it was prone to mistakes. But, when the admission process started being governed electronically, the work became much easier and there was almost no chance of mistake in the merit list preparation for admission.

In order to provide a service, it required the cooperation and approval of other departments also. If it was done manually, it took too much time for approval from other departments. But, e-governance is a system which integrated various departments for providing services. In one the universities the e-governance system showed that the attendance of the students was linked with the Controller of Examination Department. Students with inadequate attendance are marked ineligible while applying for examination form fill-up.

One of the indicators of efficiency of any system is the level of satisfaction among the customers. It is needless to say that if the customers were satisfied with the services, it can be termed as efficient system. A student of a university expressed his satisfaction with regard to library related works saying *“browsing the catalogue of the library online at home is an awesome experience.”* Almost all the Students felt satisfied with the e-governance system applied in the library as it facilitated students to access the catalogue online, check the availability of learning resources, get the exact location of the learning resources.

Transparency

The respondents also disclosed that in the time when most of the things were done manually, there was a lot of allegations of corruption in the admission system. Since, it was done manually and access to the information was quite hard, there was some amount of indiscipline and corrupt practices. The

admission date was violated earlier, but after e-governance no one could apply for admission after the specified dates programmed in the software. One of the universities was able to centralize the admission procedure to that extent so that it could control or keep a watch on the admissions going on its affiliated colleges. This happened due to e-governance. And the administrators of the university felt very happy because there was not a single incident of corrupt practice or allegation of that sort during the admission process. They said that in that the college authorities were happy too because same rules and regulations applied indiscriminately to all the affiliated colleges.

Another important area where transparency contributed the most as said by the respondents was in the process of tendering or securing suppliers for the institution. The new system of tendering was electronic tendering. It implied to putting notice, requirement specifications and budget estimation on the web and inviting quotations online. The selection procedures of the invited quotations and the bidders also happened online. This paved the way for transparency in the most sensitive area that was finance of a Higher Education Institution.

Accountability

There was good practice of accountability in some of the library departments which were electronically governed. Students got a chance to see the status of a book in the library independently online. After securing the book the electronic system automatically generated an acknowledgement message for the student which also gave the student the date for returning the book. The students also received reminder messages from the system for returning the book. The student also got acknowledge message after returning the book in the library. This was how e-governance system in the library maintained accountability in the institution.

Participation

The respondents were of the view that e-governance had increased in participation in the administration of Higher Education Institutions. With rising of electronic mails, it was very easy and convenient to send a message from one person to another. The online admission system of the universities had a provision for students to send electronic mails if they faced any difficulty or any other issue in applying or paying during admission process. The electronic mails were attended and solutions suggested quickly. This was something the students liked very much. Some of the institutions also practiced grievance redressal system through e-governance. This kind of practices secured participation of the students in various administration process.

Equity

The respondents were also of the view that e-governance had the potential to overcome inequality with regard to students residing in geographically advantaged and disadvantaged locations. Since, e-governance helped students to perform works from distance, therefore the nature of the region of the place was not a problem.

The respondents spoke that since the e-governance services could be obtained without spending much money, both the students from poor and rich family backgrounds could equally access the e-governance services. This has paved the way for equity across all economic classes in the Higher Education Institutions.

The respondents were of the view that e-governance improved the equality in the Higher Education Institutions. Equality was maintained across gender as well as various socio-economic groups. It was found that women participation due to e-governance had increased to a noticeable extent. There were many girl students who expressed that they applied for online admission by themselves without depending on anyone. The students both girls as well as boys could get the e-governance services equally without being harassed standing in the que.

Paperless administration

The respondents were of the view that e-governance had significantly cut down the usage of paper in the Higher Education Institutions. Everyday hundreds of trees had to be cut down in order to manufacture papers for use in the official, academic and personal purposes. The respondents said that by introducing e-governance the administration system in education sector had not only became easy and convenient but also made it paperless which saved thousands of trees being cut down for making paper. In this way e-governance helped in maintain an ecological balance in the environment.

Another point that emerged in the process of interviewing with respondents was saving space in the office. Some of the university offices were overcrowded with various files, documents and other papers. If works continued to take place through paper, there would occur shortage of space in the building. While conversing with a university official he said that one of the problems in the library was shortage of space for keeping books in the Library. He said that day by day the number of courses were increasing and the library department had to purchase books on those courses. The library building could not be extended due to some geographical reasons. In order to cope up with this

problem, the library department had taken a decision to move forward with digital library. They were planning to concentrate more on electronic books.

Security

The respondents who favoured that e-governance increased the security of confidential records said that not only e-governance increased the security but it reduced the damage of various important documents. They said that there were chances that manual records to get damaged due to insects, water and dust but there were no such threats to digital records. The digital records could be saved in the cloud so that it could be accessed or downloaded even if the documents got deleted from the hard disk. Even the document in the cloud could be accessed or downloaded from any device in case of emergency or necessary using User Id and Password. These respondents also said that keeping the e-governance system at bay from the virus was possible by using robust antivirus software.

The respondents who were of the view that there was a risk in e-governance with regard to security of the important documents said that in the recent times cybercrimes increased to a great extent and there could be software which could hack the e-governance system and breach the security. They regarded e-governance could be a risk for security of the documents and the e-governance processes. They suggested manual method where there would not be any kind of cyber-attack and the documents could be stored safely within the institution.

Economical

Respondents were of the view that e-governance reduced the cost of obtaining the services on the part of the stakeholders. They said that it reduced not only the cost but also the time for obtaining the services. For example, in the case of admission the students had to come to institutions physically spending money and time for applying for admission. But, due to e-governance in the admission process, they could save money and time by staying at their hometown and applying online form mobile or computer.

Challenges of e-Governance

As a result of extensive interviews with various stakeholders, the challenges of e-governance could be discussed in the following themes.

Challenges from Infrastructural Point of View

Most of the respondents expressed that the Higher Education Institutions were adequately equipped with computer-related hardware components for e-governance. But, one of the important infrastructural challenges with regard to e-

governance in Higher Education Institutions was lack of suitable software modules for running e-governance. This was the most important factor because of which the Higher Education Institutions in west Bengal were lagging behind. There was automation to some extent but it lacked integration. The institutions used software for managing various administrative and academic departmental works but there was lack of integration among the Departments. They were not linked with each other.

And, with regard to internet connection, some intuitions were still lagging behind. There were still a few institutions which were in the process of providing internet connection to the whole of their campuses. The speed of the internet connection was a hurdle for smooth running of e-governance. Since, some institutions used private internet connection, they had to face this problem. Some of the institutions were situated outside of the town and thus geographical location of the institutions was also party to the slow internet connections.

Challenges from Financial Point of View

To put up e-governance in the Higher Education Institutions required a lot of money to spend on it. The process of implementation and maintenance of e-governance was quite expensive. Most of the respondents expressed that there was financial crunch in the process of implementation of e-governance. Due to lack of financial resources the institutions were facing a challenge to implement e-governance. There was also not so much financial cooperation from the Central as well as the State Governments as the respondents said. The financial allocation by the concerned Government for each Higher Education Institutions decreased to some extent.

Challenges of e-governance from psychological point of view

Psychological challenges implied to the type of attitude the stakeholders had towards e-governance. In some institutions the respondents said there was apathy of top officials for planning and implementing e-governance. This kind of attitude posed a challenge for introducing e-governance in the institutions.

As the respondents said, most of the non-teaching employees who were aged did not have favourable attitude towards e-governance. They held conventional beliefs, lacked knowledge in Information Communication Technologies and opposed working in the method of e-governance. They had been continuing the manual system of working for many years in the institutions and did not show any sign or initiative or favourable attitude in e-governance.

As the respondents said that most of the students had favourable attitude towards e-governance but they lacked awareness. The students enjoyed the

services provided through e-governance. They did not have to struggle in order to get the services, these were on the fingertips of the students. But, the most important factor which posed a challenge in implementation of e-governance was students were not aware of the benefits provided to them through e-governance. Some of the students were ignorant about the e-governance benefits provided in the institutions. Not only that awareness, the students also lacked digital literacy. Digital literacy is the knowledge, skills and behaviours used in a range of digital devices such as smartphones, tablets, laptops and desktop PCs for gathering information and solving a problem. This was because some students hailed from rural areas of the state and hardly got opportunity to use all those digital devices.

Technical challenges

One of the technical challenges that the students faced was lack of user-friendliness of the e-governance applications and the website. User friendliness implied to easiness in using e-governance applications and website. There were many users who were non-experts who did not know how to use the applications in right manner. Such users needed guidance to find right manner to perform their transactions. The e-governance applications and the websites should be designed in such a way that it became very easy for use for the non-expert users too.

Another point that posed challenge in the implementation of e-governance was students' inability to understand English language. Almost all the e-governance applications were written in English. Most of the students studied in Bengali medium educational institutions and lacked knowledge of English. They found it difficult to proceed with the e-governance application and website. Thus, this was a great challenge which threatened the success of e-governance in the Higher Education Institutions.

To hold e-governance in Higher Education Institutions, a robust and tested technology is required. Since, e-governance was serious matter and it required a lot money to implement, it was not desirable that it ran for several months and suddenly collapsed one day. In one university a Department prepared a software for providing e-governance services. After working for several months, it started having problems and did not meet the requirements properly and collapsed. Similarly, there were several e-governance initiatives in the beginning, later all ceased to exist due to lack of technical requirements. Sometimes, the vendors also failed to provide a tested software for running e-governance in the institutions also.

Manpower Related Challenges

For the success of e-governance it needs adequate number of trained employees. This factor highly challenged the implementation of e-governance in Higher Education Institutions. The employees needed some basic training in the Information Communication Technology. Far being having training, some employees did not have even computer literacy which posed a great challenge towards e-governance. In e-governance system, it is the employees who provides the electronic services, but if they lack minimum knowledge and skills in the Information Communication Technology, it would be very difficult for e-governance to be successful.

Vendor Related Challenges

One of the most important challenges that the respondents expressed was lack of parity between the software provided and the System Requirement Specification. There was a communication gap or understanding gap between the two parties i.e. the software providers and the university authority. The requirement was something, but ultimately the software provided did not have many of the features as per the requirements. The university authorities also could not articulate properly to the vendors. This happened because the university authority did not have sufficient technological knowledge and the vendors were not well-versed in university administration pattern. The solution could come if the university authority could appoint a staff having adequate technological knowledge to interact with the vendors. Thus, the communication gap or lack of coordination was a threat to the implementation of e-governance in the Higher Education Institutions.

Though very few, but still as some respondents spoke, there was a bit lack of cooperation from the vendors or service providers. The zeal they showed while giving presentation in front of the university authorities in order to bag the tender or e-governance project, did not show that much zeal in their works after selection and payment by the university authorities.

Conclusion

From the above analysis, it could be concluded that the stakeholders of higher education institutions looked upon e-governance as an opportunity for making the administrative processes better. Providing services through e-governance fosters efficiency, transparency, accountability, participation, equity, security, frugality and less use of paper. Most of the institutions have implemented e-governance to some extent. There are certain hurdles that prevents from having optimum benefits of e-governance. These challenges are lack of appropriate infrastructure, lack of financial resources, attitude of people,

lack of robust technology, scarcity of skilled manpower and communication gap between vendor and the authorities of the educational institutions.

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