

Education GenNext Perspectives, Opportunities and Challenges

Editors:

Dr. Sr. Tanuja Waghmare

Dr. Shakuntala S. Nighot



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PEER REVIEW COMMITTEE

Dr. Indu Garg

Former HoD of Department of Education, University of Mumbai

Dr. Mabel Pimenta

Principal, Pushpanjali College of Education, Vasai

Dr. Giselle D'souza

Associate Professor, St. Teresa's Institute of Education, Santacruz

Dr. Sheela Philip

Assistant Professor, St. Teresa's Institute of Education, Santacruz













FOREWORD

"Yes, it's important to inspire the next generation but let's not forget to inspire the now generation too."

Onyi Anyado

WHY GEN NEXT?????

Teaching and learning is vivacious, and we are the forerunners, capitalizing on expertise and trade there is a tendency to recreate education. We make a constructive impression, enabling 1000's of teaching and learning centres, educators and learners to have an exhilarating understanding.

Education Gen Next knowledge is compliant and modifiable to meet the requirements of the 21st century learners. Tutoring a student is difficult at a time when there is worldwide contention at its peak. The aptitude of the future students to compete and thrive globally, hinges on schooling at all levels of primary, secondary and advanced education. In order to, help the country's economy it is necessary to provide the youth, proficiency, information and innovative skills that they need to trail great openings and attain long term success.

Today's students face a fast changing world that demands diverse abilities and knowledge than those, we required in the 20th century. When an educationist plans and creates new schools, and live Gen Next learning themselves, they take the lead in emergent gen next learning across the nation. Tutors are combining the best of what we know about focused, reliable knowledge with enterprising thoughts about student success to completely re imagine schools. Instructors often make use of Ed - tech as they make the shifts in instruction, teaching roles, and learning experiences that the gen next learning requires.

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What is Gen Next learning from a student's perspective?

A student always feels that learning should be: Personalized, Flexible, Interactive and Engaging, Relevant, Organized, Collaborative, Agile and Supportive, Challenging but achievable with opportunities.

Students have a lot of opportunities too, they could engage in Cooperative Education Programmes, Externships, Internships, Leadership Training, Service Learning; they could also join a Campus Club and Student Organizations where they can have fun and master management skills and teamwork and develop Problem Solving Skills and get hands on experience along the way.

Gen Next learning happens when everyone - kids and adults alike - take charge of their own learning and have the prospects to do their best possible work. It should be power-driven by zealous people, enthusiastic to create future ready leaders. Gen Next is an invitation - to organizations of successful individuals dedicated to learning about and becoming engaged with the most pressing challenges facing future generations.

In this most crucial time of Covid - 19, let us as educators help ourselves as well as our learners to cope with this challenging situation as we know.....

"Education is for improving the lives of others and for leaving your community and world better than you found it....

Dr. Sr. Tanuja Waghmare Dr. Shakuntala Nighot







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We extend our heartfelt gratitude and appreciation to all those who contributed towards producing this intellectual work. This book contains the papers contributed to national webinar Education GenNext: Perspectives, Opportunities and Challenges, which has been a grand success with 3667 registered participants from more than 7 countries and almost from all states of India. To the delegates who participated, your presence was valuable to us! This overwhelming response and success was a result of cooperation, efforts and inputs received from many people.

We owe our gratitude to our management for constant support and encouragement we receive for any such academic endeavor.

We are thankful to our distinguished resource persons of the webinar for sharing their wealth of knowledge and expertise at various expert sessions as listed below.

Dr. Javashree Shinde.

Director, TLC, Dept. of Educational Technology, SNDT Women's University, Mumbai

Keynote Address: Education GenNext: Why and How?

Mr. Viral Dedhia

Founder, Director, EdFly Learn

Tools & Guidelines for Effective online Teaching

Dr. Sandhya Khedekar,

Principal, GES College of Education, Sangamner

Expert Session 1: Effective Use of Technology Tools in Academics

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Dr. Sarika Sawant

Assistant Professor, SHPT School of Library Science, SNDT Women's University, Mumbai.

Expert Session 1: Enhancing Visibility of Researchers through Academic Social Platforms

Dr. Saptarshi Ghosh

Associate Professor, Dept. Library & Information Science, North Bengal University, Darjeeling

Expert Session 3: Paradoxical Betweenness in Academic Endeavours and Research Metrics

Dr. Gopakumar V.

University Librarian, Head: Dept. of Libray & Information Science, Goa University

Expert Session 4: Citation Management to Avoid Blame of Plagiarism: A practical Session

Dr. Indu Garg

Former Head of Dept.of Education, University of Mumbai **Valedictory Address**

We are indebted to our sponsors Union Bank of India Santacruz west Branch, Bank of Maharashtra Khar Road Branch, Vidyaram Mohanji Charitable Trust, Mrs. Geeta Dhote, Mr. Aanand Mittal, Mr. Neel Sahani, Jeena & Company, Dawar's College of Commerce, Mr. Aanand Sahway, Mr. Milind Bengali, Mr. Ishan Phohoomul and Prabha Rao Family for the finantial support through the Educational Grants they have provided us.

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> Dr. Sr. Tanuja Waghmare, Principal, St. Teresa's Institute of Education.













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LIST OF CONTRIBUTORS

- Ashish Sharad Gurav, Researcher, M.A., (English), M.Ed. NET (Education), Ashoka International Centre for Educational Studies and Research, Nashik.
- **Bliss Onil Gonsalves,** St. Teresa's Institute of Education, S.V. Road, Santacruz (W), E-mail: stie73@gmail.com
- **बी.जी. खाडे,** सहयोगी प्राध्यापक, शासकीय अध्यापक महाविद्यालय, मुंबई. E-mail: bharamukhade65@gmail.com
- *Cerena Aurin D'cunha*, Asst. Professor, St. Teresa's Inst. of Education. S.V. Road, Santacruz (West), Mumbai-54. E-mail: stie73@gmail.com
- Cindrella Sandeep D'mello, Assistant Professor, St. Teresa's Institute of Education, S.V. Road, Santacruz West, Mumbai 400054. cindrellanunes@rediffmail.com
- Cletus Zuzarte, College of Social Work, Nirmala Niketan, 38, New Marine Lines, Churchgate, Mumbai 400020. E-mail: cswnnprincipal@gmail.com; cletusz@gmail.com
- *Dalvina Ferreira*, St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West), Mumbai-400054. E-mail: stie73@gmail.com
- Durgavati Sharma, B.Ed Students, K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai – 400077.
- Eldrita Godinho, St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West) Mumbai-400054. E-mail: stie73@gmail.com

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- Giselle Ann D'souza, Associate Professor, St. Teresa's Institute of Education, S.V. Road, Santacruz, Mumbai, India. E-mail: stie73@gmail.com
- Hemant Kulkarni, Post Graduate Students Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. hemantkulkarni548@gmail.com
- Joan Lopes, St. Teresa's Institute of education, Santacruz, Mumbai.
- *Kailas More*, K. J. Somaiya College of Engineering, Vidyanagar, Vidyavihar (E), Mumbai 400077. E-mail: kailas.more@somaiya.edu
- *Kalpana Chavan*, Assistant Professor, St. Xavier's Institute of Education, Churchgate, Mumbai. E-mail: kalpanachavan11@gmail.com
- *Mabel Pimenta*, Principal, Pushpanjali College of Education. E-mail: pimentamabel60@gmail.com
- Madhavi Dharankar, Associate Professor & Head, Department of Educational Technology, SNDT Women's University. mdharankar@det.sndt.ac.in. Juhu Road, Santacruz (West), Mumbai 400049
- *Manju Saxena*, M. phil in Education (Intredisciplinary), Indian Institution of Education, Center for Educational Studies, Savitri Bai Phule Pune University, 128/2, J.P. Naik Path, Kothrud, Pune, Maharashtra 411038, E-mail: iiipune@vsnl.com
- *Marina B. Pereira*, Associate-Professor and Head- Department of Economics, Nagindas Khandwala College, Malad (West), Mumbai 400064. E-mail: marina_bertha@rediffmail.com
- *Misba Nasir Sayed*, B.Ed Students, K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai 400077.
- Natasha Agnes D'souza, St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West). Mumbai 400054. E-mail: stie73@gmail.com
- Nikhil Gupta, Post Graduate Students Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. E-mail: nikhilgupta.444nig@gmail.com

 \bigoplus







- Nitinkumar Dadasaheb Mali, Research Guide, M.A., M.Ed., SET, Ph. D. (Education & Geography), S. S. H. Naik College of Education, Navapur, Dist: Nandurbar, Maharashtra
- **Pawan Tiwari**, Post Graduate Students Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. E-mail: pawantiwari670@ gmail.com
- **Pratibha Pandey**, Librarian, Post Graduate Govt. College, Sector-46, Chandigarh. E-mail: pratibhapandey81@gmail.com
- Raveena Shetty, S. M. Shetty College of Sci. Comm. and Mgt Studies, Hiranandani Powai, Mumbai -400076. E-mail: raveena.shetty999@ gmail.com
- **Renu A. Shah**, Assistant Professor, College of Social Work, Nirmala Niketan, Mumbai.
- Reshma A. Rodrigues, Assistant professor, St. Teresa's Institute of education, S. V. Road, Santacruz West
- *Riju Sharma*, Post Graduate Government College, Sector-46, Chandigarh. E-mail: gc46chandigarh@gmail.com
- Roggya Rizvi, PhD Student (Research Scholar), Dept. of Education, University of Mumbai, Kalina Campus, Mumbai. E-mail: roqqya. rizvi@gmail.com
- Sandhya Khedekar, Principal, Gokhale Education Society's College of Education, Sangamner, Dist-Ahmednagar, Maharashtra. E-mail: ksandhya2008@gmail.com
- Sanyog Shantaram Padelkar, M/s. Sanyog Padelkar Consultants, Office No. 4, Manik Tower, 1st Floor, Bicholim-Goa 403504, E-mail: sanyog.padelkar@gmail.com
- Shabana Khan, MESCO, Address: Office No.1 & 2, Plot No.423, Landmark Building, Near Saraswati Mandir School, Senapati Bapat Marg, Mahim (W), Mumbai - 400 016, (Extn. No.22), http://www. mescotrust.org, E-mail: shabana.khan@mescotrust.org
- Shakuntala Nighot, St. Teresa's Institute of Education. Santacuz, Mumbai 400054. E-mail: shakun.457@gmail.com









- **Sheela Philip,** Assistant Professor, St Teresa's Institute of Education, Santa Cruz (West), Mumbai 400054.
- Sheena Thomas, HoD, Department of Education, The Bhopal School of Social Sciences
- **Sr. Delicia Fernandes,** Principal, St. Teresa's Junior College of Education.
- *Sujit Tilak*, K. J. Somaiya College of Engineering, Vidyanagar, Vidyavihar (E), Mumbai 400077. E-mail: sujit.tilak@somaiya.edu
- *Sunil Yashavantrao Desale,* Assistant Professor, G.E.S. College of Education, Sangamner, Dist. Ahmednagar (MS).
- **Swati Paranjape,** Assistant Professor, Physiotherapy Department, Seth G S Medical College. Parel, Mumbai 400012, E-mail: swati. paranjape@kem.edu.
- *Tanuja Khan,* Assistant Professor, Department of Education, The Bhopal School of Social Sciences.
- Tanuja V. Koli, Associate Professor, Department of Sociology, Chetana's, H. S. College of Commerce and Economics, SMT. Kusumtai Chaudhari College of Arts, Govt. colony, bandra (e), Mumbai – 400 051.
- *Usha Sharma*, Asst. Professor, K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai 400077, E-mail: principal.bed@somiya.edu
- *Valmik Garje*, Associate Professor, Siddharth College of Arts, Science and Commerce, Mumbai, India, Email:v almikgarje@gmail.com







ABOUT THE BOOK

With globalization and technological advancement, Education today is undergoing great transformation. This has prompted re- engineering of Education which has impacted the society to in an enormous way. For the effective functioning of the Education system, there is need to respond to change and sustain practices that are resilient. Stake holders are expected to reorient themselves to address the changing paradigms of teaching- learning, by gearing up for the change. Hence, there is need to discuss and evolve ways and means of transforming the practices in educational institutions that serve humanity. To provide forum for brainstorming on various issues related to present and future Education system, to help and equip education functionaries with the required Next Generation Education skills, to upgrade and to facilitate progress in the education system, a national seminar Education GenNext, Perspectives Opportunities and Challenges was planned in March 2020 with following objectives.

OBJECTIVES

- To share academic best practices, innovations and research.
- To explore the scope for networking, collaboration and partnership
- To deliberate upon future challenges in higher education.
- To suggest recommendations that address educational policies.

Due to CORONA crisis and countrywide lockdown, seminar was postponed and organized as National Webinar on 19th and 20th May 2020. Papers included in this book are the selected papers contributed by various researchers, students and academicians and professionals across India to the National Seminar Education GenNext. The book

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includes research papers, literature reviews, conceptual papers, and case studies on the following themes and subthemes.

THEMES

Technology Tools in Academics

Virtual Classrooms, Web 2.0/3.0 Tools in Education, Digital Divide, Teaching-Leaning Innovations, Mobile & E- Learning, Knowledge and Education Management with ICT

Education for Sustainability

Environment Friendly Education, Inclusive Education, Assistive Technologies, Employability of Education, Academic Libraries and Information Services, Reading Culture, Innovative Practices in Academic Setup, Applying Research to Practice, Academic Failure Prevention, Value Education

Global Issues in Education

Equity and Inclusion through Education, Diversity and Social Justice in Schools and Communities, Educational Stress, Motivation







ABOUT THE EDITORS

Dr. Sr. Tanuja Waghmare. PhD., M.A. (English Literature)

Dr. Sr. Tanuja is currently the Principal of St. Teresa's Institute of Education, one of the pioneering and prestigious Teacher Education College in Mumbai. She holds 19 years of vast experience as Teacher Educator and five years of expertise in school administration as principal of St. Paul's Convent High School, Dadar and Queen of Angels, Bharuch. She also has been a member of several Committees of various colleges and University of Mumbai such as Syllabus Revision Committee for Sociology and English Method, Co-ordination Committee for BOS in Education, FIP Selection Committee etc. Dr. Sr. Tanuja has authored a book titled 'Honing Your Writing Skills' and several research papers published in National as well as International Journals. She has been awarded with the prestigious Jamunabai Govinji Madhaviji Prize for her doctoral research titled Development of a Program for Enhancing English Composition Skills of Students of Std. IX. Institution is moving towards excellence with her dynamic and motivating administration.

Dr. Shakuntala Nighot. PhD, MLISc, BEd, BSc (Maths and Computer Applications)

Dr. Shakuntala Nighot holds 16 years of professional experience comprising of initial seven years in corporate and special libraries. Since January 2011 she is perusing academic librarianship at St. Teresa's Institute of Education. Dr. Nighot has also worked as a visiting faculty, paper setter and Examiner at SNDT Women's University. She is instrumental in serving as a Library Supervisor for MLISc Trainees of University of Mumbai and SNDT women's University. She has been a resource person for various workshops, training programs and lectures

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conducted at various colleges. She has authored a number of research papers in national and international journals. Mrs. Nighot is recipient of three prestigious awards namely Smt. Malati Dalal Prize, Prof. Vidyut Khandwala Prize and M.A. Master Memorial Prize for securing first rank in the SNDT Women's University in her post-graduation. She had also secured 5th rank in University of Mumbai in her B.Ed. examination. ICT in Library Management, Internet Search Strategies and Citation Analysis are her areas of interest.







1

Effectiveness of Flipped Classroom Strategy on Problem Solving Ability of Students of Standard Eight

Prof. Ashish Sharad Gurav* and Dr. Nitinkumar Dadasaheb Mali**

ABSTRACT

Flipped Classroom Strategy is not new in the field of education. Earlier, it was only applied in engineering field for learning the difficult concepts. But now with the results and suggestions of many researches, we as a teacher of secondary and higher secondary or in higher education for teaching various subjects, we can apply flipped classroom strategy for students' learning. 21st century education system focusing on learner and learning styles, as it is called learner centered education system. Due to the emergence of ICT on the horizon of education, many teaching learning methodologies are replaced by the new methodologies.

In school education, there are many subjects difficult both for teachers in teaching and for students in learning. English language is one of the subjects, which has multi facets difficulties for teachers as well as students. English is foreign language but at the same time, it is very important language for well round development of students of India. Flipped classroom strategy will be effective for teaching and learning of English grammar. Researcher is going to apply flipped classroom strategy in eight standard students of English medium students for teaching English grammar.





^{*}Researcher, M.A., (English), M.Ed. NET (Education), Ashoka International Centre for Educational Studies and Research, Nashik.

^{**}Research Guide, M.A., M.Ed., SET, Ph. D. (Education & Geography), S. S. H. Naik College of Education, Navapur, Dist: Nandurbar, Maharashtra



INTRODUCTION

Grammar is called the backbone of any language. It is said that English language is very easy language for learning but at the same time it very complicated also. There are many aspects of English grammar which are just avoided by teachers in their teaching plan. This is the general observation when researcher came across the English teachers and school students. Researcher did the discussions with the school teachers and students regarding the teaching and learning of English grammar in schools. Researcher came to know the scope of research in English grammar and teaching strategies applied by school teachers. For this research paper Researcher has selected one topic of English grammar i.e. Voice: Active Voice and Passive Voice. Can a teacher use flipped classroom strategy for teaching and learning of voice: active and passive voice to 8th std. students of English medium school.

STATEMENT OF THE PROBLEM

A Study of Effectiveness of Flipped Classroom Strategy on Problem Solving Ability of Students of Standard Eight

Explanation of Problem

There are many methods for teaching English grammar but teaching is only one side of the coin after teacher's teaching whether students have learnt it or not? If students face any difficulty in learning then what to step teacher can take. That's why; researcher has focused on problem solving ability of students of standard eight

Need of the Research

It is needful for school students to enhance the ability of problem solving in learning English grammar. It is observed in many schools, English grammar is not taught. And where it is taught, students are not asked the feedback or students bother to ask the doubts to teachers. Hence, it is very important to carry out the research for the students to enhance their problem solving ability.

Significance of Research

Change is the only thing which is permanent. And education is no exception for it, so methods for teaching English grammar must







be changed with due respect to time, students' learning style, their interest and many other things.

OBJECTIVES OF THE STUDY

- 1. To study the difficulties of 8th std. students in learning English grammar.
- 2. To enhance the students' ability of problem solving in learning English grammar.

Assumptions

- 1. Flipped Classroom Strategy provides the prior knowledge for students to view as homework through video lectures or other means while freeing up classroom time to engage in learning activities with the support from the teacher and peers.
- 2. Flipped classroom strategy enhances problem solving ability in learning English grammar.

HYPOTHESIS OF THE STUDY

Null Hypothesis

- 1. There is no significant difference between pre-test and post-test mean scores of problem solving ability of Experimental group.
- 2. There is no significant difference between pre-test and post-test mean scores of problem solving ability of controlled group.

Scope

- 1. This research paper is related to 8th std. students of English medium.
- 2. This research study is concerned to English grammar voice: active and passive voice.

REVIEW OF RELATED LITERATURE

Review of related literature will give the guideline to the researcher. Due to it researcher will get the right direction. In review of related literature researcher will be helped by the research paper, books on research, online material such as website and journals.

Bryce F. Hantla, (2017), Flipped Classrooms in the Humanities: Findings from a Quasi-Experimental Study, Liberty University,







CPE Christian Perspective in Education Volume 10 Issue 1 winter 2017, The College of Biblical Studies.

Objectives

- 1. To assess the implication for teaching in higher education.
- 2. To study the classroom environment in humanities classes.
- 3. To examine personalization, innovation and student cohesion.

Findings

In general, the results of this research indicate that the Flipped Classroom environment for the humanities student better matched with their preferred classroom environment, as recorded in the pretest version of this assessment.

RESEARCH METHODOLOGY

Research Method

Researcher has used experimental method for this study. In present research effectiveness of flipped classroom strategy will be verified so that researcher has selected the **Experimental research**.

Present research is quantitative research as well as qualitative research.

Applying the **random sampling** researcher has selected one school. Researcher contacted the Principal of the school to explain the purpose of the study and the help needed from the school, and to seek their permission for the students to participate in the study. The constraints of time and resources do not permit the researcher to select more than one school.

Researcher selected Eight Standard English Medium Students applying the random stratified sampling the students who have scored above 75% in seventh standard such 60 students are the sampling for this research study. Researcher gave the test to both the groups controlled and experimental based on voice: active and passive voice.

POPULATION AND SAMPLING

Population

All SSC board English medium Eighth Standard students of Nashik City are the population of the research.







Sampling

Researcher has used **random sampling** for selecting one school. And for selection of two groups (Experimental and controlled) **stratified** sampling has been used. If there are 1000 students, sample will be 10% and further those 10% students will be divided in to two equal groups, one will be experimental group and another will be controlled group. Population and sample will be depended on actual number of students.

Variables

Independent Variable

Programme based on Flipped Classroom Strategy.

Dependent Variable

1. Scores obtained by students in Problem Solving Ability Test

Controlled Variable

- 1. Age of the students is the major controlled variable.
- 2. There are two **Tests** such as Problem Solving Ability Test
- 3. In English medium school coeducation is available so both Genders male and female are controlled variable
- **4.** Each **School Environment** is different for conducting a research project.
- **5.** Researcher has selected the particular **Topic** for this research work.
- **6.** There are **Equated groups** in this research work.

Statistical Tools

Mean, Median mode standard deviation, 'T' test, percentage

DATA COLLECTION AND ANALYSIS

Collection of the data is done from the selected school, teachers and students.

Analysis of the data is done with the selected research tools. This will give the benefits to knowledge and education.







FINDING

Researcher applied 't' test for analysis of the marks. Researcher has found the difference between the mean score of pre test and post test based on voice: active and passive voice given to the students of 8th std. It is found in the statistical tools such as mean, median, mode and standard deviation; there is difference in the scores of controlled and experimental group.

CONCLUSION

In short, researcher has got the conclusion that flipped classroom strategy is very effective for teaching and learning of English grammar for school students especially for the students of 8th std. in English medium schools. Students of 8th std can identify the problems and also can solve the problem in English grammar specially in voice: active and passive voice. Further, researcher is recommending the flipped classroom strategy for teaching and learning of other school subjects as well. Hence the null hypothesis failed to be accepted.

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2

Effectiveness of Flipped Classroom with Constructivist Approach for Teaching Mathematics

Sunil Yashavantrao Desale*

ABSTRACT

Flipped classroom is the new teaching mode, a new pedagogical method in the context of information globalization. If we look towards the journey of teaching-learning process, it is from objectivism to constructivism which is from teacher centered approach to the student centered approach. In this paper researcher tried to correlate the constructivist learning with flipped classroom learning and to check its effectiveness for teaching the unit 'Mensuration' in the subject Mathematics for 8th Standard English medium students of Maharashtra state board.

Keywords: Flipped Class room, Constructivist learning theory

INTRODUCTION

We can often see that the problems encountered in teaching practice, especially in schools, are derived from the traditional methods. However, in recent research, it has been shown that new teaching approaches are more effective than the traditional teaching approaches which have been pushed away, and thus the search for new teaching approaches which are more effective is essential. Unfortunately, it is not possible to ignore it, as many schools today use traditional teaching approaches, Such







^{*}Assistant Professor, G.E.S. College of Education, Sangamner, Dist. Ahmednagar (MS)

problem has prompted researcher and educators to develop more efficient and effective teaching practices (Huang, R., & Shimizu, Y., 2016). Conventional Methods of teaching learning were based on objectivism which includes structuralism, functionalism, behaviorism and finally leading towards cognitivism which acted as the link between objectivism and constructivism. At the same time technology plays an important role in improving the quality of teaching. Flipped classroom is one of the new types of teaching method to teach student with the help of technology. In this class transmission of information is done outside the classroom and has been realized the internalization in the classroom. The main aim of the paper is to correlate the constructivist learning with flipped classroom and check its effectiveness for teaching the unit 'Mensuration' for 8th standard students of Maharashtra state board.

FLIPPED CLASSROOM

Flipped classroom means classroom activities that have traditionally taken place inside the classroom which takes place outside the classroom. (Bishop and verleger, 2013). It is instructional strategy and type of blended learning that reverses the traditional learning environment by delivering instructional content, often online, outside the classroom. It moves activities, including those that may have traditionally been considered homework, in to the classroom.

CONSTRUCTIVIST LEARNING THEORY

In flipped classroom, students are the main subject of cognition and the active constructors of meaningful construction which breaks through the limitations of traditional classroom. Student preview the relevant information through some online media before class to have their autonomous meaningful construction. Such a mode is carried out by the constructivist learning theory which holds the opinion that students are active constructors of meaning, the leader and controller of the learning process while teachers only assists students in developing their autonomous learning.

Constructivism has emerged as a powerful theory of explaining how human learn about the world around them and how new knowledge is formed. In this theory knowledge is not waiting to be discovered but rather it is constructed by humans by interaction with the world and with each other. (Felder, 2012 &Gordon, 2008). In constructivist theory







students are at the center of teaching and the subject of cognition. Teachers are finding the new teaching mode which is helpful to constructivist approach. Teachers are not supposed to impart information here as well as students are not the passive listeners. The role of teacher and students has greatly changed. Constructivist teaching mainly focuses on the student's opinion and assuming that the students are the active constructer of the knowledge meaning. The role of teacher is the faithful supporter, facilitator, motivator, collaborator and only to help and promote the meaning of construction of students. The role of the students in constructivist learning is to participate actively in the activities and try to solve the complex real world situation given by teacher.

In constructivist learning environment three factors are important, which are cause to take students at the center, externalizing knowledge and realizing self feedback. This learning emphasizes on the role of situation in meaningful construction through assimilation and adaption. Also it focuses on the key role of collaborative learning in meaningful construction. The interaction between the learner and surrounding is very important and learning environment is more important than teaching environment.

METHOD

As a model in the study, the experimental method with a pre-test and post-test equivalent groups design was used. Tests applied to the students in Experimental group and Control group after the experiment.

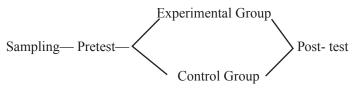


Fig.1. Research Design

SAMPLING

Students studying in 8th std, Secondary School in Nashik are included as sample. The participants in the research were randomly selected from this sampling group from an English medium secondary schools in Nashik, total 60 students and out of them 30 are included







in experimental group while the other 30 are included in the Control group.

METHODOLOGY

The experimental method with pre- test and post- test equivalent group design was used for the study. Firstly researcher developed the achievement test on the topic 'Mensuration'. The test items are based on the properties, Surface area, volume, their relationship of the three dimensional geometrical shapes Cube, Cuboids, Cylinder, Cone, Sphere. To check the validity of test, the test was validated by two experienced Mathematics teachers, in order to decide whether it was appropriate for the level of students or not. Each correct answer was scored as 1 marks and incorrect answer or not attempted question was scored as 0 marks. The test was carried out on a group of 100 students. By analyzing the results and applying necessary statistics, two equivalent groups with same characteristics of 30 students were formed.

For teaching the topic 'Mensuration' using flipped classroom with application of Constructivist approach, researcher prepared text material, PPT, and videos suitable for constructivist approach. The topic was taught using traditional method to Control group and using flipped classroom with constructivist approach to the Experimental group. Then the post –test was given to both experimental groups.

NULL HYPOTHESIS

There is no significant difference between the mathematics achievements of 8th grade students before and after teaching with traditional method and flipped classroom constructivist approach.

DATA ANALYSIS

The t-test from the parametric test was applied to check the effectiveness of given treatment.

Table 1: T-Tests Results Regarding Post-Test Scores

Groups	No. of Students	Mean	Standard deviation	t- Value
Control Group	30	12.23	3.52	9.67
Experimental Group	30	19.86	2.51	







FINDINGS

The calculated t- value from the table is 9.67 while the t- value from table at 0.05 level is 2.00 and at 0.01 level is 2.66. That means the calculated t- value is more than the table value at both 0.05 and 0.01 level. Hence null hypothesis was rejected and research hypothesis was accepted by the researcher.

CONCLUSION

- 1. After implementation of program researcher found significant difference in statistical scores of standard 8th students of experimental group over control group.
- 2. Achievement of Mathematics of 8th grade students by learning with flipped classroom with constructivist approach is significantly more than that of achievements of Mathematics learning by traditional method.
- **3.** Teaching through flipped classroom with constructivist approach is more effective than teaching traditionally the topic 'Mensuration of 8th class of Maharashtra state board

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A Study of Use of Mobile Phones for E-Learning by Undergraduate Students of Greater Mumbai

Dr. Valmik Garje*

ABSTRACT

In the contemporary period, electronic devices ranging from television, computers, mobile phones, tablets, radios, etc. are offering varied levels of knowledge to people from different strata of population. E-learning has become very significant in this fast moving life. Web technologies have accelerated the speed of e-learning. Use of mobile phones in e-learning can be termed as m-learning i.e. learning through the mobiles. Different applications have been introduced, which facilitate the learning. These applications are updated periodically which serve the latest data to the learners. However, it has to be noted that as the system has immense advantages, the disadvantages of the same cannot be overruled. The present study focuses on the use of mobile phones (Smart phones and tablets included) for e-learning by the undergraduate students in Greater Mumbai. The results show that more than disadvantages, the mobiles phones are serving greater utility in enhacing the academic performance of the students.

Keywords: M-learning, Technology, Smartphones, Academic performance, Excellence





^{*}Associate Professor, Siddharth College of Arts, Science and Commerce, Mumbai, India, Email:v almikgarje@gmail.com



INTRODUCTION

Mobile learning, also known as m-learning, is a new way to access learning content using mobiles. Mobile learning supports, with the help of mobile devices, continuous access to the learning process. This can be done using devices like your phone, laptop or tablet. You can learn wherever and whenever you want! With the advent of mobile learning, educational systems are changing.

Examples of mobile learning in education

Offering mobile learning material

This is the most common way of using mobile learning. You can offer texts, videos or audios. Participants can be given assignments after watching a video that their instructor has put online. This method of mobile learning is relatively less interactive. It's more about individual consumption. There is no interaction between the trainer and the learners, which makes it an asynchronous way of learning.

Interaction during lessons

Instructors can also use mobile devices to increase interaction. For example, you can ask questions during your training by using online discussion forums or asking your learners to complete a survey after taking a training.

Instructors ask questions and the learners answer them using their mobile devices or communicate between themselves in a group discussion forum. It's possible to get immediate feedback. This is especially effective when training large groups.

Synchronous learning

Would you like to have immediate feedback from your teacher or fellow students? This is possible with synchronous learning. You are able to get direct feedback even when you are at home. In addition, teachers can interact with their students during lectures.

LITERATURE REVIEW

Ready to Learn Cell Phone Study: Learning Letters with Elmo (Horowitz, et al. 2006), assessed the effectiveness of cell phone-delivered video clips for preschoolers, from different economic demographics







in the US as tutors for their children's video clips of alphabets. The findings of the study revealed more success from families below than families above the poverty line. The study concluded that cell phones have the potential to be an effective medium for learning because of their portability, convenience, ease and appeal to children.

Emerging technologies for learning (**Stead, 2006.**) is a review of a project, which is finding ways of reaching people who have not benefited from mainstream education in Britain. The Review addresses how mobile technologies are transforming the future of learning and how the use of mobile phones in learning create opportunities to reach students who were hard to reach and engage, such as young offenders, traveler communities, disengaged teenagers and work-based learners in difficult contexts.

Mobile technologies and learning (Attewell, 2005) project in Britain, with partners in Italy and Sweden, targets young adult learners with poor literacy or numeric, some of whom were unemployed and other homeless. The Project predicts that if the processing power of some sophisticated third generation (3G) mobile devices such as smart phones and camera phones is further developed, soon many people would prefer mobile phones over personal computers.

The case for using SMS technologies to support distance education students in South Africa (Viljoin, du Preeze & Cook, 2005) at the University of Pretoria; aimed at assisting students to utilize the resources that they already have to support them in their learning process. The m-learning was mainly to provide basic administrative support to adult distance learners with 0.8% e-mail access and 97% cell phone entry level. The study concludes that as a result of the high rate of adoption of mobile technologies in African countries servicing distance students in South Africa through mobile phones support should enjoy consideration.

OBJECTIVES

The main objective of the present paper is to evaluate the usage of mobile in learning techniques in the modern world, highlighting the advantages and disadvantages of the same.

METHODOLOGY

For the present study both secondary and primary data were used. The secondary data had been retrieved from various books,









journals and published articles related to topic. Primary data was obtained from the closed ended questionnaire which was circulated to 50 students from undergraduate colleges of Greater Mumbai. The responses were collected and the results were obtained, fulfilling the objectives of the study. The present research is of descriptive nature.

RESEARCH FINDINGS

Advantages of mobile learning

Wherever and whenever

It's possible to lay in bed and watch a lecture or complete a survey whenever you want. *Motivation*

Employees also feel more motivated to learn something new or to take a training if they can take their learning materials everywhere with them, especially when they don't have time to learn during their regular work hours.

Different types of content

You can add videos, audio files, and images with mobile learning. Videos make it possible to make learning livelier and more interesting.

Long distance is not a problem

While one learner might be in New York and the other in Amsterdam, it's still possible to view the same content and take the same tests! This is one of the main benefits of mobile learning.

Disadvantages of mobile learning

Distraction

Mobile devices can be a great distraction for participants. Children like learning on tablets, but gaming on tablets seems to be even more fun! As a teacher you are not always able to control what your pupils are doing on their tablets. For adults, mobile learning can also be distracting if your users get constantly interrupted with text messages and notifications. Therefore, it requires self-discipline and focus on their part. However, if you can make your training interactive and fun, the other applications available on mobiles won't be a distraction for your learners.







Lack of Internet connection or electricity

Using mobile devices for e-learning could be an issue if your users don't have Internet connection or electricity readily available. In spite of that, data gathered by GSMA intelligence indicates that there are now more mobile devices than there are people in the world. Considering the enormous growth of mobile devices, a lack of Internet connection, poor connection quality, and restricted access to electricity should become problems of the past.

Table 1: Smart phones are being used for different purposes

Uses	Percentage of Respondents				
Playing games	71				
Taking memos	12				
Taking photos	88				
Watching movies	27				
Listening songs	36				
Surfing Internet	89				

The following tables reveal how the respondents use mobile phones for different purposes. Most of the recent handsets are equipped with cameras, true color displays, stereo sound, and external memory cards. They can be multi-purpose for the students as shown in the data.

Table 2: Handsets owned by the pre-service teachers

Phones	Percentage of Respondents					
Орро	22					
One plus	9					
Vivo	29					
Samsung	26					
others	14					









Table 3: The difficulty of using mobile phones for teaching and learning

Problems	Percentage of Respondents
Text input	58
Small screen	65
Slow connectivity	45
Too expensive	19
Difficult to use	8

Table 4: Acceptance of mobile phones for teaching and learning

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Mobile phones can improve the quality of education	4	42	2	52	0
I am interested to use mobile phones as teaching and learning tools	3	29	12	52	4
Mobile phones can be used to assist teaching and learning	8	22	3	63	4
Mobile phones can be effective tools in classrooms and at distance learning	7	25	1	67	0
Mobile phones can be used for administrative purposes (e.g. send SMS messages to parents)	3	19	9	65	4
Should secondary students bring their mobile phones to schools?	0	13	2	77	8
Do you want to see "m-Learning" be part of your curriculum?	0	12	41	41	6







This study shows that the majority of the respondents generally accepted the use of mobile phones for teaching and learning. They found the inhibiting factors are accordingly small screens, text input, slow connectivity, expensive, and difficult to use.

In this study, the focus is to discover the acceptance of mobile phones for teaching and learning by a group of pre-service teachers. The experiment was generally well-received by my students. They found that it is fun to participate in the exercise. The findings of this study are summarized in the following:

- The respondents agreed that mobile phones can be used for teaching and learning. However, they were somewhat skeptical towards the quality that mobile phones can bring to education.
- The majority of the respondents were very liberal and interested to use mobile phones for teaching and learning.
- With this age group, SMS messaging was a popular way to communicate.
- Mobile phones were mainly used for talking, texting, taking photographs, and playing games.

CONCLUSION

The use of digital technology in the learning process and teaching practices in formal teaching is highly dependent on the ability of teachers of introducing it without jeopardizing the richness of the classroom environment, namely the attention that students need to follow the flow of argumentation and to guarantee the quality of the inquiring.

Although several studies value the importance of technologies in our media-enriched world and the "learn anytime and anywhere" motto associated with mobile learning, we argue that the classroom dynamics are becoming more and more at risk with the addictive dimension brought about by the ubiquitous presence of digital devices and social media in students' lives.

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Effective Use of Technology Tools in Academics

Dr. Sandhya Khedekar*

ABSTRACT

Online learning is the newest and most popular form of distance education today. Within the past decade it has had a major impact on postsecondary education and the trend is only increasing. In this paper we will explore what the experience of online learning is like for students and how it has changed the role of the instructor with effective use of Technology Tools in Academics. Online learning is education that takes place over the Internet. It is often referred to as "eLearning" among other terms. However, online learning is just one type of "distance learning" - the umbrella term for any learning that takes place across distance and not in a traditional classroom. Distance learning has a long history and there are several types available today, including: • Correspondence Courses: conducted through regular mail with little interaction. • Telecourses: where content is delivered via radio or television broadcast. • CD-ROM Courses: where the student interacts with static computer content. • Online Learning: Internet-based courses offered synchronously and/or asynchronously. • Mobile Learning: by means of devices such as cellular phones, PDAs and digital audio players (iPods, MP3 players).

Keywords: Technology Tools, Effective Use, Academics

^{*}Principal, Gokhale Education Society's College of Education, Sangamner, Dist-Ahmednagar, Maharashtra. ksandhya2008@gmail.com



Children raised with the computer "think differently" from the rest. They develop hypertext minds. They leap around.

-Dr. Michael S Gazzaniga-

Linear processes that dominate educational systems now can actually retard learning for brains developed through game and web-surfing processes on the computer."

-Peter Moore-

MOST POPULAR APPROACH TODAY IS ONLINE LEARNING

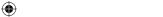
- A majority of academic leaders believe that online learning quality is already equal to or superior to face-to-face instruction. (The "no significant difference" phenomenon.) In years past, instructors had to create their "virtual classrooms" from scratch which was difficult and often led to poor results. Course Management System (CMS) software is utilized by just about all colleges today. CMS allow instructors to design and deliver their courses within a flexible framework that includes a number of different tools to enable learning and communication to occur. Popular for-profit CMS include:
- Blackboard (www.blackboard.com)
- WebCT (www.webct.com)
- eCollege (www.ecollege.com)
 Low cost alternative and open source CMS include:
- ETUDES-NG (http://etudesproject.org)
- Moodle (http://moodle.org)
- Angel (http://angellearning.com)

A New Paradigm for Teaching and Learning Online learning is catalyzing a pedagogical shift in how we teach and learn. There is a shift away from top-down lecturing and passive students to a more interactive, collaborative approach in which students and instructor co-create the learning

OER: "Open Educational Resources (OERs) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt and re-share them. OERs range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation." - UNESCO, Home Page dated 2nd October 2013







Success in open educational resources (OER) has been reported by the many Educational Institutions and distance learning students. It is unclear, however, how valuable OER are in learning and teaching. Approaches to OER policy and sustainability are just two other key aspects that remain unresolved across the sector. The use of digital resources is seen as one way of addressing the dual challenges of quality and equity. Open educational resources (OER), free of licensing encumbrances, hold the promise of equitable access to knowledge and learning. However, the full potential of OER is only realizable by acquiring: (i) greater knowledge about OER, (ii) the skills to effectively use of OER and (iii) policy provisions to support its establishment in

Searching OER-

· Google Advanced Search

the continent's higher education milieu.

- Creative Commons Search
- JORUM (UK)
- Xpert
- Connecting Repositories
- BASE
- FreeFullPDF
- Directory of OER
- http://nsouoer.krc.net.in/
- http://egyanagar.osou.ac.in/slm-list.php
- http://epgp.inflibnet.ac.in/
- http://www.ebookbou.edu.bd/
- http://nroer.gov.in/welcome
- http://www.sakshat.ac.in/
- http://oasis.col.org/

OER RESOURCES

 The Community College Consortium for Open Educational Resources - CCCOER is a joint effort by the OER Center for California, Foothill-De Anza Community College District, the League for Innovation in the Community College and many other







- community colleges and university partners to develop and use open educational resources (OER) and especially open textbooks in community college courses.
- OpenStax is a non-profit digital ecosystem serving millions of users per month in the delivery of free educational content to improve learning outcomes.
- Free Online Course Materials is a California State University MERLOT collection of over 35,000 open course materials.
- MIT OpenCourseWare (OCW) is a web-based publication of virtually all MIT course content. OCW is open and available to the world and is a permanent MIT activity.
- The Open Course Library, from Washington State University, is a collection of expertly developed educational materials including textbooks, syllabi, course activities, readings, and assessments for 81 high-enrollment college courses. 42 courses have been completed so far, providing faculty with a high-quality, affordable option that will cost students no more than \$30 for textbooks.
- **OER Commons** was created as a network for teaching and learning materials, the web site offers engagement with resources in the form of social bookmarking, tagging, rating, and reviewing.
- The Open Education Resource (OER) Foundation is an independent, not-for-profit organization that provides leadership, networking and support for educators and educational institutions to achieve their objectives through Open Education.
- WikiEducator is a community project working collaboratively with the Free Culture Movement towards a free version of the education curriculum by 2015. Driven by the learning for development agenda WikiEducator is developing free content for use in schools, polytechnics, universities, vocational education institutions and informal education settings.
- The World Digital Library (WDL) makes available on the Internet, free of charge and in multilingual format, significant primary materials from countries and cultures around the world.

CHALLENGES FOR HIGHER EDUCATION: "This vertical expansion requires consolidation at horizontal level. But, presently





higher education is facing several challenges like quality of higher education, faculty shortage; quality teachers, unable to keep pace with market demands, poor quality of curriculum, poor quality of research, poor quality of teaching etc. in majority of tertiary institutes." Recently, in a survey it was reported that many of our top institutes like IITs, IIMs not been in the top 200 list of universities in the world ranking. The reason is the teaching and researches in Indian universities are far below the standard of European or American and even among some of the Asian countries. If we compare it within our countries we will find wide disparities in terms of quality of teaching, quality of research etc. India has only fewer numbers of creditable institutes of higher education and it benefits fewer numbers of students. Since large force of human resource (youths) are studying in substandard institutions, transforming them into human capital is a challenge for Indian education system. Unfortunately, that advantage cannot be sustained unless we upgrade our education system. One area that is in desperate need of change is our higher education network. Networking of higher education institutes will help these institutes in more than one way. First, quality educational resources which is being created or stored in their repository is available free of cost. Secondly, it will improve the teaching learning standard in the universities or colleges which are suffering from poor quality of educational resources. Thirdly, it will also meet the paucity of teachers. Fourthly, it will enhance the capacity of students as well as teachers. Finally, it will enable students to compete globally.

BEST WEBSITES FOR ONLINE TEACHING JOBS Higher Education Websites

1. HigherEdJobs

http://www.higheredjobs.com/

2. Inside Higher Ed

https://careers.insidehighered.com/

3. The Chronicle of Higher Education

http://www.chronicle.com/section/jobs/61









Job Search Engines

4. Indeed.com, SimplyHired.com

http://www.indeed.com/, http://www.simplyhired.com/

Big Online University Websites

5. Jobs and Careers Pages of Online Universities

The really big online universities like Kaplan, ITT Tech, American Public University, and the University of Phoenix always have open positions, whether it's for part-time online adjunct faculty positions, full-time online faculty, instructional design gurus, graders or course mentors.

Searching the "Careers" section of large online school websites is a good idea, as well as a useful way to find out what the minimum requirements and payment schedules are for online faculty.

Online Teaching Job Boards

6. Adjunct Professor Online*

http://www.adjunctprofessoronline.com/online%20adjunct%20 jobs

7. Get Educated Job Boards

https://www.geteducated.com/online-teaching-jobs/positions-available

BENEFITS OF ONLINE TEACHING AND LEARNING:

Why online distance learning and why now? Online distance learning meets the needs of an ever-growing population of students who cannot or prefer not to participate in traditional classroom settings. These learners include those unable to attend traditional classes, who cannot find a particular class at their chosen institution, who live in remote locations, who work full-time and can only study at or after work, and those who simply prefer to learn independently. The minimum requirement for students to participate in an online course is access to a computer, the Internet, and the motivation to succeed in a non-traditional classroom. Online courses provide an excellent method of course delivery unbound by time or location allowing for accessibility to instruction at anytime from anywhere. Learners find the online environment a convenient way to fit education into their busy lives. The ability to access a course from any computer with Internet access,





24 hours a day, seven days a week is a tremendous incentive for many of today's students.

Some of the main advantages of online learning include: Convenience: 24/7 access from any online computer; accommodates busy schedules; no commuting, no searching for parking. • Enhanced Learning: Research shows increased depth of understanding and retention of course content; more meaningful discussions; emphasis on writing skills, technology skills, and life skills like time management, independence, and self-discipline.

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5

Importance of Research to Practice in Higher Education

Bliss Onil Gonsalves*

ABSTRACT

The quality of learning and teaching in education lies in the application and understanding of the knowledge that is gained, both by the students as well as teachers. Research is the essence of education wherein one applies the knowledge gained by thorough study. The practice and application of research in education completely eliminates the monotonous cycle of exams for evaluation. The American sociologist Earl Robert Babbie defines research as, "Research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. Research involves inductive and deductive methods." (htt) This paper seeks to identify the different philosophical views of research, it's types and their implementation, it's indicators and it's outcomes in education. The analysis of this paper is solely based on the cross cultural findings of students and educationists in India and across India. The aim of this paper is to sensitize the teachers and students to adopt and practice innovative methods of research in education using technology.

Keywords: systematic inquiry, inductive, deductive, philosophical views, indicators, cross cultural findings, technology.





^{*}St. Teresa's Institute of Education, S.v. Road, Santacruz (W), E-mail: stie73@gmail.com



INTRODUCTION

In today's fast paced world, education is demanding changes with respect to adoption of technology, qualified teachers, resourceful smart classrooms, good infrastructure, etc. However, in the long run, globalization has resulted in changes in all spheres of education and it takes place every passing second. Therefore the need arises for the adoption of thorough research and practice in the field of education, both by teachers and students to enhance the learning and teaching process and to actually apply the knowledge by gathering evidence through surveys, interviews, analysis in order to develop the skills of critical analysis and reaching conclusions and making generalizations from the results obtained.

The quest for education makes education more productive, i.e. it not only allows educators and learners to cross the threshold of merely delivering lectures and giving exams but also engages them in data collection, conducting research and analyzing theories by looking for references. Research allows educators and learners to explore their sources by going beyond the demands of the curriculum to learn something new and expand and apply their existing knowledge. (PRAMODINI D V, 2012)

PHILOSOPHICAL VIEWS OF RESEARCH

Research philosophy is nothing but our assumptions and our beliefs and how they influence our research process. (Saunders, 2015)

Education is a complex social undertaking, having myriad important dimensions that can be examined from psychological, sociological, and political perspectives, yet there is one question that is uniquely philosophical: "the question of determining the ends of education" (Wingo, 1974, p. 22) (Randall Koetting)

Thus research allows educators and learners to give a direction to their perspectives by means of investigating and gathering evidences. The main distinguished views of philosophy of research are as follows:

Positive Research Philosophy: This research philosophy is based on the idea of understanding the social world in an objective way wherein the researcher detaches himself from









personal prejudices, beliefs and values and becomes an independent researcher.

Interpretivist Research Philosophy: This research philosophy is the opposite of the positive research philosophy wherein the researcher understands the social world in a subjective way and builds up on his understanding, experiences and interpretations.

Pragmatist Research Philosophy: Pragmatism refers to world view and therefore this research philosophy is solely based on mixed methods of research wherein the researcher has the liberty to choose the strategies, techniques and tools which best support his research aims.

Realistic Research Philosophy: This research philosophy considers the ideas of the positive and interpretivist philosophies wherein the researcher views the social world in a realistic way. (Pranas Žukauskas, 2017)

Thus, the importance of practicing research has it's roots in philosophy.

INDICATORS OF A GOOD RESEARCH

A good research study can be characterized by a good use of resource materials for the investigation, findings and survey. The following are the indicators of a good research:

Problem/Topic: The educators or learners must see to it that they choose the appropriate problem or topic for their research study. For example 'Pedagogical Challenges Faced by a teacher' is a good topic for an educationist working on improving the learning and teaching process in an institution, whereas 'Conformity and Compliance' would be a good topic for a student of Psychology.

Relevance: The relevance of the research study is one of the most important indicators of a good research. The research should be relevant to the contemporary times and should aim at solving the problem in today's time or should address an issue that the world is facing today, not an issue which has been addressed in the past.





to the problem.

Validity: The validity of the research study is in fact the characteristic measuring tool of understanding whether it deals with a specific problem or issue and suggests ways or means in identifying the problem or providing a realistic solution

Innovation: The way a research is conducted, the different tools used to gather evidences or surveys; etc makes it more innovative and different. The quality of the research to present something worthwhile holds much value compared to the quantity of the research.

CASE STUDIES

Suresh Gyan Vihar University, India

This is a case study of the Suresh Gyan Vihar University which is in Jaipur, India established in 2008. This university has gained a lot of reputation in a short span of time because of it's achievements. The vision and mission of this university is "...to be a pioneering research driven university with focus on sustainability, ethics and values to impart industry relevant education and contribute to knowledge skills and expertise through continuous engagement in research, documentation and innovation". (Jain, 2019) This university is a pioneering research based institution which has been building many centers of excellence for research study and documentation. Following are the activities that this institution has undertaken to promote and adopt research work in the curriculum:

- Organizing conferences such as C3W (Convention on Climate Change and Water), CTM (Convergence of Technology and Management), etc for the purpose of sensitizing students and educators about sustainability.
- Organizing social service and awareness programs by inviting resource philanthropists like Dr. S. N. Subba Rao (Gandhian thinker and motivator), Kiran Bedi (Indian Police Service Officer), Rajendra Singh (waterman), R. A. Mashelkar (scientist), etc in order to empower and motivate the students to actually apply their knowledge to the contemporary times. (N R Narayana Murthy, 2007)

The university has also undertaken many self-financed and externally funded research projects by establishing research centers









like Centre of Excellence on Climate Change, Centre of Excellence on Renewable Energy. It has also established various committees such as Women Protection Cell, Research Pool, etc. (Jain, 2019)

University of the Arts, London

This is a case study of the University of Arts which is the largest British university with fine arts as a specialization having around 5,265 international students. The university conducts research in the fields of spanning art, design and communication. The UAL repository preserves the research work of the university's researchers and students and makes it available for references to a wider audience. The Archives and Special Collections Centre of UAL in London holds the Stanley Kubrick Archive and is based in the London College of Communication. (htt1) Following are the activities that this institution has undertaken to promote and adopt research work in the curriculum:

• UAL integrates various themes as a part of the research work and curriculum. Some of the themes are-

Living with Environmental Change- The students are expected to put their research work into creative practice for understanding environmental change, designing business models to address the issue of environmental change with the help of research. (htt1)

Digital Futures- UAL has reckoned the advancement of digital technology with the increase in globalization and thus it makes the students explore how technology affects the lives of humans and how it affects and impacts different communities and the economic growth. (htt1)

Community Resilience- UAL motivates students to use their creativity through art and design to address the issues in different communities by engaging in co-design and co-creation. (htt1)

• UAL has also established the 'UAL Research Season 2020' which explores book launch, projects that aim at achieving sustainability in the art of fashion, etc. (htt1)

Cross Cultural Survey

The following cross cultural survey was to examine how much importance research work is given in Indian education and abroad.







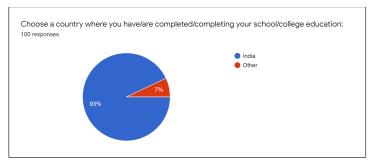
The purpose of this cross cultural survey was to compare the type of research based assignments and project work in education in India to the research work done in institutions abroad.

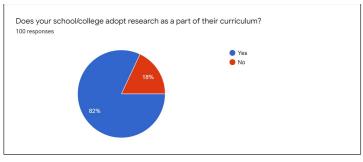
Hypothesis: Research is the essence of education and the application of knowledge highly depends on research.

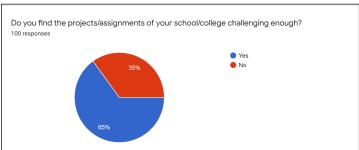
Methodology: Online survey of students studying in India and abroad (Higher Education).

Target group/ Samples: Students of higher education studying in India and abroad.

Online Survey:



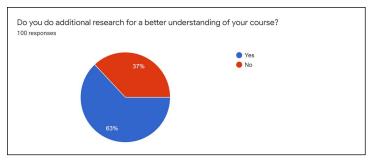


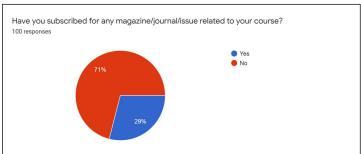


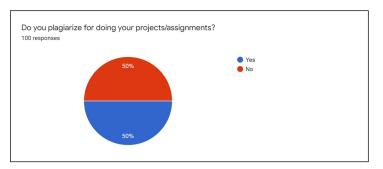


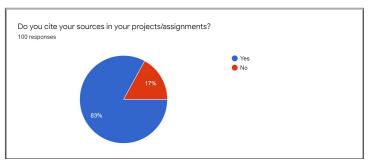








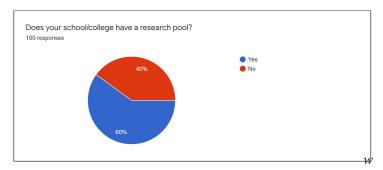


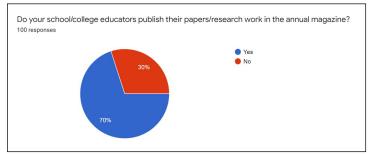


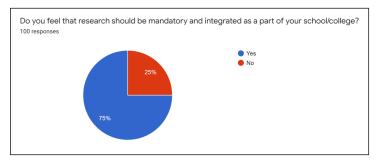












Results: The survey was conducted with 100 samples of students studying in India and abroad. There is a significant good response of 82% for adoption of research, 65% for difficulty level of research work, 83% for citation in research work, 70% for publishing of the research work by educationists, whereas 70% of students have not subscribed for any magazine/journal/issue, 60% of students have revealed that they do have a research pool in their institution and 50% of students have admitted of plagiarizing in their assignments in spite of being







higher education students. However, 25% students still do not feel the need for research work to be integrated as a part of their curriculum.

Limitations: Since the survey was cross cultural, getting responses from students studying abroad was not possible. The minimum number of responses from students studying abroad is the biggest limitation of this survey. Also, the size of the sample was 100 which take into account a very small group of the entire education sector.

IMPORTANCE OF RESEARCH TO PRACTICE IN HIGHER EDUCATION

In the past decade, there has been a different overlook into education. With globalization, there has been a rising need to implement new changes to meet the needs of the world. One of the major problems students face when they graduate and start working is the practicality; most students are not ready for a job as there is no application of knowledge and the students face a total alienation from the real world. For example including the internship and Action Research in the B. Ed (Bachelors in Education) attempts to train the trainee teachers in delivering quality lessons. Therefore, research should be included as one of the dimensions in the curriculum framework.

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6

Creating Innovative Learning Spaces

Miss. Eldrita Godinho*

ABSTRACT

Innovation is doing things differently and coming up with things that are out of the box. Innovation in education is not just restrained in the use of technology, but it is something that empowers students to become lifelong learners who are instruments of change. It is a tool that assists teachers to do things differently and in a creative manner in the classroom, which can aid the teaching-learning process. According to (Whitney,(n.d), "Innovation in education is stepping outside of the box, challenging one's methods and strategies to support the success of all students as well as ourselves. This transformation may be small or a complete overhaul, but it is done with purpose and supports the whole student". The purpose of this paper is to sensitize teachers concerning innovative practices in academic set-up which can be of great help to them as well as students to scrutinize, analyze and use different tools to uncover something creative as well as to create an innovative learning environment for students. Such innovative practices can help teachers step out of their comfort zone and come up with creative ways to engage students in learning better, satisfying their curiosity and relating to the abstract concepts better.

Keywords: innovative learning environments, innovative education, learning spaces, educational environment, educational innovation, educational practices

^{*}St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West) Mumbai-400054. E-mail: stie73@gmail.com



INTRODUCTION

Education in the past was all about chalk and talk. Learning was constrained within the four walls of the classroom. It was extremely rigid. It followed a teacher-centric approach where the teacher was actively involved in teaching while the students were passive listeners. In conventional education, it was also an accepted fact that students know nothing and they have to entirely depend upon the teacher for knowledge. The students were rarely allowed to express their views, opinions, ideas, etc concerning a concept or topic. There was little to no flexibility in teaching & learning. Apart from this rote memorization was given utmost importance. Education was limited to 3R's-Writing, Reading, and 'Rithmetic. However, today we see an enormous shift in education. The approach is more learner-centric or student-centric. Importance is given to the 3H approach-Head-on, Heart-on & Handson. Teaching and learning is no longer restricted within the four walls of a classroom. Rote learning that dominated education since ages is no longer preferred. Meaningful & experiential learning is given utmost importance.

Today the world is changing at a rapid pace. And to match its speed it is essential to be equipped with exceptional skills. Now more than ever, education has become more demanding. Millennials' are the future of this nation and to feed their requirements, exceptional quality education is required. Hence, schools are constantly collaborating with teachers to come up with innovative and futuristic methods of teaching and learning and are continually incorporating new teaching-learning techniques in the curriculum to groom children for their future.

Now the question is what is innovation then and how can one incorporate innovation in education.

Innovation is such an overworked concept. But it simply means thinking and creating something that is apart from the usual. Innovation in education is merely getting exceptional and creative ideas flowing and utilizing the best ones for educational instruction. It also means empowering individuals with the freedom to prosper on their own and thrive in this dynamic world resourcefully. (Valerie (n.d.), while defining 'Innovation in Education' on the same lines says









"Innovation in education means allowing imagination to flourish and not be afraid to try new things. Sometimes these new things fail, but it's awesome when they are a success. Without the right attitude, innovation would just be a word and the art of education would miss out on some great accomplishments."

Today in the 21st century, teaching-learning is not just limited to giving suggestions or guidelines to the students but allowing creative freedom to flourish within them. A futuristic approach is crucial, for the students to get primed for the ever-changing world and social environments outside the academic setups which are extremely grueling. To meet these demands it is essential to fabricate innovative, creative, open and reliable learning spaces for students to grow and allow them to be bold enough to take risks.

Nowadays, many teachers and administrators are open to take up challenges and create effective learning environments for their students. But however one of the biggest challenges that they face is to capture and sustain the attention of each student and convey ideas effectively to create a lasting impression on them. This is where innovation comes into picture which assists teachers to make their teaching methods more effective and create a classroom environment that is fun, enriching and student-friendly.

A few mentions of some amazing and innovative classroom setups that assist teachers to shift from their mundane teaching styles and reinvent their teaching methods are:

1. Outdoor Classroom

Some lessons are best learned when they are taught outside of the classroom. To prepare individuals to face challenges and compete fearlessly in the ever-changing world teachers need to allow individuals to explore new windows of opportunities, and for this very reason it is important to make learning spaces that are beyond the four walls of classroom wherein the individuals can find countless opportunities to make learning applicable. Outdoor classrooms require prior planning. Many topics in Math, Science, Geography, History, Environmental studies can be taught outdoors. Certain concepts are difficult to understand if they are taught in the abstract, hence outdoor classrooms give excellent opportunities for students to understand these concepts in the concrete. This can







be done by organizing visits to market places, banks, parks, forts, caves, beaches, farms, etc.

For instance, a Math teacher can teach mathematical concepts like budgeting, profit, loss, etc by taking students to a nearby store. A teacher teaching Environmental studies can teach food chain outdoors wherein the students can be distributed cutouts of grass. grasshoppers, frogs, snakes, and eagles and instructed to run away from their predators, the grass has to run away from grasshoppers, grasshoppers have to run away from frogs, frogs from snakes and snakes from eagles. At the end of it, the teacher explains that this is how food chain functions. Plants(grass) are the producers, animals that eat plants are called herbivores like the grasshopper is a primary consumer, animals that eat herbivores like the frog are secondary consumers or carnivores, animals that eat carnivores like the snake are tertiary consumers and finally animals at the top of the food chain like the eagle are apex predators. Apart from this History can also be made relevant and interesting to the students by organizing appropriate visits to museums, field visits, etc

2. Brainstorming Sessions

Brainstorming involves groups generating creative ideas spontaneously. (Osborn, 1953) has given a great definition for brainstorming- it is a technique by which a group attempts to find a solution(s) to a specific problem by amassing ideas spontaneously. Brainstorming in education simply requires groups to concentrate on a particular topic and allow free flow of unique ideas. Brainstorming sessions discourage passiveness among pupils as the entire class is required to actively participate in sharing their views and opinions.

Brainstorming sessions in the classroom help students to come up with some amazing ideas naturally. Prior planning is crucial to have a successful brainstorming session with favorable outcomes. As no answer or idea is perfect or wrong students feel comfortable sharing their views and ideas in class which they may otherwise not be confident enough to share. Brainstorming also gets the creative energy flowing in class. Brainstorming sessions teach pupils to respect others' opinions as well as build team spirit. The knowledge that is pursued even through simple conversations with peers during brainstorming sessions can allow students to







retain information better and longer than simply reading it out of a textbook or being told by a teacher.

For instance, brainstorming sessions are conducted wherein the teacher gives a topic, concept or pose a question to the students. The students have to think of relevant answers, words or ideas concerning it which are then mentioned on the board. These answers are accepted by the teacher without any judgments and finally, they are summarized and reached to conclusions.

3. Flipped Classrooms

Flipped classroom teaching technique is becoming increasingly popular nowadays, which the teacher can use in an academic-setup. In a flipped classroom, the teacher takes a back seat and plays the role of a resource provider, and it is the student who is made responsible for his/her learning. It is a great way to engage the entire class in independent learning. The students in flipped classrooms are encouraged to learn concepts on their own using various technological tools. Though it might sound weird that students are made responsible for their own learning, but many researches have shown that flipped classrooms have extremely positive results. Students learn, understand and remember the concepts better when they are put in charge of their own learning. (Livia Mihai, 2016)

4. Crossover teaching

Often teachers fail to realize that children can learn infinite things beyond the classroom. Crossover teaching is teaching students with real-world experiences. Here learning happens beyond the four walls of a schoolroom. Crossover learning gives students a break from formal schooling. It enables teachers to effectively combine both formal as well as informal learning domains to provide the best quality education to the students. Cross over learning also provides an opportunity for students to relate their personal experiences with content in the textbook. For instance, a teacher may pose few questions or a problem to the students the answers to which have to be worked on during a visit to a historical site, museum or maybe even going on a heritage walk. The teacher then summarizes the topic in the classroom by asking students, their views or answers to the questions posed.







5. Games, puzzles, crosswords and more

Everyone loves to play games, puzzles, crosswords, word searches, brainteasers, etc. which encourages logical-thinking and problem-solving. Teachers can use these wonderfully innovative activities to grab students' attention. Using these activities they can kill two birds with one stone, wherein they can use these activities to introduce a topic or may use it for recapitulation as well. Either way, it sure is to grab the attention of the students. For example, to introduce a topic on 'Uses of Metals' in Science or 'Occupation during the Vedic period' in History teachers can prepare a word search or a crossword where the students can find some common metals or occupations from it and relate it to the content.

6. Audio-visual aids

According to many empirical studies, it has been proven that an average human can have an attention span of only a few seconds. Hence, capturing the attention of students for a period of 20-30 minutes is difficult. Today, almost 80% of the classrooms are equipped with projectors and smart boards which is a boom to teachers. Audio-visual tools act as a great assistance to teachers which help them to have a lasting impact on the students. Teachers can also incorporate audio-visual aids to supplement textbooks. Teachers can display a wide range of documentaries, pictures, historic films, etc on these smart boards. Through audio-visual aids, teachers can take students on a virtual tour and transform the classroom into any place ranging from park, market, bank to even space. The possibilities that these audio-visual aids provide are countless.

7. Role-play

Role-playing is changing one's behavior to assume a role; it can be either unconsciously to fill a social role, or consciously to act out an adopted role. ("Role-playing," n.d.) Role-playing usually takes place between two people or a group. In a role-play selected students who are assigned certain characters are expected to act out roles to explore a particular scenario. Teachers' teaching Literature, History, Math, etc can conduct role plays to make the topic lively and content relatable to the students. By performing role-plays pupils' can get a better understanding of the feelings of the character and









his/her struggle which the pupils' may otherwise not get to know through simple narration. For instance, students can play the role of a banker, a shopkeeper, a historical personality like Mahatma Gandhi, etc.

8. Storytelling

Storytelling is another great way to engage and sustain students' attention. It is one of the most creative and innovative methods of teaching. It allows freedom of imagination among students. History, Literature, Science and other innumerable disciplines can be taught by narrating the content in a story form. Real-life stories can also be narrated which may intrigue the students.

It is not only innovative practices that make all the difference in students learning but also the learning environment plays a major role. Physical factors ranging from the arrangement of desks to the color of the walls in the classroom all play a role in how well the student learns. For instance, dark colors make the place feel boring while pale and warm colors draw in more light and make the classroom feel bright and welcoming. Apart from this emotional environment in the classroom also plays an important part. Students feel motivated to learn and share their opinions and ideas when they feel that their views are respected.

CONCLUSION

Today it is all about innovative learning. Parents are constantly striving to give the best quality education to their children. Hence, raising the bar for educational policymakers. Students are no longer passive recipients but they are constantly placed on the front foot. By implementing and incorporating a few of these techniques teachers can surely make a difference in each student's life. It only requires a tad more effort on the part of the teacher. Education is an enlightening experience. Age-old teaching methods are nowhere enlightening students. Hence, change is essential.

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Role of Mass Media in Political Socialization of Students

Dr. Cindrella Sandeep D'mello*

ABSTRACT

Political socialization, the process by which citizenship orientations are transmitted, is conditioned by shifts in the political, social, and economic contexts at the community, nation, state, and international levels. This research present paper discusses role of mass media in political socialization of the college students based on religion. Descriptive, survey and causal comparative method was used. A stratified random sampling technique was used and sample consisted of 896 college students perusing professional courses in greater Mumbai. The findings revealed a significant difference in the role of mass media in political socialization of the college students based on religion.

Keywords: Mass media, Political socialization, Religion

INTRODUCTION

Political socialization is affected through a variety of agents The most important among them are the family, education, peer groups, work place and mass media. It goes without saying that in modern societies all are influenced in socialization process by mass media. The effect of mass-media is the same irrespective of the young or the old or whether one lives in rural or urban areas. The composition of the society and the distribution of resources within the society exert influence on the role played by media. Political views can be formed on the basis





^{*}Assistant Professor, St. Teresa's Institute of Education, S.V. Road, Santacruz West, Mumbai - 400054. cindrellanunes@rediffmail.com



mass- media reports, that is why, each and every government controls its own media, simply because, media can have a deep influence.

The process of political socialization is to create a nominal interest among the people, to inculcate value, discipline, and teach people to become obedient, and to inculcate some superior values. Political socialization is acquired at three levels --- cognitive, emotive, and evaluative through these agents of socialization. These agents of socialization affect an individual, and thus the society as a whole. There are many agents of socialization, but which are the most important in society, with the most profound impact? In the present context it is necessary for us to know the role of these agents of socialization. Is there any influence of each agent on the members of society? Which agent plays a dominant role in political socialization of the individuals in the society? With these questions in reference the researcher felt the need to study the role of family, mass media and education in the political socialization of the college students.

OPERATIONAL DEFINITIONS

- 1. Role of Mass Media in Political socialization means actions and activities assigned or pattern of behavior expected from mass media by which students are taught, exposed or conditioned to the norms and values of the society with respect to political knowledge, political participation, sense of political efficacy and political trust to be a productive member of society.
- 2. Political Socialization is a process by which students are taught, exposed or conditioned to the norms and values of society to be a productive member of it. Political socialization means level of knowledge and understanding among students about political knowledge, political participation, sense of political efficacy and political trust. Further, these sub-variables are defined as
 - Political Knowledge means the level of knowledge and understanding of students about the political system of the country.
 - Political participation means different mechanisms used by students to express opinion and ideally exert influence on the government.
 - Political Efficacy means the amount of faith and impact students feel or believe they have upon their government. Political









efficacy indicates citizens' faith and trust in government and his/her own belief that he/she can understand and influence political affairs.

Political Trust means the basic evaluative orientation towards the government founded on how well the government is operating according to the students normative expectations.

OBJECTIVES OF THE STUDY

- 1. To Study the Role of Mass Media in the Total Political Socialization of the college students on the basis of Religion
- 2. To Compare the Role of Mass Media in the Total Political Socialization of the college students on the basis of Religion

HYPOTHESIS OF THE STUDY

1. There is no significant difference in the Role of Mass Media in the Total Political Socialization of the college students on the basis of Religion

METHODOLOGY

Descriptive, survey and causal comparative method was used for the present study.

SAMPLE AND SAMPLING TECHNIQUES

Stratified random sampling technique was used. The sample for the present study consists of 896 students in greater Mumbai colleges. (329 Males, 567 Females)

TOOLS

For the present study researcher constructed Political Socialization questionnaire. The tool consisted of 44 items. Each of the 44 items in the tool had Yes /No option. Students had to tick mark on any one option. *Yes* alternatives were given a score of 1 and *No* alternatives were given a score of 0. Its reliability index as per *Cronbach alpha* is 0.85.

Under each item there 4 options provided (Teachers, Peers, Academic interactions, Co-curricular activities) to assess the role of education with respect to political socialization and its sub variables. Each ticked option was given a score of 1 in order to assess role of education.







ANALYSIS OF DATA

Following descriptive and inferential analysis techniques were used in the study

- **Descriptive statistical analysis-** Measure of Central Tendency, Measures of Normality, Measures of Deviation and Graphical Representation
- Inferential statistics Anova, t-test

FINDINGS AND DISCUSSION

Table 1: f-ratios for Differences in the Role of Mass Media in Political Socialization of College Students on the Basis Religion

Presage Variables	Group		N	df	Mean	SD	t- ratio	p- value	Level of Significance
Religion	Christian	Between Groups	10297.6	2	5148.80	10.06	0.00	3.00	Significant at 0.05
	Hindu	Within Groups	456979	893	511.734				Level
	Muslim	Total	467276.6	895					

A significant difference was seen in the role of mass media in political socialization of college students based on their religion (F=10.06) and p < 0.05, therefore the null hypothesis is rejected. It can be concluded that there is a significant difference in the role of mass media in college students' political socialization on the basis of religion.

Table 2: t-ratios of Differences in the Role of Mass Media in Students' Political Socialization on the Basis of Religion.

Group	N	Mean	SD	t-value	p-value	Level of Significance
Christian-	177	52.50	30.83	1.97	0.00	Significant at 0.05 Level
Hindu	639	43.90	20.77			
Hindu-	639	43.90	20.77	1.97	0.52	Not Significant
Muslim	80	45.00	13.44			
Christian- Muslim	177	52.50	30.83	1.96	0.00	Significant at 0.05 Level







t-ratios for role of mass media in political socialization of Christian and Hindu, Christian and Muslim students was significant (t= 1.97, 1.96) and for both the groups, p<0.05. Therefore the null hypothesis for these groups is rejected. There is a significant difference in the role of mass media in political socialization of Christian and Hindu, Christian and Muslim students

However, it is also seen that t-ratio for role of mass media in political socialization of Hindu and Muslim students is not significant (t=1.97) and p>0.05. Therefore the null hypothesis for this group is accepted. There is no significant difference in the role of mass media in political socialization of Hindu and Muslim students,

Greater mean score of Christian students for role of mass media in political socialization than Muslim and Hindu students indicates that mass media plays greater role in political socialization of Christian students than Muslim and Hindu students respectively.

Mass media differs in its role of political socializing Christian, Hindu and Muslim students. Mass media plays a greater role in political socialization of Christian students than the Hindu and Muslim students' respectively. This could be because of encouragement and motivation provided by the religion in using mass media. Use of mass media for the religious activities could have an impact on the role played by the mass media in political socialization. Difference in the political interest of students belonging to different religion could be responsible for the role of mass media in their political socialization. Attitude of mass media towards different religions could be a factor contributing to this difference. Difference in the concern shown for different religions by mass media could add to this difference. Coverage of issues related to different religions could have an impact on the political socialization of these groups. Support provided by mass media to the different religions could have an impact on their political socialization.

Drives and initiatives undertaken by media for different religions could be a factor contributing to this difference. Justice provided, safety ensured, protection of rights, freedom guaranteed, equality of religions could be some of the factors responsible for the role played by the mass media in political socialization of the students belonging to different religions. Image of different religions formed by mass







media could be a factor responsible for the role played by mass media in their political socialization.

Richa Singh (2014) reported that the 'middle class' has increasingly sought to influence national agenda and policies through new forms of citizens' activism and on issues that directly affect it. Copeland, Gary A.; Davis, Donald M. (1984) indicated that fundamentalist issues, political distrust, political power, and political knowledge tended to be the areas of distinction between viewers and non-viewers of religious broadcasts. Hsuan-Ting Chen; Yonghwan Kim (2011) reported that exposure to political talk shows contributed to increases in political knowledge and online political participation; however, it lead to negative attitude towards the politics. According to Okafor, Godson Okwuchukwu (2013) the influence of the mass media is a contentious issue when it comes to childhood socialization. While the issue of media has been extensively investigated, the "third parent's role as a socializing agent has been overlooked. Media has the ability to impact on the thoughts, feelings, and behaviour of individuals. Yousaf, Zahid. (2012) studied private news channels role in altering the political perception of Pakistani people. Researcher concluded that the social diffusion of electronic and digital technologies has made instantaneous communication possible, rendered many border checks and controls over information infective, and exposed an enormous consistency to diverse cultural outputs and values.

CONCLUSION

As we Indians are celebrating 70th Independence Day, the country is in need of people having political knowledge to select the apt persons to rule the country. No social system works in isolation. It is quite obvious that both education and politics influence each other to a lesser or greater extent. The students are going to be the citizens of the country. They are going to rule the country and they are going to be ruled. If the students are politically socialized, it would be of immense help to the society. They would become good citizens of the country to rule and to be ruled. If we expect young people to be committed to democracy, they must know what it's worth is.







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8

Social Media: Your Purchase with the Advent

Dr. Joan Lopes*

ABSTRACT

Social media technology has become a growing phenomenon with many and varied definitions in public and academic use. They allow users to create profiles and utilise those user-operated profiles to interact with each other. They further provide a platform for the expression of interests and the discovery of commonalities between users while enabling them to build and maintain connections and invite others to join communities. Social media in education, being a relatively new concept has been the central concern of many educators, teachers and parents. In the short time that it has existed, people all over the world have welcomed it as an indispensable addition. For a generation who spends a majority of their time in the virtual space, focus must lie on the key interests and needs of students while using social media in education. Also, social media provide ways to enhance connections with students as it brings them closer by alleviating the necessity of physical presence.

INTRODUCTION

Social media technology has become a growing phenomenon with many and varied definitions in public and academic use. Social media generally refers to media used to enable social interaction(s). The term social media technology (SMT) refers to web-based and mobile applications that allow individuals and organisations to create,



^{*}St. Teresa's Institute of education, Santacruz, Mumbai.



engage, and share new user-generated or existing content in digital environments through multi-directional communication. In addition to these features, SMT also contains design elements that create virtual social spaces encouraging online interaction(s), thereby broadening the appeal of the technology and promoting transitions back and forth from the platform to face-to-face engagement.

SOCIAL MEDIA IN CLASSROOMS

Learning today is not just about studying a textbook but also interaction and communication. Until a few decades ago the latter aspect of learning was limited to the physical space of a classroom. Now however, social media has widened the dimensions of the available spaces for the social component of learning.

WhatsApp and Education

Technology has also transformed the field of education. Its influence has been reflected in the amount of available literature that has discussed the benefits of technology assisted learning and the wide range of educational resources available to the general public in the World Wide Web (WWW). More recently, there has been a heated debate about the usefulness of the new generation of mobile phones namely smart phones for educational purposes. Researchers have argued that along with their regular uses i.e. sending text messages, surfing the WWW, etc. the diverse applications (apps) available in smart phones open up a plethora of other choices for educators and consequently ample opportunities to enhance students' learning and to make studying a worthwhile experience for them (Godwin-Jones, 2011; Yang, 2013). This study aims at understanding how often, secondary school students in Mumbai turn to social media - namely WhatsApp messenger, for educational purposes.

STATEMENT OF THE PROBLEM

"A Comparitive Study of the Use of Social Media among Secondary School Students."

NEED FOR THE STUDY

Research has indicated that social media has created a lot of debate and speculation amongst educators on how these media can be used to support learning, but there have been rather few studies so far. The









teaching strategy plays a key role in supporting students in moving from using social media to support coordination and information retrieval to also using such media for collaborative learning when appropriate.

Thus we as teachers need to understand the current use of social media, primarily WhatsApp, by the students, and how to encourage students to use such a medium appropriately so as to lead to better learning.

AIM OF THE STUDY

"To study the comparison of the use of WhatsApp among students of standard VI and VIII."

OBJECTIVES

- 1. To study the use of social media among students of standard VI and VIII.
- 2. To compare the use of social media (WhatsApp) between standard VI and VIII
- To evaluate the use of social media among students of standard VI and VIII.

OPERATIONAL DEFINITIONS

Secondary school students: Students between the ages of 11 and 16 or 11 and 18, who have finished primary school education.

Social media: Computer mediated tools that allow people to create, share or exchange information, ideas and pictures in virtual communities and networks.

WhatsApp: An instant messaging app for smartphones that uses the Internet to send text messages, images, video, user location and audio media messages.

SIGNIFICANCE OF THE STUDY

The findings of this study will enable parents, teachers, educators and founders of social media companies to know how WhatsApp is used by secondary school students and the knowledge gained can be utilised by educators to influence teaching strategies to integrate the usage of WhatsApp as a teaching aid and to provide help to students outside of the classroom by creating WhatsApp groups. Further research in this







field of education could be carried out by educators as an offshoot of this particular study.

SCOPE AND DELIMITATIONS OF THE STUDY

- The sample comprised of students of the S.S.C board only.
- The sample comprised of students of the English medium only and not the vernacular medium schools of the locality.
- The sample was restricted to the school located in suburban Mumbai and not South Mumbai and Navi Mumbai.
- The sample comprised of students of standards sixth and eighth only and not all the standards.
- The sample includes students of standards sixth and eighth who do not suffer from any kind of disability

METHODOLOGY

The researcher has used the descriptive method to carry out the research.

SAMPLING

For this study, there were a total of 30 secondary students of std. VI and IX located in the Mumbai region.

The researcher used a questionnaire from the website -SurveyMonkey.com and a rating scale for her study as the researcher found this tool the most apt tool to use for her study. In this tool the respondents responded to statements in writing. The researcher explained the meaning of items that were not clear and the purpose of the study.

QUANTIFICATION OF DATA

After the collection of data, the responses were quantified by given scale values to each items as discussed. After which for each student the total scores were calculated. The rating scale used to study the levels of use of social media (WhatsApp) by standard sixth students was a 3 point scale to quantify the response. The response categories were as follows:

- **1.** Always
- 2. Sometimes
- 3. Never









The questionnaire was scored numerically using 1, 2 and 3. 1 is the lowest indicator of use. 2 is the middle indicator and 3 is the highest indicator.

The lowest possible score is 10 and the highest possible score is 30.

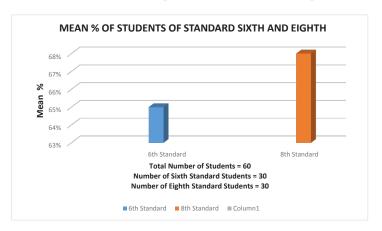
DATA ANALYSIS

The researcher for her study has made use of the bar diagrams to depict her statistical data.

DESCRIPTIVE ANALYSIS

INTERPRETATION: On analysis of these results the researcher has found that the use of social media (WhatsApp) is higher in the students of standard eighth as compared to the students of standard sixth.

The researcher has chosen to carry out a study to compare of use of Social Media (WhatsApp) for students of standard VI and VIII and to find out whether WhatsApp has proved useful in their studies as a source of information and helped in their overall development.



In order to study the use of social media, the researcher has used a standardized tool (questionnaire) for the students of Our Lady of Health School, Sahar. The researcher studied the responses of the students and her findings were tabulated and graphed accordingly.

The next step was the analysis and interpretation of the data collected because the purpose of the analysis is to summarize the completed observation in such a way that they yield answers to the research







questions. The last step was to study the data collected and how to use it to draw conclusions. The researcher then had to give recommendations and suggestions and point out areas of further study.

As per the data collected, the researcher came to a conclusion that the students of the higher grade use more of social media (WhatsApp) compared to the students of the lower grades.

Just as we prepare our kids for life in the real world, we should prepare them for life in the online world. We as parents and teachers, we need to help promote the use of internet use for educational purposes by encouraging online projects to be done by the children. Also they may be advised to look up the internet to gain more information about topics mentioned in the curriculum and share these videos and articles with their peers in class. The schools can start to use social media in their own right to talk to parents, display and explain classroom activities and, encourage feedback and debate.

FINDINGS

From the above data we can conclude that, permission given by parents to use the internet was higher in standard eighth students compared to standard sixth students. Also the use of WhatsApp for educational purposes was higher in standard eighth students compared to standard sixth students. Majority of the eighth standard students directed their friends to WhatsApp for educational information. The eighth standard students found sharing of messages more easy as compared to sixth standard students. Thus, the eighth standard students found WhatsApp very helpful in studies as compared to sixth standard students. The eighth standard students found WhatsApp very helpful in their overall development as compared to sixth standard students.

SUGGESTIONS FOR FURTHER STUDY

Following are the areas of further study:

- This study can be conducted among the students of secondary school studying in other boards like CBSE, ICSE, IB AND IGCSE.
- This study can be conducted among the students studying in vernacular medium schools.
- This study can be conducted among the students in the schools of Thane district and Navi Mumbai.









• This study can be conducted after a WhatsApp group is created whose members are students and a teacher of a particular subject and where exchange of information (in the form of informative videos and educational websites) takes place between students and teachers, where students can ask any doubts regarding the subject the teacher teaches. This experiment can be carried out for a month and then students' knowledge on that particular test can be tested

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9

An Empirical Study to Analyze the Effect of Visual & Social Media on Cognitive Abilities & Active Reading of Youth

Sujit Tilak*, Kailas More** and Raveena Shetty***

ABSTRACT

Human is a social animal, so he has accepted social media as integral part of his life. But here we need to understand its role and effect on our learning process. There is gradual revolution in our learning processes such as from a) Reading extensively i.e. mugging-up, chanting etc. b) Using different reading strategies such as skimming, summarizing, etc. c) Using visual media i.e. picture, animation video etc. to d) Using visual social media (VSM) e.g. YOUTUBE, BLOG etc. However new learning process i.e. VSM has underestimated the importance of active reading, and it has become the topmost medium of learning rather than reading. Today VSM plays very important role in learning process, as (Visual Media) VM are more impressive than book, so that authors blog on website also transformed, as printed words became shorter and became more visual into microblog, multi-media microblog, Vlog etc. but using VSM for learning goes hand-in-hand with using mobile devices more for

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^{*}K. J. Somaiya College of Engineering, Vidyanagar, Vidyavihar (E), Mumbai – 400077. E-mail: sujit.tilak@somaiya.edu

^{**}K. J. Somaiya College of Engineering, Vidyanagar, Vidyavihar (E), Mumbai – 400077. E-mail: kailas.more@somaiya.edu

^{***}S. M. Shetty College of Sci. Comm. and Mgt Studies, Hiranandani Powai, Mumbai -400076. E-mail: raveena.shetty999@gmail.com



other activities e.g. facebook as one kind of addiction, which affecting human physically and mentally for e.g. distraction, anxiety, mind volatility etc. the above research paper is attempt to understand the impact of VSM on cognitive ability and active reading of youths, the finding of which can help us developing and designing techniques and corrective measures to enhance active reading.

Keywords: Cognitive abilities, Visual Social Media, Active reading, Multimedia blogs, Learning Process

INTRODUCTION

According to one research in Cuban (2001), we remember 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we hear and see, 70% to 90% of what we say while doing things. This proves that Visual Social Media (VSM) impacts our cognitive function but we practice reading medium for cognition very scarcely. However when VSM was not available, that time reading was only medium available for learning. But majority of youth have accepted that they read less. The hours spent for active reading decreases as youth stated using VSM more for learning process. It is quick and instant to use the VSM for learning and understanding the toughest subject and improve the cognition. But at the same time excessive use of VSM also adversely affected the youth in so many different ways. Such as patience and determination level of youth are diminishing, reading seems to be very tedious and boring activity for them, they remain distracted, unfocused, volatic etc. reason for that is as we use electronic devices more we became addicted to it and they can also lead to cognitive impairment, affecting nervous system etc. and further it affecting our reading culture

OBJECTIVES

- 1. To study and analyse the impact of VSM on cognitive abilities and active reading of youth.
- 2. To discuss about the corrective measures to be followed for reducing negative impact of VSM.







3. To create awareness among youth about problem connected with excessive use of VSM and its repercussions.

RESEARCH METHODOLOGY

The data for the research collected through primary and secondary research. The primary data collection is processed and divided into two parts, which is used for two different purposes. One is 'review analysis of study' second is to support conclusion through 'five point rating scale questionnaire'. Responses of 100 youths has been collected for research through google form and personal talk. Secondary data collected through previous research work, textbook, articles etc.

PART A) REVIEW ANALYSIS Sampling

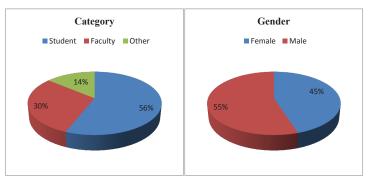


Fig.1 Fig.2

The sample size for the research was 100 youths from different field including 56 students, 14 teachers, and 30 others. The given graphs show that 55% participants are male and 45% participants are female.

Hypothesis

Hypothesis tested during the present study

H1 Participant who uses VSM for learning actively read less.

H2 Participant who uses VSM excessively for learning becomes volatic







H3 Participant leastly or scarcely evaluates, critically analyse, and summarize the information gained through VSM as compared through reading.

Analysis

Unpaired t test results

Questionnaire includes 10 questions with option 'YES', 'NO', and 'MAYBE'. Reply of population i.e. in 'YES' for question 1 to 10 has been taken in to consideration for calculation of T Score, for e.g. 32% female and 47% male say 'YES' to that, they spend more time on computer and other devices for different purpose and so on. Mean Score of reply 'YES' for Group 1 (female) and Group 2 (male) are 23 and 32.8 respectively.

P value and statistical significance

The two-tailed p value equals = 0.03361134

By conventional criteria, this difference is statistically significant.

Confidence interval

The mean of group one minus group two = -9.8 95% confidence interval of this difference from -16.3546 to -3.24538

Intermediate values used in calculation

T=2.3

Df = 18 (2.10)

Standard error of difference = 6.5546

Data review

Group	G 1	G 2
Mean	23	32.8
SD	5.944	12.0904
SEM	1.879716	3.82332







Result Analysis

Overall 79% spends more time on surfing internet and 13 % disagrees for the same. Fig.3 Overall 54 % agrees that they spend more time on watching Facebook and Youtube videos online and 31 % denies for the same 54% Fig.4 78% use Youtube and Blogs as a learning medium and 13% disagrees for the same. 78% Fig.5 77% thinks that Youtube and Blogs are useful in learning and educational purpose but 2 % denies for the same. Fig.6 50% finds it sufficient, satisfactory and comfortable to use Youtube and Blogs online and 15% denies for the same. 50% Fig.7







54% thinks that excessive use of Youtube and Blogs etc. for learning diminishes the 20% reading culture and active reading but 20 % denies for the same. 54% Fig.8 46% thinks that watching videos for learning are replacing their brain activity 28% or Videos playing their part of mental process 28% denies for the same. 46% Fig.9 31% thinks that watching more videos online makes their mind volatile but 36% denies for the same. Fig.10 48% thinks that watching more videos online affecting their health in so many ways but 19% denies for the same. Fig.11 41% thinks that watching more videos online will put bad effect on our future generation but 31% denies for the same. 41% Fig.12





The study also shows that 5 % of participant use only Youtube and Blogs for their learning and studies, whereas 15% use Youtube and Blogs more but read less for learning and studies and 53% uses reading and Youtube and Blogs both.

26% thinks that reading is best mode of learning difficult concept where as 39% and 26% thinks classroom teaching and Youtube and Blogs are best mode respectively.

46% agrees that they read less with 36% agreed that they read only for two hours.28% participant agrees that excessive use of electronic device is main obstacle, which prevent them from achieving academic excellence, whereas 24% and 20% thinks that engaged in other activities like dance, job etc. and mental health is major obstacle respectively.

PART B) LIKERT SCALE

Analysis of Data

After distributing five point rating scale questionnaire to 100 participant the overall level of agreement and disagreement gave the following outcome and comparison.

Scale value assigned to each of the five responses.

Level of Agreement	Scale value
SA (Strongly agree)	5
A (Agreed)	4
N (Neutral)	3
D (Disagree)	2
SD (Strongly disagree)	1

To calculate mean score, formula used as follows.

Mean score =
$$\underbrace{(FSA*5+FA*4+FN*3+FD*2+FSD*1)}_{N}$$

Here F stands for frequency and FSA stands for frequency of strongly agreed and so on.

Responses

The mean score of all 100 responses was calculated in table as follows:









Sr. No.	Statement	Mean Score
1.	VSM diminishes reading culture	3.67
2.	After using VSM participant impatiently turn toward watching more video for break or recreation etc.	3.74
3.	After using VSM participant skip to play video games, Facebook and Whatsapp for longer period (participant agrees that its obstacle in learning)	3.51
4.	Participant likes VSM rather than books for learning	3.36
5.	Participant prefers VSM rather than reading complete book for particular subject	3.34
6.	Participant scarcely or leastly evaluate, predict, critically analyse, summarize information gained through VSM as compared to Reading a book	3.30
7.	Participant creates less idea as the watch VSM more rather than reading for e.g. creation of new literature etc.	3.23
8.	Participant faces distraction, unfocused after visualizing VSM more in learning rather than reading	3.43
9.	Participant thinks active reading has declined	4.05
10.	Participant thinks excessive use of VSM increases the volatility of mind	3.51
11	Participant thinks that VSM learning makes them addicted to use mobile and other technology more which prevent reading	3.78
12	Participant feels unpleasantness, confusion, distraction and vomit from steady flow of learning etc. after using VSM	2.99
13	Participant excessive use of VSM affect persistent or determination of learning	3.44

Above table indicates that mean for all the questions are more than (3.00) norms that means most of the population of the study agrees







that there is negative impact of excessive use of VSM on cognitive abilities and active reading of the youth.

CONCLUSION

We always evidence the certain level of transition and mutability in our society. That variability is inevitable and we have to accept it. Our education system has been transformed and has laid to many changes since modern period. Now time has come which supports the terminology i.e. 'Reading less libraries' or 'Reading less education', as importance of reading has been drastically declined in recent year. However VSM have the prospective to affect vast field of cognitive territory, but experimental research of impact of VSM on cognition is in the process. The potential impact of excessive use of VSM which leads to cognitive impairment is still uncertain. At present we can only predict that excessive use of VSM has the possibility of synthesizing or constructing the symptoms of initial stage of cognitive impairment such as dementia. Alzheimer etc. but it needs scientific base to draw certain kind of conclusion. However with this research we can ascertain that there is a negative impact such as volatility of mind, lack of determination and persistency etc. due to excessive use of VSM, moreover there is negative impact on cognitive abilities as well as on our active reading skills.

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10

Reflective Practices among Social Work Educators in Maharashtra— A Literature Review!

Mr. Cletus Zuzarte*

Keywords: Reflective Practices, Social Work Educators, Theory-Practice Linkages, Learning from Practice, Knowledge and Learning Processes, Evaluation, Innovation, Inclusive Practices, Effective Practices, Professional Learning, Continuous Professional Development, Life Long Learning

INTRODUCTION

Social Work (S.W.) Education has been a matter of concern for all social work practitioners with the growing understanding and positioning of social work as a 'Profession'. The skills of the social work professional need to be articulated and its applications in the field need to be highlighted as it stems from those who have propounded theory. The ability of the social work educator to promptly and precisely apply and point to the application of reflective practice theory in the context of being an educator in the field will highlight the importance and acceptability of the profession to a great extent. The social work educator would need to carefully understand and make concrete applications of reflective practice in order to achieve this end. Before we attempt to understand who is a social work educator let us first understand

^{*}College of Social Work, Nirmala Niketan, 38, New Marine Lines, Churchgate, Mumbai 400020. cswnnprincipal@gmail.com; cletusz@gmail.com







how we look at how we understand education and an educator who is primarily a teacher.

Education has been commonly understood upon as the process of facilitating learning, or the acquisition of knowledge, skills, values, beliefs, and habits. Etymologically the word 'education' has been derived from the Latin word 'educatio' meaning breeding, bringing up or rearing, which is understood in the context of 'educo' that is (i.e.) I educate or I train. Philosophically the term education as propounded by Socrates which highlights a deeper understanding of the term as it seeks to explain education as a process of 'bringing out or drawing out' of a student the meaning and understanding of that which is sought to be learnt. Education involves two primary actors, the 'educator' or commonly understood as a 'teacher' and a 'student' who is a 'learner'

There are various settings through which education is imparted, it could be through an informal or formal setting for that matter through any situations or experiences that has a formative effect on the way one thinks, feels, or acts which may actually contribute towards a persons' education.

A 'Teacher' is commonly understood as someone whose job is to teach, especially in school; while a 'Professor' is a teacher in a college or university. A teacher is also understood as a person who has a role to perform which includes the task to impart knowledge, instruction in a formal or informal setting. There are various competencies and qualities that are required of teachers and which can also can motivate teachers to opt for this profession often with a sense of altruism and ownership and not merely performing a job or a task.

Competencies required by a teacher is broadly understood as a person who is a manager of instruction, a caring person, an expert learner and a cultural and civic person. The Organization for Economic Cooperation and Development has argued for the necessity to develop a shared definition of skills and knowledge required by teachers. A common understanding has been attempted to arrive at three common areas of competencies (European Union) that requires teachers to work with others, work with knowledge (technology & information) and work in /with society. To summarize these it would be best understood scholarly as having 'knowledge' (subject / domain specific), 'craft skills' (lesson planning, teaching technologies, managing students,







monitoring and assessments) and 'dispositions' (values and attitudes, beliefs and commitments)

Teaching is a process which aims to bring about meaningful learning through a method that is morally and pedagogically acceptable. It involves a teacher, a learner, content in form of knowledge facts information and skill to be imparted as a deliberate intention on the part of the learners to learn, and finally a method that respects the learners' cognitive integrity and freedom of choice. Teaching is also understood as an art and science through which an educator imparts knowledge to students in a formal setting, employing a variety of methods

There are various methods through which education is imparted. These include teaching, training, storytelling, discussion and directed research to name just a few. Education frequently takes place under the guidance of educators or teachers. From the point of view of the learner or student there could also be a process of self-learning where learners can also educate themselves. The methodology of teaching is called pedagogy.

A Social Work Educator in this context is understood as one who possesses the domain specific knowledge of 'social work theory'; has the required skills that apply these theories to practice; and the required dispositions that is required of a social work professional and is able to communicate the required learning to students in the classroom and in the field. The question that many social work educators are raising is that, "have social work educators (i.e. those who have not only obtained a professional education in social work and are technically qualified as per UGC requirements,) been able to engage in this process of reflective practices so as to become effective and efficient in their profession? According to Dr. Murugan from Alagappa University, "Social work educators can play an important role to lend credibility to this process by indicating the contribution of theory and indigenous knowledge to the profession and linking concretely classroom learning to field experience and realities". (2018).

Professional /domain specific teachers and more so social work educators play an important role in the design of curriculum and its development. This process is central to an educator's activities, and the process of owned responsibilities. Individual teachers draw out from their own experience and contribute towards curriculum planning and develop its content, through the use of case studies, examples,









documented data and research (sometimes even field action experience). The understanding of the concept of a narrative is important in this process. Contextual narratives, document analysis, the use of metaphors, philosophy, rules, principles, values, beliefs and images can be used effectively in curriculum development.

CURRENT SCENARIO CONCERNING TEACHERS / EDUCATORS

Teachers / Educators enter the professional field of education through a very simple interview which tests the candidates capabilities and experiences and the mandatory requirement of an discipline specific post graduate degree along with an entrance test certificate taken by the candidate at the National or State level (NET/SET). Educators enter into the profession sometimes "without any proper programme preparation, knowledge of pedagogy and educational psychology. The conventional thinking in the academic circles is that appropriate scholarship in a discipline is enough to become a good teacher in higher education". It has been observed that often "University teachers learn how to teach by the pure trial and error to one method of teaching lectures method to complete their teaching roles, modern knowledge however present a different concept of teaching learning must change to bring and develop new and advanced skills and apply it in their class room teaching". (MEd Notes, Mumbai University).

Focusing on the process of teacher education, i.e. being an educator at the tertiary level, there is a growing realization by professional educators that there is a need to have a clear guidance for educators into "initial professional education, their subsequent induction in service training and their professional development as educators" (NCERT). Professional development is an affirmation of the three specific areas of knowledge, skills and disposition, which has been articulated by Joyce and Showers, 2002 as effective programmes that should be based on curricular and instructional strategies that have a high probability of affecting students' ability to learn and in turn students' learning achievement, thereby professional development should:

- 1. Enrich teachers' knowledge of the subjects being taught
- 2. Sharpen teaching skills in the classroom
- **3.** Keep up with developments in the individual fields, and in education generally







- 4. Generate and contribute new knowledge to the profession
- Increase the ability to monitor students' work, in order to provide constructive feedback to students and appropriately redirect teaching.

There have been many indigenous methods engaged by educators to enhance and build on existing knowledge. For e.g. one experienced teacher shared on her process to engage in reflective practices. She traced her journey of being a teacher and her growth through every class that was taken with her students. One of the most productive means has been the process of reflecting on the lesson plan and where one has failed to communicate effectively and where one needs to improve in the case of future delivery of class content. Another field based educator spoke of building a 'knowledge spiral for field work'. There are different challenges and constraints faced by teachers, depending on the various levels of experience in the teaching profession and the responses they had to the situations faced.

HOW DO WE UNDERSTAND REFLECTION?

Reflection is a way of approaching an understanding of one's life and actions, as exemplified by Socrates' notion of reflection as 'the examined life' for ethical and compassionate engagement with the world and its moral dilemmas (Nussbaum, 1997).

The various processes of reflection as outlined particularly by Schon (1987) can be summarised as the analysis, synthesis, evaluation and feeling. Calderhead (1989) defined reflection broadly; 'as an acquisition of attitudes and skills in thinking. It is a process of becoming aware of the influence of societal and ideological assumptions, especially ethical and moral beliefs, behind professional practice'. The two components are clearly not discrete since good practice will, for example, consist of the practitioner eliciting the client's or service user's reflections on the practice. Reflective practice is more focused on professional practice, but reflection is relevant to all aspects of living.

Many writers make a distinction between reflection and critical reflection (Fook and Askeland, 2006). The idea of critical reflection seems to be more associated with writers in the education field, in particular adult education Part of the difficulty in pinning down exactly what reflective practice and critical reflection mean may be due to the







fact that there has been a great deal of development of these concepts in widely varying fields, from the health and welfare professions to law, management, business and education, and from both research and practice traditions.

According to Judy Cooper, "while reflective practice is about individual workers striving to improve their practice, critical reflection refers to the variety of academic theories and models that have been developed to help social workers become reflective practitioners". 'It is this academic knowledge, combined with effective supervision, that creates a reflective practitioner', says Professor Keith Brown, director of the Centre for post-qualifying social work at Bournemouth University. And, he claims, 'it is fast becoming a lost skill among social workers and supervisors'.

WHAT IS REFLECTIVE PRACTICE?

Let us first understand some of the basic theories that enable us to build on the term 'reflective practice'.

The cycle of experiential learning was first described by **Kolb** (1974) and has been developed by **Gibbs** (1988) and Schon (1987). In essence, individuals reflect on their experience, construct new theories of action by abstract conceptualization, experiment with these in practice and then re-enter the cycle of reflection, developing practice on each iteration of the cycle.









Schön (1987) is of the view that real life practice situations can be messy, involve uncertainty, and may challenge our preconceptions and beliefs. It is clear from Schön's idea that a reflective practitioner requires honesty and openness to engage in a critical 'reflective conversation'. "Reflective practice is a way of reducing the gap, by unearthing the actual theory that is embedded in what professionals do, rather than what they say they do". In this sense reflective practice is essentially a way of improving practice. (Donald Schon: 1983)

Reflective practice according to **Dave Evans** is split into two interrelated components, practice and reflection, which are clearly not just as simple as doing and thinking. Practice, is an event which is usually, but not always, observable, which Michael Eraut (1994) calls 'practice performance'. "It includes cognitive and affective aspects as well as the behavioural. On the hand reflection, implies a number of processes which are largely linked to the practice event" (Evans, 1997)

According to **Jones and Joss**'s description of the reflective practice approach, "we believe that one cannot consider knowledge separately from understanding or from the values implied by selective acquisition and use of different forms of knowledge, or from the context in which knowledge is being applied. Knowledge is never complete, and is constantly being modified through practice and reflection. It is the understanding and the integration of theoretical developments with practice theory and practice itself that are important for competent professional practice" (Jones & Joss, 2002)

Paulo Freire in his book titled, 'Pedagogy of the Oppressed' speaks of 'dialogical action' and the process of conflict between thesis and anti-thesis that is able to bring about synthesis through an active engagement with powerless groups. He speaks of 'conscientization' in the context of the awakening of critical consciousness through the investigation of 'generative themes' and the stages of investigation. This perspective can lend a deep insight into the process of critical thinking and reflective practices in the context of the education pedagogy.

According to Jan Fook (2002) critical reflection places emphasis and importance on an understanding of how a reflective stance uncovers power relations, and how structures of domination are created and maintained.

Reflective Practice is understood as 'an ongoing scrutiny of practice based on identifying the assumptions underlying it'. (Jan Fook, 2005).

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"The terms 'reflective practice' and 'critical reflection' are often used interchangeably. Both involve an ongoing scrutiny of practice based on identifying the assumptions underlying it. 'Reflective practice' emerges principally from the work of Donald Schon (1987), who was one of the first to alert us to the crisis in the professions often represented by the perceived gap between formal theory and actual practice. In Schon's thinking, reflective practice was a way of reducing the gap, by unearthing the actual theory that is embedded in what professionals do, rather than what they say they do. In this sense reflective practice is essentially a way of improving practice. This understanding of Reflective Practice has been taken from Jan Fook's chapter on "Reflective Practice and Critical Reflection" in the book by J. Lishman (Ed.), 'Handbook for Practice Learning in Social Work and Social Care'

The understanding of Reflective Practice is to "apply critical reflection and analysis to inform and provide a rationale for professional decision-making". To hone this capability, social work educators have an important role in shaping the processes and enabling students to become social work professionals and obtain the desired and expected outcomes. "Social workers are knowledgeable about and apply the principles of critical thinking and reasoned discernment. They identify, distinguish, evaluate and integrate multiple sources of knowledge and evidence. These include practice evidence, their own practice experience, service user and carer experience together with research-based, organisational, policy and legal knowledge. They use critical thinking augmented by creativity and curiosity" (Professional Capabilities Framework, Munro Report, 2010).

RESEARCH STUDIES ON REFLECTIVE PRACTICES

In the article by **Jonathan Parker** entitled "Developing Effective Practice Learning for Tomorrow's Social Workers", considers some of the changes in social work education in the UK particularly focusing on practice learning in England. The changes and developments are briefly identified and examined in the context of what we know about practice learning. The paper presents some findings from a small scale qualitative study of key stakeholders involved in practice learning and education in social work and their perceptions of these anticipated changes, which are revisited at implementation. The implications for practice learning are discussed. Through a qualitative study the author took a purposive







sample with participants from three stakeholder groups with an interest in practice learning and they were asked if they would like to participate. The tool used was semi-structured interviews concerning their views on changes occurring in practice learning. The findings revealed how the respondents believed that practice learning was crucial to social work education, that 'it was not simply an academic programme of study but was also a practice and vocational course during which students can begin to link theory and practice and suggested that increased length of time may assist the process' (Parker, 2007)

In the article "The Role of Self-Awareness and Reflection in Social Care Practice," Greene, Aoife examines social care worker's understanding of self-awareness and reflection, the impact of reflection on their practice, and the factors which support and/or impede reflection in their practice. This qualitative study contributes to knowledge by exploring the role of self-awareness and reflection in social care practice among a small group of social care practitioners in Ireland. The study included interviews with seven social care workers who were pursuing a postgraduate qualification in social care practice. The main findings indicate that the participants had a general understanding of self-awareness and how to reflect on practice with critical incident reports being identified as the most common tool used to reflect. The findings also suggest that the role of self-awareness and reflection in social care practice appears to be an ideological concept which the participants believed to be an essential professional skill, but in fact it was not exclusively employed in everyday practice.

Learning from reflective practice in another discipline the author **Jorwekar Gokul** in his article "Reflective Practice as a method of learning in medical education: history and review of literature" speaks of reflective practice is an analytical practice in which an individual (student) adds a personal reflection about the action, incident, situation or thought. The author has reviewed literature to find out history, various models, genesis and application of reflective practice in medical education. He has made an attempt to focus on role of reflective practice in present medical education and profession. His study employed literature review as he studied the history of reflective practice from the Buddhist era to Roman Philosophers; Kolb, Schon & Gibbs, David Boud & Terry Borton (Reach and Teach - Gestalt Therapy) which covered Reflection in Action and Reflection on Action







His major findings were a discussion on Gibb's Reflective Model - Description, Feeling, Evaluation, Analysis and Conclusions (General & Specific) arriving at the point that reflective practice is unstructured or semi structured approach directing learning. It is a learning process that can be taught to professionals. Reflective practice is an important part of teacher education and advancement programs. For better learning, the students must be engaged in reflective practice. Adding reflection to learning fosters the clinical thinking and decision making ability. He used the illustration of reflection writing with an example of the Borton Model - - What happened?, So What? & What Next?, as part of the process.

Speaking of the process of reflective writing process, **Lakshmi** in her article "Reflective Practice Through Journal Writing And Peer Observation: A Case Study, examines Peer Observation and journal writing of two teachers working on the same language programme in terms of a variety of topic headings, and suggests that reflective practice can be a useful tool for both classroom research and teachers' professional development.

The Teacher participants maintain Journal writing and Peer Observation as a means of reflective practice. They consider these practices as a mirror, which reflects the teacher's own image as a practitioner. The post-reflection discussion reveals that the teacher participants believe in reflective practice as an effective means of self-evaluation and of developing sensitivity to students' learning. The teachers' reflective practice involving the processes indicate their progress towards being producers of legitimate knowledge out of their own lived realities as professionals who are capable of constructing and sustaining their own professional development over time.

The method of study was a case study approach with an investigation into the role of reflective practice in enhancing ESL teachers' awareness of their own classroom teaching contributing thereby to their professional development. The sample size being two ESL Teachers (English Speaking & Language) The tool used was a semi-structured questionnaire. The questions focused on the teachers' beliefs about ESL teaching-learning process, teaching strategies, opinion on reflective practice, and the use of bilingualism while teaching. The sampling strategy - through informal interviews the teacher expressed his personal opinions about various aspects of ESL teaching. The teacher expressed her reflections through





Journal writings which was followed by post reflection discussion with teachers. There was Peer Observation & Analysis of Teacher 2 classroom teaching in six classes.

The two teachers led through the reflective practice through journaling and peer observation expressed 14 concrete areas where improvement in their methodology and process could lead them to become better teachers.

- The teachers' classroom decisions were informed ones because they were based on inquiry-derived understandings because of reflective practice.
- The decisions the teachers made and the actions they took proved to be experiences of educational value for them. This happened because their reflection on, and inquiry into, their classroom practices took place not as a set of prescriptive skills but rather as a mindset which Dewey (1933) described as a set of attitudes consisting of open-mindedness (seeking alternatives), responsibility (recognizing consequences), and whole heartedness (continual self-examination).
- Their reflective practices through journal writing or peer observation or video recording created what Clandinin and Connelly (2000: 42) call "a new sense of meaning and significance" which brought a new sense of meaning and significance to their classroom work.

In the article by **Mishna and Bogo** titled "Reflective Practices in contemporary social work classroom", the authors attempt to provide analysis and strategies about teaching social work practice and its interrelationship with a diverse society. They present a framework to aid instructors' understanding of and response to conflict situations in the classrooms. They propose the reflective practitioner paradigm along with the contributions of mindfulness, as useful for social work instructors in examining their practice as educators.

The authors through their study aimed to prepare a framework to aid instructors' understanding of and response to conflict in the classrooms. Study of two scholars - Schon (1983, 1987) articulated a theory of reflective practice & Kabbat-Zinn (2003) which spoke of mindfulness based stress reduction, their insights speak of Teaching Diversity and Oppression Both scholars and researchers emphasize that in order to manage demanding issues and affect within the classroom, instructors







must foster an environment that feels "safe," and that enables students to examine their own values, listen to others, and both challenge others and be challenged. paper,

The authors contend that both the term "safety" in the social work classroom and the focus on strategies to achieve safety, are limited. They propose that the main concern should be assisting the instructor to respond effectively to those interactions with in the social work classroom that prove challenging so that diversity content and related emotions enhance, rather than interfere with, the learning of social work content

The methodology of study was Literature Review which had a sample size of a study of two scholars - Schon & Kabbat-Zinn

- Schon (1983, 1987) who articulated a theory of reflective practice &
- Kabbat-Zinn (2003) who speaks of mindfulness based stress reduction.

Various strategies were discussed and finally eight principles were proposed to deal with students - as social work educators one needs to have the sustained ability to pay attention to individual students and to inter actions within the classroom, and to recognize tension or emotional turmoil that could erupt into confrontation and conflict.

The authors propose the reflective practitioner paradigm along with the contributions of mindfulness, as useful for social work instructors in examining their practice as educators. A large number and variety of strategies have been put forth in order to deal with the tensions and emotions that may arise in the classroom. The following principles are present:

- 1. Reflect in and on practice
- **2.** Recognize the importance of professional development as an educator
- Solicit feedback from students
- Anticipate emotion and conflict and expect to mishandle some incidents
- 5. Along with ground rules, prepare students for the possibility of conflict

- **6.** Engage in recovery and repair
- 7. Consult with colleagues
- **8.** Engage in teaching development activities.





In the action research entitled, "Critical Reflection in Community Work Education: A Social Work Curriculum Addressing Social Deprivation and Poverty" by Ernest W.T. Chui, Donna K.P. Wong, Y.C.Wong, Cecilia L.W. Chan, C.K.Law from University of Hong Kong and Vicky Tam from Hong Kong Baptist University, speak about the pedagogical problem of enhancing critical reflection in community work education. Through this approach the researchers "focused on the community work skills laboratory offered to second year Bachelor of Social Work students in the Department of Social Work and Social Administration. The six-month-long laboratory consisted of a series of eight seminars on issues related to community work and a community project in an assigned agency and client group. The class of 70 students was divided into nine laboratory groups, each working with a different agency and client group. The action research design for this project was centred on the action-observation-reflection-change cycle drawn from the Kember and Kelly (1994) and Zuber-Skerritt (1992) models. A series of quantitative and qualitative data collection and assessment methods were employed, including classroom and field observations, focus group interviews with questionnaires, and the Competence and Aptitude Assessment in Community Work Scale which was developed for the purpose of this project.

From the data collected, it was obvious that there had been considerable effort on the part of the students in critically reflecting their own attitudes and biases and their levels of adequacy of knowledge and practice competence. The project identified contextual as well as personal factors that affected teachers' effectiveness in bringing about critical reflection in students. These included, Saliency of social issues, Work load incurred by a compact curriculum, Student's disposition and background, Instructor's teaching style and interaction with students, the Effectiveness of critical incidents, Collaboration with agencies and front line workers, the Client's real life exposition enhances student's learning and most important of all was the implications drawn out for Effective Community Work Training / Education.

The action research revealed that the design of the skills laboratory was effective in imparting the three domains of values, knowledge and skills of community work to students. Given its action oriented nature in contrast with the lecture method of traditional classrooms, the laboratory design provided natural situations for students to assimilate real life







issues in their affective, cognitive as well as behavioural domains. "With a specific focus on critical reflection, it can be postulated that, based upon the students' self-reflection and the instructors' on-going observation and assessment, there has been remarkable change in the students' capacity to engage in critical self-reflection. It is believed that students benefit enormously from this conceptual ability such that they may sustain independent learning in the future.

The direct experience of encountering real people, real issues and social problems, in the flesh, provides the most vivid material for students to think about, reflect on and then integrate into their mental horizon. This capacity of critical self-reflection can help a learner to derive his/her own schema of processing incoming information, and then coming up with his/her own framework for organisation and assimilation. This essentially serves the missions of education in general, and social work and community work education in particular, which deals with such social issues as social injustice, poverty, social deprivation and the like" (Chui et all, 2011)

Citing Schon (1983, 1987) who presented the theory of reflective practice, Mishna and Bogo explain how Schon studied a range of professions and critiqued the prevailing notions of professional practice. "Traditionally, primacy is given to formal theory, which is valued and taught in academic preparation of practitioners as if these theories only need to be applied in a linear fashion to real world problems. Schon proposed that many situations encountered by professionals are complex, "messy," indeterminate, and frequently ethically challenging. He observed professionals as they worked in seemingly automatic ways with unexpected or puzzling situations that did not fit theoretical propositions or match standard procedures. He noted that professionals engage in what he termed reflection in practice—while they are actually engaged with a situation, they are creatively applying learning from both current and past experiences and attempting to figure out what might work. Professional practitioners also engage in reflection on practice—reflection after the experience to derive learning and new understanding from a situation. Through these two intertwined processes, practitioners reshape their approaches and develop 'wisdom and artistry.' " (Mishna and Bogo, 2007). According to the authors this notion of reflective practice as a way to enhance practice through reflection has been increasingly reflected in its application in the







health, education and social work sectors in the United Kingdom. And this approach can certainly be applied to social work education. In her article she goes on to making concrete applications of reflective practice to situations of diversity experienced in the classrooms and how she as social work educator was able to deal with the situations effectively.

Elaborating further in order to emphasize on reflective practice the authors Mishna and Bogo draw on three categories of knowledge. "The first category refers to prepositional or scientific knowledge" associated with the practice and empirical literature of the profession. In this case, the knowledge base involves social work education, for example, factors that promote positive learning in the social work classroom. The second category entails experiential knowledge gained from reflecting on one's own practice in similar teaching situations and articulating general and specific principles. The final category of knowledge arises out of instructors' personal knowledge or self-awareness about their specific issues and needs. Reflective thinking allows practitioners to express their own practice wisdom gleaned from their experiences and build a "local, contextual craftknowledge" (in cite Atkinson & Claxton, 2000, p. 3), which can support further planning and actions. This body of literature also acknowledges actions that emanate from what has been variously termed intuition (in cite Atkinson & Claxton, 2000), or creative and automatic behavior (in cite Schon, 1983), and referred to as reflection in practice. As such, it recognizes that not all practice is deliberate and the result of conscious planning; it arises from highly developed tacit or implicit knowledge or wisdom to generate solutions in the moment. This type of practice wisdom often has eluded concrete definition and explication and is, therefore, difficult to study (Eraut, 2002)." (Mishna & Bogo, 2007).

Keeping the definitions discussed above on 'reflective practices' in mind, we still need to delve further and understand the core components of this concepts in the context of the goal of being an educator namely to raise the standard of teacher quality. How do we define professional development and how do we link it to reflective practices? Are they synonymous, interdependent or mutually exclusive? According to Zwozdiak-Myers central to one's development as a teacher is the 'commitment and capacity to analyse







and evaluate what is happening in your own lessons and use your professional judgement both to *reflect and act* upon these analyses and evaluations to improve pupil learning and the quality of your teaching'. She has presented a 'framework of Reflective Practices' that attempts to capture the understanding of 'reflective practice' within nine discrete dimension, leading the educator to effectively engage in reflective practice, plan for and structure one's professional growth and development. This approach to professional development points to 'concepts of the teacher as reflective practitioner, a researcher and an extended professional' This framework seeks to highlight the distinctions between ways of thinking and speaking aspects of teaching, learning and practicing teaching – which are descriptive, comparative and critical reflective conversations, revealing a movement from surface to deep to transformative learning.

A CONCEPTUAL FRAMEWORK ON REFLECTIVE PRACTICE

The Researcher will draw out the main concepts and basic framework of the Research from the author Paula Zwozdiak-Myers who has clearly elucidated on the topic of Reflective Practices of Educators. She has proposed the 'Framework of Reflective Practice', a perspective which is "based around nine dimensions, which have been identified through a synthesis of the literature on reflective practice advanced by eminent scholars, researchers and practitioners within the field. This construct supports Moore's (2000: 146) proposition that teachers should perceive themselves 'as researchers and theorists as well as practitioners' as the pursuit of becoming a reflective practitioner is not so much about the acquisition or development per se of the skills and areas of knowledge required for successful teaching, but rather concerns 'the particular skills needed to reflect constructively upon on-going experience as a way of developing those skills and knowledge and improving the effectiveness of one's work' (ibid.: 128). (Zwozdiak-Myers, 2010)

Reflective Practice is defined as: 'a disposition to enquiry incorporating the process through which student, early career and experienced teachers structure or restructure actions, beliefs, knowledge and theories that inform teaching for the purpose of professional development'.

Two very broad, interrelated strands – a disposition to enquiry and a process – are embedded within this definition.







Ways in which the work of key proponents within the field contribute toward an understanding of the characteristic features associated (are contained) with the first strand.

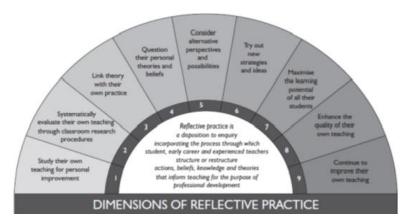


Fig.1: Framework of reflective practice

The second strand, captures reflective practice as a process, incorporates numerous concepts advanced by theorists over past decades, particularly in relation to the nature of reflective activity and its translation into professional practice. (Paula Zwozdiak-Myers: 2010)

Reflective practice as a disposition to enquiry has at its roots the early work of Dewey (1933), specifically in relation to the reflective attitudes of open-mindedness, responsibility and wholeheartedness, which he considers to be both prerequisite and integral to reflective action.

Open-mindedness refers to the willingness to consider more than one side of an argument and fully embrace and attend to alternative possibilities, which requires an active desire to listen to more than one side and recognise that formerly held views and beliefs could be misconceived. Reflective teachers question and challenge why they do as they do (Zeichner and Liston, 1996) by interrogating assumptions, beliefs and personal theories from a range of perspectives or lenses (Brookfield, 1995), which can be evidenced in those who are open to scrutiny and change.

Responsibility refers to the disposition to carefully consider the consequences of actions and willingness to accept those consequences. Dewey (1933: 32) argues that misconceptions and confusion can arise







when individuals 'profess certain beliefs [yet] are unwilling to commit themselves to the consequences that flow from them'. Teachers who evaluate their own practice and question whether the outcomes are effective, for whom and in what ways, as opposed to those who merely question whether their objectives have been met (Zeichner and Liston, 1996), demonstrate responsibility.

Wholeheartedness refers to the way in which open-mindedness and responsibility come together, through an interest in and enthusiasm for some situation or event. Whole-hearted teachers examine their assumptions, beliefs and the consequences of their actions regularly and approach each situation with a view to learning something new (Zeichner and Liston, 1996).

The *key attributes* of extended professionals; and qualities associated with the teacher as a professional signpost how reflective practice as a disposition to enquiry has been interpreted. This highlights not only the importance for practitioners to clearly express and frequently review their own professional values but also that these values need to derive from an understanding of what constitutes appropriate ethical practice in educational contexts. To realise this aim teachers must justify how their own values are underpinned by the expectations of what those within the profession regard as appropriate, legitimate rules of engagement. (Zwozdiak-Myers: 2010)

The Code of Professional Values and Professional Practice for Teachers and in the case of Social Work Profession which needs to be articulated, can provide a framework to illustrate what aspects of teachers' professional behaviour must conform to specific rules when conducting their duties. Thus, an important task for teachers is to 'work out their educational values, not in isolation and abstraction but in collaboration with colleagues and amid the complexities of academic life' (Nixon, 1995: 220). This can, in part, 'be accomplished by reflecting critically on what it is that you do and importantly, justifying why it is that you are doing it, in relation to what is happening around you in your own classroom and the wider context of the academic institution'. (Zwozdiak-Myers: 2010)

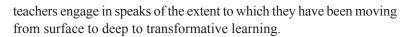
Reflective Conversations are distinct from descriptive and comparative conversations. There is a need to explore how reflective conversations and narrative enquiry incorporate different types of discourse and different patterns of thinking. One cannot make judgements about the capacity of individuals to engage in reflective practice or routine action. The types of discourse and reflective conversations











Nine Dimensions of Reflective Practice: (Zwozdiak-Myers: 2010)

1. Study one's own teaching for personal improvement:

In this dimension Paula speaks of how critically constructive self-reflection and considered response underpin the art of self-study, namely the centrality of reflection and evaluation within the improvement process; Quoting Schon (1987) she draws links between knowing in action and reflection on action using the experiential learning theory. Kolb's exposition of experiential learning theory, which captures the learning modes of concrete experience, reflective observation, abstract conceptualisation and active experimentation, has been explored within the process of learning, in addition to the concepts of preferred learning styles and learning spaces



2. Systematically evaluate one's own teaching through classroom research procedures:

The key characteristics of action research and processes are embedded within this paradigm. This consists of ethical implications behind research involving human participants; research instruments and techniques are used to gather, collate, analyse and evaluate data; various criteria appropriate for assessing the validity of action research are used.

Undertaking action research enables an educator to identify issues and address problems identified through observation, reflection



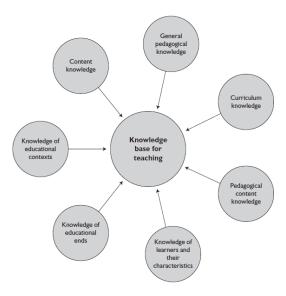




and evaluation. This means thinking critically about what you are doing, finding ways of systematically investigating it and making sense of your investigations. As an educator one gains experience, confidence and learns to challenge, communicate and explore ideas, one becomes a more effective teacher and both an expert and a critic of one's own practice

3. Link theory with practice

As an Educator one needs to understand the nature of theory that is relevant; how episteme (to know, to understand, to get acquainted) and phronesis (wisdom relevant to practical action) relate to teacher cognition and teacher behaviour within a Gestalt framework (whole is greater than its parts). The teacher could explore the seven sources of the knowledge base for teaching (Shulman,1986) and how these may be developed. Further the teacher also needs to understand the significance and use of processes inherent within pedagogical reasoning and action which explores the cyclical process of comprehension, transformation, instruction, evaluation, reflection and new comprehension. This enables the educator to consider the relationship between theory and practice as one engages in praxis: that is, thought-full-action and action-full-of-thought (Freire, 1972)







4. Question one's personal theories and beliefs:

Personal theories and beliefs have been defined and the multiple sources from which they originate. Teachers' personal theories and beliefs can influence teaching in the area of the development, academic achievement, behaviour and motivation levels of their pupils. This highlights the need for teachers to subject personal theories and beliefs to careful scrutiny and critical analysis to make explicit the taken-for-granted assumptions, ideologies and intuitive screens we may have about teaching and which can unwittingly underpin much of our work. As Palmer (1998: 2) writes: 'When I do not know myself, I cannot know who my students are. I will see them through a glass darkly, in the shadows of my unexamined life – and when I cannot see them clearly, I cannot teach them well'. Social cognitive theory (Albert Bandura) is introduced by Paula to explain, in part, how the decisions we make and the ways in which we exercise control and personal agency are strongly influenced by our self-efficacy beliefs.

5. Consider alternative perspectives and possibilities

The epistemological assumptions underpinning the constructive approach to learning have been introduced and their implications for the construction of professional knowledge in teaching have been explored in several ways. These include an analysis of how professional learning conversations, the mentoring relationship, peer observation and pupil voice enable you to reflect upon pedagogical issues from multiple perspectives.

The key message is that interpretation is a meaning-making process, contextually driven and situationally bound, and several possible meanings can be associated with any course of action, dependent upon whose perspectives and interpretations of experience are sought. An open-minded attitude and receptive, collaborative disposition to enquiry enables you to engage with alternative perspectives and possibilities from a wide range of lenses that, in turn, can change your internal representations of knowledge in response to these perspectives as well as through cumulative experience.

6. Try out new strategies and ideas:

When teachers ask searching questions of educational practice that arise from their own circumstances and interests, they exemplify an







active approach to professional learning by seeking new strategies and ideas, evaluating and reflecting on their impact and trying out new practices and ways of working to improve their teaching, thus achieving one's educational goals, objectives and learning outcomes.

As teachers actively critique and challenge what they claim to know, the insights gained are expressed in terms of new possibilities for teaching and they reconstruct and reframe personal theories and assumptions about their own practice. Through integrating new strategies and ideas into their own practice, teachers take ownership of their teaching as they appropriate new knowledge, which gives them the degree of autonomy needed to make professional judgements in response to each unique situation (as per the needs of diverse learners).

Research on effective teaching to promote student learning presents a wide range of active engagement techniques, these include an analysis of the purpose and potential uses of modelling, questioning, explaining and small group work. As one tries out these strategies and ideas and evaluates their impact on one's own teaching and pupil learning a teacher can build upon and extend one's existing repertoire to provide pupils with powerful and meaningful learning opportunities to achieve a wide range of educational goals.

7. Maximize the learning potential of all the students

As an Educator one needs to recognize that children and young people have a right to education and an equal opportunity to learn, also as affirmed by the United Nations Charter of the Rights of the Child and Youth. India is a signatory and has further strengthened certain aspects like the Right to Education and various Food and Nutrition Schemes that enact the law and work towards inclusion of minority and disadvantaged groups of students. Teachers need to work at personalised learning aims that narrow the attainment gap and raise achievements for all pupils.

Developments leading to the introduction of the Assessment for Learning Strategy in 2008 can be explored along with their research-based principles to guide classroom practice and help every student make good progress and become an independent









learner. A pedagogy of personalised learning, underpinned by the principles of progression, differentiation, relevance and assessment for learning and which aims to narrow the gaps in attainment and raise achievement for pupils by tailoring provision, can be introduced. The key message is that one needs to design a range of teaching, learning and assessment experiences in light of the difference and diversity presented by one's students, to ensure the principles of inclusion are enacted and the learning potential of all students can be fully realised.

8. Enhance the quality of your own teaching:

Paula shares on how opportunities created for student learning are inextricably linked to the quality of teaching; variables and principles associated with effective teaching and learning, including the growing impact of ICT.

Teaching is a demanding profession that requires a complex matrix of knowledge, skills and understanding to judge which strategies are most appropriate in accommodating the needs of different groups of learners and each individual learner. Society now expects educational institutions to: deal effectively with different languages and student backgrounds; be sensitive to culture and gender issues; promote tolerance and social cohesion; respond effectively to disadvantaged pupils and pupils with learning or behavioural problems; use new technologies; and keep pace with rapidly developing fields of knowledge and approaches to pupil assessment. Teachers need to be capable of preparing pupils for a society and economy in which they are increasingly expected to become self-directed learners, able and motivated to keep learning over a lifetime.

The complex nature of teaching requires teachers to build a range of knowledge bases they can draw upon and relate to their own practice. Building integrated knowledge bases requires an active approach to learning that leads to understanding and linking new to existing knowledge. Moon (1999) presents the view that learners approach their studies with a cognitive structure, a flexible network of ideas and knowledge, shaped by prior learning. This cognitive structure provides the framework within which teachers locate new ideas, and will, if deep learning is to occur, be challenged and modified







in the process. The euphemism transformative learning describes situations where teachers are prepared to abandon preconceptions and re-examine their fundamental assumptions about themselves, the subject matter and the nature of knowledge.

Some key debates and theoretical positions concerning what constitutes pedagogic expertise and quality teaching are needed from an international perspective along with the need to assess the quality of your own teaching in relation to the new Teachers' Standards and Criteria for 'outstanding' trainee teachers.

9. Continue to improve your own teaching

The key competencies for Educators are embedded within the Organisation for Economic Cooperation and Development (OECD) framework (2003) which outlines the core characteristics of professional learning communities and how communities of practice and online social networks can support teacher learning. Effective professional learning communities and communities of practice have been introduced. This enables you to recognise how the collective capability of the community as a site of learning through mutual engagement, joint enterprise and shared repertoire can significantly contribute toward your professional growth and development as a teacher.

Continuous Professional Development (CPD) essential features elaborates on how to create a well-structured Professional Development Portfolio to evidence your on-going growth and development as a teacher. Of particular significance is the need to evaluate the impact of professional development and for opportunities to be tailored to meet the developmental needs of individual teachers at different career stages. The main purposes of the Professional Development Portfolio (PDP) provides guidance on how you might go about creating a PDP to evidence your knowledge, skills, accomplishments, expertise, goals and aspirations as you progress throughout your teaching career.

Responding to the innumerable problems that the social work profession attempts to respond to, gives rise to various types of practices of social work, social welfare activities and social services in India. "At times all the three practices are used interchangeably for the well-being of the marginalised people at large. There is a need for social







work educators to prepare students to work effectively in the field through a deep understanding of 'reflective practice'. This conceptual understanding can be applied concretely by social work professionals who are engaged in specialized activities like counselling, therapeutic action, social action, community organization, resource mobilization, environmental modification, service facilitation, development planning and so on with special reference to the skills, values, and principles of social work profession". (MSW Notes, Alagappa University)

CONCLUSION

Over the years the social work profession has been able to evolve and develop itself with various well-defined principles which guide its practice. The specific skills that a social worker needs to imbibe through social work educators need to be refined and tested through experience acquired and tested in the field by students. "Despite initial hiccups in the beginning, there is continuous increase of knowledge in the field of social work in India" (Alagappa Univ, 2018).

This article through literature review has attempted to ascertain the existing reflective practices and processes that social work educators employ as they teach and supervise social work students in class room and field work settings, the researcher will use these readings especially the framework proposed by Paula as the basis for the doctoral research to be undertaken in the context of Maharashtra, India. The reflective learning processes would examine the concrete application of reflective practice theory as applicable to the social work education context and possibly even evolve theoretical constructs from which would possibly emerge a handbook on reflective practice for social work educators.

This topic has been my passion from my young days as I was so impressed with the quote of Socrates the Greek Philosopher, who said, 'An unreflective life isn't worth living'. In fact he could be mentioned as the one of the foremost thinkers on this topic along with Aristotle and continues to inspire me to emulate my ideals into practice as an academician, thereby making it effective for myself, my colleagues in the profession and the students that I serve through my professional social work practice". It is a hoped that after having explored this theory and framework through this study, the findings would contribute immensely to enhance academic social work profession and the processes thereof.







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11

Eco-Friendly Classroom: Let's Make Earth a Better Place

Miss. Dalvina Ferreira*

ABSTRACT

Education plays a vital role in shaping the minds of future learners as it prepares them to deal with every circumstance in life. It's not only about reading and writing but education is more about how we utilize it in our daily life and towards our self-growth. A school should not just concentrate on helping the students read a few passages or write an answer during their assessment but visualize and work on their holistic development. A pupil is an important aspect in the field of education, similarly, the environment is a crucial part of humans and all the natural beings surviving on this planet earth. The purpose of this paper is to sensitize the pupil regarding the degraded environment, it's ill effects on human beings and another natural habitat, and varied ways to cope with the loss using education. Eco-friendly teaching strategies could be adopted; reusing paper, making used pens for artwork, or a simple step could be carried on by the teacher wherein she can shift the classroom outside the classroom set up which could not only give the student break from monotonous setup but also help conserve the energy, the students can make use of steel stationery.

Keywords: Education, Eco-friendly Education, Teaching-Leaning, conservation, Green Classrooms

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^{*}St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West), Mumbai-400054. E-mail: stie73@gmail.com



INTRODUCTION

Malcolm X says, "Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

Man has several basic needs including food, clothing, shelter, currently, education has become a pivotal part of human life. Education is making oneself apt and filling oneself to the utmost knowledge. The focus of education is the social, physical, emotional and intellectual development of man. The word education derives from the Latin words 'Educated', 'Educare' and 'Educere'. Education means to train(process to draw from within), Educare is to bring up and Educere means to bring forth. Therefore education is to develop the inborn qualities of a child to the full

DEFINITIONS

"Education is a process of in which and by which knowledge, character, and behavior of the young are shaped and molded"

-Prof. Drever

"In the wider sense, it is a process that goes on throughout life, and is proposed by almost every experience in life." -S.S Mackenzi "By education, I mean the all-round drawing out of the best in

"By education, I mean the all-round drawing out of the best in child and man-body, mind and soul. -M.K. Gandhi

The learner receives what we term as education in a school, which is rich in all the sources required by the student. A school is incomplete without the presence and activities of the students. Similarly, along with the students, all the natural components present on the earth are incomplete without the Environment.

The environment covers all the occurrences which profess their influence on the individual from conception to death.

According to Anastasi, "The environment is everything that affects the individual except his genes".

According to Douglass and Holland, "The term environment is used to describe, in the aggregate, all the external forces, influences, and conditions, which affect the life, nature, behavior and the growth, development, and maturation of living organisms."

Among the nine planets, Earth is the only planet where life exists. To satisfy every need of the living organisms the earth has amazing biodiversity, especially meet the needs of humans. Since the time







humans have evolved the environment has played a crucial role in their development. From their basic needs of food, clothing, and shelter to their occupation they rely on their surroundings. In the process of using resources available in their surroundings, humans have deteriorated the environment to the fullest.

To fulfill his basic and secondary needs man set up industries, factories that produced various goods and commodities which made his living easier. But these factories have proved to be hazardous to the environment, as the let out several poisonous gases and chemicals which are directly let out into the eco-system. Even though the poison is let into the surroundings it is even harming the humans and other natural beings. From walking to using auto-mobile to commute man made a lot of developments over time. Making his life comfortable he made the environment sick, thinking about his hygiene he made his surroundings unhygienic

"Earth provides enough to satisfy every man's needs, but not every man's greed."

— Mahatma Gandhi

Ever-increasing human requirements have disturbed the natural elements and created an ecological imbalance. The entire earth and its inhabitants are affected by pollution. Life on earth is endangered. The balance between living and non-living things in nature have dwindled. K.K Shrivastava states in his book *Environmental Education Principals, Concepts and Management* that "Natural resources have been utilized to meet the demand of better living to such an extent that has caused serious ecological and environmental imbalances. Man's participation is the only way to improve environmental protection. The best insurance for the environment is a commitment to prevent the deterioration of land, water, and air and hence the introduction of environmental education at various levels of our education system."

According to the United States Environmental Protection Agency (EPA), "Environmental education is a process that allows individuals to explore environmental issues, engage in problem-solving, and take action to improve the environment." Environmental education is an effective way to develop an understanding of environmental awareness. School is one of the best platforms to take a step to conserve the environment. It is a place where a child is not only nurtured or filled







with knowledge but also sensitized regarding various issues around the globe. The following are the steps the school can follow:

MINIMAL USE OF PAPER

Paper is an essential part of the teaching and learning process. From assignments, attendance, notices, evaluation papers everything relies on paper. Paper is made from trees. It is said on an average one tree makes 500 sheets of paper. If the school decides to go paperless tones of paper will be saved. The wasteful consumption of paper can be reduced if the school chooses to use a substitute for paper.

(a) Electronic media

Electronic media is one of the best mediums to educated young geniuses and can be used as an alternative to paper. E-resource includes emails, google docs, smart boards, apps, etc. It not only makes learning easy and interesting but also indirectly contributes to the conservation of the environment

(i) Emails

Any assignments that the students have to submit need not be in the form of a paper. They can simply create an email Id and mail the assignment to the assigned teacher before the deadline. The email can also be used by the teacher to send in the assignment details and also update the students and parents about the various happenings in the school.

(ii) Google docs

Another way to go green and save paper is through google doc. It is the platform through which students can work on a group project as it offers collaborative work. Not just as a group project but it also helps students and a teacher work together on a specific assignment, where the teacher can help the pupil correct the errors made.

(iii) Kahoot

It's an app that makes a class interesting by avoiding the use of boring paper worksheets. The students can access the app through the computers in their computer room.







(iv) Seesaw

A student portfolio app where the parents can track the progress of their ward and it contributes to the paperless classroom as it avoids the use of paper notices or paper results which help parents track the student's progress.

(v) Class tree

Before going on a field trip or a tour the pupil had to sign a consent letter from his/her parent. This process not only creates stress for the teachers but also indirectly to the environment as it makes use of paper. This app is a substitute for the paper consents as it directly reaches to the parents to allow the students to go to the field trip.

(b) Smartboard

With the help of a smart board the teacher can show pictures, models of various concepts that a teacher would otherwise show as a printout, this, in turn, contributes to a paperless classroom.

(c) Orals

The teacher could simply use for an oral test or viva instead of preparing worksheets which a lot of paper. This method not only will help improve student-teacher relationships but also in return help save paper.

TEACHER

The teacher, back in times was considered as the whole and soul of the education system. During the Pre-British period teacher was a channel to reach God, but, eventually, the role of the teacher changed. The teacher is now a facilitator, who gives an opportunity to the student to learn and make maximum use of the available resources while his/her duty as a teacher is to assist the students as and when they require. There are numerous ways through which a teacher can promote an eco-friendly classroom.

(a) Sensitize the pupil

The next learning ground to the pupil after his/her family is the school. The person responsible for the learning to happen is the teacher. The main focus of a teacher should not only be the







completion of the syllabus, but the teacher should also think globally. Sensitizing the student regarding the environmental concerns it must. The teacher can talk about it during her class or connect it while she is teaching the subject matter.

(b) Guest lectures

The teacher could arrange for a guest lecturer, discussing various environmental concerns and various human practices that could hamper the environment.

(c) Demonstration

There are various practices one could follow to conserve the environment. The teacher could demonstrate various practices that the pupil could practice. For example reusing newspapers by making decorative articles or using it to cover the books, preparing a bin which helps to prepare compost for the school garden.

(d) Tree campaign

The teacher collaborating with other school staff can initiate a tree plantation campaign either for the whole school or her class. The school can maintain a garden and every person part of the school could take up the responsibility of the garden. As a community work project, the could ask the students to plant a seed in their community or society.

(e) Eco-friendly practices

Plautus says, "Practice yourself what you preach". A teacher should always act as she says. For example, if she tells her students to save water she must see to it that she does the same. A teacher is a role model to her students, hence if she treats the environment wrongly it will reflect in her student's practices. Simple practices could be carried out not only by the teacher but in collaboration with the students. For, the leftover water in the water bottle could be poured for the plants instead of throwing in the sink, putting off the running water tap, put off the lights and fans if not in use.

THE STUDENT

One of the important elements of the school set up a student can help conserve the environment in various ways.









(a) Eco-friendly notes

Instead of using paper or a book to take down notes a student can use an electronic medium (Ipad, tablet, laptop, etc.) which stops the waste of paper and also prove to be cost-efficient as E-media is considered as a one-time investment.

(b) Smart transport

The student can opt to walk down or ride a bicycle if the school is in their vicinity. Walking or riding the bicycle won't just help conserve nature but also helps the student live a healthy lifestyle.

(c) One water bottle

Plastic bottles add on to the degradation of the environment, the student can make use of a steel bottle and refill whenever required.

(d) Get educated

One of the best things a student can practice is to pay proper attention to all they are taught about the environment and even make others aware of it. The student should show a keen interest and strive hard to conserve his/her mother earth.

CURRICULUM

According to K.K Shrivastava (2010), states in his book *Environmental Education Principals, Concepts and Management* that, "The education system in India has incorporated certain aspects of the environment in school curricula as far back as 1930". Environment(EVS) is an important subject added to the syllabus from class one. As the curriculum framers, the education department should make efforts to add-in more matter to sensitize the pupils regarding environmental concerns. The framers of the curriculum can add assignments relating to the environment.

As a responsible person, it is our duty to not just talk about taking steps to save the environment. It is time we take steps to save our mother earth from deteriorating and give her a gift of new life and even save our own. Let's work together and make this planet a better place to live.







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- This is very good review of the subject, but cannot qualify as a conceptual paper because there is no new concept introduced here that is not already known







12

Perception of 21st Century Learners Towards Ecological Citizenship and Sustainable Development Awareness

Ms. Rizvi Roqqya* and Ms. Kalpana Chavan**

ABSTRACT

Environmental Citizenship is defined as responsible proenvironmental behavior of citizens. These citizens can participate individually or collectively as a group for solving contemporary environmental problems, intercepting new environmental issues, achieving sustainability in order to develop a healthy relationship with nature. The main objective of the research was to study ecological citizenship and sustainable development awareness in learners of 21st Century on the basis of gender i.e boys and girls. For the present study the researchers have used quantitative method of causal comparative type descriptive research. The sample consists of 58 high school students of Greater Mumbai and to select it random sampling was done. The tools used for the study are questionnaires for sustainable development and ecological citizenship. The tools used were valid and reliable with Cronbach Alpha 0.901 and 0.660. The result of the study states that there was no significant difference in the perception of 21st century learners towards ecological citizenship and sustainable development awareness based on gender (boys and girls). Ecological citizens are citizens that participate in civic and political activities

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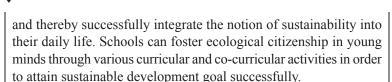






^{*}PhD Student (Research Scholar), Dept. of Education, University of Mumbai, Kalina Campus, Mumbai. E-mail: roqqya.rizvi@gmail.com

^{**}Assistant Professor, St. Xavier's Institute of Education, Churchgate, Mumbai. E-mail: kalpanachavan11@gmail.com



Keywords: Ecological citizenship, Sustainable development, perception, Education, gender difference, 21st century learners.

INTRODUCTION

The Concept of Ecological Citizenship was put forth by a British political theorist Andrew Dobson in 2006. Ecological Citizenship is defined as type of citizenship that encourages individuals, communities and organizations as citizens of the world to consider environmental rights & responsibilities (Kadir and Cevdet, 2018). Ecological Citizenship consists of a series of rights such as right to have clean air, right to have clean water, right to life and so on. It also consists of duties such as duties towards nature, protection of environment, sustainable consumption etc. Ecological citizens are those citizens who actively participate in civic & political activities and thereby successfully integrate the idea of sustainable development into their day to day life. Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Report)

ASPECTS OF ECOLOGICAL CITIZENSHIP

Ecological Citizenship is a broad term which includes various aspects like responsibility, sustainability, rights and justice and participation. Ecological citizens are citizens who have awareness that she has a responsibility for future generations and her present behavior will leave an impact on future of people. Therefore, the main responsibility of ecological citizens is to have a sustainable ecological footprint. If it is unsustainable then the ecological footprint has to be reduced because every living being on this earth has a right to live in a healthy environment., therefore it is the responsibility of each and every individual of any nation whether they are developed or developing countries to balance their ecological footprints. In order to pursue environmental justice active participation of every individual is a must. Ecological citizens demonstrate individual, social and political participation in order to address environmental problems (Kadir and Cevdet, 2018).



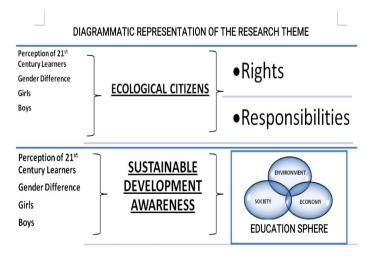




ASPECTS OF SUSTAINABLE DEVELOPMENT

Important aspects of sustainable development are environment, economy, society and education. Sustainable Development are processes and pathways to achieve sustainability. It includes three spheres (aspects) of sustainability i.e. environment, society and economy. These three spheres should be balanced in the pursuit of development and excellent quality of life. The three spheres are intertwined with one another. A flourished society depends on healthy environment in order to provide basic essentials such as clean air, safe drinking water, food and other resources to its citizens. Economic development which poses a threat to well being of humans and environment has no place in sustainable paradigm. In order to address these three spheres a fourth sphere plays a vital role i.e Education for Sustainable Development (ESD). ESD implies variety of pedagogical technique that promotes critical and reflective higher order thinking skills in a participatory approach in order to solve environmental, societal and economic problems at all the three levels (individual, national or global level) (ESD UNESCO, 2018)

In this 21st century we are facing the extreme of climate change which heralds the crisis of melting of glaciers, untimely changes in natural pattern of seasons and causing disruption in our day to day life. In these circumstances it is expected of the education and society that the 21st century learners are equipped with knowledge, attitude and skills required to be ecological citizens and aware about sustainable development.









Ecological Citizenship: Ecological Citizenship is a citizenship of learners who will be conscious of the repercussions of their actions on the ecology, which will take care of nature, reuse, recycle, segregate waste, conserve energy, act responsibly, read about how to save the earth, are conscious of what to consume and buy which will not affect the environment adversely.

Sustainable Development Awareness: Sustainable Development Awareness is defined as awareness in which individual or group of individuals are conscious and sensitive towards development along with the notion of sustainability. For eg Development in terms of good quality life of people along with Environmental protection, awareness of sustainable products, development considering sustainable policies and practices which are practically implemented rather than mere theoretical subjects in school or educational institutes.

21st century learners: Those students who are born in the 21st century, that is after 2001 AD. The students who have experienced the climate change crisis and are aware of what is happening to the environment.

AIM OF THE STUDY

The broad aim of the research is to study the perception of 21st century learners towards ecological citizenship and sustainable development awareness.

OBJECTIVES OF THE STUDY

To achieve the aims, following objectives were formulated:

- (*i*) To study perception of 21st Century Learners towards Ecological Citizenship on the basis of gender (Boys and Girls)
- (ii) To study perception of 21st Century Learners towards Sustainable Development Awareness on the basis of gender (Boys and Girls)

HYPOTHESIS OF THE STUDY

To achieve the objectives of the study following null hypotheses were formulated:

(*i*) There is no significant difference in perception of 21st Century Learners towards Ecological Citizenship on the basis of gender (Boys and Girls)









(ii) There is no significant difference in perception of 21st Century Learners towards Sustainable Development Awareness on the basis of gender (Boys and Girls)

METHODOLOGY OF THE STUDY

The present study makes use of descriptive method of causal comparative type. The study focuses on gender wise differences in the variables therefore the methodology of the study may be termed as descriptive method of the causal comparative type.

SAMPLE AND SAMPLING

For the present study the sample consists of high school students (IX and X standard students) of Greater Mumbai were selected. Random sampling technique was used for this study. The final data gathered for the given study was 58 after separating out blank and incomplete forms. Out of which 28 were boys and 30 were girls.

TOOLS FOR THE STUDY

To assess the level of Ecological Citizenship a five point likert scale developed by Kadir and Cevdet (2018) was used which consists of 44 items and its Cronbach Alpha was 0.901. To assess Sustainable Development Awareness a five point Likert scale developed by Michelle and Sara (2017) was used which consist of 20 items and its Cronbach Alpha was 0.757.

DATA ANALYSIS AND HYPOTHESIS TESTING

Testing of Hypothesis 1: The null hypothesis states that there is no significant difference in perception of 21st Century Learners towards Ecological Citizenship on the basis of gender (Boys and Girls). The technique used to test this hypothesis is t-test. As the obtained t-value 0.16 is less than table value 2.00 and 2.66 therefore it is not significant even at 0.05 and hence the null hypothesis is accepted. The following table shows a relevant statistic of perception of 21st Century Learners towards Ecological Citizenship on the basis of gender (Boys and Girls).







Table 1: Relevant Statistics of Perception of 21st Century Learners towards Ecological Citizenship on the Basis of Gender (Boys & Girls)

Variable	Gender	Sample Size	Mean	Median	Mode			ʻt' value	l.o.s
Ecological	Boys	28	69.85	68		0.05			Not
Citizenship	Girls	30	65.4	64.5	73	2.00	2.66	0.16	Significant

Testing of Hypothesis 2: The null hypothesis states that there is no significant difference in perception of 21st Century Learners towards Sustainable Development on the basis of gender (Boys and Girls). The technique used to test this hypothesis is t-test. As the obtained t-value 0.34 is less than table value 2.00 and 2.66 therefore it is not significant at 0.05 and 0.01 and hence the null hypothesis is accepted. The following table shows a relevant statistics of perception of 21st Century Learners towards Sustainable Development on the basis of gender (Boys and Girls).

Table 2: Relevant Statistics of Perception of 21St Century Learners Towards Sustainable Development Awareness on the Basis of Gender (Boys & Girls)

Variable	Gender	Sample Size	Mean	Median	Mode	Table value		ʻt' value	l.o.s
Sustainable	Boys	28	74.10	74.5		0.05			Not
Development Awareness	Girls	30	76.33	78.5	80	2.00	2.66	0.34	Significant

FINDINGS OF THE STUDY

The finding of the study reveal that there is no significant difference in learner's perception towards Ecological Citizenship on the basis of gender but still greater mean scores (Mean = 69.85) of boys proves that boys were better ecological citizens compared to girls (Mean =65.4). The study also shows no significant difference in learner's perception towards Sustainable Development Awareness Awareness on the basis of





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gender but still greater mean scores (Mean = 76.33) of girls proves that girls were more concerned about Sustainable Development Awareness compared to boys (Mean = 74.10). The values of mean, median and mode for the variable Ecological Citizenship were found to be 69.85, 68 and 70 for boys whereas 65.4, 64.5 and 73 for girls. The values of mean, median and mode for the variable Sustainable Development Awareness were found to be 74.10, 74.5 and 82 for boys whereas 76.33, 78.5 and 80 for girls respectively. The nearness or closeness of the values of mean, median and mode in the study indicates a near normal distribution.

DISCUSSION

The findings of the study align with study of Ojala and Jamison (2005) where they were also unable to identify perfect ecological citizens. The study also shows consistency with the study presented by Alex and Nick (2005) where they have analyzed five articles which fail to throw light on the true aspects of ecological citizenship. In the present study, the secondary school students, both boys and girls, were asked through the questionnaire of their perception to their role as ecological citizens. The students disagreed or were neutral to their role as conscious, vigilant citizen who felt the responsibility and ownership towards the environment. They felt it was the responsibility of the authorities or social workers or NGO to look after the environmental issues. The girls and boys felt that they were to study about the environment as a part of bookish knowledge as it was a part of their syllabus, but there seemed no connections to the students' day to day lives. The ongoing curriculum may be was not conducive in fostering ecological citizenship or may be the school subjects about sensitization to ecology or building citizenship values were not stressed in creative, innovative ways. The Curriculum was transacted or implemented only through lecture method, stressing more with propositional knowledge of concepts and theories rather than procedural knowledge of activities and experiences. This could have led to both boys and girls not relating to their role as the ecological citizens. Thus, it shows that merely having environmental study as a part of curriculum is not helping students to become ecological citizens. There is a deliberate need for a way of inculcating into students ecological citizenship through actual activities and programs. Thus present study also has strong conceptual connections with the Ecological Citizenship









Model designed and implemented on B.Ed students by the researcher to help to connect with the youth, mentor the youth to take a journey on the path of responsible and belonged citizen (Chavan, 2019).

The findings of the present study also reveal that the learners in 21st century learners were more interested with their own comforts and luxuries. They were hardly involved in activities, programs concerned with environmental campaign, water conservation or saving electricity. If they were involved also, it seems that they were just passively involved. The students whether boys and girls were not aware of the food consumed, whether it affects the environment or were a part of promoting fast food with chemicals and preservatives which impacts the environment. The learners of today's times were hardly paying attention to news on ecology and sustainable ways of looking after the environment. The learners were more concerned with consumerism with regards to food, clothing and buying of luxury items. The sensitization towards looking after the weaker and mute animals, trees, environment was not on their priority list.

CONCLUSION

Education especially in secondary school need to be more focused on developing knowledge, skills and attitude of students towards the ecology and their role as today's citizens. This can be developed through skits, role play, field visits rather than disengaged teaching and lecturing. Ecology citizenship awareness amongst both boys and girls is essential, otherwise the youth of tomorrow is moving towards selfvested interests rather than taking ownership, leadership and commitment towards ecological care and concern. Learners' of 21st century need to be made more aware of the importance of balancing ecology with the sustainable development. The questionnaire reflected the perception of boys and girls towards sustainable development, especially of secondary education students and it showed that the students have to be made more sensitized. Their concern for environment, balancing development with environment was deteriorating at quicker pace, and here too there is no difference between girls and boys towards their perception of the development and ecology. Thus, to conclude the authors are further studying the relationship between ecological citizenship and sustainable development perceptions of the boys and girls. The soft data also has brought indifference, detached and disengaged attitude of





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adolescence boys and girls towards ecological citizenship and sustainable development and therefore there is a need to develop student friendly and activity-based modules for fostering the ownership, responsibility of ecological citizen. The need to disseminate knowledge, skills and value about sustainable development in participative and involved way has to be the priority of the education system. The authors on basis of the context of perception of learners of 21st century are working on creating and developing learning resources and modules for ecological citizenship and sustainable development.

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Environmental Friendly Libraries: The Importance of Green Libraries

Pratibha Pandey*

ABSTRACT

The green library or sustainable library is a new concept and library professionals are becoming aware of its importance. This paper highlights the environmental conditions, effect of environment on society and efforts of different organizations towards green India movement, role of a librarian towards making their library green, features of green library, initiatives in India and out of India. Further this paper focuses the importance of green library in ongoing era and green library initiatives in India.

Keywords: Green Library, Green librarian, Environmental Friendly Libraries, Green Library Movement

INTRODUCTION

Science has impacted the lifestyle of present society from traditional living to imbibing modern technologies. The modern technology can be considered a boon as it has made our lifestyles comfortable. But in some ways, looking at the impact of technology on environment it seems to be a curse. We cannot reverse the process but we can definitely bring a change by creating healthy lifestyle changes. Green revolutions had been started in every sector to overcome the burdens of the pollution from society and library is one of them many scientists are working





^{*}Librarian, Post Graduate Govt. College, Sector-46, Chandigarh. pratibhapandey81@gmail.com



in so many projects for the development of universe. The creation of green libraries is most important to develop the users' satisfactions.

The green library movement started emerging in the early 1990s and is gaining popularity in the field of library and information science profession. The library professional are also trying to develop such a kind of library that will be minimize the electricity consumption, energy efficient and environment friendly.

DEFINITIONS

According to the **Online Dictionary for Library and Information(ODLIS)**, Green libraries are "designed to minimize negative impact on the natural environment and maximize indoor environmental quality by means of careful site selection, use of natural construction materials and biodegradable products, conservation of resources(water, energy, paper), and responsible waste disposal (recycling, etc.,)"

According to the **Oxford English Dictionary (1989)** defined the term green as "pertaining to, or supporting environmentalism". The term "sustainable "relates to "forms of human economic activity and culture that do not lead to environmental degradation, esp. avoiding the long term depletion of natural resources"

OBJECTIVE

The objectives of this paper are:

- To contribute towards making our earth green.
- To make use reusable products.
- Use of technology for reducing library expenses.
- To make library modern in terms of green revolution and give green service to patrons.
- To save energy by making library surroundings nature friendly.
- To create environmental awareness among people and readers in general.
- To promote green library movement.

Green India: The Green India initiative is taken by Government of India through its various projects which focuses on keeping our surroundings clean, by taking measures to decrease carbon dioxide level, by taking measures to stop deforestation and to make society









aware for green library movement. Big companies both nationally and internationally like TERI (The Energy and resource institute), Infosys, Coca-Cola, Google, Microsoft, Nestle, NIKE, Philips, P&G, Tata Motors aims to play a lead role to reduce the carbon economy level and help to decrease the impacts of climate change.

INITIATIVES TAKEN BY MINISTRY OF ENVIRONMENT

Major initiatives are being taken by Ministry of Environment, forest and climate change through programs like:

- Compensatory Afforestation Management and Planning Authority (CAMPA)
- Compensatory River Conservation Directorate (NRCD)
- Capacity Building for Industrial Pollution Management (CBIPM)
- National Green Tribunal (NGT)
- National Mission on Himalayan Studies (NMHS) United Nations Development Programme

(UNDP) has a great role in international level for the sustainable development. It follows some goals made by UNDP itself to foster the life style of human being and long life of earth as well.

Elements of Green Library

- Community &Locality Library is heart of any institution or university, it should be in a perfect locality such as noise free zones to make readers concentrate on their study. While choosing the location for library reach through public transportation system must be given extra attention. LEED and U.S. Green Building Council have given various guidelines to develop world class green library.
- Area India is a diverse country in terms of languages, culture, traditions, weather and lifestyles. So before planning for a constructional setup it is most important duty of the institutional head to think about all these aspects and make a separate plan for hilly area and for plain area setups.
- Constructional material While we think about green library the first thing which comes in to our mind is the library building.
 There are lots of standards and protocols in India and outside India









to make a green building by using recyclable and environment sustained materials.

- Light The library buildings should be planned in such a manner that during day time natural light is enough and there should be no need of light generated from electricity. Use of low energy consumption bulbs should be promoted and readers should be made aware of save electricity benefits.
- Air Air is also a most important factor. Air should be pure and breathable. Natural green surroundings help in making library ambience cool. Having trees around Library help in controlling air conditioner operation during summer. In hilly areas, library buildings should be planned according to sunny locations so that it will reduce room heater and blower expenses. These measures reduce the electricity consumption.
- **Electricity** Electricity can be generated using direct sun light by using solar panels on the roof top of library building.
- Water For the good sanitation system, supply of pure clean water is necessary which helps in library to become clean, green and healthy. As natural resources are scarce and decreasing day by day library can reuse waste water and rainwater in plantation, harvesting and flushing in toilets.

THE ROLE OF GREEN LIBRARIAN

- Social media is an important tool for Librarians to promote Green Library movements.
- The Librarian should be constantly willing to work under the Eco-library system.
- Librarian should promote green library tools, techniques to encourage others.
- A Librarian can encourage other librarians towards green library by organising discussion, seminar, and conferences.
- The green librarian's role is of most importance as he will be acting as eco librarian and has to handle the budgets to support the green library movement.
- Use wooden furniture that is bio degradable.







- Solar panels can be used for roof.
- Using paper insulation made from newspaper and cardboard which are recyclable. It protects wall from fire and insects.
- Rooftop planting is also a good idea.
- Book shelves should not be exceeds 110 cm in heights.
- Special arrangements for physically handicapped patrons.
- There must be a parking lot for the patrons and staff to smoothly run the library.

WHAT LIBRARY STAFF IS ALREADY DOING?

- Turning off lights when they leave their offices.
- Installing Ceiling fans instead of overusing the AC's.
- Having large glass windows which will provide natural light and will help in cutting cooling and heating costs.
- To save money and electricity eco friendly light bulbs can be used.
- Using recycled paper.
- Using safe cleaning products is also a great idea.
- Fixing leaks if any in the washrooms etc.
- Using re-usable mugs/beverage containers rather than disposable.
- Purchasing printers that duplex and have a standby energy mode.
- Turning off computers and monitors at night.
- Recycling old computers in a safe way.
- Using laptops instead of desktop computers.
- Using stairs rather than elevators.
- Having every-other light off where possible.
- Using two wastebaskets in each office, one for trash and one for paper.
- Recycling toner cartridges.

MORE THAT LIBRARY STAFF WOULD LIKE TO DO OR HAVE DONE

- Find a way to recycle books
- Segment the lighting circuits so that one switch doesn't turn on so many lights









- Eliminate personal printers and use networked printers
- Provide bins for recycling non-returnable bottles and paper
- Re-fill toner cartridges rather than buying new
- Install low flush toilets
- Install a new server and run multiple servers on one server box
- Automate shutoff of computers at night
- Reduce use of individual electric heaters
- Reduce printing at student computer stations
- Need more recycle bins
- Departments/faculty/staff/programs should reduce distribution of printed flyers
- Sponsor green library Competitions like essay writing and slogan writing.
- Display regarding reducing Carbon Foot Print can be done.
- Hold recycling contests.
- Visit to green libraries can be organized.
- Starting a Blog on green library initiatives taken by respective libraries.
- Establishing a small "Green Committee" within the Library to keep this initiative alive among staff may be helpful

Indian initiatives towards Green Movement: India has been ranked third on the list of top 10 countries in Leadership in Energy and Environmental Design outside America, according to the latest US Green Building Council report. Canada followed by China occupies the top two ranks in the ranking of the top 10 countries for Leadership in Energy and Environmental Design (LEED) outside the US. There are numbers of Green library situated at different parts of the country.

There are some other green libraries too. They are:

Karnataka university library Dharwad: The library was established in 1950s. The library is a eco-friendly library. The library follows the traditional Gurukul system. They have setup a green natural surroundings. The Library provides an open study area for students. The green library is situated nearest to all P.G departments so that students can get maximum benefits.









Mumbai University Library: The Mumbai University Library is made with eco-friendly material and allows sufficient light and is well ventilated. It was established in the Year 1880's. The library provides a big open space area for the readers. The stack material is made of wood.

Madras University Library: This library was built in the year 1907. The library use wood material in stack areas, reference hall, periodical section and reading hall. Big windows in the library are a boon as it provides sufficient light during day time.

Some more examples of green libraries are:

- Calcutta University Library
- Delhi University Library
- · Perma Karpo Library, Ladakh

CONCLUSION

The libraries are always facing problems in terms of space and budget. The books are also facing problems from dust, moisture, fungus and it needs special care. The green libraries are a boon to society as they minimize electricity consumption and focuses on maximum use of renewable sources like air, sunlight, woods. Nowadays it is much more needed for a library to become green. Librarians need to play an important role in green library movement. A first step would be to recognize the need for more information on the issue, to seek information, to gain insight and confidence and enthusiasm, and then to put information to use, and find "green" means to share and disseminate information. The librarians should play an important role for making libraries green and support green library movement. Green library initiatives are supported by many national and international bodies. Government should encourage the green library initiatives.

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14

The Gen-Next Power – The Genius Hour

Sr. Delicia Fernandes**

ABSTRACT ·

"Unthinking memory-driven or rote learning is clearly one of the biggest problems in Indian school education" says Arghya Baneerjee. Academic stress is one of the major reasons for the rising suicidal rates among the students in India. Hence there is a need to customise education. Let's explore and harness the power of creativity in our own classrooms by the effective implementation of the Genius Hour. Genius Hour is an approach to learning where students are guided by their own interests, background knowledge and the curiosity to learn. Genius Hour requires time, reflection, collaboration and sharing. The benefits of the Genius Hour are tremendously rewarding. Thus the Genius Hour is an inquiry-driven, passion-based classroom strategy, designed to excite and engage students through the unrestrained joy of learning! Genius Hour merits overweighs its demerits. Thus we as educators, working within the framework of our Indian Educational system can be creators of Geniuses in our ordinary classrooms by an extra effort – an extra hour, thus transforming our ordinary learners into extraordinary Geniuses for the Generation Next!

Keywords:

- Genius Hour
- · Learner-centred
- Innovative teaching learning practices





^{*}Principal, St. Teresa's Junior College of Education.



- Collaborative Learning strategy
- Reflective Learning
- Experiential Learning
- Interest based learning.

INTRODUCTION: PROBLEMS OF INDIAN EDUCATION TODAY

"Unthinking memory-driven or rote learning is clearly one of the biggest problems in Indian school education" says Arghya Baneerjee (the Pioneer of the Levelfield School) on 10th April 2018. According to Banerjee, "Rote learning is not just about memorizing dates of battles and formulas of science, but takes place every time we switch off our brains and perform an activity without thinking".

Academic stress is one of the major reasons for the rising suicidal rates among the students in India. Students are forced to enrol in coaching factories, where they have to cram for exams.

Professor Shekar, who teaches at IIM – Bangalore says," A change in the Indian Education system is needed if we are to help our children's creativity to bloom to its full potential". He adds," Good mathematicians have the capacity to be excellent musicians too".

Hence there is a need to customise education. But from where do we start? We are just teachers, incapable of revamping the entire Educational system. But can I as a teacher be the very change I desire? So as educators let's begin just where we are and the little ripples of change will overtake the entire system. Let's explore and harness the power of creativity in our own classrooms by the effective implementation of the Genius Hour.

WHAT IS THE GENIUS HOUR?

Genius Hour is an approach to learning where students are guided by their own interests, background knowledge and the curiosity to learn. It is a little different from our traditional learning; it is less formal and less organized. Genius Hour is truly "open-ended" learning characterized by student self-direction, passion-based learning, inquiry and autonomy. https://geniushour.com (n.d.)

We are all aware of the Pareto Principle of 80/20 Rule. One of Google's most famous management philosophies is called 20% time;







wherein they encourage their employees in addition to their regular projects, to spend 20% of their time working on creative and innovative ideas, which has consequently led to the huge 20% products such as Google News, Gmail and Adsense.

We as educators too can employ this strategy to harness a vibrant creativity pulsating through our classrooms through the effective implementation of the Genius Hour.

Genius Hour motivates the students to explore their own ideas and follow their own instincts in learning for the sake of learning, creating for the sake of creating and doing for the sake of doing.

Teachers and students love Genius Hour because it allows kids to dive deep into their passions which traditional schooling doesn't do," says A.J. Juliani, director of learning and innovation at Pennysylvania" Centennial School District.

Implementation of the genius hour

- 1. The teacher allots a set amount of time for the students to work on any topic or project of their choice.
- 2. They then spend several weeks researching the topic.
- 3. Then they start working on that project to create something novel, something they can call their own, which will be shared with the class or the school or the world online.
- **4.** Deadlines are limited and creativity is encouraged. It's all about doing new things in new ways".
- **5.** They create something new- may be a new product, a new game, a new video, a new model or a new invention.

Special features of genius hour

- It is student –centred and not teacher-centred.
- It emphasizes on inquiry and research and not rote learning.
- It creates something novel and innovative and not stereotypes.
- It is purpose –driven not forced.
- It is less rigorous and not straining.
- It is collaborative and social and not self-oriented.
- It is holistic and not compartmentalized.
- It is practical and not just theoretical.









BASIC REQUIREMENTS

Time

While time is the most valued possession for a teacher to give up due to the massive workload, syllabus completions with other routine chores; this is the very key for creativity and quality. But the teacher can set mini-project deadline. Students can choose their own mini-projects such as – a PowerPoint, 3D model, background research, creating a new logo or a new video of their own.

Reflection

Motivating the students to be engaged in authentic reflections is an art. Students should be encouraged to keep a notebook for journaling their brainstorming, thinking about the project, vocabulary, research notes, data, interview notes and works cited. The reflections can also be posted online.

Collaboration

The Genius Hour is a socially academic part of our classroom. The teacher as a facilitator can organize partner and group chats; where students work together and swap expertise.

Sharing

Sharing is an essential element of the Genius Hour. The students should be aware that their final product or outcome would be shared with others. Some can start a new blog, or submit ideas for publication. The teacher can also invite their peers and families to showcase their innovative ideas for publication.

Benefits of the genius hour

1. COMMUNITY LEARNERS:

Students and teachers get involved and see what others have done.

2. INDEPTH KNOWLEDGE:

The students dive deep into the ocean of knowledge to fathom the depth of their subject matter.

3. POSITIVE PEER PRESSURE:

Students see what their peers are working upon and are encouraged to make their project meet the standards of the rest of the class.







4. LOVE FOR LEARNING:

Students are now focussed on learning for the real sake of learning and not just rote learning and reproducing. It ignites the flame of pure learning.

5. FUN:

The Genius Hour enables learning and fun to co-exist.

6. EXPERENTIAL KNOWLEDGE:

Students learn in the true sense of the word by actually doing.

7. LIFE-LONG AND VOCATIONAL LEARNING:

Students develop a love for learning and are motivated or trained vocationally.

Thus the Genius Hour is an inquiry-driven, passion-based classroom strategy, designed to excite and engage students through the unrestrained joy of learning!

This strategy enhances our daily classroom activities by giving the learners freedom to use their creativity to come up with novel ideas and inventions, be it for various competitions or the projects and assignments and inevitably it has produced myriads of masterpieces.

Demerits

- 1. Time-consuming: Planning, conducting and execution of the Genius Hour is time –consuming.
- 2. Challenging: Conducting the Genius Hour poses a challenge to the teachers.

The teacher should be competent and an efficient facilitator, motivator and guide.

- 3. Resources: The execution of the Genius Hour requires a lot of resources and technology. Hence the teacher or the school should be resourceful, which may not be possible for schools.
- **4.** Student's personality: This method which is very helpful for the intelligent and creative students, it may lead to discouragement and frustration to the average students.
- **5.** Competition: Sometimes these activities may lead to unhealthy competition and an attempt to please the teacher and acquire fame.







6. Evaluation: Evaluation becomes difficult and may be subjective or partial.

Genius Hour merits overweighs its demerits. Thus we as educators, working within the framework of our Indian Educational system can be creators of Geniuses in our ordinary classrooms by an extra effort – an extra hour, thus transforming our ordinary learners into extraordinary Geniuses for the Generation Next!

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15

Changing Peer Group Composition and Learning Outcomes: An Experimental Study

Paranjape Swati* and Dharankar Madhavi**

ABSTRACT

Peer-learning is effective in metacognition, social and skill learning. Studies on Peer-learning in health sciences use random group composition. Present study aimed to assess influence of change in group composition on learning outcomes.

This was two phase pre-post two group experimental study. Sampling was convenient;37 fourth year physiotherapy students were included and randomly allocated in two groups, In phase1, group one was sub-grouped based on scores of content knowledge test taken prior to experiment, ensuring high, low, medium scorers grouped together making subgroup means equal. Group two chose their own sub-group partners. In the second phase group one learners chose their partners and group two sub-grouped through equating the scores. Five case-based sessions were presented in each phase and both groups fulfilled the objectives by peer discussion. Learning outcomes were short term and long term case analytical ability by test scores.

Scores of short term case analytical ability were better in learner's choice group than equating group however they were not statistically

^{**}Associate Professor & Head, Department Of Educational Technology, SNDT Women's University. mdharankar@det.sndt.ac.in. Juhu Road, Santacruz (West), Mumbai 400049







^{*}Assistant Professor, Physiotherapy Department, Seth G S Medical College. swati.paranjape@kem.edu. Parel, Mumbai 400012



significant. Learner's choice group was significantly effective than equating group for long term case analytical ability. Composition of groups influences the learning outcomes, playing an important role on the quality of learning.

Keyword: Peer-learning, Group Composition, Group Dynamics, Learner's Choice, Equating

INTRODUCTION

Health science education is competency based education. Students learn in variety of environments like clinical placements, laboratory and lecture based setting in an un-incidental or incidental way (Hennig et al., 2008). Peer learning (hereafter referred as PL) can be a component in any of these environments. PL provides interactive, reflective and self-directed learning environment where learners learn from and with each other (Falchicov, 2003). In health science education interpreting important data, diagnosis, choose best possible treatment options, decision making in real life situations is essential. Process of clinical decision is often intuitive; hence difficult to learn for a novice clinician or therapist (Frantz & Rowe, 2013). The common instructional approaches used in health science education are problem based or case based learning (hereafter referred as CBL) approach.

REVIEW OF RELATED LITERATURE

When literature search was done for present paper literature on PL took various terminologies like peer tutoring, collaborative learning, co-operative learning, near peer teaching and group learning. There is extensive discussion done by Falchikov (2003) focusing on design, delivery, and evaluation of peer-tutoring, and operating interactive factors, which was focus of this paper.

Topping (2005) have explored factors and variables affecting the study design and the learning outcome. Literature on CBL has elaborated on its implications and benefits. CBL uses cases to pose cognitive and learning related challenges to learners. Cases act as catalysts for class discussion and collaborative analysis. (Osinubi, 2014) Important characteristics of CBL are to hypothesize based on previous knowledge and present information to come to solve the case and to consolidate







and integrate the theoretical base with its clinical relevance improving analytical abilities (Williams, 2005).

REVIEW OF RELATED RESEARCHES

Majority of researches were favouring the PL and CBL in improving students' multi-faceted abilities and learning outcomes. Various aspects covered under PL and CBL are

- intrinsic motivation (Scagar et al. 2016)
- developing analytical and problem solving skills (Gade and Chari, 2013)
- understanding concepts and lateral thinking (Nair (2013)
- conflicts in collaborative learning can be challenging (Aranio et al., 2012)
- case discussion as sustainable and effective resource (Weidenbusch et al., 2019).

Thus there was consensus on effectiveness these approaches. However though group dynamics influenced by group design is not found to be addressed. Hence research question emerged was "whether change in peer group composition in PL strategy affects the analytical ability when used with case-based approach?" Hence the study titled "Changing Peer Group Composition and Learning Outcomes: an Experimental Study" was conducted in physiotherapy discipline.

RESEARCH OBJECTIVE

This study aimed to fulfill following objectives

- **4.1** To compare effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of short term case analytical ability
- **4.2** To compare effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of long term case analytical ability

HYPOTHESES

The null hypotheses to be tested were as follows







- 5.1 There is no difference in the effectiveness of group formed through equating and through learner's choice peer-led approach to casebased learning in physiotherapy education in terms of short term case analytical ability
- 5.2 There is no difference in the effectiveness of group formed through equating and through learner's choice peer-led approach to case-based learning in physiotherapy education in terms of long term case analytical ability

METHODOLOGY

The research methodology adapted was as follows

- **6.1 Research Design:** This was quasi experimental two group pre-test post-test cross over study design. It was conducted in two phases.
- **6.2 Population:** Physiotherapy education is a UGC approved discipline. Approximate population size is 1500 from 40 colleges of physiotherapy across State of Maharashtra
- **6.3 Sample**: Participants from Physiotherapy department of Seth G S Medical College were included in the study by convenient sampling. Sample size was 40 however the repeater students were excluded from the study. Resultant 37 students were included in the study.
- 6.4 Experimental Treatment: Before the experiment began the content knowledge pre-test was taken. The students were randomly allocated in two groups A & B. Group A was sub-grouped on basis of pre-test score where high, medium and low scorers were grouped together ensuring mean score of all subgroups is equal. Group B was allowed to choose their sub-group partners. After 20 days of wash out period these groups crossed over. Group A, was allowed to choose their partners whereas Group B was sub-grouped on basis of equating scores. In each phase five case-based sessions were conducted where real life case scenarios were presented. Students were given the objectives to fulfill by peer group discussion. Free use of the resources like internet, books, and notes was allowed during discussions. After the sessions the related case-let was given to solve. The scores of this case-let analysis were recorded.
- **6.5 Tools for Data Collection:** Outcome variables were short term and long term case analytical ability. For assessment of these variables



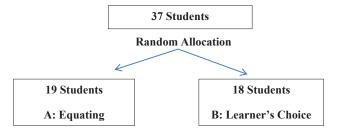




tool was developed by the researcher based on the content developed for the treatment. It was validated by the unbiased subject experts. It was estimate of the ability of the learner to analyze the presented case and establishing the correct diagnosis and treatment planning. It was assessed as

- 6.5.1 **Short term case analytical ability:** Done immediately after first session of each phase of experimental intervention.
- 6.5.2 **Long term case analytical ability:** Done at the end of last session of each phase post experimental intervention in terms of case-let analysis score.

Design and flow of participants through experiment is depicted in figure 1



Phase I: 5 Case-based sessions of peer-learning for each group



Phase II: 5 Case-based sessions of peer-learning for each group

Figure 1: Design & flow of participants through experiment

DATA ANALYSIS & IMPORTANT FINDINGS Short Torm Cose Analytical Ability

Short Term Case Analytical Ability

The data were subjected to normality testing using Kolmogorov Smirnov Test (KST) (Ghasemi & Zahediasl, 2012). The statistical analysis is summarised in the table 1.









Table 1: Statistical Analysis of Short term case Analytical Ability for Normality

Parameter	Mean	SD	SE	n	D	D _{n,α} 0.05	D _{n,α} 0.01	Distribution
Equating	27	12.84	2.11	37	0.21	0.14	0.16	Non Normal
Learner's choice	29.18	16.85	2.77	37	0.23			Non Normal

D= Observed value, $D_{n,q}$ = Critical Value

Observations

- Mean test scores in learner's choice group were higher than the equating group
- Data not found to be normally distributed

As data did not pass normality, significance of difference of mean in test scores between equating and learner's choice groups was tested using Wilcoxon Matched Signed Rank Test (Wilcoxon, 1945; Whitley & Ball 2002). Inferential statistics is summarized in table 2.

Table 2: Summary of Inferential Statistics for Short Term Case Analytical Ability between Equating and Learner's Choice Groups

	Median	Ranks	T (Observed)	T _{crit} 0.05	T _{Crit} 0.01	ʻp' Value	Significance
Equating	30	32	196	159	128	0.20	No
Learner's Choice	34	32					

T= Observed rank value T_{crit}= Critical rank value

Observations and interpretations

- Observed rank value is higher than critical rank value at 0.05 and 0.01
- The calculated 'p' value for significance of difference of mean between group is observed to be higher than the desired significance level (p > 0.05)







Findings

- Difference of mean in test scores for short term case analytical ability between equating and learner's choice groups is not found to be statistically significant.
- As the difference is not statistically significant the null hypothesis is retained.

Long Term Case Analytical Ability

The data were subjected to normality testing using KST (Ghasemi & Zahediasl, 2012). The statistical analysis is summarised in the table 3.

Table 3: Statistical Analysis of Long term Case Analytical Ability for Normality

Parameter	Mean	SD	SE	n	D	$D_{n,a}$ 0.05	$D_{n,a}$ 0.01	Distribution
Equating	27.27	14.27	2.34	37	0.12	0.14	0.16	Normal
Learner's Choice	31.86	13.12	2.15	37	paired sample			

D= Observed value, $D_{n,q}$ = Critical Value

OBSERVATIONS

- Mean score of learner's choice group is higher than equating group
- The paired data were normally distributed

Data were tested for significance of difference of mean in test scores between equating and learner's choice groups using paired 't' test. Inferential statistics is summarized in table 4.

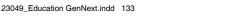
Table 4: Summary of Inferential Statistics for Long Term Case Analytical Ability Between Equating and Learner's Choice Groups

	Mean	df		l	Table Value 0.01	CI 95%	ʻp' Value	Significance
Equating	27.27	36	2.14	2.03	2.72	-08.94	0.03	Yes
Learner's Choice	31.86	36				to -0.24		

df= degrees of freedom, 't' obs= Observed 't' value, CI= Confidence Interval









Observations and interpretations

- Observed 't' is higher than critical 't' at 0.05
- The calculated 'p' value for significance of difference of mean between the groups is observed to be lower than the desired significance level (p > 0.05)

Findings

- Difference of mean in test scores for long term case analytical ability between equating and learner's choice groups is found to be statistically significant.
- As the difference is statistically significant the null hypothesis stands rejected.
- Grouping by learner's choice is found to be significantly better in improving the long term case analytical ability as compared to equating group.

DISCUSSION OF RESULTS

Short Term Case Analytical Ability

There was no significant difference in both the groups. Results support the previous research report which highlights aspect of peer acceptance in collaborative learning, associated with anxiety (Greco & Morris, 2005). Equating group in this study was heterogeneous in terms of group design. The peer partners were high, medium and low scorers grouped together. Though the peers were blinded about this fact, they not being close friends, there could have been the factor of social anxiety which may have affected the quality of group interaction among them. There have been reports where the heterogeneous group formation may not always benefit the learners. Present study results are consistent with these reports (Wing-yi Cheng et al., 2008). For the learners this group was perceived as asynchronous group. This could have led to limited social interaction, participation, exchange of ideas in the initial phases. There are studies where collaborative learning benefits low and medium scorers and high scorers shown to have decreased performance (Stockdale & Williams, 2004). However in this study results were not analysed by individual performance assessment but were for the group. Therefore individual differential achievements may have









reflected as low overall achievement. However the lack of evidence limits the endorsement of this fact in present study. In collaborative learning, context plays very important role. Interaction with others is a key factor in knowledge generation (Hill et al., 2009). Present study learner's choice group, there could have been good interaction and feeling of being in team that could have contributed to better test scores in this group. However probably this being the first ever experience of formally designed peer learning sessions, newness to experiment may have affected the quality of interaction between peers in the initial phases in both the groups. Therefore initial phases of experiment there could have been limited interaction; tendency to avoid the conflicts may have been the strategy in both the groups. This probably would have seen as no significant difference in both the groups in short term case analytical ability.

Long Term Case Analytical Ability

Learner's choice group was significantly better than equating group. Research shows that in collaboration learning, one can't ensure the knowledge generation just by providing environment (Hill et al., 2009). Extent of learning depends on quality of interaction (Scager et al., 2016). Scientists have identified perceived sense of being a community has a large influence on the social interaction (Hill et al., 2009). It is shaped by participation, receiving feedback from others (Hill et al., 2009). In learner's choice group, peer partners being friends, there could have been freer and open environment for group discussion. Friendship fosters learning as students use friendship to learn, they can ask anything when it comes to friendship (Roberts, 2009). The role of positive interdependence has been thought to be a crucial factor in collaborative learning (Johnson & Johnson, 2009) There is development of trust between the friendship groups which creates opportunities to explain, apply concepts and gain different perspectives (Senior & Howard, 2014). Present study results support these findings as learner's choice group performed better than equating group. Groups are dynamic social systems under influence of various contextual factors, where time spent together greatly influences the social interaction (Hommes et al., 2014). In present study also there was improvement in scores over the last sessions in both groups. Some research reports have reported that the friendship quantity and positive friendship quality does not always









serve protective function (Greco & Morris, 2005). Present study findings contrast this assumption as it showed significant improvement in long term case analytical ability in learner's choice group as compared to equating group. Present study endorses the influence of friendship on long term case analytical ability. Johnson and Johnson (2009) have also highlighted that the higher quality relationship plays important role where competitive efforts versus cooperative efforts of the group influence the outcome

CONCLUSION AND LIMITATIONS

Present study results conclude that composition of groups significantly influences the group dynamics. Changing group composition influences the quality of learning outcome. When students chose their partners they performed better in case analytical ability, than when in equating group. However these results may not be generalized for the different content, domain and disciplines.

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Equity and Inclusion through Education A Gandhian Innovative Practice in Academic Social Responsibility

Dr. Marina B. Pereira*

ABSTRACT

Most institutions of higher education have become education industries that are merely churning out educated products trained in solving academic problems but totally unfit for the ordinary business of life. In the recent past, many institutions of higher education have been granted autonomy and have introduced many co-curricular choice based credit courses. They must use these opportunities to function as potent tools of change. By training the learners in inclusion and equity the institutions of higher education can create responsible citizens- sensitized to societal and environmental problems. GenNext Education Policy should aim at restoring and nurturing the human element in education.

This Paper is a Case study of a Gandhian Innovative Practice in Academic Social Responsibility introduced by our institution since it was granted autonomy by the University of Mumbai in June 2016. It is based on primary data which was collected through Simple Random sampling by administering a questionnaire. The t test has been used for hypothesis testing.

The Study is divided into three Sections. Section I gives a backdrop of the present condition of the institutions of higher

E-mail: marina bertha@rediffmail.com





^{*}Associate-Professor and Head- Department of Economics, Nagindas Khandwala College, Malad (West), Mumbai 400064.



education. It is an introduction explaining the opportunities thrown open by autonomy to introduce innovative practices of Academic Social Responsibility. Section 2 mentions the objectives of the study, research methodology, hypothesis and methods of data collection. The sample profile, findings of the study and conclusion are explained in Section 3.

Keywords: equity, inclusion, Gandhian, academic social responsibility, education

BACKDROP

Most institutions of higher education have become education industries that are merely churning out educated products trained in solving academic problems but totally unfit for the ordinary business of life. Woe behold if faced with a small emotional problem or a miniscule slipping of grades and the so called academic heroes catapult into complete zeroes attempting suicide or attacking one's peers or near and dear ones as the education system has trained them in little else other than acquiring degrees. Intolerance and inability to tolerate difference of opinion has far reaching effects on relationships.

Nobel Laureate Theodore Schultz calls investment in education human capital formation. Venugopalan (2005), Chattopadhyay (2009), Mohan and Rege (2010) and Cotton and Winter (2010) have assigned a significant role to education in developing a sharing and caring attitude among the youth. By training the learners in inclusion and equity the institutions of higher education can create responsible citizens- sensitized to societal and environmental problems. GenNext Education Policy should aim at restoring and nurturing the human element in education. Educational reforms can go a long way in fostering a sustainable world order.

INTRODUCTION

The Gandhian pedagogy of Nai Talim emphasizes the role of education in character building and bringing about holistic development of a person. Bapu gave a talisman to instill humanism in the youth - when in doubt recall the face of the poorest, whether the policy measure is going to be of any value to him (Axelrod 2010). In the recent past, many institutions of higher education have been granted







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autonomy and have introduced many co-curricular choice based credit courses. They must use these opportunities to function as potent tools of change (Singh and Stuckelberger, 2017). Drawing inspiration from the words of Gandhiji and akin to the views of Bhatia and Bhatia, 2015; Kataria, 2019 this Paper makes a strong case for incorporating innovative practices in higher education.

It is a Case study of a Gandhian Innovative Practice in Academic Social Responsibility introduced by our institution since it was granted autonomy by the University of Mumbai in June 2016. Under autonomy besides modifying the syllabi to suit the emerging needs of the economy, the Course structure has been modified whereby students have to mandatorily earn eight additional credits in addition to their normal credits both at the Undergraduate and Post Graduate level. These additional credits have to be earned from a basket of courses designed to ensure employability, personality-building or comprise community outreach programmes. These Certificate Courses aim at training the learners to share the fruits of development with our rural brethren as well as the urban underprivileged to bring about equity and inclusive growth. by imparting quality education and introducing educational reforms.

OBJECTIVES OF THE STUDY

- To examine the role of academic autonomy in higher education in introducing innovative practices and educational reforms.
- To introduce the human element in education and foster Gandhian principles of Satya, Ahimsa, Sarvodaya and Antyodaya.
- To sensitise the youth to societal problems and environmental concerns through community outreach programmes.
- To analyse the role of education in bringing about inclusion and equity in society through academic social responsibility.

METHODOLOGY

The study is a Case Study of the Certificate Courses introduced under autonomy in our institution since June 2016. Two 30 hour courses of 2 credits each have been introduced namely - Gandhian Studies at the Undergraduate level and Value Education at the Post Graduate level. The Course curriculum comprises theoretical and practical components – the







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theoretical component includes a Peace Examination, book reviews and lectures while the practical component is the 'Say No to Plastic' campaign.

Through this flagship programme of Academic Social Responsibility the students are sensitized to the needs of the marginalized both in rural and urban areas and are made aware of environmental concerns through this campaign. It is executed through an Exhibition-Cum-Sale of cloth and jute pouches, purses, bags from ordinary vegetable and tiffin bags to office and laptop bags. The bags are stitched by marginalized women identified by the student volunteers from nearby areas. The students themselves purchase the cotton material, design the bags and supervise the whole process of the making and sale of cloth and jute bags right till the exhibition-cum-sale and payment to the marginalized women. Some artistic students paint the bags with messages promoting sustainability and Gandhian values like Satya, Ahimsa, Sarvodaya, Antyodaya, etc. Learners also collect old bedsheets, sofa covers, curtains to recycle into vegetable bags which are donated in the village adopted by the National Service Scheme unit of the College inorder to ensure that the area is plastic free. Sometimes the learners collect torn jeans or denim clothes to be recycled into pouches prepared by the urban marginalized women.

The institution has also adopted an Adivasi group from Maswan village Palghar. and organizes an Exhibition-Cum-Sale of Warli jute bags and folders and cloth bags, pouches, purses, T-shirts, table cloths produced by it. In all College programmes gifts and mementoes presented are cloth or jute items from the group or Centre. For festivals and functions students and staff are encouraged to buy and present ecofriendly gifts from the Group. For Seminars, workshops and Conferences folders are arranged from the Adivasi Group. The learners function as volunteers during the Exhibitions-Cum-Sales and try to promote the products of our rural brethren.

The prices of the cotton and jute bags range from Rs. 125/- to 250 /- depending on the size and design. The students are encouraged to buy even small items like handkerchiefs, pencil pouches or small purses for loose change - the prices of which may be as low as Rs. 30/- or 40/-. These exhibitions-cum-sales are held at least four times a year for at least two days each - each day's turnover being around Rs. 6000/ to 8,000/-. The NKGSC cloth bag campaign is run on a no









net profit basis. The sales revenue is used to fund the cotton material and the stitching charges to the women. Students receive duty hours and credit points for co-ordinating the campaign while the monetary fruits are shared with the poor. In the case of the Adivasi group the entire sales proceeds are handed over to the Group.

DATA COLLECTION

The study is based on primary data collected through structured questionnaires administered to Certificate Course students of Value Education and Gandhian Studies. The Ouestionnaire had two Parts-Part A -Before joining the Course and Part B - After completing the Course Two samples of 20 students each from Undergraduate and Post Graduate levels respectively were selected through Simple Random Sampling. Both groups had completed the 30 hours course of Gandhian Studies at the Undergraduate level or Value Education at the Post Graduate level. The questions were aimed at studying the personality traits of respondents and their empathy for the underprivileged, understanding of societal problems and ecological concerns before and after the completion of the course. There were 12 multiple choice questions with options -Mostly, Sometimes, or Never. The responses were coded on a three point scale from zero to two depending on the degree of positivity of the trait. The scores of each respondent were totalled before and after completing the Course.

HYPOTHESES

Null hypothesis **Ho**: There is no change in the personality traits, empathy for the underprivileged, understanding of societal problems and ecological concerns after the completion of the Certificate Courses in Value Education and Gandhian Studies.

Alternative Hypothesis \mathbf{H}_1 : There is a significant change in the personality traits, empathy for the underprivileged, understanding of societal problems and ecological concerns after completion of the Certificate Courses in Value Education and Gandhian Studies.

The hypothesis was tested using the t test at 5% level of significance.

FINDINGS

Sample Profile of Respondents: The first sample comprised of 20 female students in the Age group 18 to 21 years, while the second









sample comprised of 17 female students and 3 male students in the Age group 21 to 24 years.

Table 1.1: Family Structure of Respondents Sample 1: Undergraduate Respondents

Family Structure	No. of Respondents	Percentage
Joint	4	20.00
Nuclear	16	80.00
Total	20	100.00

Table 1.2: Family Structure of Respondents Sample 2: Post Graduate Respondents

Family Structure	No. of Respondents	Percentage
Joint	5	25.00
Nuclear	15	75.00
Total	20	100.00

Maximum respondents i.e. 16 (80 per cent) in the Undergraduate Group and 15 (75 per cent) in the Post graduate group lived in Nuclear families. Only 4 (20 per cent) respondents in the Undergraduate Group and 5 (25 per cent) in the Post graduate group lived in Joint families. The researcher believed that the family structure leads to a development of a different value structure in individuals. Living in joint families instills values of respect, care for the elderly, compassion, empathy, etc. while living in nuclear families makes individuals more independent, creative, responsible, etc.

Table 2.1: Monthly Household Income Sample 1: Undergraduate Respondents

Monthly Household Income	No. of Respondents	Percentage
Upto 25,000	05	25.00
25,000-50,000	10	50.00
50,000 - 75,000	04	20.00
75,000-1,00,000	01	05.00
Total	20	100.00







Table 2.2: Monthly Household Income Sample 2: Post Graduate Respondents

Monthly Household Income	No. of Respondents	Percentage
Upto 25,000	02	10.00
25,000-50,000	12	60.00
50,000 - 75,000	05	25.00
75,000-1,00,000	01	05.00
Total	20	100.00

The income levels of the respondents households was studied to test responsible behavior in lower and middle income groups. In the Undergraduate Sample 5 (25 per cent) respondents belonged to households with monthly income upto 25,000; 10 (50 per cent) respondents belonged to households with monthly income between 25,000 and 50,000; 4 (20 per cent) respondents belonged to households with monthly income between 50,000 and 75,000 while only 1 (5 per cent) respondents belonged to households with monthly income between 75,000 and 1,00,000.

On the other hand, in the Post Graduate Sample 2 (10 per cent) respondents belonged to households with monthly income upto 25,000; 12 (60 per cent) respondents belonged to households with monthly income 25,000 and 50,000; 5 (25 per cent) respondents belonged to households with monthly income between 50,000 and 75,000 while only 1 (5 per cent) respondents belonged to households with monthly income between 75,000 and 1,00,000.

Table 3.1: Sample 1: Undergraduate Sample

Respondent	Scores Before	Scores After	d	d ²
1	10	20	10	100
2	5	12	7	49
3	6	16	10	100
4	4	10	6	36
5	5	11	6	36









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Respondent	Scores Before	Scores After	d	d ²
6	6	19	13	169
7	6	18	12	144
8	4	16	12	144
9	5	18	13	169
10	6	18	12	144
11	6	17	11	121
12	7	15	8	64
13	5	12	7	49
14	6	16	10	100
15	4	16	12	144
16	4	10	6	36
17	5	18	13	169
18	6	17	11	121
19	5	12	7	49
20	9	19	10	100
			196	2044

Degrees of freedom=19, Calculated value of t = 2.5464Table value of t= 1.729 at 5% level of significance

The calculated value of t was 2.5464 which is much higher than the table value at 5% level of significance. Thus the Null Hypothesis that is There is no change in the personality traits, empathy for the underprivileged, understanding of societal problems and ecological concerns after the completion of the Certificate Course in Gandhian Studies is rejected.

Table 3.2: Sample 2: Postgraduate Sample

Respondent	Scores Before	Scores After	d	d ²
1	4	20	16	256
2	4	22	18	324
3	6	18	12	144







Respondent	Scores Before	Scores After	d	d ²
4	7	18	11	121
5	5	19	14	196
6	5	18	13	169
7	3	17	14	196
8	4	19	15	225
9	5	18	13	169
10	5	19	14	196
11	4	19	15	225
12	3	18	15	225
13	4	16	12	144
14	4	15	11	121
15	6	17	11	121
16	6	17	11	121
17	5	16	11	121
18	7	18	11	121
19	4	18	14	196
20	5	19	14	196
			265	3687

Degrees of freedom=19, Calculated value of t = 3.0413Table value of t= 1.729 at 5% level of significance

The calculated value of t was 3.0413 which is much higher than the table value at 5% level of significance. Thus the Null Hypothesis that is there is no change in the personality traits, empathy for the underprivileged, understanding of societal problems and ecological concerns after the completion of the Certificate Courses in Value Education is rejected.

The study showed that there is a significant change in the personality traits, empathy for the underprivileged, understanding of societal







problems and ecological concerns after completion of the Certificate Courses in Value Education and Gandhian Studies.

CONCLUSION

Academic autonomy in higher education to introduce innovative practices and educational reforms are the need of the hour in order to restore the human element in education. Gandhian principles of Satya, Ahimsa, Sarvodaya and Antyodaya. have great relevance in this era of Globalisation. Gandhiji believed that India truly lived in villages. The Youth are dynamic and can bring about a change in the world (Radhakrishnan, 1998). This innovative Gandhian practice of Academic Social Responsibility can sensitise the youth to societal problems and environmental concerns. It can definitely be used as a tool of equity and inclusive education to bring about sustainable development.

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Case Study of Jeevan Jyoti Inclusive School (Theme-Global Issues in Education)

*Dr. Mabel Pimenta

ABSTRACT

Inclusion is about learning to live and care for each other. Inclusion involves learning how to love and care for one another. Inclusion implies inviting people left out to come in. It is structuring schools as a society where all children can learn. Inclusion is a noble undertaking to comprehend kids with unique needs, requirements, and ambitions. The inclusion ideology is based on the reasoning that "Children learning together learn to live together" It emphasizes changing the system as opposed to the child.

'Inclusive education' policy has been introduced in India, however the concept is in its infancy This qualitative study analyses the case Jeevan Jyoti Inclusive School of Varanasi in India. It elucidates the benefits and challenges of children with disabilities in inclusive education.

This case study was designed to explore how a school in Varanasi (Uttar Pradesh), India adapted and implemented inclusion. The perceptions and experiences of the principal, teachers and parents regarding inclusion were also explored in the context of inclusive practices of the school. Multiple sources of data collection including in-depth interviews, observations, document review and focus group were used to answer research questions.

E-mail: pimentamabel60@gmail.com

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^{*}Principal, Pushpanjali College of Education.



BACKGROUND OF THE STUDY

In India, efforts are made at National, State, and Local levels to promote Inclusive Education. The movement with a motive education for all titled as 'Sarva Shiksha Abhiyaan' is being implemented in the Indian scenario by the government since 2000 to include all types of learners such as children with environmental diversities and diversity in disability. Non-Government Agencies (NGOs) in India play a significant role as it functions at the grass-root level to collect database and start need-based inclusive schools in rural and remote areas. Mass media plays a substantial role in embracing the concept of Inclusive Education in the community, mainly by the parents of non-disable children. Episodes like 'Satyamev Jayate,' videos, and documentaries on the rehabilitation of children with special needs that are widely watched by the masses are successful in accepting and working with them.

Inclusive education is when all students, regardless of any challenges they may have, are placed in age-appropriate general education classes that are in their own neighborhood schools to receive high-quality instruction, interventions, and supports that enable them to meet success in the core curriculum (Bui, Quirk, Almazan, & Valenti, 2010; Alquraini & Gut, 2012).

RESEARCH CONTEXT AND RATIONALE

The policy of 'Inclusive Education' is in infancy in India. However, it is cost-effective, hence beneficial for developing countries. More than 90% of kids with disabilities are discovered in India's rural regions. The special schools and integrated education programs are few and cannot serve all the disabled children. So, inclusive education is essential to provide educational opportunities to all disabled children in their locations.

In India, the 'disability' classification is laid out in Persons with Disabilities Act 1995, which outlines seven kinds of 'disabilities', namely blindness, low vision, hearing impairment, locomotor, leprosy cured, mental illness and mental retardation. In this paper, the first two categories are considered – children with blindness and low vision. Education in the light of the right to education for children with disabilities as laid out in CRC and more illustriously in UNCPRD, this research seeks to understand the experiences of children with disabilities in the inclusive school in Varanasi, India.





This qualitative study analyses the cases of children with disabilities studying in an Inclusive school in Varanasi, located in Uttar Pradesh, India. The inclusive culture was analyzed after a study of the knowledge, skills, and attitude of teachers, parents, and children in accepting children with disabilities. An effort is made to elucidate the benefits and challenges of inclusive education.

In the preview of the right to education for children with disabilities as laid out in CRC and more illustriously in UNCPRD, this research seeks to understand the experiences of children with disabilities in the inclusive school in Varanasi, India.

CONCEPTUAL FRAMEWORK

This research considered an 'inclusive school' as one where the children with disabilities studied alongside their non-disabled peers with some support mechanisms for continuing their education in that school.

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RESEARCH OBJECTIVES

- To find out how Jeevan Jyoti Inclusive School is with regard to students with special educational needs.
- This study aims to examine the extent to which Jeevan Jyoti Inclusive School meets the criteria for an inclusive school.
- Examine the experiences of children with disabilities in inclusive schools
- Observe the attitude of the teachers
- Study cooperation of the parents

RESEARCH METHODOLOGY

The present qualitative study is about interviews of children with disabilities, general education teachers, resource teachers, and parents of children with disabilities in an inclusive school in Varanasi, Uttar Pradesh. The researcher employed the case study method as it allows an









intensive study (Shepard 2003) within its real-life context of children with disabilities.

Table 1

Ontology	Interview
Viewing the social reality as the social construction of the participants Participant and non participant observation, both the methods were used for the research.	In depth interviewing has been used to gather information from the students, teachers, parents and peers (non disable).

METHODS

To address the inclusivity of 'Jeevan Jyoti Inclusive School' case study research design was used to ascertain multiple perspectives through interviews. A profile of each of the four children was compiled from information obtained from their teachers, special needs assistants, and parents.

This qualitative study is based on the discussion with children with disabilities in the Inclusive school at Varanasi. The researcher employed the case study method as it allows an intensive study (Shepard 2003) within its real-life context of children with disabilities. As a part of the case study total of 17 in-depth interviews were conducted, nine of the students and 8 of teachers, parents, and the principal.

Interview technique - In-depth interviews of 9 learners with special needs, were conducted from an inclusive school in Varanasi. The general characteristics of the children are presented in Table 1.

RECORDING OF INTERVIEW FOLLOWED BY ITS ANALYSIS

Table 2: Characteristics of research respondents-students

Name	Age	Class	Disability	
1. Deepti	7	III	Low vision- Acquired at age 5	
2. Kriti	9	IV	Partial vision impairment- genetic	
3. Sonal	10	V	Blind-genetic	
4. Ashika	12	VII	Blind-genetic	





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Name	Age	Class	Disability	
5. Aastha	15	IX	Blind -genetic	
6. Neha	12	VI	Cerebral Palsy-genetic	
7. Priti	12	VI	Intellectual disability	
8. Sangeeta	11	VI	Regular student	
9. Babita	14	IX	Regular student	

^{*}Names of all the children have been changed to maintain anonymity.

The discussions related to children's perceptions and experiences regarding themselves and their placement in regular educational settings were noted down. The interviews were recorded by the researcher in the format prepared for the purpose. In this research, it particularly helped as the interview span with children lasted more than an hour in each case, and the questions related to the study were interspersed with a lot of other information sharing.

The students in this study obtain supportive mechanisms for learning as they have special educational needs. The special students were supported by delivering some concession and flexibility in school timing. The schools made the 'writer' available to two students, and one has a visual impairment and polio militias. The school in the study has the policy to give extra time for children with disabilities to complete their examination as these special students possessed a 'Disability certificate.'

Table 3: Characteristics of research respondents-Teachers,
Parents and Principal

Role	No.
Resource Teacher	1
General Education Teacher	1
Parents- Children with special needs	3
Parents-regular students	2
Principal	1

DATA COLLECTION AND ANALYSIS

Permission from the school principal was sought with ease in January 2020. Necessary information about the child's background







information, reports/feedback related to performance, challenges, and achievements were secured from interviews with principals. Interviews with fifteen non-disabled peers, with appropriate consent, provided data pertaining to interpersonal interactions. The fifteen non-disabled peers were identified by the children themselves as their 'good friends' so the researcher explored their attitudes towards their peers with disability.

The principal of the school had communicated to the teachers the purpose of our visits to schools. The concerns raised with the Principals included; the basic requirements for an inclusive school, how do the admissions criteria reflect the needs, attributes and diversity of potential students, in what way the school is different from other schools, what were the support systems available for children with disabilities etc. The researcher had to resort to convenient sampling for the regular teachers. The researcher used to spend time in the 'staff room' and those teachers who visited the place during that time and showed willingness to share their experiences were included.

ABOUT THE INSTITUTION

Sisters of St. Mary's Convent run, 'Jeevan Jyoti Inclusive School', Near Tibetan University, Varanasi, Uttar Pradesh, India. It is a girls' school.

Mission Statement: "To lay a foundation to an inclusive society, through all-round development of the girl child by accepting and celebrating the diversity of every category of students and build a Nation of Justice and Truth"

The Goal of the Institution: To include all students in the mainstreaming of education is their Principle Goal. This "Jeevan Jyoti School" was established in 1975 by Sr, Irene. Initially, it was started for visually impaired students by Sr. Irene Gonsalves, who is an executor director.

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THE ESTABLISHMENT OF CBSE INCLUSIVE SCHOOL

They had the inception of having an institute from 1975 with the motto of an "Inclusive Society." The vision was complete in the year 2011 when the special school was transformed as "Jeevan Jyoti Inclusive School" affiliated to the Central Board of Secondary Education. In the Academic year, 2019-2020 the total strength of the school is 1500 girls. The total number of students with disabilities in school is 72.

The students with special needs pursuing education in the school are as follows –

Special conditions	No of students
Visually impaired- including low vision	56
Mild Hearing Impairment	01
Locomotor Impairment	02
Cerebral Palsy	03
Mild Intellectual Disability	10
Total	72

In these past forty-four years, over 450 visually impaired girls are educated and rehabilitated. Eleven students of this school are awarded by Ph.D. And are professors in different colleges in New Delhi. More than 166 girls are settled in life with good jobs in government officers or good schools. Nearly 270 have secured a good job in government offices and are economically well off, and few others are housewives.

The resource room of the school is well equipped as it has technological devices that are modern and very expensive. They also have the personnel to operate the advanced types of equipment. The schools make the 'writer' available to the children who may need







their help. The 'writers' are usually children from lower grades who volunteer their services.

TRAINED TEACHERS FOR INCLUSIVE SCHOOL

In the year 2008, Jeevan Jyoti climbed one more milestone of preparing the personnel to be the teachers of the visually challenged children through the establishment of the department of Human Resource Development, recognized by the Rehabilitation Council of Indian, New Delhi. The teachers of the school are cooperative and understanding of the needs of these girls. The school organizes seminars regularly for these teachers. The teachers have various symposia. One of the workshops was on the world sight day, "Motivation, Change, and Transformation." Those teachers who take care of the special children had a seminar on "sensory integration and Hand therapy."

Every year 30 students come out fully trained to be the teachers of the Visually Impaired Children. They have teachers to teach them how to read, especially one of the teachers, who is blind.

THE INTERVIEWS OF THE CANDIDATES

The interviews were conducted using a bilingual approach for the teachers. The students and parents were interviewed in Hindi since it is the local language in Varanasi.

The interviews were conducted in Feb. 2020. The questions intended to gain an understanding of the extent to which these students regarded themselves as part of the school and community culture and felt accepted by their friends, classmates, and teachers.

The purpose of the study was stated to the prospective participants before interview; it was also made clear that there would be no consequences to their schooling or in any other way. It was voluntary to participate in the interviews for any of the candidates. It was conducted only after obtaining consent from the candidates. For interviews, the researcher used a bilingual approach for the teachers. The students and parents were interviewed in Hindi since it is the local language in Varanasi.

STRENGTHS OF THE INSTITUTION

Life and working style at 'Jeevan Jyoti Inclusive School' are very informal, like a family. The Principal, regular teachers, special









teachers, and experts in 'Jeevan Jyoti Inclusive School' work to build the life of children in an Inclusive set up as their togetherness is for the building up of society or an organization. This year, there are 124 girls with visual impairment studying from Lower KG to Class XII for CBSE Board. They These children make friends quickly with everyone without any inhibitions. As a classroom in the school is a perfect example of inclusion.

Sincere efforts of the teachers add for the betterment of their world, wherein children with disabilities and without a disability are loved, accepted, and taught together. These visually impaired children have vision loss, but they are well equipped with learning and study materials. They have Braille machines to print the learning material.

The parents of the girls are supportive and cooperative. They cooperate with the teachers and take efforts to complete their studies. All these girls stay in Sister's Convent. The parents of Special School students bring them in the spirit of optimism believing in their God-given extraordinary capacities. They learn through confidence and persevere in steady achievements. Parent's faith in self and determination in daily works leads these children to great accomplishment. As Helen Keller says, "Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence".

They have regular check-ups and counseling sessions for these girls. Therefore they are firm and confident. They study in the school with the regular student. They have writers for their examination. The school has ramps to climb up and come down for all the floors. They get individual attention while teaching the subjects, and their classmates help them to complete their activities. They also have a special school until the fourth standard and extraordinary Audio Room for these girls. They also have a Music Room with various musical instruments.

CHALLENGES

At the beginning of 2008, when Jeevan Jyoti Inclusive School was launched, they had to make arrangements to sell the admission forms to parents. It was a challenging task to convince people to admit their wards in an inclusive school as they were the first generation of Inclusive learners. Since 2008, every year, the school authorities make a temporary arrangement in front of their school gate for admission. They encourage parents to take admission in this school as they have









only girls in their school. The entire resources of this school were transformed in an inclusive set-up with a disabled-friendly environment. The directors had difficulties in raising funds as it is in the middle-class society. The school could overcome this crunch as it was supported by a religious organization and people from the local community.

RESULTS OF THE STUDY

The researcher believes that Jeevan Jyoti Inclusive School has made significant progress on the road to becoming an inclusive school. The case study highlights the obstacles which are preventing Jeevan Jyoti Inclusive School from becoming even more inclusive towards children with special educational needs. The study shows the importance of having adequate resources and supports in place in the school to ensure that inclusion benefits everyone involved. It also shows how important it is that teachers receive training in the area of special education and the need for teachers to liaise with professionals such as speech therapists, occupational therapists and psychologists.

The study shows: there is a willingness among all members of the school community to include

- Children with special needs; the attitudes of teachers and all members of the school community contribute
- The principal has an important role to play in making the school inclusive;
- Revealing insights by the four parents into the degree of inclusivity in Rose Hill School

CONCLUSION

Inclusion is essential for all, especially children with and without disabilities. "When everyone is included, everyone wins," says Jesse Jackson. Efforts of every person are only a drop in the ocean to make our dream come true of an Inclusive Society. The teachers are parents, too; they should be involved in this inclusive setup. They should understand the difficulties faced by these students. The teacher should have a training session on inclusive school for disabled and impaired. The teachers need to respect and take care of children with special needs. They should be given more attention as they are special. The teacher









should take the initiative to know and to help these students in academics. The inclusive environment will bring hopes and new beginnings, life in these children. Therefore, to make life more visible, these children are an asset to us. They see life beautifully and make our lives beautiful to live in this world

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Constructing Understanding of Inclusive Education among Pupil Teachers through Case Studies

Dr Sheena Thomas* and Ms Tanuja Khan**

ABSTRACT

This paper is an attempt to actualize the concept of inclusive education and instill the feeling of inclusivity among the Pupil Teachers. The Pupil Teachers were divided into two groups, G 1 with 17 Pupil Teachers and G 2 with 32 Pupil teachers. The students in G 1 were given the assignment of learning the concepts of inclusive education through a case study approach wherein they were asked to present their understandings through case study. The case studies were moderated by co learners and the researchers. The students in G 2 were taught through regular classroom teaching. A questionnaire was circulated among both the groups and the finds reveal that the perception and understanding of the concept of inclusive education was better among G-1 students.

Keywords: Inclusive Education, case study approach, perception, understanding

INTRODUCTION

Inclusive Education is an umbrella term meaning 'Education for All'. Real objective of Education is achieved only when it is inclusive

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^{*}HoD, Department of Education, The Bhopal School of Social Sciences

^{**}Assistant Professor, Department of Education, The Bhopal School of Social Sciences



and not exclusive. The government of India is striving to achieve this objective making it binding on the institutes under various laws. Integrated Education for Disabled Children (IEDC) was launched as a flagship program by the government in 1974 aiming to mainstream the disabled children.

National Educational Policy (1986) recommends to integrate the specially abled with the general community at all levels as equal partners, to prepare them to live a life with dignity. But just enrolling children to normal schools won't serve the purpose until we give them a conducive environment to learn and grow.

The Right of Persons with Disabilities Act 2016 (RPD Act) mandates inclusive education and stipulates that children with disabilities be admitted in all educational institutes without discrimination and be provided with an environment that maximizes academic and social development with the goal of full inclusion.

ROADBLOCKS TO INCLUSIVE EDUCATION

Lack of Competent Teachers

As teachers we need to facilitate learning for each child and help him reach his or her zone of proximal development. But a major flaw lies in the ground realities with respect to competent teachers who would help in translating this dream into a reality. One of the main difficulties in implementing inclusive education is that general education teachers receive insufficient training to work in complex teaching contexts and to respond to the unique needs of all the pupils in their classroom (Shani, 2016). Majority of teachers are neither trained nor are they inclined to take up challenging tasks like mainstreaming education for all.

PERCEPTION OF TEACHERS FOR INCLUSIVE EDUCATION

Generally teaching is considered to be a easy profession. Mostly females who wish to strike a balance between work and home join the profession either by choice or by default. Since the mindset is of an easy profession encountering challenges is not a cup of tea for many. And not being trained to handle diverse groups especially the specially abled worsens the situation.

The research reveals a considerable gap between the declared desire of general teachers to provide Inclusive Education and their actual







behavior (Huang and Dimond, 2009; Shani, 2015). Common statements like why am I given these challenged students in my class reveals the entire perception. Previous researches also indicate that there was a direct correlation between appropriate training and positive attitudes toward inclusion (Seçer, 2010; Ntombela, 2011). Thus, instilling the right professional ethics along with providing them the skillset to be a warrior of Inclusive Education must be part of all teacher education programs.

OBJECTIVES

- To study the *pupil teachers' perception of inclusive education in two groups taught by two different approach.*
- To study the Conceptual Understanding among the pupil teachers in two groups taught by two different approach.

BACKGROUND OF THE INCLUSIVE EDUCATION PROGRAM

The government of India is constitutionally committed to ensuring the right of every child to basic education. The Government of India has created numerous policies around special education since the country's independence in 1947. One of the earliest formal initiatives undertaken by the government was the Integrated Education for Disabled Children (IEDC) scheme of 1974 (NCERT, 2011). The Kothari Commission (1966) further highlighted the importance of educating children with disabilities during the post-independence period (Pandey 2006). The National Policy on Education, 1986 (NPE, 1986), and the Programme of Action (1992) stressed on the need for integrating children with special needs with other groups. The Government of India implemented the District Primary Education Project (DPEP) in 1994–95. In late 90s (i.e. in 1997) the philosophy of inclusive education is added in District Primary Education Programme (DPEP). This programme laid special emphasis on the integration of children with mild to moderate disabilities, in line with world trends. To accelerate the policy of education for all, Sarva Shiksha Abhiyan (SSA) was launched to achieve the goal of Universalization of Elementary Education in 2001. A zero rejection policy has been adopted under SSA, which ensures that every Child with Special Needs (CWSN), irrespective of the kind, category and degree of disability, is provided meaningful and quality education.









National Curriculum Framework (NCF) 2005 has laid down a clear context of inclusive education. In 2005, the Ministry of Human Resource Development implemented a National Action Plan for the inclusion in education of children and youth with disabilities. It is important to integrate these children into regular schools to help them socialize and build their confidence.

MODEL TO ACTUALIZE INCLUSIVE EDUCATION

With the intention to actualize the concept of inclusive education the researcher taught the paper Creating an inclusive school in B. Ed IV Sem. To facilitate the learning a powerful assessment technique was used. The students were divided into two groups based on their interest, ease and willingness. Group 1 consisted of 17 students. These students were guided to study and research each unit and identify their area of interest in the unit. They were further guided to do a literature review pertaining to their interest and also locate a child with similar problem and then weave a story around that topic. They were asked to conclude by asking a critical question. Group 2 consisted of 32 students and they were taught through regular classroom lectures.

RESEARCH METHODOLOGY

Case study approach was uniquely used to construct and create understanding among pupil teachers in Group 1. Students were asked to draft case studies pertaining to their area of interest from the broad area of inclusive education. Thus, students become active learners from passive listeners.

They became more inquisitive and researched to understand the dynamics of the problem. The problem was converted into a challenge and a solution was sought for the same by converting the core concept into a case study.

The students were further asked to collaborate and improvise the case study of the collearners. The students collaborated and cooperated to present good case studies. They were further divided into groups and a focused group discussion was conducted by the researchers to gauge the learning. Group 2 was taught through regular classroom method. Researchers made all efforts to explain the concepts through lectures, discussion and notes.









A self-made questionnaire was administered to check the pupil teacher's perception in both the groups. The students were also asked to apply their learning in simulated classrooms.

SAMPLE & TOOL

49 pupil teachers from B.Ed-IV semester were divided into two groups according to their interest and abilities (Group-1 included 17 pupil teachers and Group-2 included 32 pupil teachers). Group 1 was given the task of submitting case studies based on their experience and Group 2 was taught through regular classroom lectures. Both the groups were given pre decided interventions for 4 weeks. Researcher made questionnaire with a total of 50 items. This was validated by experts in the field and it was used as a tool to analyze the perception of pupil teachers' on case study approach in learning of B.Ed-IV Semester paper on Inclusive Education. A total 50 items questionnaires were distributed where all the respondents were asked to read the statements given and choose their answers based on rating scale (4-Likert scale ranged from 4= Strongly Disagree, 3= Disagree, 2= Agree and 1= Strongly Agree). The questionnaires consisted of 4 sections.

Section	No. of Items	Description
A	10	It was about the demographic background of the respondents which includes gender, race, teaching experience, preference of teaching style and the highest academic qualification
В	15	Pupil Teacher's perception of inclusive education
С	15	Pupil Teacher's understanding of the concept of Inclusive Education.
D	10	Pupil Teacher's advocating for change and making efforts for inclusive education

DATA COLLECTION PROCEDURE

The researchers mutually shared the responsibility of administering the questionnaire. The data was collected within the timeframe of 4







weeks. The respondents were given 2-3 weeks to prepare the case study material and complete the questionnaire and send it back to the researcher for data analysis. After 4 weeks, all the complete filled-up questionnaires were gathered and collected for further data analysis by the researcher to get the output and findings for the research.

DATA ANALYSIS PROCESS

All the data collected from the respondents were gathered together to be analyzed using Statistical Package for the Social Sciences (SPSS) version 21. The analysis includes both descriptive and inferential analysis. The researchers used descriptive analysis to analyze the frequency and percentage of the overall population in the demographic background. Besides, it is also used to determine the mean, standard deviation, frequency and percentage to identify the effectiveness of Case study integration for pupil teachers' in learning as well as the effective elements of case study approach in learning B.Ed-IV module of Inclusive Education in Bhopal.

In the present study, the Mann-Whitney U Test is used to test the hypothesis developed by the researcher. The test is used to compare the differences between two independent groups towards one dependent variable. Mann-Whitney U Test is used as an inferential analysis by the researcher to test the null hypothesis created by the researcher

HYPOTHESIS TESTING

H01 - There is no significant difference between pupil teachers' perception of inclusive education in the two groups.

Table 1: Mann-Whitney U-test between pupil teacher's perception of Inclusive Education taught through case study and regular classroom instruction

S.N	Group	N	Median	Range	Mean Rank	Mann Whitney U	P
1	G-1	17	2.33	2.20-3.33	59.89	855.00	0.02**
2	G-2	32	2.20	1.95-2.33	45.86		

Significant P<0.05







From the result in Table 1, it shows that there is significant difference between pupil teachers' perception taught through Case Study approach and regular classroom teaching of Inclusive Education (Mann-Whitney U= 855, P= 0.02) where group-I scored higher median (2.33) and mean rank (59.89) as compared to the group-2 school with median (2.20) and mean rank (45.86). Hence, the null hypothesis is rejected. It is a very clear indicator that students perception changes when they are involved in understanding the problem.

H02 - There is no significant difference in the understanding of pupil teachers in the two groups

Table 2: Mann-Whitney U-test between the effectiveness of case study integration for pupil teachers in learning with the B.Ed-IV curriculum of Inclusive Education.

Group	N	Median	Range	Mean Rank	Mann Whitney U	P
G-1	17	2.00	1.40-2.00	65.94	546.00	0.01**
G-2	32	1.60	1.60-2.35	46.92		

Significant P < 0.05

From the result, it shows that there is significant difference between the understanding of the concept in the two group of students. (Mann-Whitney U=546, P=0.01) where group-1 scored higher median (2.00) and mean rank (65.94) as compared to the group-2 with median (1.60) and mean rank (46.92). Hence, the null hypothesis is rejected. The finding is an indicator that students who engaged in drafting case studies were having better understanding of the concept because of their involvement.

MAJOR FINDINGS

Pupil teachers of Group 1 who drafted case studies based on their on field experience.

- The pupil teachers were able to address to diverse learning styles.
- The pupil teachers were able to create an environment that first could mobilize the learner to pursue the curriculum.







- The pupil teachers were able to adjust to the changing scenario and were confident to face the challenges.
- The pupil teachers reflected on the problems and collaborated to find the apt solutions for the specially abled.
- The pupil teachers became more empathetic to the challenges of the specially abled and promised to be empathetic teachers contributing to be instruments of change.
- The perception and understanding of the concept becomes more concrete when cognitive domain is clubbed affective domain of the learner.

DISCUSSION AND CONCLUSION

The results of this study show that case study-based teaching and learning wherein the students draft case studies based on their on field experience will develop a holistic understanding and perception on Inclusive Education compared to traditional classroom. This is because, using case study as a tool will prepare an active learning environment that is more interesting and effective for both teachers and students.

In conclusion, the very first stage of case study implementation must be effective to make sure that, pupil teachers are able to make the best use of it. Case study approach of teaching learning integration in curriculum will result in a huge success and will benefit for both teachers and students. The use of Case Study approach especially in teaching and learning is more about practicality as compared to theories and that is why pupil teachers must be given time to learn and explore it, face the "trial-and-error" phase before they are completely comfortable with its usage and able to make use of it for teaching and learning.

Finally, the integration of Case Study in classroom needs serious consideration in order to increase the competency of the country's education system. This will help in increasing the world ranking of the national education and produce the better future work force. In order to enhance the use of Case Study approach of teaching learning in classroom, the government needs to improve and change the teachers' belief about the integration of case study approach of teaching and learning in classroom. As the teachers' role is the key role in making any of the new policy to be implemented efficiently and successfully, this practice in B Ed classes will pave way for a concrete tomorrow.







The constructivist approach of making students learn dynamics of inclusive education by formulating case studies out of the syllabus has been proved to be highly effective.

RECOMMENDATIONS

It might be too common for issues and challenges of practical approach integration to be discussed but in-depth study of case study approach of teaching and learning integration in core subjects in institutions is least discussed. It is good if further studies can be made based on what barriers teachers are facing in using practical approach in their daily classrooms. Besides, rather than just focusing in B.Ed classes or Inclusive Education, it is best if this study can be conducted in different classes in other institutes on more subjects. This is because some institutes might have flexible and enough funds that makes practical approach implementation much faster and easier. It is good if comparison can be made between different institutes in which it can take the good side as examples and make improvements needed from the flaws identified.

Other than that, it is highly recommended for comparison studies about case study approach integration in teaching and learning to be done between public and private institutions. It would be exciting to see the findings between the effectiveness of case study approach of teaching and learning integration in public and private institutions. The study can be expanded to a state level and the effectiveness should be studied in a bigger demography.

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A Journey from Abstract Thinking to Augmented Reality: Perception of Pre- Service Teachers

Misba Nasir Sayed*, Durgavati Sharma** and Ms. Usha Sharma***

ABSTRACT

Maths is an abstract science since it deals with numbers, quantities and space. Though we have modified Math curriculum still the students lack visualization of concept. In 21stcentury we need digital focused curriculum to make students as constructors of knowledge. Teachers need support system to deal with situations where there are errors of differentiating between a two dimensional and a three dimensional figure. Students face challenges in spatial reasoning. Augmented Reality is one such digital support which a teacher can use to help students learn in interactive multi-sensory approach and collaborative learning environments. Students can make use of Virtual Reality app through mobile devices and visualize a concept in better ways than traditional methods. It would break monotony among students and create an engaging digital environment for the students. Even NEP 2019 suggests the use of augmented reality in educational settings to make immersive and interactive content.

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^{*(}B.Ed Students), K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai – 400077

^{**(}B.Ed Students), K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai – 400077

^{***(}Asst. Professor), K J Somaiya Comprehensive College of Education, Training and Research. Vidyavihar, Mumbai – 400077, E-mail: principal.bed@somiya.edu



The paper tries to test perceptions of pre service teachers about the use of Virtual Reality App in teaching of Math. This study would focus on orienting and giving hands on experience on use of Virtual Reality app using mobile device.

Keywords: Augmented reality, visualization of concepts, spatial reasoning, collaborative learning environments.

INTRODUCTION

Students perceive Maths as an abstract subject. To make it more concrete we need to take students in the world of Augmented reality. It is an appealing support which teachers can use to provide personalized learning. Using the Augmented Reality app teachers can provide a platform where the students can be accountable of their own learning. According to NEP 2019, the use of augmented reality in educational settings makes content interactive. The policy not only focuses on creating and delivering of the content with high quality rather it stresses on the use of technology in the Mathematics classroom to improve the quality of teaching and learning process. According to an online article by 2025 we would have Generation Alpha in which 2 billion children would be technological citizens. The new emerging technologies can incorporate AR and VR content so as to make learning faster and joyful. Schools and colleges must provide Augmented learning environment for developing the critical thinking and problem-solving skills for students in the Maths classroom.

CONCEPT OF AUGMENTED REALITY AND VIRTUAL REALITY

In Virtual reality (VR) a person moves virtually in the world of technology with the limited information of the object whereas in Augmented reality (AR) a person experiences a real-world effect in the virtual world by moving from one place to another or by changing the different locations in the real world. VR is just related to the virtual world and it has nothing to do with the real world rather AR gives a tour of real- world in a virtual-reality by providing a step ahead of virtual thing in the original surrounding or locality.

THEORETICAL FRAMEWORK CONSTRUCTIVISM

For the present study the framework of constructivism helps to understand the functioning of Augmented reality technologies





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in the Maths classroom. Augmented reality relies on the concept of exploratory learning. Here the learner constructs knowledge based on his own thinking, connects the presented information with their own experiences under a collaborative framework. Applying Piaget's constructivism in an augmented reality environment the learner is free to manipulate the virtual objects presented in the virtual environment as they please without feeling anxious as in the real world in the traditional classroom. Augmented Reality supports as a MKO in such a way that the scaffolded instruction helps the learner explores, test and make clarifications between the 2 D and 3D figures. It actually helps to facilitate the student's construction of knowledge.

LITERATURE REVIEW

The review of the literature based on use of augmented reality helps to know more about its effectiveness and challenges.

Chao, W.H. & Chang, R.C. (2018) suggested the development of AR App could provide different degrees of interactivity and makes learning meaningful. It was concluded that the use of AR Math App improves students' learning outcomes and motivates through interactive changes of 3D space.

Lei, Xin & Zhang, Andong & Wang, Bingcheng & Rau, Pei-Luen. (2018) conducted an exploratory study of the application of VR in children's education. It was concluded that VR made abstract knowledge easier to learn and helped to overcome student difficulties in the process of learning. The transcribes of one of the mathematics teacher mentioned that "If children can observe a model from all angles or make a model by themselves, the learning outcomes will be much better. In addition, some mathematical thinking modes can be taught using a virtual reality environment"

Yingprayoon J. (2015) developed a simple Augmented Reality system and concluded that it could make learning more joyful, interesting, captivating, impactful by motivating the learners in the Maths classrooms.

Banerjee G. & Walunj S. (2019) designed and developed an Augmented Reality (AR) based application-GeoSolvAR that targeted the middle school students for improving their visualization skills. Thematic analysis of interviews showed that the in service teachers had acceptance for Augmented Reality.









From the above literature it can be concluded that the use of Augmented reality can improve learning outcomes, motivate students, remove learning difficulties and convert Maths into concrete form.

OBJECTIVES

- To create awareness among pre-service teachers towards the use of Virtual Reality app in teaching of Mathematics
- To give hands-on experience to the pre-service teachers about the use of Virtual Reality app for teaching of Mathematics.
- To examine the perceptions of pre-service teachers about the use of Virtual Reality app for teaching of Mathematics.

RESEARCH QUESTION

What according to pre service teachers is the perceived potential use of VR app in teaching of Maths?

The following are the sub questions

RQ1 What according to the pre service teachers are the perceived benefits of making use of VR app in teaching of Maths?

RQ2 What according to the pre service teachers are the main challenges of making use of VR app in teaching of Maths?

METHODOLOGY

Research Design

The following research adopts the Across-stage Mixed Model Research, where quantitative and qualitative approaches are mixed. Here the researcher first uses qualitative method data and then quantifies it for knowing extent of the positive /negative perceptions about use of VR app in teaching of Maths among the pre service teachers. Furthermore the researcher makes interpretation using this quantified data.

Participants

The sample of the study was 26 pre-service teachers from a particular D.El. Ed College from Mumbai.





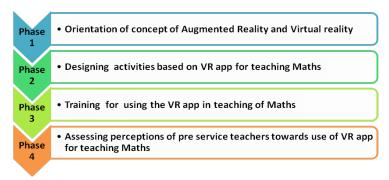


Sampling and Sampling techniques

Due to time constraint, convenient sampling was used. Apart from this Purposive sampling was used since perceptions of pre service teachers were to be tested.

Data Collection

A self made questionnaire later validated by the content experts was used to collect data. The research was conducted in the following phases:



Data Analysis

To answer the research question the researcher analyzed the transcribes and clubbed together to get the themes as follows:

What according to the pre service teachers are the perceived benefits of making use of VR app in teaching of Maths?

Conceptual clarity: 73 % of pre service teachers felt that making use of VR app in teaching of Mathematics would be developing conceptual clarity in students. Some of the transcribes were

"Such apps can be used for remedial teaching; it will bring clarity of the difficult concepts." "The use of virtual reality app can remove misconceptions among students between 2D and 3D images" "It can be used for any concept of geometry for students better understanding."

Active learning: 81 % of pre service teachers felt that making use of VR app in teaching of Mathematics would encourage active learning in the students. Some of the transcribes were









"Learning with mobile can bring activeness in the students." "Students would participate more if VR app is used in learning Maths"

Interesting: 77% of pre service teachers felt that making use of VR app in teaching of Mathematics would be interesting for the students. Some of the transcribes were

"It would be useful as it is fun-learning for kids." "Students would be attracted more as they like technology" "Students will be engrossed because they will be able to see and understand the concepts in the Virtual world within a joyful learning environment."

Negative perceptions: Though most of the teachers had positive perceptions towards the use of VR app in teaching of Maths, yet there were few (31%) who felt that use of such app was a time waster and is not ideal for our classrooms. Some of the transcribes were

"Using this app is not possible in all classroom s as all students might not have a smart phone" "Such apps can take lot of teacher time in a Maths classroom." "We can't use this because we need android phone or a smart phone."

What according to the pre service teachers are the main challenges of making use of VR app in teaching of Maths?

Teacher expertise: 85% pre service teachers felt that teacher expertise could be one of the challenges for making use of VR app in teaching of Mathematics. Some of the transcribes were

"This app can't be beneficial if the teacher herself is not aware of how to use this app" "Teacher should be techno-savvy and aware about the topics in which this app can be used"

Age appropriateness: 69% pre service teachers felt that another challenge for making use of VR app in teaching of Mathematics could be to identify right age where the app can be useful. Some of the transcribes were

"Teacher should be aware at which age this app can be used or else it will not work" "All the students might not know to use technology. We must remember this"

Technology issues: 77 % pre service teachers felt that technology issue can be another challenge in making use of VR app in teaching of Mathematics. Some of the transcribes were

"Due to weak internet it can be a little difficult to use in classroom and also in some remote places." "We must not depend on such resources as there can be technology failure so other resources are better."







FINDINGS OF THE STUDY

The study on perception of pre service teachers towards use of VR app in teaching of Maths had **mixed reactions** as it was found by most of the teachers as beneficial for conceptual **clarity**, **active learning**, developing interesting **as well as** time **waster and not ideal**. The pre service teachers felt that **teacher expertise**, **technology issues** as well as identifying **age appropriateness** could be the challenges of using VR app in teaching Maths.

CONCLUSION

Students have negative perceptions about Maths. A teacher can help to change student's perceptions. In this study the use of VR app was positively perceived by most of the pre service teachers however they also perceived many challenges in using it in the classroom. Recommendations for various stakeholders can help to make the future teachers be more prepared to handle its usage in their own setting. More researches need to be published for use of VR app in teaching of Mathematics specifically for the Primary level. Further such studies can be conducted to identify perceptions of the students towards use of VR app in Maths classrooms.

RECOMMENDATIONS OF THE STUDY

For administrators

- More workshops for the teachers on use of VR app in teaching of Maths.
- Infrastructural changes in the form of AR devices, smart phones, strong internet connections
- Library to be equipped with literature on use of AR in Maths classrooms.

For teachers

- Reading researches on use of VR app in Maths classroom.
- Joining discussion forums to get inputs on the challenges faced in use of VR app in the Maths classrooms.
- Publications of resources based on use of VR app for teaching Maths.







For curriculum framers

- Creating handbooks for school teachers for use of VR app for teaching Maths
- Designing Maths Textbooks with content on VR app

For teacher education colleges

- Curriculum of Pedagogy of Mathematics with component of AR and VR.
- Internal Practicum on using VR app for teaching Maths
- Action research projects on use of VR app in Maths classroom

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Reading: The Gateway to a Life Long Learning

Miss. Natasha Agnes D'souza*

"The more that you read, the more things you will know. The more you learn the more places you'll go."- Dr. Seuss, "I Can Read With My Eyes Shut!"

David K. Dickinson. 2012. How Reading Books Fosters Language Development around the World. (https://www.hindawi.com/journals/cdr/2012/602807/)

Research on literacy development is increasingly making clear the centrality of oral language to long-term literacy development, with longitudinal studies revealing the continuity between language ability in the preschool years and later reading. The language competencies that literacy builds upon begin to emerge as soon as children begin acquiring language; thus, the period between birth and age three also is important to later literacy. Book reading consistently has been found to have the power to create interactional contexts that nourish language development. Researchers, paediatricians and librarians have taken notice of the potential for interventions designed to encourage parents to read with their children. This article reviews research on the connections between language and later reading, environmental factors associated with language learning, and interventions developed in varied countries for encouraging book use by parents of young children.

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^{*}St. Teresa's Institute of Education, S.V. Road, Santa Cruz (West). Mumbai – 400054. E-mail: stie73@gmail.com



Training to read is about paying attention and comprehending as well as succeeding to apply what is impressed on the page. Through story telling children start getting familiar to a wide range of words. The most fundamental task as an educator or parent would be getting your child ready to succeed as a reader. At the initial stages of growth a child's book shelf could be occupied with a diversity of books, this would introduce the child to the richness of literate across the culture. As Albert Einstein quoted, "If you want your children to be intelligent, read the fairy tales. If you want them to be more intelligent, read them more fairy tales."

The merit of reading is a vital development for the growth of every child's education. It constructs their learning expeditions through their life time. "You can find magic where ever you look. Sit back relax all you need is a book!" — Dr. Seuss. This is the most delightful entity about books! They assign a premise for their academic role and success. As per an article posted on the blog Edarabia, a child should always be allowed to read what they like to read, they should be controlled only if what they read is not age appropriate. By reducing restrictions a child is able to read more and take an interest in learning. Reading empowers a child to spark their imaginations and also express themselves creatively by which they could stretch their intellect. A child models their adult, parents and educators could make use of this opportunity and help the child in picking up beneficial interest at an early stage. The adults could also be an avid listener there by helping their child to perfect their language skills.

"Today a reader, tomorrow a leader" – Margaret Fuller Reading is a mighty instrument that opens doors for empathy, exploration and learning. It is true that reading should be nurtured until a child flourishes into a well rounded personality.

An article on Edu Note blog lists down the variety of benefits on reading which includes a sense of satisfaction, improving concentration, imparting knowledge, exercising brain strength, reducing stress, enhancing analytical thinking, improving vocabulary and improving writing skills. Reading materials such as books, journals, newspapers and magazines have proved to be the most inexpensive source of knowledge and entertainment. Reading is the cheapest way of accumulating knowledge and thus improving lifestyles.







As per an article posted on the blog Touch-type Read and spell, developing strong reading skills is one of the fundamental factors of every early education program. Sometimes however, there may be undiagnosed disabilities that a child may get subjected to namely being dyslexia or slow processing. If the root problems of such issues are addressed, the teacher as well as the parent could come along with an appropriate coping strategy which would help the child in accomplishing advancement in reading milestones.

Students face difficulties with decoding. Decoding is when children are able to put sounds to letters in order to sound out written language. Reading skill is very important as its opens the opportunity to absorb other existing knowledge. Reading comprehension is advanced level of reading skill. Senior high school students are expected to master these skills.

"A reader lives a thousand lives." – Galileo. A open book opens a new world. A book is a good teacher because it gives you knowledge and expects no fees. It provides alternate life experiences, case studies and stories.

Jordan Peterson a Canadian author, clinical psychologist and scholar mentioned in one of his interviews that a different way to explore the world is through reading. He felt that Youtube and Podcast are replacing physical books as the value gained by the reader in the end of the day was same. People of all age now enjoy not only reading books but also hearing audiobooks which has now gained an impetus due to technological advancement. People are in touch with books through podcast as they listen to audiobooks while driving, walking or undertaking any other activity which he finds is quite positive even though the medium is quite different. Spoken words have a larger reach and longer duration as a book. He believed that it is been a revolution in the modern world.

As the quote goes "Great leaders make great writers and further great writers make great communicators and even further great communicators make great persuaders and none the less great persuaders make great society and that is exactly what the world needs." When you have a good book to keep you company there can be nothing better in this universe. Reading is love in action. The possibilities of reading too are endless. One would never have to study for spelling test, it would









enhance and expand the vocabulary and it helps you to further expand your perspective while you come across different characters in your book.

Bill Gates an American business magnate, software developer, investor, and philanthropist best known as the co-founder of Microsoft Corporation spoke about his reading habits and favourite books in a 2010 interview with the Academy of Achievement. He read books pertaining majorly to genres of science fictions, biographies. It's no secret Bill Gates reads a lot. How one reads a books matters more. Reading makes one see the world differently According to Bill Gates one of the most efficient way to read is by taking notes in the margin because that enables the reader to attach a new piece of knowledge to an already existing knowledge. It enables one to unlearn and relearn time and again. Reading books that are more prevalent to the current scenario enhances practical and logical thinking. Reading biographies on inspiring personalities enables one to garner the best life lessons and formulas to lead a successful life.

All one can take after contemplating on the lives of these great personalities is that great personalities are born by reading. It improves ones analytical thinking skill as well as ones concentration power. One becomes quite ambitious. It teaches one to be more human, great works of literature and poetry opens one to experience and feelings one haven't had. It shows one other world's and broadens ones horizon. It helps you see other's perspectives. It gets you close to another person's skin and it can help one understand the real people in their lives a little better.

Reading is a pleasure. It enriches ones' life. A child should learn to read everything. Educators can enable a child to make the library their second home. Reading also helps one brain function. It strengthens one neural path ways. Reading is good for all kinds of learning not only language. Reading also helps one to reflect on one's own life. Books are words of wisdom that spread in pages. Books help you connect with the greatest minds that have accomplished something in life. They reveal to you how great people have made things possible.

Amidst, all these challenges 23rd of April is celebrated as World Book Day. This day is celebration of authors, illustrators, books and most importantly reading. The reason for choosing this particular date is quite interesting. The 23rd of April is quite a symbolic date for world literature because it is the death anniversary date of many great authors





and poets such as William Shakespeare, Miguel de Cervantes, William Wordsworth and many others.

Research findings have proved that school libraries have a positive outcome on a child's learning outcome. The impact has been highlighted through their performance which includes improvement in reading test scores, higher academic accomplishment and positive attitudes towards learning. The education system in India is based on the British system of education. School is a gateway of knowledge and plays quite an important role in building up a love for reading. According to UNESCO, "The school library provides information and ideas that are fundamental to functioning successfully in today's information and knowledge based society. The school library equips students with lifelong learning skills and develops the imagination enabling them to live as responsible citizens." Dr. Ranganathan the famous Mathematician and Librarian from India stated that the school libraries should act as laboratories for students and the librarians should function as guides to help the students in learning and using the books for improvement of knowledge and scholarship.

Another prominent role in India was played by Dr. Babasaheb Ambedkar. In the 1930's he oversaw the construction of a house in Dadar called Rajgriha, where he stocked his 50,000 odd books. That was his love for books. According to an article on Velvida blog, Dr. Babasaheb Ambedkar had a vast collection of books on law, economics and other constitutional matters. The inspiration and motivation left by Dr. Babasaheb Ambedkar have led to various signs for instance during marriage ceremonies the dalits are left with book stalls. If one pays attention to the statue of Babasaheb Ambedkar closely he has a book holding in one hand.

Thus reading is one of the best habits a child could inculcate while developing in life. Books can illuminate, inform and guide one to the right direction. Books does enable one to have a glimpse of different cultures, tradition, art, history, geography, psychology, health and nutrition, wellness, self-improvement and several other subjects and aspects of life. It helps you to unlearn and relearn and keep learning. Daily allotting 30 minutes only for reading especially for children will enable them to improve the quality of their mind.

As per the data collected in 2018 by India Today, many government schools do not consider reading as an important part of academics and









call it as distraction. Their findings stated that as many as 100 million children are unable to read. Developing literacy skill in education is the need of the hour as reading sets a life long foundation of education. It was further suggested that the government should make reading a part of the school curriculum by including weekly reading sessions.

"A person who has never listened to nor read a tale or myth or parable or story, would remain ignorant of his own emotional and spiritual heights and depths, would not know quite fully what it is to be human." – Ursula K Le Guin.

In conclusion as per the findings I have made I could say that books inspire us to dream, it is a tool to achieve our dreams, it offers a wide dimensions and volumes of knowledge, experience, ideas and thoughts, facts and information. It creates questions, answers questions, provides a yardstick to children to chat their own moral and spiritual growth, It helps to embrace multiple perspective, build connections and broaden views. It helps in finding purposes and helps a child to expand their inner self, inner world, inner mind and inner life. They are highly interactive, widens consciousness and creates a warm emotional bond.

Books would not only prepare a child academically but create a child to be a limitless potential human.







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Treating Young Minds in Gennext Classrooms with Biblotherapy!

Dr. Shakuntala Nighot*

ABSTRACT

Teachers in the twenty first century are dealt with various emotional, psychological, social and educational problems of their students. Bibliotherapy is one of the best effective approach which teacher can use to address these issues. It can be effectively applied to classroom environment. It helps teachers to deal with individual student issues. Effectiveness of bibliotherapy depends on several facets such as understanding of therapists about problem of the child, selection of suitable literary resources pertaining to the issue of child, students self-help nature etc. Bibliotherapy may have limitations but there are hardly any side effects of it.

Keywords: Bibliotherapy, Academic Stress, Book Therapy, Academic Counseling

INTRODUCTION

This paper talks about importance of bibliotherapy for students in present and next generation. Education is stirring fast in electronic and digital mode. Tremendous information is available on internet pertaining to every possible query of the students. Habit of approaching a book to satisfy the curiosity or for getting solution to a problem is diminishing in today's learners. They are too impatient to read through a book running into chapters to find a solution for a difficulty. Instead,

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^{*}St. Teresa's Institute of Education. Santacuz, Mumbai 400054. Shakun.457@gmail.com



they prefer to "google" for everything they want. At the same time psychological issues are more commonly observed in present generation students. It's percentage may increase in next and coming generations. In this scenario, bibliotherapy can help the educators to be aware of appropriate coping up strategies for student issues. Bibliotherapy can serve as supportive therapy to treat various psychological traumas among students.

RATIONALE

Educators can provide opportunities for their students to work through various problems through the use of carefully selected literature and materials. Through bibliotherapy, students can identify and relate to characters in their bibliotherapy literature and, thus, work through personal issues and problems. It is imperative, however, educators carefully select literature that will be appropriate and applicable to each student's individual situation. Bibliotherapy is an excellent tool which educators can use to reach out to students who struggle with social, emotional, educational or academic issues. The incorporation of bibliotherapy into your classroom doesn't require drastic changes in everyday routines. One of the most powerful aspects of bibliotherapy is that it can be easily incorporated into already-set classroom reading routines.

Over the years, librarians across the world, being specialized in contents of the books, are providing informal bibliotherapy in the form of Readers Advisory Services. There is great need that specialized librarians should practice bibliotherapy exclusively for betterment of society.

DEFINITION

Biblio means 'list of books' and Therapy stands for 'method of treatment'. From academic point of view bibliotherapy is use of selected books and other literary material having content with specific therapeutic values as supportive treatment to injured minds.

More precisely it's the use of reading materials to address personal problems or for psychiatric therapy (Merriam-Webster, 2007)

BIBLIOTHERAPY: HISTORICAL DEVELOPMENT

Today, bibliotherapy is commonly used as a supplement to any modern treatment or medicinal therapy; however, previously it was









often used as the only form of treatment, and sometimes it used to prove as a wonder cure. Originally, bibliotherapy was one of the services provided by only large hospital libraries for people with pychological problems as a coping strategy of soldiers of wartime traumas, and for mental healing of incapacitated veterans.

In late 1930's, and in the 1940's, counselors started using it bibliotherapy in association with librarians which made it more prevalent. In 1946, it was used with children initially to instill moral values in them. Large indices comprising of the book title, summary, and story moral were specially prepared for that purpose. In 1946, Sister Mary Agnes claimed that bibliotherapy can be used to help students to resolve more specific issues rather than to get moral values. In modern era, bibliotherapy is used to treat people with a number of syndromes, to help resolving various psychological and some physical problems. Also, the indices used for bibliotherapy today resemble those of the past, but disorders and issues that can be helped or addressed are in place of moral values and character traits.

Though it's not much officially practiced in India, the theory is used frequently along with other treatments in advanced countries like USA and UK.

Problems Faced by Students and Need for Bibliotherapy in Classrooms

New age students are facing serious issues like anxiety, depression, trauma, sleep disorder, low self-esteems, ragging, bullying in school and college scenario etc. Teachers need to address many social, emotional and personal issues related to their students apart from academic issues (Cook, Earles-Vollrath, & Ganz, 2006) like

- Children lacking with the emotional intelligence
- · Economically backward status of student's family
- Vernacular medium students with English or technology phobia
- · Diversity in their Social, Family and Cultural background
- Children of divorced parents
- Death or illness of near and dear one
- Children with psychological or physical disorder in themselves or in the family









 Lack of social, or academic skills which are crucial and many more.

Hence educators should be familiar with appropriate coping up strategies for these students to maintain healthy environment in classroom.

According to Forgan, (2002) bibliotheraphy should be chosen by teachers to deal with problems in the classroom because books can help students to get motivated and charged by introducing to following things

- self-concept
- strategies to release the emotions to reduce the mental pressure
- encouraging self-appraisal, positive thinking
- developing interest beyond self
- variety in human behavior and effect of motivation
- he/she is not the only person facing that problem.
- there can be several answers to a problem
- discussing the problem openly can lead to a solution
- a well implemented and proper action plan can solve the problem

Who Can Assist in Bibliotherapy for Student?

- · Friends and Families
- Teachers, Book Reviewers, Librarians
- Counselors, Psychologists and Medical Practitioners.
- Student himself practicing self bibliotherapy
 All these people together or individually can help an academician to provide effective bibliotherapy to her student.

Characteristic Prerequisite to Practice Bibliotherapy

- Person should be well read and should know number of different types of literally work with their therapeutic characteristics.
- He/she must have knowledge about various types of problems which students can face. (small questionnaires or interviews can help here).
- He should be able to recommend the appropriate literature which can put the child back to working mood. Practitioners may prepare manuals, indices or book of books to practice biotherapy effectively.







- He/She should possess an administrating property and should be able to develop the tools like 'Criteria to Judge the Effectiveness of the Bibliotherapy', 'Feedback Mechanism' etc.
- Should be able to prescribe alternative literature, if initially suggested books doesn't produce the required effect.

Most Effective Literature Types for Bibliotherapy

Poems, Novels, Moral Stories, Biographies, Autobiographies, Career Guidance Books, Ethical, Spiritual and Self-help Books, History Books can speak thousand words through a single line/paragraph or situation which helps to large extent to someone in the same trauma and situation to get out of it. Recorded experiences in literature helps lot to cure injuries to minds.

Literary Work Recommended in Bibliotherapy Must Possess Few of the Following Properties

- Therapeutic value
- Anesthetic property: which helps to forget pain, anxiety, problem
- Shock absorbing capacity: which helps to reduces the intensity of it
- Stimulant value: creating extra energy which will refresh and awaken mind power to cope up with the problem
- Capacity to charge the minds with positivity
- Just like medicines, which has a basic but very important ingredient
 helpful to reduce intensity of health problem, these books should
 have some basic ideas, situations or characters helping to heal the
 minds quickly.
- It should prevent undesirable side effects.

Factors to Consider

Following factors should be taken ito account while prescribing book trough bibliotherrapy

- · Age of the student
- · Gender of student
- Cognitive level of reader: will he be able to understand the book with right perspectives?
- Problem the student is facing







Success of bibliotherapy mainly depends on a person's ability to self-help while passing through 3 important phases of bibliotherapy: Identification, Emptying, and Perception or Determination.

Phase 1: Identification, is important in the therapeutic process because a person struggling with an issue generally try to find another individual in alike circumstances. Through literature suggested during bibliotherapy, an individual meets characters that experience or struggle with similar situations to his or her own so, it is important to that teachers carefully select books including the characters with whom students can relate.

Phase 2: Emptying, in this phase person undergoing bibliotherapy, gets sensitively involved in a story due to the emotional relevance to the situations faced by characters. As a result he or she can discharge own emotions and fights caused by that particular situation. It is extremely important for an educators to provide such an atmosphere that child can open up to discuss his or her feelings and thoughts. (Discussion in private consulting room or writing through diaries)

Phase 3: Determination, or Insight leading to some positive resolution. Student undergoing bibliotherapy reaches to insight only when he or she enters the third and final stage of bibliotherapy. It occurs when a student (with the help of literature characters or literature situations similar to his own) apprehends that his or her condition can and should change. These books indirectly act as catalyst for change, students can discover innovative ideas to bring this change to change the situation to face the problem in his life successfully. The absolute phase of bibliotherapy inspires students to tackle the problem by increasing his coping up approaches, studying other behaviors, understanding and determining the tenacities to their personal issues.

Most powerful features of bibliotherapy is that it can be used to address abundant problems, and by designing it properly. Step by step, it brings out the student through a problematic situation to a resolving determination. It gives positivity to live the life.

SIGNIFICANT STAGES OF BIBLIOTHERAPY

Prater, Johnstun, Dyches, and Johnstun (2006) advocated following important stages of bibliotherapy.







- Develop a trusting rapport with the student to whom you think bibliotherapy can help to tackle his specific issue. You must ensure adequately trusting and respectful relation so that he/she will be able to willingly converse his/her state of mind regarding the literary characters and difficulties as they relate to his or her own struggles in those situations.
- 2. Identify precisely the problem with the child. Make sure you know what the student is suffering or undergoing. Make out the time to converse with him or her, and use this information to pinpoint your understanding and ideas (ensuring him trusted environment will help enormously with this stage).
- 3. Try to find help from other teachers, librarians counselors and school psychologists who may be able to assist. Librarians can recommend suitable literature, school psychologists can assist you to recognize various behavior problems and can help students through catharsis and recognition, school counselors and teachers can provide the required emotional support to the students facing a problem. If the issue is not directly related to parents they also can be included to know more thoroughly about the child.
- **4.** Provide the safe environment to student to read and grasp the material mindfully.
- 5. Set goals and activities. As percentage of benefit or assurance can't be claimed in bibliotherapy. Propose activities or consultations boosting student's reflective thought about the own tussle and aligning with your goals as a bibliotherapist for the student.
- **6.** Progressive relevance, appropriateness of reading level should be taken into account while choosing suitable literature for student. It should be well written and contain alike situations with suitable reading level for the student.
- 7. If the book is projected to address complex and delicate or sensitive issues, present it carefully only to those for whom it has been proposed.
- **8.** Generate such opportunities for the students that he can participate and contribute in more and more reading and literally activates planned for his specific bibliotherapy. Such as vocabulary, making sentences with phrase, book reviewing, summaries, new title to old story etc.







- 9. It's important to conduct resilient post-reading activities to involve student actively in the determination and resolution phase of bibliotherapy, such as book talk, discussion about own or anybody's relevance with book characters and situations, pen down his feelings before and after reading the book, or create another creative end to a literary work or writing it with new climax.
- 10. Finally, evaluate and apprise the effectiveness of bibliotherapy on the student using the information assembled during, pre and post bibliotherapy and supplementary projects to recognize areas of attainment of predefined goals. Brainstorming will help to generate more innovative ideas for areas that needed enhancement and expansion.

Precautions

- If expected results are not received, bibliotherapist must keep record of it and try to prescribe new set of literature.
- Overdose of bibliotherapy and literature with too much complex language should be avoided.
- Response to therapy in various stages should be noted down properly and ultimate result or change noticed in student's behavior or action should be recorded properly.

Limitations

- Bibliotherapy is more useful in psychological issues with mild intensity. For severe and extreme psychological traumas it's not so effective.
- It's not a complete psychotherapy, it a just possible supportive way
 to help students who struggle with certain issues to find coping
 strategies and solutions.
- Bibliotherapy might take longest time go to the history and root of problem like homeopathy.
- Unlike injection in modern medical science it can't be forcefully
 injected into the body or mind. Bibliotherapy can't make wonders
 of its own, person undergoing should be of self-help nature and
 teacher or bibliotherapist should also work little extra and other
 than routine way.







- Intensity of effect of same book may vary with people, time and the kind of problem.
- Evidence based practice in a more scientific way is needed for concrete results which is little lengthy, complex and challenging process in case of bibliotherapy.

CONCLUSION

Treating and healing young minds with bibliotherapy requires careful selection of literature and deliberate guidance through it. Furthermore, educators need to provide a safe environment for students to work with the literature, and to guide the students through the literature and to help them to relate and express to the literary ideas, situations and characters and to use them to tackle real life problems. Bibliotherapy is an excellent tool that can be incorporated into the classroom to treat various psychological problems of students.

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शिक्षक-प्रशिक्षणार्थ्यांनी केलेल्या पुस्तक परीक्षणांचा अभ्यास A Study of Educational Book Review by Trainee-Teacher

डॉ. बी.जी. खाडे*

सारांश

'शिक्षक—प्रशिक्षणार्थ्यांनी केलेल्या पुस्तक परीक्षणांचा अभ्यास' करण्यासाठी शासकीय अध्यापक महाविद्यालय, मुंबई येथील बी.एड. द्वितीय वर्षाच्या सर्व ४३ प्रशिक्षणार्थ्यांचा सहेतुक नमुना घेण्यात आला.

एकल गट अभिकल्पाचा वापर करून चौथ्या शैक्षणिक सत्रामध्ये संशोधन पूर्ण केले (२०१९—२०) असे आढळून आले की, प्रशिक्षणार्थ्यांनी दर्जेदार शैक्षणिक पुस्तकांची निवड करून त्यांची परीक्षणे करण्यात यशस्वी झाले. केलेली परीक्षणे त्यांनी परिसंवादात सादर केली व चर्चा घडवुन आणली आणि सर्वांचे एक पुस्तक स्मरणिका रुपात प्रकाशित केले. कृतिकार्यक्रमांचा प्रशिक्षणार्थ्यांवर सकारात्मक परिणाम झाल्याचे आढळून आले.



^{*}सहयोगी प्राध्यापक, शासकीय अध्यापक महाविद्यालय, मुंबई.

E-mail: bharamukhade65@gmail.com

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प्रस्तावना, महत्त्व व गरज

श्रवण, भाषण, वाचन व लेखन ही मुलभूत भाषिक कौशल्ये आहेत. ह्या मुलभूत कौशल्यानुभूतींनी विद्यार्थ्यांची व्यक्तिमत्त्व समृद्ध होणे गरजेचे आहे. वाचन हे यापैकीच एक मुलभूत व महत्त्वाचे कौशल्य आहे. 'वाचन संस्कृती' हा शब्दसमुच्चय आपण अनेकदा ऐकतो. 'वाचाल तर वाचाल', ग्रंथ हेच गुरु'....... अशी सुभाषिते ऐकतो. वाचनाची गरज व महत्त्व आपल्याला समजते. परंतु बऱ्याच वेळा तशी कृती घडत नाही असे दिसून येते. सद्यस्थितीत बऱ्याच शाळा—महाविद्यालयांमधील विद्यार्थ्यांची वाचनाभिरुची कमी झालेली आढळून येते.

संशोधक गेली २८ वर्षे शिक्षणशास्त्र महाविद्यालयांत शिक्षक—प्रशिक्षकाचे कार्य करत आहे. अध्यापन, मुल्यांकनाचे कार्य करतांना शिक्षक—प्रशिक्षणार्थ्यांशी वाचनाबाबत चर्चा करत आहे. निरीक्षणे करत आहे. या दीर्घ कालावधीतील अनुभवाचा आढावा घेतला असता शिक्षक— प्रशिक्षणार्थ्यांचे वाचन कमी होताना आढळून आले. बाजारु तयार नोटस्वरती परीक्षा देऊन पदवी प्राप्त करण्याकडे अधिक कल असल्याचे आढळून आले. भविष्यकालिन शिक्षकांची 'वाचन संस्कृती' कमी झाली तर ती बाब शिक्षण क्षेत्राला घातक ठरेल. यासाठी शिक्षक—प्रशिक्षणार्थ्यांना शैक्षणिक ग्रंथ/पुस्तक वाचनाकडे वळविण्याची गरज निर्माण झाली. त्यातूनची ही संशोधन समस्या निवडली गेली.

शिक्षक—प्रशिक्षणार्थ्यांनी विविध शैक्षणिक पुस्तके वाचून त्यातील विचार, ज्ञान, कृती, दृष्टिकोन यांचा स्विकार करणे आवश्यक आहे. काही शिक्षणतज्ज्ञांनी शिक्षणक्षेत्रात केलेल्या नवोपक्रमांची ओळख करून घेणे महत्वाचा आहे. शैक्षणिक पुस्तकांचा शोध कसा घ्यावा? वाचन कसे करावे? टिप्पणे कशी घ्यावीत? परीक्षण कसे करावे? याचे प्रशिक्षण/सराव देण्याच्या हेतूने संशोधकाने पुढीलप्रमाणे संशोधन समस्या निवडून समस्या विधान केले.

समस्या विधान

शासकीय अध्यापक महाविद्यालय, मुंबई येथील शिक्षक—प्रशिक्षणार्थ्यांनी केलेल्या पुस्तक परीक्षणांचा अभ्यास.







संशोधनाची उद्दिष्टे

- 1. शिक्षक—प्रशिक्षकांसाठी पुस्तक परीक्षणासंबंधीच्या कार्यनीतीचे नियोजन व आयोजन करणे.
- 2. शैक्षणिक पुस्तकांचे परीक्षण या विषयावर शिक्षक-प्रशिक्षकांच्या परिसंवादाचे आयोजन करणे
- 3. शिक्षक—प्रशिक्षकांच्या पुस्तक परीक्षणांची स्मरणिका (पुस्तिका) प्रकाशित करणे.
- 4. पुस्तक परीक्षण कार्यनीतीची परिणामकारकता अभ्यासणे.

पारिभाषिक शब्दांच्या कार्यात्मक व्याख्या

1. शासकीय अध्यापक महाविद्यालय, मुंबई महाराष्ट्र शासनाचे १९०६ साली स्थापन झालेले, शिक्षक—प्रशिक्षण देणारे, मुंबई येथील एक अनुदानित शासकीय अध्यापक महाविद्यालय म्हणजे शा.अ.म. मुंबई होय.

2. शिक्षक—प्रशिक्षणार्थी :--

शासकीय अध्यापक महाविद्यालय मुंबई येथे शिक्षक—प्रशिक्षण घेणारे सन २०१८-२०१९ या शैक्षणिक वर्षातील द्वितीय वर्षाचे शिक्षणशास्त्र पदवीचे विद्यार्थी.

3. पुस्तके :

शैक्षणिक क्षेत्रावर आधारित विविध लेखकांनी प्रकाशीत केलेली पुस्तके.

4. परीक्षणांचा अभ्यास :

निश्चित करून देण्यात आलेल्या निकषांआधारे प्रशिक्षणांर्ध्यांनी केलेल्या पुस्तक परीक्षणांचे सर्वेक्षण विश्लेषण व मूल्यांकन.

संशोधनाची व्याप्ती व मर्याटा

1. प्रस्तुत संशोधन मुंबई विद्यापीठाच्या द्विवर्षी बी.एड. अभ्यासक्रमाशी संबंधीत आहे







- 2. प्रस्तुत संशोधन द्विवर्षीय बी.एड.च्या चतुर्थ सत्र कालावधीपुरतेच मर्यादित आहे.
- 3. प्रस्तुत संशोधन शासकीय अध्यापक महाविद्यालयात मुंबई येथे शिक्षक—प्रशिक्षण घेणाऱ्या द्वितीय वर्षाच्या ४३ शिक्षक—प्रशिक्षणार्थ्यांप्रतेच मर्यादित आहे.
- 4. प्रस्तुत संशोधनाच्या उद्दिष्टांशी संबंधित हे संशोधन आहे.
- 5. प्रस्तुत संशोधन शैक्षणिक पुस्तकांच्या परीक्षणाशी संबंधीत आहे. महाविद्यालयाने निश्चित करून दिलेल्या पुस्तक परीक्षणांच्या निकषांची मर्यादा आहे.
- प्रस्तुत संशोधनाला संशोधक, शिक्षक—प्रशिक्षणार्थी व कार्यनीतीच्या मर्यादा आहेत.

प्रस्तुत संशोधनाचे निष्कर्ष शिक्षक—प्रशिक्षणार्थी आणि शैक्षणिक पुस्तकांच्या अभ्यासकांना उपयुक्त ठरतील.

पुस्तक परीक्षण कार्यनीती व कृतिकार्यक्रम

शैक्षणिक पुस्तक परीक्षण उपक्रम राबविताना संशोधकाने संशोधनाच्या मुख्य उद्दिष्टांतर्गत येणाऱ्या उपउद्दिष्टांचा विचार करून कार्यनीतीचे नियोजन व आयोजन केले ते पुढीलप्रमाणे:—

कार्यनीती आराखडा

कृती	कृती कार्यक्रम
 शैक्षणिक पुस्तके ही संकल्पना स्पष्ट करणे शैक्षणिक पुस्तकांच्या वाचनाचे महत्त्व पटवून देणे शैक्षणिक पुस्तकांचे वाचन करण्यास प्रवृत्त करणे. 	उद्बोधन पर व्याख्यानांचे आयोजन







कृर्त	ो	कृती कार्यक्रम
5.	शैक्षणिक पुस्तकांचा शोध घेण्यास मदत करणे. शैक्षणिक पुस्तकांचे संकलन करण्यास मदत करणे. प्रत्येकी किमान पाच शैक्षणिक पुस्तकांची निवड करणे व संकलन करणे.	'शैक्षणिक पुस्तके शोध मोहिम दिन' चे आयोजन प्राचार्य, संशोधक, प्राध्यापक व ग्रंथालय प्रभारी प्राध्यापकांच्या मार्गदर्शन व निरीक्षणांतर्गत महाविद्यालयाच्या ग्रंथालयातील शैक्षणिक पुस्तकांचा शोध घेण्याची संधी देण्यात आली.
	निवडलेल्या पाच शैक्षणिक पुस्तकांचे वाचन करण्यास मदत करणे. पाच शैक्षणिक पुस्तकांमधून आवडलेल्या एका पुस्तकाची परीक्षणासाठी निवड करणे.	'शैक्षणिक पुस्तके वाचन अभिरुची पंधरवडा' चे आयोजन व सहाध्यायी चर्चा सप्ताहाचे आयोजन.
	शैक्षणिक पुस्तक परीक्षणांसंबंधीचे उद्बोधन करणे. शैक्षणिक पुस्तक परीक्षणाच्या निकषांची/मुद्दयांची निश्चिती करणे.	'असे करावे पुस्तक परीक्षण' विषयावर उद्बोधनपर व्याख्यानाचे आयोजन व शैक्षणिक पुस्तक परीक्षण नमुन्यांचे सादरीकरण.
11.	आवडीने निवडलेल्या शैक्षणिक पुस्तकाचे शैक्षणिक पुस्तक परीक्षणाच्या निकषांधारे (मुद्दयांच्या आधारे)/दृष्टीने वाचन करणे.	'विविधांगी वाचन व चिकित्सक परीक्षण' व्याख्यानाचे आयोजन • सहाध्यायी चर्चा व प्रत्याभरण





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कृती	कृती कार्यक्रम				
12. निवडलेल्या शैक्षणिक पुस्तकाच्या परीक्षणाचे कच्चे लेखन करणे.13. निवडलेल्या पुस्तकाचे अंतिम परीक्षण लेखन करणे.	• गरजेनुसार मार्गदर्शन (ऐच्छिक)				
14. शैक्षणिक पुस्तक परीक्षणांचे सादरीकरण करणे.15. सादरीकरणांवर चर्चा घडवून आणणे.16. शैक्षणिक पुस्तक परीक्षणांचे मुल्यांकन करणे.	 परिसंवादाचे/सेमीनारचे आयोजन विषय— 'मी केलेले पुस्तक परीक्षण' सहाध्यायी चर्चा व प्रत्याभरण मार्गदर्शक आणि सहाध्यायी मुल्यांकन. स्वयंमुल्यांकन. 				
 17. छात्राध्यापकांना स्मरणिका संपादन व प्रकाशनाचे महत्त्व पटवून देणे. 18. छात्राध्यापकांना स्मरणिका संपादन/प्रकाशनाची संधी प्राप्त करून देणे. 19. 'पुस्तक परीक्षण' स्मरणिका प्रकाशन करणे. 20. छात्राध्यापकांचे अभिप्राय घेणे. 	 स्मरणिका संपादन प्रकाशन' व्याख्यान (उद्बोधन) छात्राध्यापक संपादक मंडळ उपक्रम कार्य विभागणी व कार्यपूर्ती प्रकाशन सोहळा छात्राध्यापक प्रतिक्रिया. 				

संशोधनाची कार्यपद्धती

प्रस्तुत संशोधनासाठी संशोधक कार्यरत असलेल्या एका शासकीय अध्यापक महाविद्यालयातील बी.एड. द्वितीय वर्षाचे ४३ प्रशिक्षणार्थी सहेतुक नमुना निवड पद्धतीने निवडले गेले. प्रत्येक प्रशिक्षणार्थ्याने किमान पाच शैक्षणिक पुस्तकांचा शोध घेऊन संकलन केले. वाचन करून त्यातील आवडलेल्या एका पुस्तकाची निवड केली. अशी एकूण







४३ पुस्तके परीक्षणासाठी निवडून त्यांचे परीक्षण केले. संशोधनासाठी निरीक्षण, प्रशिक्षणार्थी मुलाखत, अभिप्राय, पुस्तक परीक्षण, स्मरणिका दस्तावेज, परीक्षण निकष श्रेणी या साधनांचा वापर करून कतिसंशोधन/ नवोपक्रम पद्धतीने संशोधन करण्यात आले. त्यासाठी पर्वोत्तर परीक्षण एकल गट अभिकल्पाचा वापर करण्यात आला. प्राप्त माहितीचे विश्लेषण करून पुढील निष्कर्ष प्राप्त झाले.

संशोधनाची निरीक्षणे व निष्कर्ष

- 1. पुस्तक परीक्षण उपक्रमामुळे महाविद्यालयातील ४३ प्रशिक्षण गर्थ्यांनी प्रत्येकी किमान ५ प्रमाणे शैक्षणिक पुस्तकांचा शोध घेऊन वाचन केल्याचे आढळून आले. ४३ ग ५ = २१५ म्हणजे एकूण २१५ किमान व ३०४ कमाल पुस्तकांचा शोध घेऊन वाचन करण्यात प्रशिक्षणार्थी यशस्वी झाल्याचे आढळून आले.
- 2. पुस्तक परिक्षणासाठी दर्जेदार शैक्षणिक पुस्तकांची निवड प्रशिक्षणार्थ्यांनी केल्याचे आढळून आले. ४३ प्रशिक्षणार्थ्यांनी प्रत्येकी एका निवडलेल्या शैक्षणिक पुस्तकांमध्ये मराठी २५ (५८टक्के) इंग्रजी १० (२३टक्के), हिंदी ६ (१४ टक्के), तर उर्दू २ (५ टक्के) असे भाषानिहाय वर्गीकरण असलेले आढळून आले.
- 3. पुस्तक परीक्षण कार्यनीतीमुळे पुस्तके वाचनाची व परीक्षणाची दृष्टी प्राप्त झाल्याचे ८२टक्के प्रशिक्षणार्थ्यांनी अभिप्राय दिले.
- 4. पुस्तक परीक्षण विषयावरील परिसंवाद आयोजनामुळे सर्वानी केलेल्या पुस्तक परीक्षणांचा आस्वाद सर्वांना घेता आला व इतरांनी निवडलेल्या शैक्षणिक पुस्तकांची (४३) ओळख झाल्याचे अभिप्राय प्रशिक्षणार्थ्यांनी दिल्याचे आढळून आले. प्रत्याभरण व चर्चेमुळे पीरक्षण मुद्दे स्पष्ट झाल्याचे आढळून आले.
- 5. 'पुस्तक परीक्षण' स्मरणिका करण्याचे प्रशिक्षण प्राप्त झाले व आपला परीक्षण लेख स्मरणिकेत छापून आल्याचा आनंद झाल्याचे अभिप्राय प्रशिक्षणार्थ्यांनी दिले.
- 6. पुस्तक परीक्षण कार्यनीतीमुळे प्रशिक्षणार्थ्यांना पुस्तकांमधील आशयाचे आकलन झाले. लेखकांचे विचार, शैक्षणिक प्रयोग, नवोपक्रम व





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दृष्टिकोन यांचे आकलन झाल्यामुळे वाचनाची अभिरुची व प्रेरणा निर्माण झाल्याचे अभिप्राय प्रशिक्षणार्थ्यांनी दिले.

- 7. पुस्तक परीक्षण कार्यनीतीचा प्रशिक्षणार्थ्यांवर सकारात्मक परिणाम झाल्याचे आढळून आले. प्रशिक्षणार्थ्यांना पुस्तकांचा शोध घेणे, निवड करणे, पुस्तकांचे वाचन करणे, परीक्षण करणे व लेखन करून प्रकाशनासाठी लेख पाठवणे या बाबींचे ज्ञान प्राप्त झाल्याचे अभिप्रायावरून आढळून आले.
- 8. सदर उपक्रम सर्व छात्राध्यापकांना आवडला असून प्रशिक्षणार्थ्यांना शैक्षणिक पुस्तकांचे महत्व समजले व प्रशिक्षणार्थिंना वाचन, लेखन, परिसंवाद व प्रकाशनाची प्रक्रिया याविषयीची जाणीव झाल्याचे आढळून आले.

संदर्भ

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The Crisis of Learning in Schools: Selected Government and Non-Government Initiatives

Renu A. Shah*

ABSTRACT

It is quite a well-established fact for over a few years now that India has achieved significant strides in accomplishing the goals of Universalization of Elementary Education (UEE). Nearly 98% of our children between the age group of 6-14 years are in schools now. However, the dropping learning levels of children across the country is a matter of great concern. There are studies available such as ASER and Praja foundation reports which bring to the fore the crisis of learning in schools. There are multiple factors responsible for miserable learning standards of children today especially in government run public schools. A cursory analysis of these reports also inform us that decline in learning levels has worsened with the introduction of Right of Children to (Free and Compulsory) Education Act, 2009. However as years are passing by both government and non-government stakeholders within the domain of education are waking upto this stark reality of great learning crisis amongst the future of our nation. It is in this paper an attempt has been to highlight and analyse selected government (mainly Delhi government model) initiatives and also present model of few non-government organizations engaging with government municipal schools (mainly TaRL strategy of Pratham) directed towards improving quality of education of targeted children and also instill in them as rightly put by distinguished cultural anthropologist Arjun Appadurai "capacity to aspire".

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^{*}Assistant Professor, College of Social Work, Nirmala Niketan, Mumbai.



Keywords: Learning crisis, Universalisation of Elementary Education (UEE), Competencies, Curriculum, SDGs

The enrolment in elementary education, including primary and upper primary education, both of which jointly constitute the Constitutional goal of Universal Elementary Education (UEE), has increased significantly over a period of time. A cursory review of the achievements based on three aspects of elementary education-enrolment, retention and attainment of a given level of learning- highlights remarkable improvements with specific reference to UEE. The most marked progress has been made in access and enrolment, particularly in the last decade, and the goal of universal access has almost been achieved at the primary level (World Bank, 2014; Government of India, 2011). According to ASER 2018 report, the enrolment level of children have been consistently at around 97% in both the years (2014 & 2016). It is also interesting to note that almost ninety eight per cent of households across the country, including rural areas, now have a primary school (class 1-V) within one kilometer of their home and ninety-two per cent have an upper primary school (class VI-VIII) within three kilometers (Government of India, 2014).

On the other hand, a growing body of evidence is also accumulating to show us that 'years of completed schooling' is not necessarily a good indicator for what a student is able to learn. The growth in enrolment in many low- and lower middle-income countries over the past 15 years has been accompanied by an uncomfortable realization that attending school does not guarantee learning by itself. Of the estimated 250 million children not learning the basics, around half have spent at least four years in school (UNESCO, 2014).

Several developing countries including India have been able to achieve remarkable success in enhancing access to education as per the Global Monitoring Report (GMR), 2015 but improvement in quality still remains a serious concern. Various studies in India have brought to the fore declining learning levels. Annual surveys such as Annual Status of Education Report (ASER, Pratham) report wide disparities in students' achievement of basic skills (reading, writing and arithmetic).

Learning levels of children are indicators of productivity or effectiveness of education system. According to ASER, 2018 the learning levels are down nearly by about 18 percent between the year 2008 and

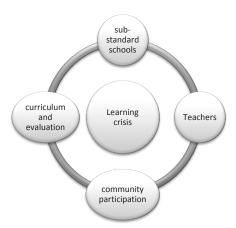






2018. While the effectiveness of the government school system has declined overall, the effectiveness of the private schools has not changed as dramatically. In 2008, 68% Std V children in private schools could read a Std II level text. This went down to 61% in 2012 and then went up again to 65% by 2018. The important thing to note is that in 2008, the percentage of Std II level readers in government schools was at 53%, or 15 percentage points lower than the 68% children in private schools. By 2018, this gap has widened to 21 percentage points on a national scale. At the same time, the proportion of children enrolled in private schools in rural India has gone up from 22% in 2008 to 30% in 2018 (ASER, 2018). Though picture is quite dismal but as revealed by ASER 2018 report itself, slight improvement has also been noticed especially in arithmetic levels in some of the states (namely, Punjab and Himachal Pradesh) over past four years. But change at the national level still remains quite elusive and dismal.

It can thus be concluded from the preceding discussion that even though children are moving up from one grade to the next, few actually master the grade-level competencies expected of them. There are many issues within our educational system having bearing on learning outcomes of children. Issues of sub-standard schools, shortage of qualified teachers and lack of community engagement are matter of serious concern which needs immediate attention. However, in this paper issues related to curriculum, evaluation and strategies undertaken to enhance learning competencies of children have been only been discussed.









IMPROVING LEARNING OUTCOMES

As we have already seen in the preceding section, that India is faced with severe learning crisis, children are enrolled in schools but years in schooling are not translating into improved learning outcomes. However over a period of time, both government and non-government actors have woken up to this stark reality and undertaking sincere efforts to address the same. In order to deal with issue of learning, it is essential that significant changes are brought in the teaching-learning processes within the classrooms both at the level of curriculum and also in the evaluation frameworks.

First of all, a fundamental shift is needed in everyone's especially teachers' mindset- a shift from a focus on syllabus completion to a focus on delivery of competencies. Teachers need to focus more on developing the learners' competencies rather than completion of syllabus. In the near term, given the present gaps in learning at all levels and also to prevent children from lagging further behind, campaign-mode remediation is needed. Specific time frame should be carved out in the regular school day to bridge these gaps and learners should be engaged based on their learning levels rather than grades.

One such strategy is Teaching at the Right Level (TaRL) implemented by Pratham NGO all over the country. TaRL aims to build foundational skills in math and reading for all children before they exit primary schools. At the instructional level, the approach works by assessing children's learning levels using a simple tool; grouping children based on learning levels rather than age or grade; using a range of engaging teaching and learning activities; and focusing on foundational skills rather than solely on the curriculum; and tracking children's progress. As part of TaRL teachers also receive strong academic support through mentors who are part of the government system. Pratham's work has been righorously evaluated by researchers affiliated with Abdul Latif Jameel Poverty Action Lab (J-PAL) at Massachusetts Institute of Technology (MIT) over the past fifteen years. These impact evaluations use randomized controlled trial (RCT) methodology that compares children with similar characteristics who are randomly assigned to different programmes. These studies indicated that significant gains in basic learning outcomes could be achieved







by reorganizing and grouping children by their learning level rather than the usual grouping by age or grade (Banerjee, Rukmini & Dufflo, Esther., 2015).

Two recently concluded RCTs of Pratham's TARL model in Haryana and Uttar Pradesh (UP) provide valuable insights as to how this model can be scaled up successfully within a government school system. In Haryana, 400 schools participated in TaRL intervention in 2012-13. Students enrolled in standards 3,4 and 5 across 200 schools were randomly involved in TaRL model. As part of this strategy, they were grouped by their reading level and taught for one hour daily using level specific material and methods. The program was implemented by trained government teachers during schools and block and cluster level officers monitored the implementation of program. At the start of program, only 34% of students were in a position to read a simple paragraph of grade 2 level competency. After completion this number jumped to 53% for students in schools that participated in program as compared to 48% for students in schools that did not participate. In UP results were even more dramatic. This program was implemented in 484 schools across UP state, locally recruited and trained volunteers and Pratham staff conducted classes for reading and arithmetic in short bursts of 10-20 days or learning camps. These camps were held in government schools during school hours for a total of 50 days in a year. It was interestingly found that at the start of this program, only 15% of students were able to read a paragraph or story. Upon completion, this number jumped to 48% for students in schools that participated in program as compared to 24% of schools that did not participated in program (Rukmini & Dufflo, 2015).

A series of randomized evaluations by J-PAL affiliated researchers over the past fifteen years have shown that TaRL consistently improves learning outcomes when implemented well and has led to some of the largest learning gains among rigorously evaluated education programs. Programs based on this strategy are being implemented in Haryana, Jharkhand, Madhya Pradesh and Odisha and can up-scaled to rest of the educationally backward districts in the country.









Along with NGO efforts, it is equally important to mention here initiatives undertaken mainly by Delhi Government towards improving the learning processes in public schools. Following are some of the reforms and initiatives of the Delhi-Government to improve the quality of education in its schools:

Improving School Infrastructure: The Department of Education (DoE) constructed over 8,000 new classrooms in the existing public schools and over 22 new schools with modern facilities in Delhi. Some 54 model DoE schools were set up across the NCT of Delhi. Estate managers were hired for each DoE school to look after the school building, assist in overall upkeep of the school and coordination with external bodies like the Public Welfare Department (PWD). In the budget of 2017-18, Delhi-Government also allocated INR 1000 million to build and modernize a library in every school.

Mission Buniyaad- an intensive in-school coaching program to bridge learning gaps amongst schools initiated in the year April 2018. Under Mission Buniyaad, students were given learning support to bridge crucial gaps via "summer camps" organized at the school during the annual summer holidays. The success of the Delhi government's Mission Buniyaad—that aimed to improve reading and math abilities of students in Class III-IX at government and municipal corporation schools—is a lesson for other states. By December 2018, 62.5% of Class III students in Delhi government schools could read text in Hindi that was of their grade-level, while, in April, just 35.9% could. The corresponding jump at the Class VIII level was from 54.6% to 71.25%. Against the April numbers, students in Classes III and IV registered massive math-abilities gains—from 18.6% to 53.9% and 27.9% to 64.3%, respectively.

Chunauti-2018: In 2018, Delhi-Government launched *Chunauti* 2018 initiative to bridge the learning gaps of students of grade 6-8 and to ensure zero dropouts in grade 9. Students from Class VI to Class IX were mapped for learning levels and the weaker students got special focus from teachers. Under this initiative, students are divided into groups on the basis of whether they can read or write Hindi and English and solve mathematics. As part of the scheme, students are divided into three groups in Class 6- Pratibha (for the best students), Nishtha (for the average ones) and Neo Nishtha (for those







who barely pass) and taught at a level that they could understand. Differentiated teaching-learning approach was employed in schools, and a specialized curriculum was designed for each of the three groups. In June 2018, The Print reported that Delhi government's schools had "outperformed" private schools. The pass percentage in government schools was 90.68 percent, whereas the pass percentage for private schools was 88.35 per cent.

Curricular reforms: There have also been major curricular reforms undertaken by AAP government. In 2016, it was noted that there was nearly 50% failure rate in Class 9 and accepted the fact that poor foundational skills of children could be reason for it. Special initiatives were launched to ensure that all children learn to read, write and do basic mathematics and incorporated as part of regular teaching learning processes in schools. Similarly, a "happiness curriculum" was introduced for all children between nursery and class 8 for their emotional wellbeing. Further an "entrepreneurship mindset curriculum" was also introduced to develop the problem solving and critical thinking skills of children in classes 9 to 12. The AAP government also took several other steps to strengthen Delhi Model of Education. It made education free upto class 12. It also increased scholarships for students who scored above 80 percent. CCTV cameras were also installed in schools and parents were provided a live feed. The management quota was also scrapped during admissions (The Financial Express, February 4, 2019).

In 2019, the grade XII students from the Department of Education (DoE) schools outperformed their private school-counterparts and the national average, in terms of the number of students passing the CBSE (Times of India, 2019). Delhi-Government's education reforms are being pitched as a model for other state governments (Shijoy & Kundu, 2017). By substantially increasing the funding for education and by implementing target policy initiatives to improve the learning levels, the Delhi-Government has pushed improving public education up on the agenda of other states as well. The perception of Delhi's successful education reforms is also backed by an analysis where the NCT of Delhi scores better than all other Indian states on SDG 4 (Sustainable Development Goals) index (Table 1) which is about quality education (Bhomick and Yadav, 2019).







SDG 4 INDEX SCORES JHARKHAND WWW. 0.193 BIHAR WINIMINIMIN 0.200 UTTAR PRADESH WWW. 0.258 JAMMU AND KASHMIR WEST BENGAL HIMACHAL PRADESH **∞** 0.807

Table: 1 SDG 4 Index Scores

Source: Soumya, Bhowmick., & Yadav, Vipin. (2019). Human Capital Formation through Public Education: How Fairs India? ORF Occasional Paper.

The education reforms, improvement in school infrastructure and a road map to further improvement in quality of education, were a prominent part of AAP's election manifesto for the 2019 general elections and 2017 MCD elections. The analysis (as given in Table 2) found the NCT of Delhi is top performer in the metric scale of quality education in India. Delhi-government's focus on improving school infrastructure, investing in bridging the learning gap of the students, improving teacher training and quality, and allocating more resources to education, is a commendable approach to tackle the crisis of learning







levels in the public schools. The public schools in Delhi, however, still face a lot of challenges. Initiatives like Chunauti-2018 and the reading programs are still teaching basic Hindi literacy. Even after the success of these initiatives, the students are not at par with their grade levels. The transition rates of students from grade IX to X remains low, and more than 170,000 students dropped out of the schools in 2018 (Praja Foundation, 2019).

The evidence and solutions for tackling learning crisis is at hand (as shown in this paper through TaRL strategy and Delhi Government Education Model). Now the need of the hour is to use them effectively and on scale immediately to ensure that children not only attend schools but also develop their age specific competencies and foundational skill. To enable millions of children to learn how to read, to comprehend and to calculate, we need massive efforts not just in terms of strong political will but equally important is to have a cadre of committed professionals. Sincere efforts should be directed towards improving quality of education of targeted children and also instill in them as rightly put by distinguished cultural anthropologist Arjun Appadurai "capacity to aspire" (Appadurai, A. 2004).

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Academic Resilience – A Way to Academic Failure Prevention

Dr. Reshma A. Rodrigues*

ABSTRACT

Education plays a vital role in achieving the goals of suatainability. One of the threats in attaining this sustanibility is academic failure. Managing academic failure proves to be major challenge for every educator. Secondary school students who are in their adolescent stage needs to develop their capabilities to deal with major setbacks of academic life. This can be achieved by developing Academic Resilience in students. Therefore, the purpose of this research was to study academic resilience of secondary school students. The study adopted descriptive research methodology of correlation and causal comparison type. Participants included 1169 secondary school students of Greater Mumbai studying in State Board of Maharashtra. Academic Resilience Scale was administered to participants. Parametric techniques, 't' test was used to test the hypothesis. Study results revealed significant difference with respect to the gender and type of family for academic resilience. Finally, educational implications of the result are discussed.

Keywords: Academic Resilience, Gender, Type of Family, Secondary School Students

INTRODUCTION

Sustainability...what does it mean? Sustainability means meeting the needs of the present without compromising the ability of future

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^{*}Assistant professor, St. Teresa's Institute of education, S. V. Road, Santacruz West



generations to meet their own. Thus it holds a great scope not only in the area of environment but also social and economic issues. In simplest words, sustainability is managing Planet, People and Profit. Education plays a vital role in achieving the goals of suatainability. Hence the added function of education takes us to 'Educating Children for Sustainability' – which trains students build better future with respect to the environment, society and economy by combining knowledge, inquiry, and action. Looking at the importance of sustainibility all governments around the world are adocating education as an essential channel in attaining environmental sustainability and to uphold the social, cultural and economic well-being of people living now and in the future. One of the threats in attaining this sustanibility is academic failure. Managing academic failure proves to be major challenge for every educator. Thus the study was focused on studying students'academic resilience - a construct of positive psychology which enables them overcome major academic failures.

CONCEPT

Positive emotions can help a student overcome minor and major setbacks of academic life. In the last few years, interest in resilience as a psychological construct from the positive psychology frame, has increased. Resiliency theory has been researched across many disciplines. The term resilience stems from Latin (resiliens) and was originally used to refer to the pliant or elastic quality of a substance (Joseph, 1994). The American Heritage dictionary defined resilience as "the ability to recover quickly from illness, change, or misfortune." Resiliency, or resilience, is commonly explained and studied in context of a two dimensional construct concerning the exposure of adversity and the positive adjustment outcomes of that adversity (Luther & Cicchetti, 2000). The concept of resilience when applied to academics, called as academic resilience. 'Academic resilience' refers to a student's capacity to overcome acute or chronic adversities that are seen as major assaults on educational processes.

REVIEW OF RELATED LITERATURE

Arif Muhammad Irfan and Mirza Munawar S. (2017) studied Effectiveness of an Intervention Program in Fostering Academic Resilience of Students at Risk of Failure at Secondary School Level.







The major purpose of the study was to find out the effectiveness of an intervention programme in fostering academic resilience of nonresilient at-risk students at secondary school level. The programme comprised of activity based sessions aiming at fostering protective factors-creativity, internal locus of control, self-concept, self-esteem, self-efficacy, autonomy, sense of purpose in life, optimism, good sense of humor and teacher student relationship. The findings revealed that the intervention was significantly effective in enhancing students 'academic resilience in overall and by each selected protective factor. Rao Padmashri S. and Krishnamurthy (2017) studied Study of Academic Resilience of Urban High School Indian Students and its Impact on their Scholastic Performance. The study reveals that there is a significant correlation between level of resilience and the scholastic performance of students after eliminating the outliers. There is no significant difference between girls and boys with respect their scholastic abilities as well as their resilience attributes. The study reveals that early adolescents are less resilient compared to late adolescents. Flórez Rojas, Fernanda Luisa (2015) Factors Affecting Academic Resilience in Middle School Students: A Case Study. This research was carried out with the purpose of identifying how and which risk and protective factors affect academic outcomes. It was found that it is possible to identify and describe different protective factors from the family, such as family guidance, family support, and opportunities for meaningful family involvement that explicitly foster academic resilience in at risk-students. It was also possible to address how individual characteristics also foster positive outcomes, including optimism, perseverance, or motivation.

RATIONALE OF THE STUDY

Many students face major setbacks at least once, in entire academic journey. Though we say 'Failure is the stepping stone for success', quite a large number of students gets affected by such major failure. Sometimes, this results in dropping out and discontinuation of further education. Sometimes, it harms student's self-efficacy, their confidence and motivation which leads to poor educational outcomes. In extreme cases, some students even harm oneself by committing suicide. On the other hand, we have examples of students becoming masters of their field by persistently striving for success and excellence. One of the reason behind this success after failure is the Academic Resilience – the







student's ability to effectively deal with major setbacks of academic life. Many researchers conducted abroad have proved the importance of Academic Resilience in handling chronic or acute setbacks of academic life. Thus, the present study tries to study Academic Resilience of secondary school students.

Instead of looking at what goes wrong with students who function poorly after chronic academic adversity, we must ask about what goes right in students who function well and handles chronic academic adversities with equanimity. To study academic resilience of students one must know the natural traits that allow students successfully cope up with adversity. Thus, the researcher, has identified following five dimensions of academic resilience which boosts student's capacity to overcome major academic adversities.

Figure 1 shows Dimensions of Academic Resilience



Figure 1: Dimensions of Academic Resilience

Operational Definition of Academic Resilience: Academic resilience is defined as an ability of secondary school students in terms of their self-efficacy, control, planning, low anxiety and persistence; to rise above major academic adversities (both curricular and co-curricular) that are seen as major assaults on their educational process.

Self-Efficacy is defined as secondary school student's belief about his or her ability and capacity to achieve educational goals despite facing major academic adversities.







Control is defined as the power of secondary school students to reach educational goals despite facing major academic adversities; by directing one's own behaviour to decisions which are best suited for positive outcomes.

Planning is defined as secondary school students' skill of effectively carrying out the process of making perfect plans in order to rise above major academic adversities.

Low Anxiety is defined as secondary school students' capacity to effectively deal with major academic adversities with comfort and ease; assuring positive educational outcomes.

Persistence is defined as secondary school students' optimistic attitude that prepares them to continue their efforts for positive educational outcomes in spite of facing major academic adversities.

Major Academic Adversities is defined as hardships faced by secondary school students such as failing in final exam, change of schools, loosing rank at major examinations etc. which can hamper student's development in an academic life.

OVERVIEW OF THE STUDY

The research was carried out with the aim of studying Academic Buoyancy of Secondary School Students in relation to their Academic Resilience and Student Engagement. The following is one of the objectives kept in mind while conducting the study –

To study academic resilience of secondary school students on the basis of their

- (a) Gender
- (b) Type of Family

Thus the following is one of the hypotheses kept in mind while conducting the study –

There is no significant difference in academic resilience of secondary school students on the basis of their

- (a) Gender
- (b) Type of Family

The present quantitative study, has adopted the descriptive method of causal-comparative and correlational types. All students from Greater Mumbai studying in IXth standard of ABE schools of State Board









of Maharashtra comprised the population of the present study. The present study has included 10% students of total population as sample. 1169 secondary school students from Greater Mumbai studying in IXth standard of ABE schools of State Board of Maharashtra were selected as sample of the present study. The data was collected using Academic Resilience Scale, a closed ended questionnaire prepared by the researcher. The obtained data was analysed using descriptive analysis and parametric inferential analysis.

DATA ANALYSIS

(a) Gender

Table 1: Relevant Statistics of Academic Resilience by Gender

Variable	Group	N	Mean	SD	t	P	LOS		LOS		$100\omega^2$
							0.05	0.01			
AR	Male	540	67.18	8.57	12.4	<.0001	S	S	11.56		
	Female	629	72.97	7.20							

Interpretation of 't': The obtained t-ratios for gender difference in academic resilience of secondary school students is 12.4 which is significant at 0.05 level for 1167 degrees of freedom. Hence, the null hypothesis was rejected. The w² estimate obtained is 0.1156. Thus, the effect size of gender on academic resilience is medium. There is significant difference in academic resilience of secondary school students on basis of their gender at 0.05 level of significance. The mean academic resilience scores of males is lower than that of females. 11.56% of the variance in academic resilience is associated with the gender of the secondary school students.

(b) Type of Family

Table 2: Relevant Statistics of Academic Resilience by Type of Family

Variable	Group	N	Mean	SD	T	P	LOS		$100\omega^2$
							0.05	0.01	
AR	Joint	382	69.5995	8.4129	1.99	0.047381	S	NS	0.25
	Nuclear	787	70.6379	8.3247					

Interpretation of 't'







The obtained t-ratios for difference in type of family in academic resilience of secondary school students is 1.99 which is significant at 0.05 level for 1167 degrees of freedom. Hence, the null hypothesis was rejected. The w² estimate obtained is 0.0025. Thus, the effect size of type of family on academic resilience is small. There is significant difference in academic resilience of secondary school students on basis of their type of family at 0.05 level of significance. The mean academic resilience scores of students of joint family is lower than that of students of nuclear family. 0.25% of the variance in academic resilience is associated with the type of family of the secondary school students.

FINDINGS OF THE STUDY

- (a) The findings of the present study revealed significant difference in academic resilience of secondary school students with respect to gender. Thus, it proved the significant role of gender in raising academic resilience of secondary school students. With respect to gender, it was found that female students were more resilient in academics as compared to male students. This threw light on the fact that female students showed more self-efficacy, can have control over the adversities, can plan the studies well and had higher level of persistence with low anxiety as compared to male students. From past few years, female students of India have shown tremendous progress in the field of academics. Each year's grade Xth results proves this fact. This points out to the fact that female students of India are serious and sincere about their studies. And hence they could be less chances of major academic adversities that they could be facing. Also, females of India are trained to face adversities of life from their childhood. This could be one the reasons behind their higher level of resilience as compare to males.
- (b) The findings of the study revealed significant difference in academic resilience of secondary school students with respect to type of family. Thus, it proved the significant role of type of family in raising academic resilience of secondary school students. With respect to type of family, it was found that students of nuclear family were more resilient in academics as compared to students of joint family. The mean score showed little difference in both groups, however nuclear family showed greater scores. This gave







researcher an idea that students from nuclear family was given more freedom to take their decisions which led in their improved self-confidence, capacity of taking decisions and planning etc.

CONCLUSION

The research findings throws light on the role of gender and type of family in developing student's academic resilience. It revealed that female students and the students from nuclear family were higher on the academic resilience score. Thus, the special attention must be paid to male students and students from joint family to make them academically resilient for their progress. All stakeholders of education must properly plan, execute and evaluate all school activities which can raise the ability of academic resilience in all students which will motivate them to do better in their academics by effectively handling major setbacks of academic life.

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Valuing Value Education Through Teaching of English: A Study of Juveniles in Crime

Ms Riju Sharma*

ABSTRACT

English Teaching classroom and its role in teaching literature based on a particular value system is highly debatable and complicated. The nuances of the subject and the diverse genres of literature like short stories, poems, novels, plays, etc., if aptly used in the classroom, can contribute constructively to make learning a blissful experience for students. In this day and age, with the advent of technology, the disparity created between the 'haves' and the 'have-nots' and the lack of moral direction accounts for the rise in crime. The fountain of youth -their mind, talent, and creativity can be at its best if it is channelized at the very right age. Education can play a vital role in curbing the menace of crime amongst juveniles as it is believed that the future of a nation depends on the youth, and it is the empowerment of the choices that one makes. This paper aims at studying the causes and consequences of crimes committed by the juveniles and the possible solution through value education by envisaging learning of values through English literature to render meaning and purpose to the educational process.

Keywords: juvenile, delinquency, crime

INTRODUCTION

Degradation of moral values among Generation Z is at present a matter of enormous concern. In ancient times, values, ethics, honesty

E-mail: gc46chandigarh@gmail.com



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^{*}Post Graduate Government College, Sector-46, Chandigarh.

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and civility were high-flying in most teenagers, but in the last two decades, crime has become rife all over the world. The apocalyptic consequences of the loss of sound moral compass are attributed to the frenzied race amongst the youngsters in pursuit of never-ending materialistic things that lead to capriciousness which also stems from escalating individualism. Under the purview of a contemporary moral framework, the ultimate fact remains unaltered that the problem of violent crime committed by and against juveniles is a national crisis. The increased volume and changing corpus of juvenile delinquency cases have clogged the juvenile justice system. Spreading its tentacles rapidly in the form of violent gangs, murder, rape, fraud, burglary, robbery, deadly drug-related offences, juvenile crime, terrorism and international crime, etc., this 'legal wrong' is a result of various factors that overlap to some extent or the other. Among the 195 countries of the world, India ranks at the 65th position on the world crime index. In the Indian context, crime is an action that involves breaking the law, but an Italian criminologist and jurist Raffaele Garofalo said that crime is an morally wrong and harmful act that is regarded as criminal by public opinion because it is an injury to so much of the moral sense as is represented by one or the other of the elementary altruistic sentiments of probity and piety. He further viewed crime as something that causes injury which is sufficient enough to wound the selfless feelings of a person not in fine degrees, but in a measure in which they are possessed by a society – a measure which is essential for the claim of the individual to society. Such startling trends pose a question to the role of education in inculcating moral values among children and the main purpose of this study is to illustrate the importance of value impregnation vis-à-vis the youth through teaching of English.

FACTORS AFFECTING LOSS OF VALUES

According to a child psychologist and psychotherapist, Haim Ginott, "Children are like wet cement whatever falls on them makes an impression." During their formative years of development, the family is supreme so far as child development is concerned. Although during the past few decades intensive care and involvement of the parents and the family, on the whole, has been paramount, especially amongst the middle-class society in India, still the spurt of crime by children is on the rise. The development of personal values in a child takes place







in an unobtrusive way, but the parents should not forget to keep their expectations realistic. To raise well behaved and responsible children, one should be willing to invest a considerable amount of time, patience, and energy. Even the Article 14 of the U.N. Convention on the Rights of the Child, 1989 safeguards the rights of the children and states that the States Parties 'shall respect the rights and duties of the parents and, when applicable, legal guardians, to provide direction to the child in the exercise of his or her right in a manner consistent with the evolving capacities of a child.' However, witnessing the alarming trends of crimes committed by juveniles, the parents fear the risk of rebellion and juvenile delinquent behaviour. The reason attributed to such behaviour is perhaps when the child fails to acquire the personal values characteristic of a family and the society in which one lives. Though no single factor can explain the reason for such behaviour, some other main reasons that may add to rise in juvenile offences are likely in the case of parents who prefer raising their children in a laissez free manner as the family is cold, rejecting or neglectful due to the marital dissonance of the parents; lack of attention, affection, and love; deficient and misdirected discipline; inconsistent authority; absence of cooperation between parents or unhappy relationship with siblings. Negative child-parent communication; single parenting style; structural breaks in the family; authoritative parenting style and a few psychological and environmental factors may also not allow the parents to strike a chord and maintain close connectedness with their child, thereby making the latter more prone to delinquent behaviour.

Another major significant correlation between children in conflict with the society is low socio-economic status. Socio-economic instability has a traumatizing effect on the psyche of children. Uninformed of the consequences of indulging in crime, juveniles may sometimes come in contact with adult criminals and seek refuge in the world of alcohol and drugs. The vast majority of juvenile delinquents arrested and convicted are victims of poverty, undernourishment, and poor physical health. The same has aptly been penned down in English literature through Fagin's role in Charles Dickens's *Oliver Twist* or the boys in *Lord of the Flies* by William Golding. At the beginning of the novel *Oliver Twist*, readers are set with the conditions when they read about how the children are treated. Dickens writes that the parish children







"had contrived to exist upon the smallest possible portion of the weakest possible food, it did perversely happen in eight and a half cases out of ten, either that it sickened from want and cold, or fell into the fire from neglect, or got half-smothered by accident; in any one of which cases, the miserable little being was usually summoned into another world."

The narrator further explains how the system punishes Oliver and the other orphans for the "crime" of being born poor. Throughout the classic, Dickens links poverty and criminality, but unfortunately, children like Oliver have virtually no opportunity to raise themselves and their station.

In yet another novel *Lord of the Flies* where figurative language is predominant, the boys are primitive, underdeveloped and cruel savages (cf. Firth, 2011). While at one instance, the other boys are afraid of a sea monster or some winged creature, Simon meditates on the metaphysical nature of the beast, wondering if they should fear their natures instead of some outside force. Simon predicts that there is a darkness lurking in the hearts of the boys on the island, and rejects the notion of a beast saying:

"Maybe there is a beast... Maybe it's only us." (Golding. p.80)

Many adolescents experience an inner confusion and turmoil in life that may result in frustration, anger, and criminal behaviour as children feel emotional, impulsive, and uncertain of their role and purpose. Violence-prone children often see the world around them as filled with antagonistic forces. They are exceedingly sensitive and tend to go over the top to annoyance. As these children mature, they use fewer cues than most people to process information and may turn to deviant behaviour. Therefore, children exhibiting combinations of the aforementioned deficits in multiple domains of their lives are at the highest risk of delinquency.

IMPORTANCE OF EDUCATION

Education, for most of us, is synonymous with learning and acquisition of facts and knowledge. Divergent views and concepts have been found regarding the importance of education. To some thinkers, in ancient India, education meant accomplishment of truth and astuteness, and to others, it meant salvation and bliss. Even from the Islamic viewpoint though there is no single word that describes 'education'







within the Arabic language, however, scholars generally tend to use three different names for education - 'Tarbiyah' which means a state of moral and spiritual fostering in developing the individuals' potential and guidance of the child to the state of full maturity; 'Taadib' which puts forward the social features of a human being together with the process of character development and suitable communal behaviour and 'Taalim' which emanates from the root word 'Alima (to know, to be informed, to perceive, to learn, to discern) refers to knowledge, the imparting and receiving of it through instruction and teaching. So even Islamic education aimed at the development of socio-moral values as moral life was recorded in the Koran.

Furthermore, the western concept of education also gave importance to the overall development of man as could be reflected in Plato's idea of education influenced by the Spartan philosophy which aimed at the development of the person's psychosomatic, physical and moral traits, so that the youth could become dependable and civilized. Importance was given to uphold poise between body and soul so that the young minds could evolve as good human beings, and perhaps the same idea echoes in the words of T.C. Worsley and W.H. Auden stating that 'education is a preparation for life.' Thus, all these indicators are proof of the fact that education all over the world, including India, was deeply rooted in its culture, society and values and has been widely accepted as an essential resource, both for better individuals and communities.

EDUCATION AND VALUES

The destiny of a nation like India is primarily shaped through education in classrooms. Education involves the shaping of character and transmission of values. The growth of values takes place in a very subtle manner and is a total of many trivial events and personal exchanges. Education serves as an essential tool in preserving and transmitting the traditions, values, and culture of a society to a child in a controlled manner. In this perspective, the recommendations of the Indian Education Commission under the Chairmanship of Dr D.S. Kothari, which presented its report in 1966, seemed to justify and foresee the need for value-based education at the primary as well as the secondary level, even as we step into the 21st century. It highlighted the need for 'inculcation of universal human values.' It further expected to lay the foundation of a child to grow into a responsible and useful







citizen of the country by making education free and compulsory for every child up to the age of 14. To add to it, the National Education Policy on Education (NPE) and POA (1992) recognized the need for a 'proper understanding of the work ethos and of the values of a humane and composite culture to be cultivated through specialized institutions or by refashioning the education system.' Not only the parental or the familial moral values should play a vital role in the development of the character of children but also education should be designed in a manner that it opens the portals of harmony, self-awareness and self-realization amongst the children when they face the challenges of life else the following lines of T.S. Eliot would aptly sum up their discombobulated state:

'All our knowledge brings us

Nearer to ignorance

Where is the life

Have we lost in living?

Where is the wisdom

Have we lost in knowledge?

Where is the knowledge

We have lost in information?'

Inculcating Values through English Literature

Literature is a reflection of society. According to Showalter (2003, p. 22) the teaching of literature, for the educationists in the past as well as the present, is considered "a way of making people better human beings." Education, especially value-based education where more regard is given to the inculcation of human values or character building and where one 'strives for morality in actions,' needs to be revamped to help the youth to improve overall qualities of life to become a responsible citizen. As a curative task, literature mirrors the ills of the society intending to make the community realize its mistakes and make reparation. It also projects the virtues or ethical values in society for people to emulate.

Value in the broader sense may mean the value attached to some objects, events, person, etc., or may be defined as a set of norms of behaviour which guides the people to do things in such a way that there







will be joy, satisfaction, peace of mind and harmony among individuals and in society (Njayarkulam, 2003). At the elementary level, some core positive instrumental and terminal values like respect, happiness, honesty, and co-operation can be easily identified by children through English poetry through rhymes. Repetition and reinforcement of the value words, across the curriculum, can reinforce their meaning and help the children look at the ethical importance attached to these. At a later stage, the students may be taught to learn values with ease through prose in the form of short stories, plays, or novels. Students know the importance of being responsible, developing stillness of mind, helping each other when they are taught through specific prose and which help them to express their thoughts, feelings, and emotions freely. So the use of prose can probably, make learning more appealing in instilling values.

CONCLUSION

Therefore, the upshot of this discussion is that the learning of English literature can effectively contribute to the attainment of ethics and morals through value education. Since the Section 2 (k) of the Juvenile Justice Act, 2000 of India also defines a 'child' as a person who has not completed eighteen years of age, student involvement and personalization of the curriculum up to the age of 18 can contribute immensely to the establishment of a positive climate for teaching and learning of ethical values as the society is fractured today and its youth is swayed away in the wake of westernization and transnational flows. It is very much needed to put into practice some productive approaches for the youth on which the country's present and future depend; else it will be difficult to make constructive and congenial atmosphere of ethics and humanity.

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26

Employability and Education in India

Mr. Sanyog Shantaram Padelkar*

ABSTRACT

Employability can be defined as a set of skills, knowledge and personal attributes that make an individual more employable. Employability helps in achieving success in the profession, thereby leading to overall development of the nation. Although education and employability are two separate things, but it is always assumed that possessing a higher education degree will ensure employability of the students in getting good job. As per the recent statistical study (2018-19) of Ministry of Human Resource Development, Government of India, the country has 993 universities, 39931 colleges and 10725 standalone Institutions providing various higher education courses. Total enrolment in higher education has been estimated to be 37.4 million. However, despite all these facts the unemployment rate in India is rising every year. According to the International Labour Organisation (ILO) India has estimated unemployment numbers of 18.6 million in 2018, against 18.3 million during 2017. This figure is projected at 18.9 million for the year 2019. One of the main reasons that can be attributed to the dismal performance is small number of quality institutions in the country. In spite of the growth in the number of higher education institutes, getting admission in the prime institutions is a challenging task as they would, naturally, like to maintain a student-faculty ratio that does not impact quality adversely. This has resulted in the establishment of large number

^{*}M/s. Sanyog Padelkar Consultants, Office No. 4, Manik Tower, 1st Floor, Bicholim-Goa 403504, sanyog.padelkar@gmail.com









of self-financed private institutions, catering to the huge demand and lack infrastructure and qualified faculty, which is impacting pedagogy, quality of students and their employability. As a result, most of the students are unemployable. The biggest challenge today is to review the education to focus on imparting knowledge that responds to market demand. In simple words education's main focus should be to make the students future-ready. Unless this does not happen, education and employability cannot be correlated. It would fail to transform lives and create an equitable society.

Keywords: Employability, Internship, Technical Projects, Project Base Learning, Industry Talks, Live Projects

INTRODUCTION

One can argue that education and employability are two separate things, but it a long-standing notion that a good education provides for a better job. The main objective behind education is gainful employability. Producing employable graduates' forms part of the process of educating. It encompasses the full educational spectrum of values from imparting knowledge and understanding to developing skills and attributes.

Today most of the employers demands skills from graduates which are beyond the subject area of the study. In fact, several employers have started to give lesser importance to the educational degree and more to the generic skills acquired. For them a graduate achievement to the subject is necessary, but is not enough to be recruited. Part time work experience, involvements with projects beyond the subject, attending conferences, volunteering and associating with clubs, societies etc. are seen at par with gaining the knowledge and education through academics.

One of the most important area of concern faced by our economy is achievement of full employment. With so many educational institutes operating across India offering graduate and post graduate courses, the qualified youngster churning out of the system remains doubtful on employability quotient. There are several factors responsible for this dilemma, one of the major reasons behind this is that India has small portion of quality institutes. In fact, there are large number of self-financed private institutions, which fills the gap of education demand. These institutes lack infrastructure and qualified faculty, which impacts







pedagogy and the quality of students. As a result, most of the students are not employable.

The biggest challenge today is to review the education to focus on imparting knowledge that responds to market demand. In simple words education's main focus should be to make the students future-ready. Unless this does not happen, education and employability cannot be correlated. It would fail to transform lives and create an equitable society.

OBJECTIVE

The present paper entitled 'Employability and Education in India, attempts to identify the critical gap in employability and education system in India and suggests steps for improvement. Considering this main objective, the following specific objectives are identified for the purpose of the study:

- Discuss about the concept of employability
- Status of employability of students in India,
- Reasons for low employability
- Strategy to align education and employability

METHODOLOGY

The paper is based on the conceptual study and the data has been gathered from the secondary sources of information like different published papers, internet sources and newspapers.

REVIEW OF LITERATURE

Chithra R (2013) in her study entitled "Employability skills -a study on the perception of the engineering students and their prospective employers", has studied the Employers and employee's perspective towards employability skills required for entry level engineering graduates in multinational software companies. The study revealed a significant difference between the perception of students and employers. It was found that students with work experience have better awareness of the employability skills than the students with no work experience. Enhancing the skills and application of knowledge through specific training will enable the workers to perform their jobs in the best possible manner [1].







Aspiring Minds (2019), in their research entitled, "The new Annual Employability Survey 2019", reveals that 80% of Indian engineers are not fit for any job in the knowledge economy and only 2.5% of them possess tech skills in Artificial Intelligence (AI) that industry requires. The report highlights that the the ad-hoc changes in the Indian higher education system would not help address the problem, it rather needs a systematic and fundamental change to deal with high unemployability numbers [2].

CONCEPT OF EMPLOYABILITY

Employability can be defined as a set of skills, knowledge and personal attributes that make an individual more employable. American Society for Training and Development (ASTD) proposed 6 skill groups as the core area for employment.

S. No.	Group	Skills
1.	Basic Competency Skills	Reading, Writing, Computation
2.	Communication Skills	Speaking, Listening
3.	Adaptability Skills	Problem Solving, Thinking Creatively
4.	Developmental Skills	Self-Esteem, Motivation and Goal-Setting, Career Planning
5.	Group Effectiveness Skills	Interpersonal Skills, Teamwork, Negotiation
6.	Influencing Skills	Understanding Organizational Culture, Sharing Leadership

Employability helps in achieving success in the profession, thereby leading to overall development of the nation. Therefore, improving the employability of students in education should be the utmost priority for any country to achieve growth and development.

STATUS OF EMPLOYABILITY OF STUDENTS IN INDIA

As per the recent statistical study (2018-19) of Ministry of Human Resource Development, Government of India, the country







has 993 universities, 39931 colleges and 10725 standalone Institutions providing various higher education courses. The total enrolment in higher education increased to 37.4 million in 2018-19 from 20 million in 2012-13 [3]. However, despite all these facts the unemployment rate in India is rising every year. According to the recent study undertaken by International Labour Organisation (ILO) India has estimated unemployment numbers of 18.6 million in 2018, against 18.3 million during 2017. This figure is projected at 18.9 million for the year 2019 [4]. As per the latest date from Centre for Monitoring Indian Economy (CMIE), The unemployment rate in India rose to 7.8 percent in February 2020, the highest since last October, from 7.2 percent in the previous month. In rural areas, the rate increased to 7.4 percent from 6.0 percent in January, while in urban areas, it fell to 8.7 percent from 9.7 percent. Further, as per the estimates from International Labour Organisation, the estimated youth unemployment (workforce aged between 15 to 24 years) rate in India was at 10.51 percent. For the past decade, India's youth unemployment rate has been hovering around the 10 percent mark [5].

As per the survey conducted by ASSOCHAM during 2016 on B-School employability, except for top 20 B-School like IIM and few others, most of the 5,500 B-School in the country are producing subpar graduates who are largely un-employable. It is noted that only 7% of the total pass-outs from these B-School are actually employable, with exception to top 20 B-Schools [6].

To note further, as per the new annual employability survey 2019 reported by Aspiring Minds reveals that 80% of Indian Engineers are not fit for any job in the knowledge economy and only 2.5% of them possess tech skills in Artificial Intelligence (AI) the industry requires [2].

All these above studies and statistics poses the question on the employability and quality of the students passing from the various colleges and universities in India.

REASONS FOR LOW EMPLOYABILITY

In order to understand the industry readiness created by educational institutes and understand the reason for low employability, Aspiring Minds, has conducted, research work titled, 'National Employability Report Engineers 2019' and have undertaken survey across various engineering colleges [2]. The main findings of the survey, which are the







major reasons for low employability across various education institutes in India are as follows:

• *Internships:* As per the survey conducted, more than 60% of the students never underwent any internship training with the industry for a minimum period of two months. There were 32% of the students who has attended only one internship training for a minimum period of two months. It is only the 7% of students who underwent internship programme, more than once.

The two-month internship shows the extend of initiative taken by the students as well as their seriousness towards being job ready as the internship are considered as launching pad for final job placement. From the above data one can conclude that only 40% of the candidates are serious about taking up internships. The college must take initiatives in encouraging the students to take up internships.

- *Technical Projects:* As per survey data, more than 82% of students admitted that they have not undertaken any technical project. Only 17% student undertook technical projects of which 46% were the part of its education curriculum. A further analysis revealed that only 31% respondent students got the support from faculty in undertaking the projects outside the curriculum, which means that for 69% students there were no support from their faculty.
- *Industry Talks:* Around 53% of respondent never attended talks given by industry personnel, while 23% attended only once and 23% attended talks, more than once. The talks by industry personnel is important in improving employability, as it provides exposure to students and keep them updated on current industry trends.
- Faculty Support: The support and motivation from colleges and faculties is an important aspect for students to boost their confidence and become industry-ready. As per the survey it is observed that the current state of affairs is not encouraging. Most of the respondents i.e. around 60% felt that the focus on practical applications by faculty is very low. More than 50% of students pointed out that there exists minimal focus on workshop and seminars. It is prerequisite for teachers and colleges to focus on industry applications of the concepts covered in the curriculum which enable students to overcome the gap between theoretical knowledge and industry









requirements. This may be done by organizing workshops and seminars and talks by industry personnel.

• *Employability Challenges:* The main finding of the survey revealed that the major challenge faced by the students while searching for job is finding the right company/ profile to apply for, which is followed by clearing the interview. Even though it concludes that more than 95% of students have undertaken some kind of training to improve their employability, but mostly the training was done through college. There exists a lack of initiative and motivation from students to improve their chances of getting a job. Most of the time students focuses on cracking aptitude test rather than interview preparation, thereby they find it difficult to clear the interview and get the job.

Strategy or Approach to Align Education and Employability

Based on the facts and finding mentioned above, following strategy or approach needs to be planned by educational institutes across India to improve the employability of the students:

- *Skilled Based Education:* Skilled based education is missing in almost all education areas in India. There is a dire need to shift it's focus from theoretical knowledge to skilled based with practical approach. Core skill sets required by the industry like interpersonal skills, decision making, problem solving, innovation, creative thinking etc are in high demand and need to be introduced in education. More focus should be placed on behavioural aspects like leadership skills, communication skills, and attitudes that plays the major role in the success of a person.
- Project Based Learning: Project based learning (PBL) is the class room approach where the college graduates actively explore real problems and challenges. Skill learned through project-based learning (PBL) are highly attractive to the employers as it includes learnings to handle interpersonal conflict, ability to work well with others, make thoughtful decision and solve the problem.
- Learning through internships and live projects: Internship and live projects are short-term opportunities for the college graduates to work for an organization where they learn through the real-world







task. Internships and live projects can be coordinated with the university coursework that will helps to gain the knowledge from overall experience. Internship/ live projects equips the students to adjust to the needs of the business once they actually join the industry.

- University-Industry Collaboration: There are few universities in India who have direct and frequent collaboration with the Industry. This has resulted in mismatch of skills requirement of industry V/s skills produced by the University. The collaborative approach will enable the university to understand the industry requirement and changing environment by way of which they can plan, modify and adjust the curriculum and approach to produce skills and knowledge as per the industry requirements and standards. A constant engagement, discussion and learning must be held with the Industry players and the universities.
- *Upskilling the Faculty:* Apart from focusing only on curriculum structure for the students, it is important to focus on the skill developments for faculty and provide them with the right training. Many faculties who do not have any industrial exposure can engage themselves regularly by doing small projects with the industrial experts. This will help in gaining industrial experience as well as understanding the current industrial trends.

CONCLUSION

Many scholars have given various definitions to employability, though their definitions vary, the most common factor remains the same that is integrating employability in education. Most students enrol for education to get a good job. Many take education loans expecting a decent paying job post completing the course. Integrating employability in education is helpful for the students to acquire the job-ready skills beforehand and excel in the new workplace from day one. Institutions must nurture them with market skills, knowledge and experience to enhance their employability. The students must also take such skill development programs seriously and take part in various assessment and testing as part of the programmes to know their strength and weakness. Thus, they can enhance themselves in order to get a good offer as well as maintaining that employment or go for a better job in the future.







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Employability of Education

Manju Saxena*

ABSTRACT

"Yoga karmasu koushlam" All that Krishana says is: Be efficient at work. It is a science of action, the mastery of as many of the 64 traditional arts known as the Chausath Kalas. It is believed that Lord Krishna possesses these arts. Art is 'skill in work.' Art is a means of bringing out the inner as well as the outer beauty of a thing. Bring your vyavasaya buddhi and concentration together that is efficiency. What's the single most important thing driving the world's economies? It isn't multinational corporations, infrastructure or technology it's the education and the skills, we all have as individuals. It may be known human capital: The mixture of skills, knowledge, experience, habits and personality in each of us that can be put to productive use. Because growth, development, and poverty reduction depend on the knowledge and skills that people acquire, not the number of years that they sit in a classroom, but a transformation of their learning into action. The core idea of action is to Invest early. Invest smartly. Invest in learning for all.

Keywords: Access, Equity, Quality, Affordability, Accountability, Employability, transformation, demographic, Skill development, people-centric approach, cognitive, Entrepreneurship







^{*}M. phil in Education (Intredisciplinary), Indian Institution of Education, Center for Educational Studies, Savitri Bai Phule Pune University, 128/2, J.P. Naik Path, Kothrud, Pune, Maharashtra 411038, E-mail: iiipune@vsnl.com



INTRODUCTION

Real skill has its price everywhere. A person without art is like a beast. Schooling that does not improve cognitive skills has limited impact on aggregate economic outcomes and on economic development. According to K. Kasturirang, chair man of new education policy 2019, The Policy is founded on the guiding goals of Access, Equity, Quality, Affordability Accountability. Skill India, a campaign is launched by Prime Minister Narendra Modi on 15 July 2015 which aims to train over 40 crore people in India in different skills by 2022. As "Earning while learning" is the motto of present global educational scenario. Education and employment contribute to economic development and positive social and political outcomes. It is a Human capital which is a key factor for growth, development and competitiveness. However, despite the emphatic stress laid on education and training in this country. there is still a shortage of skilled manpower and the lack of technical and soft skills, the mounting needs and demands of the industries. We find that a large section of the population in the age group 15–59 years does not have any kind of formal training. Among the VET (vocational Education and training) holders, a large share is accounted for by non-formal trainees. Quite a high proportion of formal trainees in the workforce remain unemployed reflecting under utilization of human resource (Agrawal. 2017). More than 93% of our workforce in India is still remains unorganized. It is estimated that only 4.69% of the total workforce has undergone formal skill training in India as compared to more than 50% across the developed countries in the world. What also helps is providing training to the students, in not just technical skills but also soft skills or communication skills, preparing them to transform into workers from students.

Major Obstacles in the Way of the Skill Development Programs

The huge mismatch between education and employability has been staring in the face of our country since the last 40 years. The lack of coordinated action, dedicated to addressing the above challenges, has left India far behind, with India's demographic dividend on the verge of transforming into a demographic nightmare. As farmer President Pranab Mukherjee said in a organised CII event in Kolkata, "We often boast about India's demographic dividend. But the question that arises







is what we do with this if we cannot skill them, if we cannot educate them and cannot enhance their employability."

Some of The following points may be discuss as an obstacles in development programmes.

- The biggest problem in our country is that we have mindset issues, we've downgraded skills and working with hands. Germany, the UK, Japan or even China skills and education remain closely knitted. We somehow missed the bus in 1977 when 10+2 was introduced by D S Kothari, the then UGC chairman, with vocational education as the central objective in accordance with the recommendations of the Education Commission Report (1964-66). Unfortunately, there were few takers for vocational education, primarily due to deep-rooted social prejudices against working with one's hands as it is considered lowly and demeaning. (Thakur, 2019). We need to reconceptualize it.
- One critical hindrance of NSDC (National Skill Development Corporation) is the lack of standardisation across the skill development courses. There is no uniformity in what is taught to a person getting a vocational certification from rural area and a person from a big city. This standardisation is imperative more than necessary for their harmonious growth to ensure effective development of the skilling ecosystem.
- There have been numerous instances where a student is pushed in to a particular field due to parental pressure only to realise at a later stage in life about his /her passion.
- The Indian education system puts maximum emphasis on bookish knowledge. Hence, when an individual graduates, he/she struggles to apply this knowledge in the real life scenario.
- From primary to upper secondary, the subjects covered in the school curricula are the languages, mathematics, science and technology, social science, art, education, physical training etc. It will be observed that the curricula do not cover components of employable skills nor is there any option to introduce students to different vocations.
- The Indian education system does not consider the component of skilling in its curriculum. The option of vocation education is









limited to certain boards, which do not cater to the larger target audience. In India there are different boards that follow different systems/curriculum.

- The Indian education system adopts a top-down approach where the approach needs to be bottom up where the students and faculty at the last mile should be integrated in their objectives.
- There is lack of platforms where industrial and governmental agencies can meet regularly for a systematic up-gradation of curriculum for new skills. Ultimately it results in lack of coordination between the job aspirants and employers. Inflexibility in curriculum framework of vocational training and education made it difficult for the individual to imbibe the proper skills as who enters the vocational training will find it extremely difficult to enter general education field due to lack of equality between the two.

THE PRESENT SCENARIO OF SKILL CAPACITY IN INDIA

The demand and supply mismatch indicates that there is a serious mismatch between the education and skills that the youth attain and what the labor market demands. Therefore, in order to create a peoplecentric approach for skill development, it is required that the skill development initiatives needs to be coordinated with demand and supply scenarios across geographies, industries and labour markets so that new skills required by industry or changes in supply of labour are speedily adjusted with adequate and efficient training programs.

Ways Forward for the Success of Effective Skill Development

In most developed international countries, students are introduced to formal skill development at age 16 on words. The education system in these countries also provides for opportunities to students to move laterally and vertically to achieve their academic aspirations in main stream education. The need of the hour is to provide quality educational curriculum at all levels with targeting skills development programs. Likewise in our country the instructional material or syllabus must be prepared jointly by the industry and the educational planners. It should be regularly updated and must include more of practical learning than theoretical. So that students should imbibe the necessary job skills as demanded by the industrial sectors.





Some of the following curriculum can be followed for the different greads-

- Primary school -Communication skills, attitude, adaptability and IT skills must be included along with core subjects.
- Middle school -self-management, teamwork, creativity are the essential components for skill development.
- Secondary education- Training of stress management, selfmotivation is essential at this stage.
- Upper secondary -skill initiative, interpersonal sensitivity will give a border over view to market prospects.
- Higher education Graduation along with professional programmes like BVoc degree (Bachelor of vocational education introduced by the UGC in April 2012.) is with any mainstream graduation degree, gives opportunities to students with skills plus commercial awareness, problem solving, lifelong learning. The BVoc programme is also considered as an eligible degree for those seeking government jobs.
- Continuing education and training may meet the needs of both workers and employers. Employers and unions need to do to help people keep learning and acquire the skills they'll need for good quality jobs in tomorrow's world of massive advances in information and communications (ICT technology).
- Two new World Bank Projects have been approved to scale up skill development in our country. This includes the Skills Strengthening For Industrial Value Enhancement (STRIVE)

FURTHER SCOPE FOR SKILL DEVELOPMENT

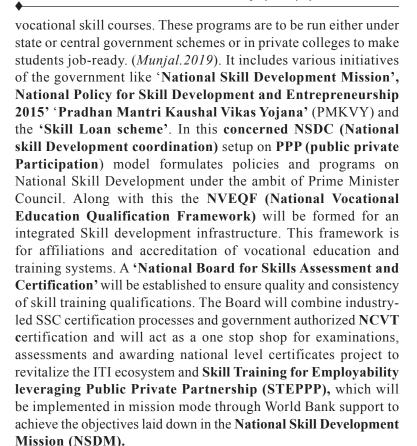
Let's look at the top organizations, missions and schemes that are the striving towards sustained livelihoods and gainful employment through skilling, up skilling and re skilling India. The National Skill Development Corporation India (NSDC) was setup as a one of its kind.

According to the Ministry of Skills and Entrepreneurship Development (MSED), 20 ministries have implemented 40 skill development programs to train 50 lakh students annually on





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CONCLUSION

All countries, regardless of their national wealth, stand to gain from more and better education. According to a recent OECD report, providing every child with access to education and the skills needed to participate fully in society would boost GDP by an average 28% per year in lower-income countries and 16% per year in high-income countries for the next 80 years. (Brende,2015). Entrepreneurship. Governmental agencies and organizations that support and promote quality education for all children must move beyond traditional models to help children develop the knowledge, skills, and attitudes that are relevant to their lives and that can lift them out of poverty. (*Epstein, M.J.2012*)







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Adjusting to the Paradigm Shift in Education Sector

Shabana Khan*

ABSTRACT

The 21st Century generation is extremely Techno Savvy. It is skilled with technology and comfortable with global and intercultural communications. Hence the Education Sector needs to set the frequency as per the rapidly changing world. The curriculum needs to be aligned with the needs of today's generation. Technology is a powerful tool for transforming learning among children. There is an essential need to reinvent our approaches of teaching methodologies to the present generation. It is a high time that we adopt the innovative learning methodologies and advance level of technological education in the curriculum to meet the learner's needs. The learning should not be limited to the walls of a classroom since the experimental learning is more informative and enlightening.

Benefits of technology in education are tremendous which provide authentic learning experiences. It is necessary to equip the students about new technologies from the early age so that they do not have difficulties in the later times. We need to expand our horizon by adopting STEM Education which is an amalgamation of Science, Technology, Engineering, Mathematics. Inclusion of STEM Education in our Pedagogy can ensure the employability

^{*}MESCO, Address: Office No.1 & 2, Plot No.423, Landmark Building, Near Saraswati Mandir School, Senapati Bapat Marg, Mahim (W), Mumbai - 400 016, (Extn. No.22), http://www.mescotrust.org, Shabana.khan@mescotrust.org







of our youth and better career choices in the future. The students need to be provided with skill based training so that there is enough scope for creativity.

Keywords: Education, Technology, Curriculum, Youth, STEM Education, Creativity, Skill based Education, Training

ADJUSTING TO THE PARADIGM SHIFT IN EDUCATION SECTOR

INTRODUCTION

Education is extremely important for the growth of a country. It plays a vital role in our lives as well as in the county's progress. It helps an individual to be a better citizen. Education is a continuous process of learning and understanding which leads to progress of an individual and the country as well. Being in the 21st century which is an Era of Technology, it is a high time that we must adjust our Education Sector accordingly. In today's time technology is constantly developing hence we need to equip our upcoming generation with the upgraded knowledge and skills. The technology has evolved over the period of time. The influence of technology has impacted the upcoming generation hence it requires a proper direction to get educated through right channel.

The present generation is highly Techno savvy and expects the rapid outcomes. It is highly necessary to fine tune our curriculum accordingly. In order to impart appropriate knowledge among them we need to improve our standard of Education. The Indian curriculum is slowly adopting the improvements but there is a high need to do the same in all the streams of the education sector. In India the total number of students is 315 Million as per 2011 Census. The country has a huge student population which needs to be provided with advanced knowledge education. The present paper is an attempt to understand the paradigm shift taken place in the education sector and areas which can be looked into in order to adjust to the recent changes taken place. To ensure a better future of our youth and the country we need to set the frequency as per the present era. By bringing technology into the Education System will ensure huge progress among students and will be able to sustain better in today's world.







CHALLENGES

• Students Teacher Ratio:

Student-teacher ratio is an important factor that affects the classroom learning of the students and teacher's performance as well. In India the number of student-teacher ratio needs to be checked for the purpose of quality education. Overcrowded classroom is one of the common challenges that are faced in our schools. It is difficult for the teacher to pay attention to the large group of students, which ultimately becomes hindrance in their teaching process.

• Lack of upgraded Laboratories and Libraries:

Application based learning has better impact on students hence there is a huge need of upgraded Laboratories and Libraries in our schools. The students need to have enough time and exposure to learn various concepts while being in the schools. Experiential learning has a great role to play in the process of education.

• Memorizing or Rote learning:

It has been observed that the students have the habit of memorize the syllabus which is not correct way of learning. Instead of memorizing or rote learning the students should be taught to learn through Meaningful learning. It involves better understanding of the concepts and ability to use the knowledge. It encourages active learning and has the long lasting impact. It helps students to have better involvement in the learning process.

Curriculum / Syllabus:

The Curriculum or Syllabus needs improvisation since the technology has taken a big leap since last few years. It is required that curriculum or syllabus taught to our students should be updated in order to make them equipped to sustain in the developed world. Latest knowledge on for instance Artificial Intelligence, Virtual Reality and E-Commerce can be included for better learning amongst today's youth.

OPPORTUNITIES

STEM education

STEM Education is a curriculum based on four specific disciplines i.e. Science, Technology, Engineering and Mathematics. These





disciplines are taught in an interdisciplinary and applied approach. It gives an opportunity for Practical demonstration to make the process of education more interesting among students. It allows the students to make appropriate use of technology. We must channelize the child's energy in a right direction. The STEM education helps children to use critical thinking, creativity and a great scope of Research. It has a good combination of theory and practice and can also minimize students' drop out during the process of education.

Training of Educators or Teachers

The training of teachers needs to be more advanced as per the newly designed syllabus which should focus more on technology based curriculum. The teachers or educators need to be equipped well with advanced teaching learning methodologies. The relation between the students and teachers can be strengthened and advance if the student-teacher ratio is appropriate. There is also a need to have student friendly environment during the class to ensure the better level of learning.

Vocational Education

Vocational Education has come into trend in today's time. It provides skill based training and technical knowledge to its students. It helps in creating skilled manpower, enhancing industrial productivity and also supports in improving the quality of Life. The students are prepared as trainees by providing practical experience and knowledge in the technical field. It opens better avenues to the youth and also has a great job market. The vocational Education molds students to be more employable or job ready. The vocational education also gives a chance to the learners various required skills like Collaboration, Communication and Problem Solving,

Humanities and Arts

In today's times we are witnessing many unfortunate incidents of hatred, crime, communalism in the society which are extremely horrifying and can put the nation and its youth in a great trouble. It has become an essential necessity to impart Value based Education among our children and youth to have better society. This can be achieved if we give importance to the field of Humanities and Arts. The upcoming







generation must be encouraged to make their career in the said field. It educates students on the importance of History, Religion, Philosophy, Sociology, Languages, Literature, Psychology, Music, Painting and Theatre. We need to nurture the creativity among our youth. Being the citizens of a country which has diverse cultures and religion, we must focus on the said areas to have peaceful nation. The field of Humanities and Arts will also have the human touch as far as the teaching-learning methodology is concerned unlike the technological fields.

Sports Education

Sports Education is another big area which has a great scope. In India we need to have proper system in place for the desired people by providing trained sports educators to impart excellent level of mentoring and coaching. The sports education not only helps in building physical stamina but also encourages various qualities in youth such as hard work, determination, willpower, discipline and team spirit.

CONCLUSION

The next generation is highly expected to have even more knowledge and experience in the area of technology. Quality Educators and Updated curriculum is the need of the hour. Our educational institutes must have technology and skill based education for the upcoming generation to create an advanced Education System. The experiential learning gives better knowledge to the learner. Having skilled youth can also encounter the problem of unemployment in the country. It can also enhance the country's economy and will have more and more educated and skilled youth, who shall be having the potential to be employable at national as well as at international level.

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29 Unplugged Education

Dr. Sheela Philip*

Every great advance in science has issued from a new audacity of imagination.

-- John Dewey

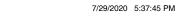
The twentieth century is when several progressive ideologies took birth and they were tangible in the major social reconstruction and makeovers that emerged. John Dewey's pragmatic philosophy mirrored a sea change in the then prevalent educational practices. Education was uplifted with the introduction of child-centred, activity-based, learning-by-doing methods. Earlier, mastery of the three Rs, namely, Reading, wRiting and aRithmetic, were the milestones in education. Children were driven to learn through rote and didactic learning. Cognitive development was considered the yardstick in learning, and intelligence quotient was a crucial, sole parameter of evaluation. Concrete, dingy classrooms and corporal punishments that were the norm are pronounced inhumane. It was frowned upon that children were put in factories as opposed to schools.

Socio-cultural perspectives too crept into education when psychologists and philosophers like Vygotsky defined it essentially as a social process. Erickson spoke of the psycho-social angles while Kohlberg provided the moral dimensions. Eventually society, culture, parents, caregivers and peers too played crucial roles in developing the psycho-social and moral domains of learning.

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^{*}Assistant Professor, St Teresa's Institute of Education, Santa Cruz (West), Mumbai 400054



Contemporary teaching-learning is essentially experiential. It is aimed at holistic development and man-making. Global perspectives have enriched education with sublime philosophies that are pivoted on interdependence, empathy, egalitarianism, social justice, sustainability.

'Teaching Unplugged' is the term used for a teaching method and philosophy that has three primary aims: teaching through conversation, taking out external inputs such as course book and technology, and letting the lesson content be driven by the students rather than being pre-planned by the teacher. The method has its origins in an article written in 2001 by Scott Thornbury and Luke Meddings called 'The Roaring in the Chimney'. They later wrote 'Teaching Unplugged', a comprehensive guide to this type of teaching and winner of the British Council ELTons award for Innovation in 2010.

The main reason for its popularity is that the focus is on the students' actual needs. Taking out all external input brings down barriers between the teacher and students. Everyone works together as a group with the teacher as facilitator and resource. Teachers have the liberty of choosing what they determine essential as their process variables depending on the presage variables; lessons can be planned anywhere, anytime.

But these could also be seen by students and parents as negative features; they expect teachers to direct the class and make decisions, they expect a syllabus and a course book, they feel that a course without technology is old fashioned. Less experienced teachers may also feel nervous about not knowing in advance what they are going to teach, and how they could bridge the gaps during periods of lull.

THE KALA GHODA FESTIVAL

The city of Mumbai hosts an annual 9-day celebration of theatre, music, song, comedy, food, dance and so on in the precincts of the historic Kala Ghoda, Mumbai. The avenues and spaces lined by the grandiose Indo-Saracenic, Neo Gothic and Neo Classical architecture provide the perfect backdrop. The event attracts 150,000 people from the city and beyond. This year, the festival was held February 1-9, 2020; it marked the twentieth celebration of this vibrant street festival. Seventy-seven workshops and activities of interest to children were conducted across these days. Live theatre and music across a genre of themes were staged in various languages. Literature and visual arts were a cultural treat. Heritage walks through the glorious region took the crown. It was a







must-visit extravaganza the city put up, comparable to any of its kind staged cross the world!

This festival was chosen as an example of unplugged education, and a group of 97 teacher-trainees (B.Ed. Semester II and IV) was invited to attend it and report their opinion on unplugged education and of this as an experience in unplugged education.

OBJECTIVES

- **1.** To enable the participant to experience the joy of responsible freedom while learning
- 2. To encourage the participant to experience the leverage mobile applications provide in documenting attendance when faced with the physical absence of a teacher
- **3.** To permit the participant flexibility in learning through the fun-use of photography that acts as the learning canvas
- **4.** To prod participants who are novices in photography to dabble with the skill
- **5.** To incorporate linguistic skills through the use of taglines into the exercise so that the outcomes of personal introspection surface subtly
- **6.** To do justice to the resources within the community, i.e., time, effort and finances that are funnelled into hosting the event as a community endeavour.
- 7. To showcase to the participant the involvement of primary, secondary and tertiary educational institutions in disseminating social messages
- **8.** To create a feeling of solidarity with artisans and skills that are going extinct
- 9. To nurture a robust cultural and national identity in the participant

METHODOLOGY

The teacher-trainees were advised to visit the Kala Ghoda festival on any date and time of their convenience, individually or in groups, with the following instructions:





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Instructions

- 1. Visit the Kala Ghoda Arts Festival 2020 at your convenience
- **2.** Document your visit using geotags
- **3.** Archive memories of your visit
- **4.** Submit a photo entry to the 'Picture Perfect Contest' that best describes your experience
- 5. Enhance the photo entry with the use of a meaningful tagline

Although geotagging and photography were used as evidence of attendance, these were not included in the evaluation; that is, these were not part of the evaluated process variables.

After they returned from the Kala Ghoda festival, the following questionnaire was administered as a Google Form to the teacher-trainees in a Google Classroom forum, with a request to answer it as indicated.

QUESTIONNAIRE

Section A

- Teaching-unplugged is a perfect setting for learner-centred, activitybased, discovery learning
- **2.** Teaching-unplanned gives me freedom to choose what to learn, and when and with whom I could participate
- 3. Street festivals are a good example of teaching-unplugged If answer to 3 is agree or neutral, answer 4, 5, 6 (Section B). If answer is Disagree, answer 7, 8, 9 (Section C) 10-13 (Section D) to be answered by all

Section B

- **4.** The unplanned, outdoors setting of street festivals has lasting outcomes as compared to classroom teaching sessions
- 5. Street festivals also honour artisans, showcase dying craftsmanship skills, and provide treats across genres of art, craft, dance, music and literature
- **6.** Primary-, secondary- and tertiary-level educational institutions can benefit from street festivals either as visitors or by participating in them







Section C

- 7. Street festivals are a commercial gimmick in the name of culture and art
- **8.** The amount of money that goes into street festivals can be better used as direct aid to the artisans
- 9. Street festivals do not necessarily lend learning to all who visit

Section D

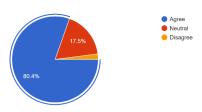
- 10. I have used geo-tags for the first time
- **11.** Geo-tagging allowed me flexibility to choose a convenient time slot and to authenticate my visit
- **12.** Geo-tagging enabled me to archive memories and reflections using photographs
- **13.** I loved the idea of entering photographs I have taken for the 'Picture Perfect Competition' to be held at our college

RESULTS

Quantitative Analysis

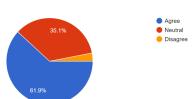
The responses from the teacher-trainees to the questions are shown below.

1. Teaching-unplugged is a perfect setting for learner-centred, activity-based, discovery learning 97 responses



 Teaching-unplanned gives me freedom to choose what to learn, and when and with whom I could participate

97 responses

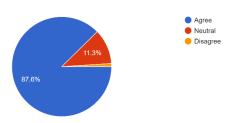






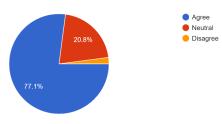


3. Street festivals are a good example of teaching-unplugged 97 responses

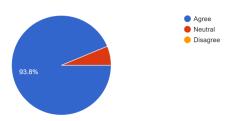


4. The unplanned, outdoors setting of street festivals has lasting outcomes as compared to classroom teaching sessions

96 responses

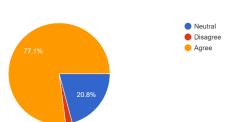


 $5. \, Street \, festivals \, also \, honour \, artisans, \, showcase \, dying \, craftsmanship \, skills, \, and \, provide \, treats$ across genres of art, craft, dance, music and literature 96 responses



6 Primary-, secondary- and tertiary-level educational institutions can benefit from street festiva either as visitors or by participating in them

96 responses









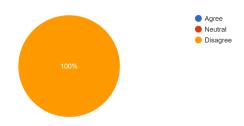
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7. Street festivals are a commercial gimmick in the name of culture and art

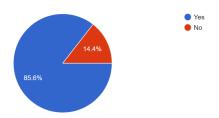


8. The amount of money that goes into street festivals can be better used as direct aid to the artisans

1 response

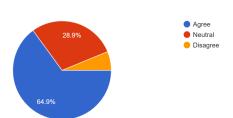


10 I have used geo-tags for the first time 97 responses



11 Geo-tagging allowed me flexibility to choose a convenient time slot and to authenticate my visit

97 responses

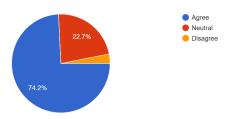






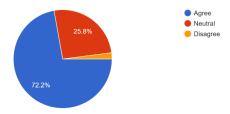


12 Geo-tagging enabled me to archive memories and reflections using photographs 97 responses



13 I loved the idea of entering photographs I have taken for the 'Picture Perfect Competition' to be held at our college

97 responses



As a follow up to the responses, a second set of questions was sent to those who gave minority answers to questions 1-6, 10-13, requesting their reasons for these answers.

QUALITATIVE ANALYSIS

The results showed that most respondents had rated the positive statements of outdoors education high as compared to prototype formal school education. Responses to questions 7, 8, 9 were in universal (100%) agreement among the respondents.

However, the group that caught the researcher's attention was the small chunk of the sample who felt that unplanned learning had poor outcomes. Being products of traditional education, it takes teachers to bank on personal insights to ascribe the real worth of a stimulus or exposure that may not be pointedly aimed at being a contributor of learning.

We are still living in an era where cognition, retention and memory retrieved through paper-pencil tests compiled during formative and summative evaluations hold the key. And, in comparison to this, unplugged education doesn't seem a viable and potent option for







documenting the learning curve. It is for this very stereotype that much worth is not reposed in visits, excursions, field trips, project work, open book exams, case studies, and so on.

Teachers only adhered to the prescriptions of the curriculum when they were conducted. The group banked greatly on being wired to technology and adopting the didactic mode of delivery in order to attain effectiveness. During subtle deliberations and dialogues within the sample, the half-hearted acceptance of the unplugged approach came to light. They summed up that their teachers too reposed little trust in unproctored logs and reports handed in by them. They recounted that only invigilated work submitted by them received zestful scrutiny. Indoctrination does play a vital role in acceptance. This was evident because, in contrast to the preceding view, they were open to an openforum presentation or viva voce when it came to certification of mastery at the doctoral level and its likes.

The researcher also felt that personality traits played a significant role in creating a positive mindset towards flexibility in learning. The left vs right brain dominance of teachers also act as a precursor to their outlook and preferences. Those who credit the outdoors approach as robust are generally those who exhibit a right-brain dominance. Such teachers incorporate this practice whole-heartedly and describe the nature of such an exposure as panoramic, fertile and organic. Such exercises would also demand patience, forbearance, insight, empathy and an indomitable will on the part of teachers, apart from content mastery. Such a curriculum is pivoted on the ecological approach to curriculum development.

In an era of technological prowess, this approach may seem outdated and old fashioned as it often fails to rise up to student and parental expectations. Nevertheless, the emergent pragmatic and psycho-social philosophies have redefined the outcome goals of education to higher levels of attainment. The easy access to information and communication has caused the cognitive domain to step aside. The affective domain now holds centre-stage.

DISCUSSION

As a teacher-educator, I would ascribe the following attributes to a teacher-trainee of today: zestful, technologically savvy, seeking instant gratification, working on structured plans of action, aiming at









objectivity, keen on tracking learning progression in pupils, wanting to provide vibrant simulation exercises that are auditory and visual. All of these are sterling traits a dynamic teacher would reflect.

However, it fails to offer flexibility. The buffet table is the best analogy I would use to describe unplugged education. Learning environs within the confines of a sequentially planned classroom are juxtaposed to those in the community. The experiences in the open are random. The learner gravitates to regions of learning that in sync with their abilities, interests, aptitude, previous experiences and so on. To students who suffer attention deficits and those who are averse to textual learning, this exposure is a subtle inoculation that can produce overwhelming positive outcomes of learning. In a few cases, unplugged education is a spark that overcomes the inertia of phobia to formal learning. It serves to provide the momentum to initiate a fondness for exploring the vast repositories of learning that the natural world provides. The unorganised presentation of knowledge within the community is not tagged with time frames and directions that prod one along a continuum.

Several researches carried out point towards a strong, positive correlation between the learning outcomes and the environment. Having to account for quantifiable parameters in the domain of learning achieved and having indicators of quality often weigh heavy on the minds of a committed teacher.

It is thus imperative for teachers to embrace and usher in learning to stream through undefined territories instead of charting pathways that are prescribed. Unplugged education encourages a teacher to harken to random awakening of creativity locked in one's imaginative capabilities. It is a formidable task for a committed teacher to calibrate the outcomes of unplugged education which banks greatly on a learner's self-talk, introspection and reflections.

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Gamification Technique: A Boon to Education System

Mr. Nikhil Gupta*, Mr. Hemant Kulkarni**, and
Mr. Pawan Tiwari***

ABSTRACT

The current study has been conducted on a sample of 55 students of Vasai-Virar to study the modern technologies used in education. Multistage random sampling technique was used for selection of the samples in this research. Findings of the study revealed that significant relationship exists between technology used in the modern world and students. In the current study we are conducting gamification technique experiments and how it can be used in education efficiently and this study will also reveal how gamification technique can improve the education in the near future. It is important for students to understand the importance of modern technology that is used in education and mainly it is important for students to understand the latest gamification technique that is used to improve the education or learning.

Keywords: Educational technology, gamification technique, game design elements

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^{*}Post Graduate Students Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. nikhilgupta.444nig@gmail.com

^{**}Post Graduate Students Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. hemantkulkarni548@gmail.com

^{***}Post Graduate Students[,] Dept of Information Technology, Thakur college of Science and Commerce, Thakur Village, Kandivali (E), Mumbai-101, Maharashtra, India. pawantiwari670@gmail.com



INTRODUCTION

The era of 21st century is often regarded as an era of technology. Technology, today, plays a very important role in our life. It is seen as a basis of growth of an economy. An economy which is poor in technology can never grow in today's scenario. This is because technology makes our work much easier and less time consuming. The impact of technology can be felt in every possible field one such field is Education.

According to the current generation how exactly modern students of today prefer to use technology and how does their learning get the benefits when they use technology, this was observed with the help of modern equipment tools and modern technology and because of this the interactivity and learning of students has been increased. They also find it very interactive, as well as full of interesting areas, when it is used by technology. The knowledge sharing has become very easy and convenient, as well as effective on our today generation. What this means is, that our minds now tend to work faster when assisted with the use of modern technology, be it any part of life, here we talk about education. The reliance and dependence of such an innovation, that simply makes life an easy, smooth journey is completely unavoidable these days even in schools, universities and colleges. Modern Students today can make use of technology in the following ways:

• Internet connection and round the clock connectivity:

The internet importance has been grown in current scenario, over the process of technology. It is important in the education world and can never be underestimated. But if we ignore the internet fraud and drawbacks, the use of the internet is like a god blessing for every students. Today, the internet is something without it we can't imagine our new era world. From entertainment to daily purposes we use the internet literally everywhere. The use of the internet allows students to do something innovative and for that we use internet in tutorials.

• Using projectors and visuals:

Visual images will have a strong appeal compared to words is always observed. Using projectors and visuals in learning is excellent way of great technological use. Top Education Institution around the world, now rely on the use of Microsoft PowerPoint presentations







and projector projections in order to keep the learning interesting and interactive. Technology use such as projectors within the colleges and schools can take the interaction and interest levels high up and also it will improve motivation. Students like to see videos visuals that make focus them to think rather than just reading words. The learning part also becomes good efficient when it comes to visual technology.

• Digital footprint in the education sector:

If we talk about digital and education, then the digital media within the education sector has now grown. This diffusion has resulted in round the clock connectivity with different forums and students that are available for different kinds of assignments or help. As the power of digital media increases, there are and there will be more applications that will assist students in development and learning.

Gamification used in education

Gamification is that concept where game thinking, different approaches and elements are used and it is different from the real games. Gamification mechanics improves the motivation and learning of students in formal and informal conditions and it also solves problem of students efficiently and also engages people in different activities. Various definitions have been summarized about gamification by different authors. Gamification is an integration of game elements and game thinking in activities that are not games. The games that are introduced have some typical features which plays a crucial role in gamification:

- Users: Users are those who participate in the gamification activity. Users can be employees or clients(for companies), students(for educational institutions).
- Challenges and tasks: Challenges and tasks are those users perform in the activity and progress towards defined objectives.
- Points: Points are those users get as a result of executing tasks that are involved in the activity.
- Levels: Levels are which users pass the particular activity and move on to another level depending on the points gained.









- Badges: Badges are those which serve as rewards for completing activity or actions involved in gamification technique.
- Ranking of users: Ranking of users are those which users gain according to their achievements.

• Software tools used in gamification

There are many tools that are used in gamification technique. Some of this tools that are involved are web-based(cloud services) and such software do not need installation and as they are cloud based they allow us to access at any time from any location. Among the most popular some gamification that are used are

- Socrative
- Kahoot!
- FlipQuiz
- Duolingo
- Ribbon Hero
- ClassDojo
- GoalBook.

LITERATURE REVIEW

According to Lee and Hammer (2011) "Traditional schooling is perceived as ineffective and boring by many students. Although teachers seek novel instructional approaches, it is largely agreed that today's schools face major problems around student motivation and engagement". The use of educational games in teaching and learning tools is a promising approach due to their abilities to teach and reinforce knowledge and other important skills that are needed in education like solving, collaboration and communication^[1]".

According to Kapp (2012) gamification is "Using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning and solve problems [2]".

According to Deterding et.al (2011)" As the use of game design elements in non-game context, is a fairly new and rapidly growing field. The concept of gamification is totally different from that of an educational or serious game^{[3][4]}".







According to O'Donovan and S. Gain, Marais et.al (2013)" Social engagement includes individual and team competitions taking part in group can help build learning activities and work on team projects and it also helps in cooperation and interaction with other students^[5]".

According to Barata and Gama Jorge, Goncalves et.al (2013)" Gamification in education can increase attendance, participation and also increases percentage of passing students and participation in voluntary activities and challenging assignments and it also creates positive effect on quantity of students^[6]".

According to Anderson and Huttenlocher, Kleinberg et.al (2014)" The majority of the papers report encouraging results from the experiments, including significantly higher engagement of students in forums projects and other learning activities^[7]".

According to Haaranen et.al (2014)" The principle of "Freedom of Fail" presumes no penalties on poor task performance and typically includes allowing students to revise and re-submit assignments^[8]".

According to De Byl et.al (2013)" The papers of the gamification instance are proved to a boon for students for motivation, interesting and easy to learn as compared to other courses^[10]".

OBJECTIVES OF THE STUDY

- To study the impact of gamification technique on students.
- To know the how the gamification technique can be used in education system.

DATA ACQUIRED

Here in this classification technique, we have used the online and offline data collection techniques from the students about the modern technology used in education and how gamification can be introduced in education and how it can prove effective in giving knowledge to students. So, the data is collected from those students who have different thinking on education system and who think how modern technology can be used in education and mainly how gamification technique can be used in learning. Students have given different reviews on modern technology used in education and also on gamification methods used in education.







METHODOLOGY

Descriptive survey method and gamification method was used for present study.

Statistical techniques used

Mean Test Technique is used for Data Analyzing.

Data analysis & interpretation

The collected data was analyzed both quantitatively as well as qualitatively. To study the modern technology used in education, the following techniques were formulated:

Table 1: Above Table Shows the Mean Values of Techniques

Traditional	E-learning	Gamification	Total
14	15	25	54

To be used for Providing a Better Education to Students

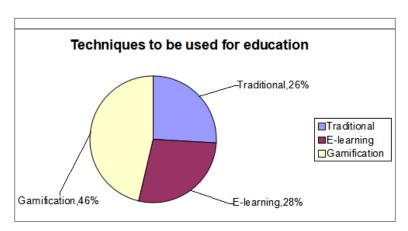


Fig 1.0: Graphical Representation of Techniques Used in Education

Here, we have just collected data from students that which techniques to be used for providing a better education.







Table 2: Importance of Gamification in Education

yes	No	Total
51	3	54

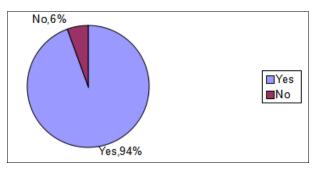


Fig 2.0: Gamification is Important in Education

To study about the students who basically believe in gamification techniques and their importance in education.

Table 3: Methods that Helps to Increase Student Grasping Power

Tradition	nal	E-learning	Gamification	Total
1		12	41	54

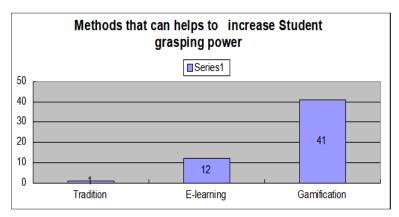


Fig 3.0: Methods that can Helps Student in Education to Increase Grasping Power







Table 4: Techniques that can give Quick Solution for Problems

Traditional	E-learning	Gamification	Total
5	11	38	54

Fig 4.0: Techniques that Provide Quick Solution for Problems

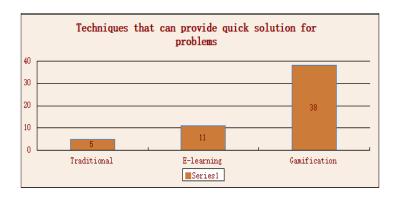


Table 5: Gamification Helps Student in Absence of Proper Education

yes	No	Total
46	8	54

Fig 5.0: In Absence of Proper Education can Gamification helps Student

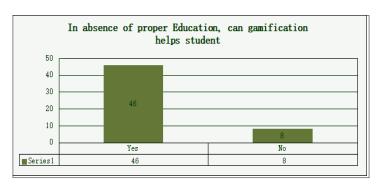








Table 6: Basics Ethics and Morals in Education

Friends	Teachers	Parents	Total
31	17	6	54

Fig 6.0: Person Responsible for Providing Basics Ethics and Morals in Education

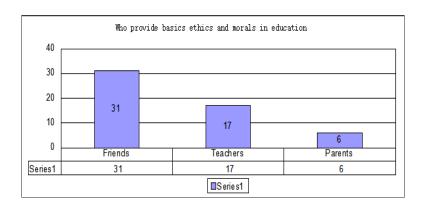


Table 7: Can Gamification include for Higher Education or Higher Studies

Yes	No	Maybe	Total
33	4	17	54

Fig 7.0: Above Graph Shows Representation of Gamification can be used in Higher Education or Higher Studies

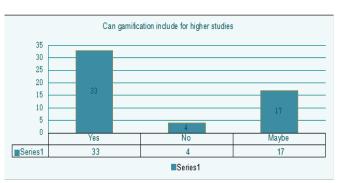




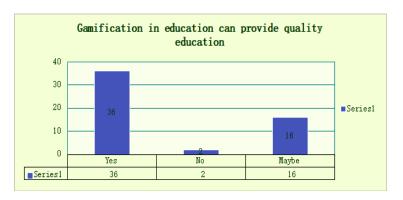




Table 8: Gamification in Education can Provide Quality Education

Yes	No	Maybe	Total
36	2	16	54

Fig 8.0: Gamification in Education can Provide Quality Education



CONCLUSION

E-learning is easy and productive method that can provide a good integration of gamification technique. Game techniques and mechanisms that are implemented in learning process provide good learning objectives and also provide motivation for students to complete there tasks and it also engages students in friendly competitive environment. Gamification mechanics is an effective approach that drastically changes the students attitude and behavior towards learning process.

FUTURE ENHANCEMENT

The main aim of this topic is to develop confidence among students of elementary stage as confidence is more important in developing the personality, body language, etc. So, here in the future work of this research paper we can create different classes based on the age criteria where the students have the high and low level of confidence. It is also necessary to give different reviews on confidence to students.







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Academic Stress Among Women in Institutions of Higher Education in India: A Study through the Lens of Caste

Tanuja V. Koli*

ABSTRACT

Indian society suffers from substantial inequalities in education based on caste and ethnicity. Women in India are not a homogenous group. Gender and caste often intersect to impede access to education in India. The present paper aims to contribute through its analysis the many important social and economic effects of higher education that are missed until now in critical understanding of stress among women belonging to marginalised castes.

Keywords: Stress, Higher Education and Caste.

INTRODUCTION

Higher education plays a unique role in creating and transforming socially engaged, civically active, and innovative individuals (Olson-Strom and Rao,2020:2). The evolution of Indian Women's education has been spread over centuries. It is as old as the history of India itself. Female literacy is important force multiplier for social development of a country. India is essentially a caste-based unequal society. Though the constitution has propagated an egalitarian society and calls for equal treatment of all citizens irrespective of their caste, colour, race,

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^{*}Associate Professor, Department of Sociology, Chetana's, H. S. College of Commerce and Economics, SMT. Kusumtai Chaudhari College of Arts, Govt. colony, bandra (e), mumbai – 400 051. (re-accredited by naac with "a" grade)



language, class and gender, there exist social inequality in everyday social reality(Mondal, 2020).

The constitutional and legislative measures for social equality and the state- sponsored development initiatives though have questioned the bases of these inequalities, have not been able to eradicate the root causes of the same. Rather, many facets of social inequality continue in one form or the other through several discriminatory practices. It is this phenomena which force a vast segment of the society to remain socially marginalized, economically deprived and politically disempowered. These inequalities became cumulative and persistent, especially for those section of the population who has been the victims of historical social injustice for centuries. Scheduled Castes (SC) in India are one of such deprived marginalized segments of society who have remained victims of persistent inequality in society despite several constitutional and legislative provisions that made for their uplift in society. (Sahani, 2019)

Studies on higher education have emphasized that educational development does not always amount to increased female inclusiveness. Analysis of Indian policies on higher education by Rohini Sahni & Kalyan Shankar emphasize that women's access to higher education varies widely based on location of caste. They suggest adapting national & regional level policies to more clearly address the exclusion of certain groups of women and coincide with grass root level reforms in order to be effective (Storm & Rao, 2020).

EMANCIPATION THROUGH EDUCATION

Dr. B. R. Ambedkar identified Caste, religion and the unequal and unfavourable treatment based on birth rather than on merit as major blocks that hinder progress in India. The principle aspect of domination and subordination of castes that produces inequality and social oppression is the Brahmanical or Hindu social order that grades people based on the principle of inequality-'graded inequality'. Dr. Ambedkar viewed education for Dalits not merely as a sole means for developing personality or source of earning livelihood but education was the most powerful agent for bringing about desired changes in society. It was a prerequisite for launching a social movement in modern times. Education was an instrument meant to liberate Dalits from illiteracy, ignorance and superstitions. It would further enable them to fight against







all forms of exploitation, oppression and social sufferings inflicted by upper caste hegemony. Education provided strength and opportunity for Dalits to fight against poverty, disease, and backwardness. According to Ambedkar, the purpose of education was to help students to study situation critically (Das, 2019).

UNDERSTANDING STRESS

Stress arises due to the combination of internal and external pressures and further exceeds with the individual's access to limited resources to cope with their situation (Sathya Devi, 2015). Stress has become an internal part of academic life to which everyone reacts differently. (Pullokaran, 2018). Thus students are very likely to experience some or many stressors' which may test their ability to cope: adapting to new environment, balancing a heavy work load, making new friends, becoming more independent, and dealing with myriad of other issues. (Sathya Devi,2015). Education is an inevitable factor for economic and social development as well as for building human capabilities. Looking from a Dalit feminist perspective this paper focuses on academic stress which becomes complex due to the marginalised caste position among the women belonging to marginalised caste. The findings show how the above mentioned stressors' get compounded in the context of marginalised caste women.

METHODOLOGY

An in-depth study through focussed group interactions of 20 women students belonging to marginalised caste group was conducted to understand their experience of academic stress while pursuing higher education. The women belonging to marginalised caste group discussed about various stressors' they experienced during their accomplishment of higher education. Almost all the women respondents from marginalised caste experienced that their academic stress compounded mainly due to their marginalised caste background.

Dalit feminist perspective was applied to analyse the study undertaken. Dalit feminism is a feminist perspective that includes questioning caste and gender roles among Dalit population and within feminism and larger women's movement. Dalit feminists advocate and have advocated for equal rights for Dalit women based on gender, caste and other issues. Dalit women face violence at higher rates including







types of violence that are specifically inflicted to Dalit women, which is also experienced in subtle ways in the field of education. Historically, the Dalit rights movement has focused more heavily on Dalit men and Dalit women's issues which have often been ignored by Indian Feminism. The larger Indian Women's movement which is mainly run by middle and upper class women have ignored caste based issues uniquely faced by Dalit women. And therefore have been criticised by Dalit feminist. As Swaroopa Rani mentions, Indian Feminists saw all women as being the same and therefore having same problems. Dalit feminist have challenged this idea (Prakash,2019).

Interpretation: Academic stress among women belonging to marginalised caste backgrounds.

- 1. Ignored and Isolated due to rural and marginalised caste background respectively: Most women students belonging to marginalised caste backgrounds had enrolled for higher education in metropolitan cities. They have migrated from small towns and rural areas compared to other women students who enrolled for higher education came from nearby cities or metro cities. The women students from marginalised caste found less acceptance by other students in campus i.e. they were isolated by those belonging to dominant castes and who came from cities or metro cities.
- 2. English language used as symbolic challenge against marginalised caste students: The women students from marginalised caste experienced that they were not included in classroom discussions-either due to they had less command over English language or also the way dominant caste urban Indian used English language in everyday life communication. As this differed from institution to institution depending on the location of the institution of higher education it did not accommodate women belonging to marginalised caste groups.
- 3. Casteist elitist approach of teachers: Women students from marginalised caste found less acceptance by some of their teachers and faced denial due to their rural location and marginalised caste background and lacked support in solving their academic difficulties. However the women students from dominant caste groups were provided the required attention for solving any difficulties or doubts. Women students from dominant caste groups had easy









- access to teachers, which was refused to the women belonging to marginalised castes. Thus women from marginalised castes experienced discrimination and neglect from the teaching faculty.
- 4. Vernacular medium education being not recognised by teachers in urban set up making the students from rural set up and small towns belonging to marginalised caste background feel unwanted or not worthy of pursing higher education: Women students from marginalised castes were labelled as unsuitable for pursuing higher education due to their vernacular education background and demotivated to pursue higher education. Most women from marginalised caste backgrounds were suggested to cancel their admissions from institutions of higher education in metro cities by their teachers and go back to their homes in villages, which lacks facility for higher education.
- 5. The women students belonging to marginalized caste background faced economic discrimination along with caste based discrimination: There was a comparison about their dressing and grooming patterns, like hair style, which was different from the women belonging to dominant caste families and who wore clothes from boutiques. Also they were discriminated about not having access to Debit/Credit cards, electronic gadgets which sometimes became essential for payment of online fees.
- 6. Lack of interaction, communication and networking at institutional levels which made more complex and difficult for women from marginalized caste group to cope up with demands of the metropolitan educational set up, to gain as well as contribute to knowledge production: Women belonging to marginalised caste had to restrict their interaction and acquaintances with men and women belonging to marginalised caste groups only as they did not own and afford electronic gadgets or other accessories like mobile phones with advanced technology possessed by the men and women belonging to dominant caste groups. Also they could not participate in weekend outings for movies, shopping or enjoying restaurant food with the men and women from dominant caste groups due to financial constraints which again restricted them from making friendship with the dominant caste and class group students. All this together excluded them from participation







at different levels like classroom or campus activities which in turn also restricted in gaining as well as contribution to knowledge production.

- 7. The women belonging to marginalised caste background were also dominated by the men belonging to marginalised caste group: The women belonging to marginalised caste background were not treated with respect by the men belonging to marginalised caste groups, as many Women from marginalised caste backgrounds experienced public criticisms during public functions or in classrooms or informal gatherings. At the same time the women belonging to marginalised caste also noticed that men from rural and marginalised caste backgrounds respected women from dominant caste backgrounds and appreciated or motivated or supported them in the work they carried out.
- 8. Castiest remarks from dominant caste groups in the institutions of higher education: Women students from marginalised caste backgrounds were openly criticised for their low social and economic status in classrooms by their classmates, teaching faculties or administrative staff and also addressed them by their caste names.
- **9. Cultural domination by dominant caste students**: Women students from marginalised caste backgrounds were not involved by their classmates to participate in decision making: while deciding topics for group projects, while planning for cultural event or they were never given opportunity for representing important official positions.
- 10. Societal constraints: Most women from marginalised caste had to fight against the restrictions forced on them by their families, relatives, caste panchayat to pursue higher education and gain their autonomy.

CONCLUSION

The study undertaken reflects the number of challenges which the marginalised caste women students undergo in their day to day life while pursuing their higher education. The whole idea of an existing and vibrant college life is unveiled by these challenges which contribute to stress and if not dealt with can only escalate and hamper their academic performance, emotional and social well-being.









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Self-Efficacy and Motivation of Student-Teachers – Vital Determinants of Teacher Performance

Dr. Cerena Aurin D'cunha

ABSTRACT

Teachers play a vital role in the overall development of the child. Student's performance ultimately depends upon the teacher's performance, which in turn will depend on the fulfillment of the teacher's needs. Hence it is not only necessary for the teachers to be aware of their performance, but also to make conscious efforts to fulfill their motivational needs and heighten their self-efficacy.

Each individual teacher is different from others and every teacher's performance may also differ from each other. Thus a study on variables of teacher performance and motivation and selfefficacy was conducted.

Keywords: Self Evaluation of Teacher Performance, Self-Efficacy, Motivation, Student-Teachers.

Teachers play a vital role in the overall development of the child. Student's performance ultimately depends upon the teacher's performance, which in turn will depend on the fulfillment of the teacher's needs. Hence it is not only necessary for the teachers to be aware of their performance, but also to make conscious efforts to fulfill their motivational needs and heighten their self-efficacy.

^{*}Asst. Professor, St. Teresa's Inst. Of Education. S.V. Road, Santacruz (West), Mumbai-54. E-mail: *stie73@gmail.com*









Each individual teacher is different from others and every teacher's performance may also differ from each other. Thus a study on variables of teacher performance and motivation and self-efficacy was conducted.

Concept of Teacher Performance: Teacher performance is defined as the degree of teacher's mastery over the subject matter, his/her sought-after personal qualities favorable to the profession (like confidence, regularity, punctuality and emotional resilience), rapport with students and colleagues, communication skills, planning and preparation and task orientation.

Concept of Self-Efficacy: Self-efficacy is defined as people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes.

Concept of Motivation: Motivation is the driving force by which human beings achieve their goal. Motivation is said to be intrinsic or extrinsic. The researcher has studied motivation using the Vroom's expectancy theory of motivation.

Vroom's Expectancy Theory of Motivation: It assumes that behavior results from mindful choice among alternatives whose rationale it is to maximize satisfaction and minimize pain. Together with Edward Lawler and Lyman Porter, Victor Vroom suggested that the relationship among people's behavior at work place and their goals was not as easy as was initially anticipated by other scientists.

The theory is based upon the following beliefs:

- 1. Expectancy is the belief that improved effort will lead to improved performance.
- **2. Instrumentality** is the belief that if you perform well, a appreciated outcome will be received.
- **3. Valence** is the significance that the individual places upon the anticipated outcome.

The motivational force for a behavior, action or task is a function of Expectancy, Instrumentality and Valence and is a product of these three perceptions.

 $MF = Expectancy \times Instrumentality \times Valence$







The theory predicts that the individual will choose to perform that activity having the strongest positive and the weakest negative force.

STATEMENT OF THE PROBLEM

'A Study of Self Evaluation of Teacher Performance of Student-Teachers in Relation to their Self-Efficacy and Motivation'

OBJECTIVES OF THE STUDY

- To ascertain the combined relationship of self evaluation of teacher performance with self-efficacy and total motivation of student-teachers
- 2. To ascertain the relationship of self evaluation of teacher performance with total motivation of student-teachers when the effect of self-efficacy is partialled out.
- **3.** To compare the relationship of self evaluation of teacher performance with Self-Efficacy and Total Motivation.

DESIGN OF THE STUDY

The present study is a descriptive research of correlational and causal-comparative type. The investigation includes the study of motivation, self-efficacy and self evaluation of teacher performance of student-teachers of existing student-teachers. Hence the study is of descriptive type. It compares these characteristics on the basis of student-teachers' gender. Therefore the study is of causal-comparative type. The study also finds the relationship of self evaluation of teacher performance with motivation. Thus, it is termed as a correlational study.

Sample: Its Size and Nature

T the data were collected from 604 B.Ed. student-teachers from the teacher education colleges affiliated to the University of Mumbai and situated in Greater Mumbai. The final sample size was 520 student-teachers. The sample consisted of 225 student-teachers from private-aided and 295 from private-unaided colleges.

Tools Used in the Present Study

The researcher has made use of the following tools for data collection:





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- 1. Motivation Scale (Dias, 2010)
- 2. Self Evaluation of Teacher Performance Scale (Pandya, 1996)
- 3. Self-Efficacy Scale (Woolfolk & Hoy, 1990)

Scope and Delimitations of the Study: The present study focuses on assessing separately the self evaluation of teacher performance, motivation and self-efficacy of student-teachers of B.Ed. colleges of Mumbai University The study also seeks to relate the self evaluation of teacher performance of the student-teachers of B.Ed. colleges of Mumbai University to their motivation and self-efficacy. The study only uses Vroom's Theory of Motivation. Teacher performance was studied as perceived by self and not as evaluated by students, by principal, by peers, by external observer etc.

FINDINGS OF THE STUDY

Hypothesis 1

There is no significant combined relationship of self evaluation of teacher performance with self-efficacy and total motivation of student-teachers.

The statistical technique used is the multiple correlation, 'R' which is described earlier in this chapter and the variables are Self Evaluation of Teacher Performance (SETP), Self-Efficacy (SE) and Total Motivation (TM).

In the present hypothesis,

the SETP is denoted by the subscript 1,

the TM is denoted by the subscript 2,

the SE is denoted by the subscript 3.

$$R_{1.23}^2 = \; \frac{r_{12}^2 + r_{13}^2 - 2 \; r_{12} \, r_{13} \, r_{23}}{1 - r_{23}^2}$$

Substituting $r_{12} = 0.648$, $r_{13} = 0.457$ and $r_{23} = 0.446$

$$R_{1.23}^2 = \frac{(0.648)^2 + (0.457)^2 - 2 \times 0.648 \times 0.457 \times 0.446}{1 - (0.446)^2}$$

$$R_{1.23}^2 = 0.4551$$

$$R_{122} = 0.6746$$







$$\begin{split} \beta_{12.3} &= \frac{r_{12} + r_{13} \, r_{23}}{1 - r_{23}^2} = 0.554 \\ \beta_{13.2} &= \frac{r_{13} + r_{12} \, r_{23}}{1 - r_{23}^2} = 0.209 \\ R_c^2 &= \beta_{12.3} \times r_{12} + \beta_{13.2} \times r_{13} \\ &= 0.3593 + 0.0958 \end{split}$$

Interpretation of Multiple R

Thus it can be seen that the multiple R between self evaluation of teacher performance, self-efficacy and total motivation is 0.6746, which is significant at 0.01 level of significance. This indicates that 45.51% of the variance in self evaluation of teacher performance is associated with self-efficacy and total motivation. Total motivation and self-efficacy contribute 35.93% and 9.58% respectively to the variance in self evaluation of teacher performance of student-teachers.

CONCLUSION

Thus it can be concluded that 45.51% of the variance in self evaluation of teacher performance is associated with self-efficacy and total motivation. The remaining 54.49% of variance in self evaluation of teacher performance in student-teachers can be attributed to other factors such as personality, teaching-learning methodology, self-concept, communication skills, mastery over subject matter, planning etc.

Hypothesis 2

There is no significant relationship of self evaluation of teacher performance with total motivation of student-teachers when the effect of self-efficacy is partialled out.

The statistical technique used is the partial correlation '' which is described earlier in this chapter and the variables are Self Evaluation of Teacher Performance (SETP), Self-Efficacy (SE) and Total Motivation (TM)

In the present hypothesis,

the SETP is denoted by the subscript 1,

the TM is denoted by the subscript 2,





the SE is denoted by the subscript 3.

$$r_{12.3} = \frac{r_{12} + r_{13} r_{23}}{\sqrt{(1 - r_{13}^2)(1 - r_{23}^2)}}$$

Substituting $r_{12} = 0.648$, $r_{13} = 0.457$ and $r_{13} = 0.446$

$$r_{12.3} \!=\! \! \frac{0.648 + (0.457 \times 0.446)}{\sqrt{(1 - 0.457^2)\,(1 - 0.446^2)}}$$

$$r_{123} = 0.6042$$

Interpretation of Partial 'rxyz'

Thus it can be seen that the partial "between self evaluation of teacher performance and total motivation when self-efficacy is partialled out is 0.6042, which is significant at 0.01 level of significance. This indicates that 36.51% of the variance in self evaluation of teacher performance is associated with total motivation.

CONCLUSION

Thus it can be concluded that 36.51% of the variance in self evaluation of teacher performance of student-teachers is associated with total motivation when the effect of self-efficacy is partialled out. Thus the relationship between self evaluation of teacher performance and total motivation was high because there was high self-efficacy. The relationship between self evaluation of teacher performance and motivation is reduced when the effect of self-efficacy was partialled out. It implies that self-efficacy enhances the relationship between teacher performance and motivation.

Hypothesis 3

There is no significant difference in the relationship of self evaluation of teacher performance with Self-efficacy and Total Motivation.

The statistical technique used is the Hotelling's t-test which is described earlier in this chapter and the variables are Self Evaluation of Teacher Performance (SETP), Self-Efficacy (SE) and Total Motivation (TM)

In the present hypothesis,







```
the SETP is denoted by the subscript 1, the TM is denoted by the subscript 2, the SE is denoted by the subscript 3. The following numerical values are obtained for computing ' ' r_{12} =  'r' between SETP and TM = 0.648 r_{13} =  'r' between SETP and SE = 0.457 r_{23} =  'r' between SE and TM = 0.446 r_{23} =  N = sample size = 520 r_{24} = 5.589
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INTERPRETATION OF 'Tnp'

The obtained = 5.589 is greater than the tabulated value of 2.59 at 0.01 level of significance. Hence the null hypothesis is rejected. The difference in and does not arise out of chance fluctuations.

CONCLUSION

There is a significant difference in the relationships of self evaluation of teacher performance with total motivation and self-efficacy. The difference is significant at 0.01 level and is in favour of. It can be said that the relationship between self evaluation of teacher performance and total motivation is significantly stronger than the relationship between self evaluation of teacher performance and self-efficacy in the total number of students. This is also corroborated by the facts that 35.93% and 9.58% of the variance in self evaluation of teacher performance is associated with total motivation and self-efficacy respectively.

DISCUSSIONS

1. An analysis of the results pertaining to hypothesis 1 indicates that there is a significant combined relationship of self evaluation of teacher performance of student-teachers with (i) self-efficacy and (ii) total motivation. Both self-efficacy and total motivation contribute significantly to the variance in self evaluation of teacher performance. This could be due to the possibility that these two personality dimensions share a complementary relationship with each other. In other words, individuals might motivate themselves to put in greater efforts to accomplish a particular task and gain







the desired results, and in the process put in greater efforts to improve their abilities; which may also result in enhancement of their belief in their capabilities. Also, when individuals believe in their capabilities to complete a task successfully, they are greatly motivated to put in efforts to gain better performance. Also, motivation, according to Vroom's expectancy theory is the product of expectancy, instrumentality and valence. These three share a striking relationship

2. Self-efficacy is the belief of student-teachers in their capabilities and expectancy is the belief that one's efforts will result in attainment of desired performance goals. Thus when student-teachers believe in their capabilities and have high self-efficacy, their confidence may increase thus motivating them to give optimum performance. Also, instrumentality is the belief that if an individual meets the performance expectations he/she will receive a reward; and valence is the importance an individual places in the expected outcome.

Thus when self-efficacy of student-teachers increases, their belief in their capabilities to execute a task increases, which leads to an increase in motivation and thus better performance. On partialling out self efficacy, the concomitant variation between self efficacy and motivation is removed and thus, the partial coefficient between motivation and teacher performance is reduced in magnitude as compared to the first order 'r' between them.

3. It may be said that the relationship between self evaluation of teacher performance and total motivation is statistically stronger in magnitude as compared to the relationship between self evaluation of teacher performance and self-efficacy of total number of student-teachers. Self-efficacy determines confidence of student-teachers in their capabilities. On the other hand, motivation energizes the student-teachers towards action. Therefore, motivation has a stronger relationship with self evaluation of teacher performance of student-teachers. Also, self-efficacy influences total motivation, so when self-efficacy is high, total motivation is likely to be higher and therefore its relationship with self evaluation of teacher performance is higher.









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Learning Motivation and the Teacher-Student Equation

Giselle Ann D'souza*

ABSTRACT

The fondest memories of the school years bring to mind teachers who made a difference in the lives of students. Inspirational teachers instill a love for the subject they teach in the students they interact with, making learning a fun-filled and rewarding experience. Such 'catalytic teaching' enhances students' engagement in a given subject transforming a mere teaching equation into enhanced student learning. The present research explored the learning motivation of students in subjects taught by their favorite teachers. Teacher Connect was considered as the main teacher attribute for students to identify their favorite teacher. The sample comprised of 225 High School and 276 Middle School students of the secondary section of an English medium school in Mumbai, affiliated to the S.S.C Board of Education. The Learning Motivation Scale and the Teacher Connect Scale were administered to collect the required data. Results revealed that students exhibited higher levels of Learning Motivation in subjects taught by teachers with whom they shared a high Teacher Connect. These findings could provide valuable implications for educators to focus on ways to bond well with their students in a bid to augment their interest in studying a subject as well as their motivation to perform well in it.

Keywords: Teacher Connect, Learning Motivation, High School, Middle School.

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^{*}Associate Professor, St. Teresa's Institute of Education, S.V. Road, Santacruz, Mumbai, India. E-mail: stie73@gmail.com



INTRODUCTION

The quality of education reflects the quality of the teachers imparting it. Students are bound to be more motivated to study those subjects in which they exhibit a keen interest. One of the many factors from which this deep rooted interest in a subject arises could be an impressive and effective teacher. Qualitative research studies have pointed out that High School children distinguish teachers based on teacher characteristics that benefit the student. In a study carried out by Phelan et al. (1992), students emphasised the importance of having a caring and approachable teacher who provides written feedback, one-on-one assistance and who is interested in students' lives outside of school. These findings suggest that students will report higher levels of learning goals and perceived ability in classes taught by a teacher they like, and lower levels of learning goals and perceived ability in classes taught by teachers they dislike.

Caring teachers are in a better position than their non-caring counterparts to maintain student interest and involvement in school work. It has been observed that there is a statistically significant relationship between teacher characteristics and student academic achievement (Kosgei et al., 2013). Studies indicate that teacher characteristics influence teaching and learning in classrooms (Adeyemo, 2005). Furthermore, the explanations for good or poor student academic performance have been quite extensive (Gravestock and Gregor, 2008). The question that arises however is why do some students put in more effort and persevere on academic tasks for one teacher, but not for another? Modern-day theories of motivation suggest that the varying levels of effort and persistence observed in different classes and subsequent achievement are, in part, due to internal motives students have for achieving academic goals and their perceived ability (Maehr, 1984; Pajares, 1996; Urdan and Maehr, 1995).

Montalvo and Roedel (1995) found that teachers whom students wanted to please were reported to have walked the extra mile to help, provided constructive, confidence-building feedback, done needless things to be nice, respected and trusted students and catered the workload to student capacity so that they did not feel overloaded. They reiterated the fact that when students like the teacher their effort and quality of work improved and vice-versa. The role of









Learning Motivation in enhancing academic performance cannot be undermined. However, existing research in the field of teacher attributes and learning motivation does not address the relationship between students' motivation to learn a subject and liking or disliking the teacher concerned. The current study seeks to extend the previous qualitative research findings through a quantitative analysis of liking the teacher and its relationship with student effort and persistence to excel in the subject taught by him/her.

AIM AND OBJECTIVES

The aim of the study was to assess the likely impact of Teacher Connect on the Learning Motivation of students in the subject taught by their favorite teachers. The objectives were as follows:

- To quantify the Teacher Connect that Middle and High School students share with their favorite teachers.
- To quantify the Learning Motivation of Middle and High School students in the subjects taught by their favorite teachers.
- To identify any likely relationship between Teacher Connect that Middle and High School students share with their favorite teachers and their Learning Motivation in the subjects taught by them.

HYPOTHESIS

The following null hypothesis was formulated for the study:

 There is no significant relationship between the Teacher Connect that Middle and High School students share with their favorite teachers and their Learning Motivation in the subjects taught by them.

RESEARCH METHODOLOGY

The research design employed was descriptive and included a survey. Moreover, the present study was of the correlational type because it sought to study the likely relationship between the mentioned variables.

Population and Sample

The sample comprised of 501 students of the secondary section (standards V to IX) of a private-aided English medium school in Mumbai,







affiliated to the S.S.C Board of Education selected by the convenience sampling technique.

Tools

- The Teacher Connect Scale comprised of a 5 point Likert scale containing 25 items relating to the emotional support that a teacher provides to help children develop warm and supportive relationships.
- The Learning Motivation Scale comprised of a 4 point Likert scale with twenty statements relating to students' motivation to learn the subject taught by their favorite teacher. Items 11, 16, 17, 19 and 20 were negative. The negative items were included to serve the purpose of lie detectors and were reverse scored.

Statistical Analysis

The scores were tabulated and then analyzed using inferential statistics which included Pearson's Coefficient of Correlation to identify any likely relationship between the Teacher Connect that Middle and High School students shared with their favourite teachers and their Learning Motivation in the subjects taught by them. When the value of obtained 'r' was greater than the tabulated 'r' the relationship was considered statistically significant at the 0.01 level of significance and the null hypothesis was rejected.

RESULTS AND DISCUSSION

Testing the Null Hypothesis

The null hypothesis states that there is no significant relationship between the Teacher Connect that Middle and High School students share with their favorite teachers and their Learning Motivation in the subjects taught by them.

Correlation between TC and LM

The following table indicates the obtained 'r' and tabulated 'r' for the respective df at 0.05 level and 0.01 level for Middle and High School Students.





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Table 1: 'r' Between TC and LM

	Obtained 'r'	df	Tabulated 'r' at .05 level	Tabulated 'r' at .01 level
Middle School	0.8996	274	0.113	0.148
High School	0.9169	223	0.113	0.148

From the above data it is seen that the obtained 'r' for Middle and High school students is greater than the tabulated 'r' at the 0.01 level of significance. Hence 'r' between the Teacher Connect and Learning Motivation of these students is significant at the 0.01 level. Table 2 shows the significance of 'r' between the Teacher Connect and Learning Motivation of Middle and High School students.

Table 2: 'r' Between TC and LM

	N	df	r	R ²	P-value	Level of Significance
Middle School	276	274	0.8996	0.8082	<. 00001	0.01
High School	225	223	0.9169	0.8409	<. 00001	0.01

INTERPRETATION

The 'r' values between the Teacher Connect and the Learning Motivation of Middle and High School students are 0.8996 and 0.9169 respectively, which are positive, strong in magnitude and significant at the 0.01 level. Thus the null hypothesis is rejected. This implies that the higher the Teacher Connect that Middle/High School students share with their favorite teachers, the higher is likely to be their Learning Motivation in the subjects taught by them.

DISCUSSION

The relationship between the Teacher Connect that Middle and High School students share with their favorite teachers and their Learning Motivation in the subjects taught by them was observed to be positive, strong in magnitude and significant at the 0.01 level. This could be attributed to the probability that students are drawn to teachers with whom they share a higher Teacher Connect in turn







making them develop an interest in the concerned subject and motivating them towards higher achievement in the same. The present research endeavor indicated that when students liked a particular teacher, they put in more effort in the subject taught by him/her, liked to take up responsibilities in the concerned class, enjoyed participating in class activities and worked hard on class assignments. Their study habits too showed improvement and homework was completed willingly and on time. They did their best to rise up to the teacher's expectations of them and paid attention in class. They eagerly awaited their favorite teacher's period on the class time-table and avoided absenteeism. Their personal liking for the teacher also enhanced their participation in class discussions and motivated them to do supplementary reference work in the subject. All school projects in the subject taught by their favorite teacher were completed on time because they respected and revered the teacher. The same findings have been supported by research evidence which suggests that students derive more motivational benefits from teachers they like over teachers they dislike. When there is a positive teacher-student relationship, students feel safe and there is a strong bond of trust within the classroom. Students are not afraid to take risks and comprehend that making errors is a part of the learning process. They are more likely to feel positive about school and have a greater chance of developing a true love for learning. As John Hattie (2009) rightly said, "It is teachers who have created positive teacher student relationships that are more likely to have above average effects on student achievement". From the moment of birth, the human brain is programmed to best learn within the context of a loving relationship. When the humanity is removed from education, so is much of its effectiveness (Olson, 2014).

Students have identified characteristics of 'catalytic' teachers as being warm, sympathetic and trusting yet set high, realistic expectations for the classroom, as they not only feel respected and safe but like that they are being challenged and extended in everything they undertake (Sinagatullin, 2009). Teachers who operate in this fashion are said to act like catalysts and facilitate higher levels of student success and are more-effective teachers (Horsley, 2012). They lower the amount of energy required for the reaction to take place by simplifying content and communication for students to learn and develop within the classroom (Carswell, Newman and Mihkelson, 1988).







Motivation is the determination to complete a task, activity or goal (Skinner and Belmont, 1993). It is the teacher's job to discover the individual motivation factors of their students and adapt their approaches accordingly in order to make sure that students want to complete the activity in question (Cohen et al., 2010). Research indicates that it is only when teachers strive to support students to become intrinsically motivated and inherently determined to complete tasks that learning will become less dependent on extrinsic factors such as stickers, sweets or other tangible rewards. This, in turn, benefits students as they begin to view tasks in terms of their educational value. (Dent and Holton, 2009; Self, 2009). All-in-all, it is only when students look up to a teacher as a role model, that they are inspired to do their best in the subject taught by him/her and transform the mere teaching-learning equation into a success story.

CONCLUSION

Teachers should develop a special bond with the students they encounter to make them active participants in the teaching-learning process. Through their gamut of positive attributes they should seek to support the academic and moral development of students. Good teachers must go beyond the textbooks and curriculum; they more importantly need to build bridges to students' hearts. It is only when they begin to endeavor to give the story of education a face-lift by being catalysts in the classroom that a paradigm shift in learning will be ushered in as students will be inspired to learn and get motivated to achieve better

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About St. Teresa's Institute of Education:

St. Teresa's Institute of Education, is a pioneering Christian Minority, Teacher Education Institution affiliated to the University of Mumbai. Established in 1973, the college is recognised by UGC under section 2(f) and 12(b). St. Teresa's Institute of Education has been Re-Accredited in its 3rd cycle with an 'A' grade by the National Assessment and Accreditation Council (NAAC). The College works towards the lofty ideals of creating teachers who are competent and compassionate. The focus is on the conscientious sensitizition of student-teachers to be artisans who will fashion the future of society. The institution works steadily towards its motto of 'Excellence in Education', guided by the sublime principles of St. Teresa of Avila, Patroness of our Institution. Students from our institution have been absorbed by prestigious schools and colleges in India and abroad.



Dr. Sr. Tanuja Waghmare. PhD., M.A. (English Literature)

Dr. Sr. Tanuja is currently the Principal of St. Teresa's Institute of Education, one of the pioneering and prestigious Teacher Education College in Mumbai. She holds 19 years of vast experience as Teacher Educator and five years of expertise in school administration as principal of St. Paul's Convent High School, Dadar and Queen of Angels, Bharuch. She also has been a member of several Committees of various colleges and University of Mumbai such as Syllabus Revision Committee for Sociology and English Method, Co-ordination Committee for BOS in

Education, FIP Selection Committee etc. Dr. Sr. Tanuja has authored a book titled 'Honing Your Writing Skills' and several research papers published in National as well as International Journals. She has been awarded with the prestigious Jamunabai Govinji Madhaviji Prize for her doctoral research titled Development of a Program for Enhancing English Composition Skills of Students of Std. IX. Institution is moving towards excellence with her dynamic and motivating administration.



Dr. Shakuntala Nighot. PhD, MLISc, BEd, BSc (Maths and Computer Applications)

Dr. Shakuntala Nighot holds 16 years of professional experience comprising of initial seven years in corporate and special libraries. Since January 2011 she is perusing academic librarianship at St. Teresa's Institute of Education. Dr. Nighot has also worked as a visiting faculty, paper setter and Examiner at SNDT Women's University. She is instrumental in serving as a Library Supervisor for MLISc Trainees of University of Mumbai and SNDT women's University. She has been a resource person for various workshops, training programs and lectures

conducted at various colleges. She has authored a number of research papers in national and international journals. Mrs. Nighot is recipient of three prestigious awards namely Smt. Malati Dalal Prize, Prof. Vidyut Khandwala Prize and M.A. Master Memorial Prize for securing first rank in the SNDT Women's University in her post-graduation. She had also secured 5th rank in University of Mumbai in her B.Ed. examination. ICT in Library Management, Internet Search Strategies and Citation Analysis are her areas of interest.

