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Journal of Educational Research

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EDITORIAL



Dear Readers

It is with immense pleasure and enthusiasm that I present the latest issue of GYANKOSH Journal of Educational Research. As Editor, I extend my heartfelt gratitude to our dedicated Editorial Board, Advisory Board, and esteemed reviewers, whose rigorous evaluations have shaped the quality of the research published herein. This issue showcases a diverse spectrum of articles that not only enrich the existing body of educational knowledge but also illuminate new pathways for inquiry and practice. These contributions, meticulously selected following comprehensive peer reviews, traverse the intricate challenges shaping the educational landscape of our nation, rendering them both significant and thought-provoking.

It is a pleasure to announce that even GYANKOSH is poised to become an important platform for world students, scholars and academicians to access the latest research. In a remarkable development, the University Grants Commission (UGC) has recently withdrawn its CARE list notice which moves the academic community towards fostering high-quality independent research. This will allow greater visibility to journals like ours so that ideas can be exchanged freely and provide further support to the attempt to widen the scope of educational research beyond the inhibiting boundaries.

I am glad to provide some snapshots of the articles in the current edition:

In the article "Artificial Intelligence Practices for Ensuring Quality Teaching-Learning in Science", the authors conduct a case study in Varanasi in an attempt to find out how artificial intelligence improves science teaching. It pinpoints core AI-integrated instruments and emergent phenomena, providing educators with practical recommendations.

The article "Enhancing Life Skills Education Through Open Distance Learning" deals with the ways, possibilities, and problems of using open distance learning to teach basic life skills to learners in the context of modern education.

The article "Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration" defends the claim that Tagore's environmental philosophy must be more actively taught in the context of contemporary courses because of the increasing ecological afflictions that rely on such philosophy.

The authors of the article "Bishnupriya Manipuri Language: A Dialect or Creole of Bengali" have provided an analytical review of secondary sources, this paper deals with the systematic investigation of the language structure of Bishnupriya Manipuri and agrues about its classification and origins.

The study titled "A Co-Relational Study of Teaching Experience and Attitudes of Teacher Educators Toward Hardware Educational Technology" relates teaching experience with the attitude toward ICT hardware and considers the educator's comprehension of the relevant technologies. In regards to the article "Participatory Learning Practices for Life Skills Development," the author emphasizes the role of participatory strategies for the development of life skills and demonstrates their application in practice.

Concerning the study, "The Flipped Classroom Approach: An Experiment with Teacher Trainees," it is noticed that the appreciation of the application of the flipped classroom model with B.Ed. trainees as an inventive

teaching and learning strategy is attended to. Within this context, the article "Mobile Phone Addiction and Its Psychological Influence on Mental Health" has an open ended remark about the overuse of mobile devices with regard to health, which is the most recent in the series.

The article "Innovative Pedagogies in Teacher Education: Teaching Through Literature with Authentic Enrichment and Interactive Engagement" looks at the role of Literature in the education of teachers as it raises questions and gaps concerning pedagogy and tries to provide illustrative creative and hands on solutions as well as interactive ways and techniques.

This issue will surely capture the interest of a plethora of people, ranging from novice researchers, and faculty members to the seasoned ones. I firmly believe all in the pedagogic community would creatively viscerally engage in the issue of 'GYANKOSH'.

I would like to acknowledge you for the great support and contributions made on our journal. I trust this comprehensive volume will, over the years, provoke proper educational research discourse and meaningful exchanges as well as provide partake real positive transformative effect. I wish we will receive your unwavering support in the future. Suggestions and comments to improve the quality of GYANKOSH are always welcomed.

Prof. Manoj Kumar Saxena Editor GYANKOSH Journal of Educational Research

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Artificial Intelligence Practices for Ensuring Quality Teaching-Learning in Science: A Case-Study of Selected Secondary Schools of Varanasi City

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Abstract

Advent of widespread Artificial Intelligence (AI) solutions and rise in technological advancement enhance human thinking and accelerate educational processes. Significant and smart use of AI applications has quietly become very common in several places at the same time and still changing our day-to-day lives. One area where AI has marked its significant presence is education and has been proved fruitful in many ways. The current study aims to identify the artificial Intelligence practices to ensure quality teaching-learning in science, on the usage and effectiveness in schools of Varanasi city. For this case study a semi-structured interview schedule was chosen. The research sample consists of CBSE affiliated schools of Varanasi city. The research findings will serve as the basis to use these disruptive technologies and AI -based applications to enhance their quality of teaching-learning.

Keywords: Artificial Intelligence (AI), Quality Teaching-Learning, Science Education, Secondary Schools.

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INTRODUCTION

Artificial Intelligence (AI) is now transforming the world all around. It is growing rapidly with the potential to change the face of education sector extensively. At its most basic level, Artificial Intelligence (AI) is the intelligence that makes machines think about, process, and mimic human thought processes in order to solve issues with little to no help from humans. John McCarthy first used the notion of Artificial Intelligence (AI) in 1955 to describe a computer that can carry out a range of cognitive processes associated with humans, including learning and thinking, solving problems, interacting with others. (Guan et al., 2020). AI can be defined in various ways- Baker and Smith (2019) stated that AI represents a broad term to explain various types of technologies and artifacts like deep learning, machine learning, natural language processing, big data, and neural networking.(Baker, n.d.).

A discussion paper on National Strategy for Artificial Intelligence published by The NITI Aayog, Government of India- with a unique brand of AI for All, emphasizes on how India may use disruptive technology to assure equitable and equitable progress in accordance with the government's developmental philosophy (NationalStrategy-for-AI-Discussion-Paper.Pdf, 2018). One of the main focuses of AI in India has been highlighted in this paper is education. AI has the potential to address quality and access concerns in the education and skill sectors that have been identified in the Indian education system. Personalized learning, administrative work automation and expediting, and anticipating the need for student assistance to lower dropout rates or suggest vocational training are some examples of possible applications. (NationalStrategy-for-AI-Discussion-Paper.Pdf, 2018.)

As a brief review of Artificial Intelligence in

Education, artificial intelligence-driven, sequentially customized instructional and interaction systems, AI-supported exploratory learning, student writing analysis, autonomous agents in game-based environments, student-support chatbots, and AI-facilitated student/tutor matching—all of which put learners strongly in possession of their own learning—are all included in the conference and journal papers on artificial intelligence and education (AIED). In addition, it covers mobile phone use outside of the classroom, whole-school strategies, one-onone computer interactions amongst students, and much more. AIED can also shed insight on teaching and learning methodologies. (Holmes et al., 2019).

The concept of student-centered learning would be the most significant addition AI might bring to Indian education. This means that rather than sticking with the prevalent one-size-fits-all approach, teachers would need to expand their confined subject matter and instructional techniques by adapting their teaching methods to each learner's requirements and circumstances within the curriculum. Since each modification in education has a significant impact on society and the next generation, it is important to give the challenges highlighted by artificial intelligence due consideration before implementing AI in the classroom. (Kasinathan, 2019.)

The severe teacher shortage that exists in India for elementary, secondary, as well as higher education levels is not new information. Based on data provided by the Indian Ministry of Human Resource & Development (HRD) in 2016, there is a one million teacher shortage

nationwide. In the context of higher education institutions, there is a persistent faculty deficit, and the challenge of finding appropriate candidates to close this gap has grown increasingly complex. How can India, the nation with the second-greatest population in the entire world, handle the difficulties of offering top-notch education to everyone in such a situation?

AI systems that employ machine learning are able to adjust in real-time to the specific needs of each student, monitoring their development and giving teachers access to real-time data and feedback. According to the presenters, AI technology has the ability to detect when a student is answering questions quickly and alert them to calm down. This can offer a degree of individualized attention that the educator who is supposed to be watching over each student's shoulder at the same time cannot provide. (Ng, 2022).

The foundation of all NLP-enabled systems for intelligent tutoring is AI. These mechanisms support the growth of attributes including introspection, thoughtful questioning, conflict resolution, creative questioning, and decision-making abilities. (Malik et al., 2019).

While specific tools like augmented reality (AR), virtual reality (VR), and massive open online courses (MOOCs) will all be used in classrooms in the future, as digital education advances, special emphasis should be given to the "over-arching intelligence infrastructure". (Matthews, 2019).

Grants for studies exploring AI-enabled classroom technology have been given by the National Science Foundation and the Institute of Education Sciences of the Department of Education (ED). Additionally, a number of papers on subjects related to AI in education, including teacher training, personalized learning, learning metrics and educational data mining, and student privacy, have been published by ED's Office of Educational Technology.

Teachers will have to learn how to use a variety of AI technologies for their lessons in addition to learning how to use specific goods if AI innovations are embraced on a larger scale. Such training may be available through teacher preparation courses offered by colleges and institutes that certify teachers. The Teacher Quality Partnership (TQP) competition run by ED intends to give these programs awards totaling about \$14 million in FY2018. Funds for teacher technology training might be redirected, and ED could be instructed to create best practices for teacher's technological competency, if Congress votes to support supporting teacher preparedness for AI. Lu, J. J., & Harris, L. A. (2018, August 1).

Schools play crucial and accountable roles in providing various learning opportunities for the learners and guide them on the way to succeed. It is needed to direct the learning towards using new skills and application to contribute for a sustainable world. The capabilities and competencies of teachers bring out spark in the creativity of the students because students are the future to shape the nation in a sustainable way to protect the planet. Therefore, students should be guided on identifying the advantage and disadvantages of Artificial Intelligence so that they can be able to distinguish between what is acceptable and what is not.

Roll and Wylie, 2016 has proposed two parallel lines of inquiry that should be pursued in the

coming 25 years in order to have an impact on education: the first line of inquiry is an evolutionary one that focuses on present classroom practices, collaborates with teachers, and diversifies technologies and domains. The another rise of artificial intelligence in education, which emphasizes infusing technologies into the everyday lives of learners in order to promote their communities, aspirations, cultures, and practices.

This is probably the most important use of artificial intelligence in education since it makes learning more comfortable, easier, and independent of past knowledge. This method emphasizes the individual needs of every student by highlighting their areas of weakness in each subject and having them retake topics they have not mastered and this will enable AI-based personalized education. Teachers shall only aid and support when pupils request it. (Harper, 2021).

A number of education specialists have expressed the opinion that our system need a radical technology intervention. A strategy that would improve accessibility and inclusivity. The use of artificial intelligence in the classroom could be the key to improving teaching and learning in India that we have been searching for.

RATIONALE OF THE STUDY

Artificial Intelligent computers have potential to work at fast speed and with higher accuracy without getting exhausted. It provides fair grading systems and offers some extra time for teachers. They use this extra time in learning and understanding that how they can construct more interesting classwork by using such intelligent technologies. Apart from this,

teachers get supportive study materials for them and offer relevant websites and applications to their students so that they can develop their understanding, and can visualise the subject matter and learning experiences of their textbooks. Therefore, integration of AI in the teaching learning greatly refines and improves assessment and evaluation techniques, increase the engagement of pupils in their studies with enriching assistance outside the classrooms. These days teaching has become challenging process with increasing number of students enrolment in classrooms. And, for this reason, incorporating AI practices is crucial for all learners. By integration of such technologies, students keep themselves updated with emerging technologies and assures that teachers as well as students are keeping up with recent and newest developments.

On such premise the researcher conducted review of studies and it was ascertained that adequate numbers of studies have been conducted in India and abroad. Enough research efforts have been made by the scholars from India and abroad on domain of artificial intelligence [(McCarthy,1955); (Nilsson, 1998); (Roll and Wylie, 2016); (Aayog, N. I. T. I., 2018); (Sangapu, 2018); (Edwards & Cheok, 2018); (Lu, J. J., & Harris, L. A. 2018); (Baker and Smith, 2019); (Matthews, 2019); (Holmes et al., 2019); (Chen, L., Chen, P., & Lin, Z., 2020); (Harper, 2021); (Ng, 2022) and others] which revealed The use of AI in curriculum creation could help teachers and the students by tailoring instruction to each individual's needs. Even from distant places, it can facilitate students' access to classrooms.

Thus, the review of studies conducted in the

field led the researcher to identification of following research questions:

Research Questions

- 1. What are the artificial intelligence practices for ensuring quality science teaching-learning in secondary schools of Varanasi?
- 2. If basic structural framework covering hardware and software components of AI is available in secondary schools of Varanasicity?

Research Design

The present study is conducted basically to identify the extent of application of AI in providing quality teaching learning in science. Moreover, study also attempts to assess preparedness of secondary schools to implement AI for science teaching learning. Case study approach was found appropriate to study practices of secondary schools as AI being the new and advanced technology for schools available in very few established and reputed schools. Thus, study was conducted in qualitative approach using case study method selecting few qualities secondary schools in Varanasi city. In order to select cases for schools a preliminary interview of stakeholders of school education was conducted to identify such schools which have initiated implementation of AI for science education. Principals of the schools and senior school teachers of science have been telephonically or physically interviewed and finally 5 secondary schools have been chosen for exhaustive analysis for the purpose of the study. It was ascertained that all these schools have been affiliated to CBSE thus, the study is done specifically in five secondary schools of Varanasi city affiliated with CBSE.

In order to be specific and to keep the

researcher centered to the application of AI a semi structured interview schedule was also developed having several open-ended questions. The questions in the interview were kept in line with different aspects of AI about its required infrastructure and its practical implications. The interview schedule was shown to expert teacher educators in the area and professionals in the field of AI. Though, the discussion in the schools was not strictly restricted to interview schedule and need based brain storming was done with concerned personnel of the school.

DATA ANALYSIS

The researcher herself visited the abovementioned schools to interact and inspect the schools in line with fulfilment of the objectives the study. The necessary consent and administrative approval were taken and researcher spent one to two days to collect necessary data from respective cases.

The researcher instantly took field notes in her diary and exact verbatim and details were written instantly to preserve the data for further analysis. In this way, the researcher completed data collection from all identified 5 cases of the study and further analysis was done for necessary thematization and drawing of conclusions of the study.

At the outset, after completion of the data collection the researcher reviewed all field notes and carefully reviewed details of all five schools. The entire data was analyzed and an effort was made to draw basic themes for the data presentation and obtaining meaningful conclusions. The themes were also shown to experts in the area for the purpose of validation and necessary triangulation of the interpretation of field notes.

After careful review of the notes following five themes emerged for presentation of data i.e.

- i. Infrastructural Preparedness
- ii. Equipment and Apparatuses
- iii. Human Resources Development
- iv. Usage of Software/Applications
- v. Topic Specific Usage of AI in Science

Theme I. Infrastructural Preparedness

vi. Teaching Learning Schedule

In the following section of data analysis, the details of cases are presented according to themes that are emerged after data review:

Some teachers and administrators reported that they have well established infrastructural facilities like Atal Tinkering Labs (ATL) to nurture an innovative mindset amongst secondary school students and Robotics labs. Their classrooms have different divisions based on the students learning pace so that proper guidance and follow up can be made. They claimed that school buses and school campus have GPS trekking facilities, whereas some stated that they face issues related to infrastructural facilities like No. of students

and Computer ratio, smart class facilities only

for senior students, infrastructures are not

equipped with latest technologies, etc.

Theme II. Equipment and Apparatuses
Most of the teachers in opinion of that schools
have not AI-enabled equipment and apparatus
like voice assistants, robots, chatbots,
computers, etc. Even their schools do not have
facilities of wi-fi for everyone. Some claimed
that internet, LAN and wi-fi devices have
installed but they are not functional. Several
reported that they face issues in handling smart
devices due to lack of proper technical soft
skills.

There have been several numbers of school

teachers and administration who reported that they have different AI-equipped devices which includes Digi-boards, smart assistance like alexa, robots, ATL, Audio-Video Recording systems, etc. They showed their smart classes, labs, and various AI-based gadgets. Several teachers confidently mentioned themselves as tech-savvy. In some cases, teachers appreciated school governing bodies as they are provided with iPadOS (tablet computers developed by Apple Inc.)

Theme III. Human Resources Development A good number of teachers mentioned that they have attended different In-service orientation and training programmes for better usage of AI-based technical nitty-gritties. Some teachers stated that these AI-based technologies have proven as a boon for them in teaching as they found themselves confident. Adequate number of teachers opined that they get varied exposure and experience by attending refresher workshops on Artificial Intelligence organized at schools in collaboration with authorities and corporate bodies. Some have attended online AI-based subject enrichment workshops by CBSE has helped them in incorporating new methods and strategies in teaching science, whereas according to some teachers the student strengths are more than teachers, some opined that they face administrative work pressure on them, lack of good technological knowledge, lack of proper training, etc.

Theme IV. Usage of Software/Applications Adequate number of teachers visualized themselves as competent and confident in using various kinds of software like Online Labs (O-labs) for school Lab Experiments, PhEt-Interactive simulations, Flexcil-best note taking app & pdf reader selected by Apple, Avogadro (molecule editor software), Hot Potato, Kahoot, Quick draw, Quizzes.com, Inkel writer (story writing), Padlet (digital palette used to create wonderful pieces that are simple to share and work together on), Wakelet (save, organize and share chapter-wise content from across the web), Jamboard (G-Suite's digital whiteboard for rich collaborative experience for teachers and classrooms), etc. Mind mapping Free and Open Educational software: Free Mind and Free Plane (windows/mac/ubuntu), Android app: Mindly and SimplyMindLite. Some reported that they have own developed software for marking attendance, applying leave facilities etc.

In some cases, teachers mentioned that they are limited to use only You tube contents, use of 'Ok Google' Google meets, Zoom, MS-PPT, MS-Excel, Spreadsheets, Google forms, etc. for science teaching. Some are unaware of advanced and emerging applications and they claimed that administrations have not provided any orientation facilities regarding such tools and applications.

Theme V. Topic Specific Usage of AI in Science

Most of the teacher mentioned that they use Text, Image, Audio, Video, Interactive, Animation, Virtual Simulations, Animated forms, Practical experiences, for demonstration of 3D structure. An aid for visual thinking that facilitates knowledge organization, improved analysis, comprehension, synthesis, memory, and idea generation. Teachers opined that O-Labs are used to demonstrate experiments by providing the opportunity to carry out, document, and

acquire understanding through experiments-anytime, anyplace, and through personalized practice in all fields of experimentation. By using Avogadro software, teachers used to construct molecular structure of chemical compounds related to chemistry and biology subjects, they can edit and view molecules in 3D. Stellarium- a software which a realistic sky in 3D which teachers use to taught solar system, eclipse simulation, shooting stars, star twinkling and tails of comets and related topics. They use Kalzium software for exploration of elements and properties, their classification based on periodic table of elements. Royal Society of Chemistry (RSC)

interactive Periodic Table provides detailed elements information.

Theme VI. Teaching-Learning Schedule Some teachers reported that students actively and enthusiastically participate in learning, they are assigned in different group activities to develop programme according to the science topics of their curriculum as AI as a course has been introduced in schools by CBSE, Automatic recording facilities supports sick and absent students, separate and remedial teaching for 20 minutes. A good number of teachers mentioned that they use TRC software for Project based assessments.

Table - 1
Themes and Identified AI Based Tools

S. No.	Themes	Identified AI-based tools which assisted AI Practices
i.	Infra structural Preparedness	Atal Tinkering Labs (ATL), Robotics labs, GPS trekking facilities, etc.
ii.	Equipment and Apparatuses	voice assistants, robots, chatbots, LAN and wi-fi devices, Digi-boards, smart assistance like alexa, robots, ATL, Audio-Video Recording systems, with iPadOS, etc.
iii.	Human Resources Development	In-service orientation and training programmes, refresher workshops on Artificial Intelligence, AI-based subject enrichment workshops by CBSE,
iv.	Usage of Software/Applications	O-Labs, Flexcil-best note taking app, PhEt, Hot Potato, Kahoot, Quick draw, Quizzes.com, Inkel writer, Jamboard, Mindly and SimplyMindLite
V.	Topic Specific Usage of AI in Science	Avogadro software, Stellarium, Kalzium, Royal Society of Chemistry (RSC) interactive Periodic Table
vi.	Teaching-Learning Schedule	Automatic recording facilities to support sick and absent students, separate and remedial teaching

On the basis of findings, the table-1 reveals six different themes and identified AI based tools which assisted AI.

CONCLUSIONS

Different schools of Varanasi city have been selected for the study and it has found that AI has the potential to transform how our education system operates, and empower teachers and learners of all abilities. Schools are considering the involvement of AI in their curriculum, and are amazed by the advantages it offers. Much effectively and more efficiently students have begun to grasp the new knowledge, information, and experiences.

Virtual simulation facilitates students to enhance their understanding and knowledge with the help of simulators and panoramas, which are exceptionally realistic images and sounds. It engages them by providing opportunities to have interactions with virtual environments, assisting them to engage inside the classroom with various web materials.

AI techniques have the ability to considerably advance instructional and learning sciences, which would open chances for the development of AI technology based on evidence.(Hwang et al., 2020).

The iterative growth of learner-centered, data-driven, individualized learning in the current knowledge age must result from the development of the Artificial Intelligence in Education (AIEd) area in the future. (Ouyang & Jiao, 2021).

Teachers are using AI-based practices to assist them in completing various works by investing less time and energy. It helps them to use the additional time to support students in making more creative classrooms by providing them with extra support materials.

EDUCATIONAL IMPLICATIONS/ SUGGESTIONS FOR IMPROVING PRACTICES

In fast-progressing information driven era,

new and advanced technology are arising consistently. It has been constantly demonstrating its potential in the past years. Almost each and all areas are utilizing AI for their advancements. The education sector should also incorporate such changes for their betterment. To bring these practices for quality teaching learning, following suggestive implications are enlisted:

- ***** Educational software can be adapted to educational needs of students.
- Students could additionally be supported by AI tutors.
- ❖ Automate basic activities in education Immediate feedback where improvement required.
- ❖ AI- based system to interact with information.

REFERENCES

Aayog, N. I. T. I. (2018). NationalStrategy-for-AI-Discussion-Paper. pdf.

Aayog, N. I. T. I. (2021). Responsible-AI-22022021. pdf.

Baker, T. (2019). Educ-AI-tion Rebooted? Exploring the future of artificial intelligence in schools and colleges. 56.

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: A review. *Ieee Access*, 8, 75264–75278.

Edwards, B. I., & Cheok, A. D. (2018). Why not robot teachers: Artificial intelligence for addressing teacher shortage. *Applied Artificial Intelligence*, *32*(4), 345–360.

Harper, T. (2021). *Top 7 Ways Artificial Intelligence Is Used in Education*. 5. Retrieved from https://trainingmag.com/top-7-ways-artificial-intelligence-is-used-in-education/

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: Promises and implications for teaching and learning.

Hwang, G.-J., Xie, H., Wah, B. W., & Gaševic, D. (2020). Vision, challenges, roles and research issues of Artificial Intelligence in Education. *Computers and Education: Artificial Intelligence*, 1, 100001. https://doi.org/10.1016/j.caeai. 2020.100001

Kasinathan, G. (2019). Exploring AI in Indian school education. 11.

McCarthy, J., Minsky, M. L., Rochester, N., Corporation, I. B. M., & Shannon, C. E. (1955). *A Proposal for The Dartmouth Summer Research Project On Artificial Intelligence*. 13. http://dx.doi.org/10.1609/aimag.v27i4.1904 Malik, G., Tayal, D. K., & Vij, S. (2019). An analysis of the role of artificial intelligence in education and teaching. In *Recent Findings in Intelligent Computing Techniques* (pp. 407–417). Springer.

NationalStrategy-for-AI-Discussion-Paper.pdf. (2018). Retrieved from https://www.niti.gov.in/sites/default/files/2021-08/Part2-Responsible-AI-12082021.pdf

Nilsson, N. J., & Nilsson, N. J. (1998). *Artificial intelligence: a new synthesis*. Morgan Kaufmann. In – Guan, C., Mou, J., & Jiang, Z. (2020). Artificial intelligence innovation in education:

A twenty-year data-driven historical analysis. International Journal of Innovation Studies, 4(4), 134-147 https://doi.org/10.1016/j.ijis. 2020.09.001

Ouyang, F., & Jiao, P. (2021). Artificial intelligence in education: The three paradigms. Computers and Education: Artificial Intelligence, 2,100020.

Roll, I., & Wylie, R. (2016). Evolution and revolution in artificial intelligence in education. *International Journal of Artificial Intelligence in Education*, 26(2), 582-599.

Sangapu, I. (2018). Artificial Intelligence in Education—From a Teacher and a Student Perspective. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3372914

10 Roles for Artificial Intelligence in Education. (2022, January 21). In TeachThought. Retrieved from https://www.teachthought.com/thefuture-of-learning/roles-for-artificial-intelligence-in-education/.

How Artificial Intelligence Can Help Education Sector: AITS-TPT. (2018, November 18). In AITS. Retrieved from https://aits-tpt.edu.in/blog/how-artificial-intelligence-can-help-education-sector/.

Enhancing Life Skills Education through Open Distance Learning (ODL): Strategies, Challenges and Opportunities

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Abstract

This paper explores the potential of Open Distance Learning (ODL) as a medium for developing life skills education, which is crucial for navigating the complexities of the 21st century. Life skills education encompasses a range of cognitive, emotional, and social competencies that enable individuals to make cognizant judgments, communicate commendably, and manage challenges. The advent of ODL offers unprecedented opportunities for making education more accessible and flexible, reaching a diverse learner population. By examining the theoretical underpinnings of life skills and the principles of ODL, this study highlights the advantages of integrating technology in life skills education, such as enhanced interactive learning and cost-effectiveness. It further discusses strategies for implementing life skills curricula, pedagogical approaches, and assessment methods suitable for the ODL context. Despite the potential, the paper acknowledges challenges such as the digital divide, engagement, and quality assurance, proposing solutions. Case studies illustrate successful implementations and outcomes of ODL-based life skills programs. The paper concludes by identifying future directions, including leveraging emerging technologies and developing supportive policies, to strengthen the delivery of life skills education through ODL.

Keywords: Life Skills Education, Open Distance Learning (ODL), Digital Divide, Interactive Learning, Curriculum Development, Pedagogical Strategies, Quality Assurance, Emerging Technologies.

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INTRODUCTION

Definition of Life Skills Education

Life skills education refers to the instruction that aids in the growth of cognitive, emotional, and social competencies, equipping individuals to navigate daily life's demands and challenges effectively (WHO, 1997). These abilities encompass decision-making, problem-solving, creative and critical thinking, effective communication, interpersonal skills, self-awareness, empathy, emotional and stress management, and relationship management. The World Health Organization (WHO) underscores the significance of life skills education in enhancing mental and social well-being, advocating for its inclusion in formal education systems globally.

Importance of Life Skills in the 21st Century Life skills have become increasingly important in the rapidly evolving landscape of the 21st century, characterised by technological advancements, globalisation, and changing societal norms. They are essential for personal development and fostering resilience, adaptability, and citizenship in a complex world. Life skills enable individuals to navigate the challenges of daily life, improve employability, contribute to community development, and participate fully in society (UNESCO, 2018). As the demands on individuals to acclimate to new methods of working and living continue to grow, the importance of life skills education in preparing learners for life beyond the classroom has never been more critical.

Overview of Open Distance Learning (ODL) Open Distance Learning (ODL) is an educational approach that removes the barriers of time, location, and socioeconomic status, offering learners the flexibility to access education regardless of their geographical location (Moore & Kearsley, 2011). ODL utilises various technologies, including online platforms, multimedia, and digital resources, to deliver course content and facilitate interaction among learners and educators. This learning mode is particularly beneficial for those unable to participate in traditional classroom settings due to personal or professional commitments, providing an inclusive and accessible educational pathway.

THESIS STATEMENT

This paper explores how Open Distance Learning (ODL) can be effectively utilised to develop life skills education, address the challenges faced, and identify the opportunities it presents. Despite its potential to transform educational delivery, ODL faces numerous challenges, including the digital divide, engagement and motivation issues, and the need for quality assurance. However, through strategic implementation and leveraging technological innovations, ODL offers significant opportunities to enhance life skills education, making it more relevant, accessible, and impactful for learners worldwide.

THEORETICAL FRAMEWORK

Theoretical Underpinnings of Life Skills Education

Life skills education is a comprehensive approach designed to equip individuals with the cognitive, emotional, and social capabilities necessary to navigate life's challenges effectively. This educational paradigm draws upon various theoretical foundations, including developmental psychology, social learning theory, and constructivist learning theory, to foster holistic development.

Cognitive, Emotional, and Social Dimensions The cognitive dimension of life skills education emphasises on critical and creative thinking, problem-solving, and decision-making skills, enabling learners to analyse situations, consider alternatives, and make informed choices (Mangrulkar, Whitman, & Posner, 2001). Emotional education focuses on selfawareness, managing emotions, and coping with stress, equipping individuals with the resilience to face life's ups and downs (Elias et al., 1997). The social dimension involves interpersonal skills, empathy, and effective communication, which are crucial for building and maintaining healthy relationships (Goleman, 1995).

Pedagogical Approaches in Life Skills Education

Effective life skills education employs active, learner-centred pedagogical approaches that engage students in experiential learning, reflection, and practical application of skills. Collaborative learning, problem-based learning, and service learning are among the strategies that facilitate the development of life skills by providing learners with real-world contexts to apply their knowledge and skills (Kolb, 1984; Bandura, 1977).

Principles of Open Distance Learning

Open Distance Learning (ODL) is underpinned by principles prioritising learner autonomy, flexibility, and technology integration, offering a distinctive approach to education catering to diverse learner needs and contexts.

Self-directed Learning

At the core of ODL is the principle of selfdirected learning, which empowers learners to take initiative in their educational journey, setting their learning goals and managing their learning process. This approach is rooted in the theory of andragogy, which posits that adult learners are self-motivated and capable of directing their learning (Knowles, 1975).

Flexibility and Accessibility

ODL is designed to offer flexibility in terms of

time, place, and pace of learning, making education accessible to individuals who might otherwise be excluded due to geographical, temporal, or socio-economic constraints (Moore & Kearsley, 2011). This flexibility is crucial in democratizing education and expanding opportunities for lifelong learning. Use of Technology in Learning

Technology plays a pivotal role in ODL, enabling the delivery of educational content, facilitating communication among learners and instructors, and providing access to a wealth of resources. The constructivist theory supports the use of technology in learning, which advocates for creating knowledge through interaction with digital tools and resources (Jonassen, 1994).

Advantages of ODL in Life Skills Education Open Distance Learning (ODL) has emerged as a transformative approach in the realm of education, particularly in the context of life skills education. Its inherent characteristics of accessibility, flexibility, technological integration, and cost-effectiveness position ODL as a crucial vehicle for imparting vital life skills to a broad audience. This section delves into the advantages of ODL in life skills education, underpinned by scholarly research and real-world applications.

Accessibility and Flexibility

ODL breaks down the traditional barriers of time and space in education, offering unparalleled accessibility and flexibility. This model is particularly beneficial for reaching diverse learner populations, including those in remote or underserved regions, working professionals, and individuals with disabilities (Bates, 2005; Tait, 2018). ODL's capacity to cater to individual learning paces and styles is another significant advantage. Learners can engage with materials conveniently, allowing for a personalised learning experience that accommodates their unique needs and schedules (Moore, 1993; Garrison & Vaughan,

2008).

Reaching Diverse Learner Populations

ODL has demonstrated its potential to democratise education, extending opportunities to those otherwise excluded from traditional educational settings. ODL has successfully reached populations across different geographical, economic, and social strata through its flexible delivery models, promoting inclusivity and diversity in education (Bates, 2005).

Catering to Individual Learning Paces and Styles

The adaptability of ODL to individual learning preferences is a critical factor in its effectiveness. This personalised approach enhances learner engagement and facilitates deeper comprehension and retention of life skills. The ability for learners to revisit content as needed and progress at their own pace contributes to a more inclusive and supportive learning environment (Garrison & Vaughan, 2008).

Integration of Technology

Integrating technology in ODL enriches the learning experience through interactive and multimedia elements. This makes learning more engaging and enables the practical application of life skills in digital contexts.

Enhancing Interactive Learning through Multimedia

Using multimedia in ODL, including videos, animations, and simulations, provides dynamic and immersive learning experiences. These tools can simulate real-life scenarios where life skills are applied, enhancing understanding and retention. Multimedia elements cater to various learning styles, making education more accessible and effective (Mayer, 2009).

Utilization of Digital Platforms for Skill Development

Digital platforms and online resources offer vast opportunities for skill development, from

critical thinking and problem-solving to communication and emotional intelligence. These platforms facilitate interactive learning, peer collaboration, and instant feedback, which is essential to acquiring and refining life skills (Dabbagh & Kitsantas, 2012).

Cost-Effectiveness

ODL presents a cost-effective education solution that reduces financial barriers for institutions and learners. The economic efficiency of online programs makes life skills education more accessible to a broader audience.

Reducing the Financial Barriers to Education By minimizing or eliminating costs related to physical infrastructure, travel, and accommodation, ODL makes education more affordable. This aspect is particularly significant for learners from economically disadvantaged backgrounds, for whom such savings can make the difference in accessing education (Rumble, 2004).

The Economic Efficiency of Online Programs Online programs can be delivered at scale, reducing the per-learner cost of education. This scalability, coupled with the reduced need for physical resources, contributes to the overall economic efficiency of ODL, allowing institutions to reallocate resources towards improving educational content and learner support services (Daniel, 2012).

Strategies for Implementing Life Skills Education through ODL

Implementing life skills education through Open Distance Learning (ODL) necessitates strategic planning and execution to ensure learners acquire the necessary competencies for personal and professional success. Strategies in curriculum development, pedagogical approaches, and assessment and evaluation are fundamental to achieving this goal. This discussion highlights critical strategies for integrating life skills education within the ODL framework, supported by

scholarly references.

Curriculum Development

Effective curriculum development for life skills education in an ODL context involves creating content that is engaging, relevant, and aligned with educational standards and competencies.

Designing Engaging and Relevant Content

Designing content that resonates with learners' experiences and interests is crucial for engagement and motivation in an ODL setting. Incorporating real-world applications and scenarios where life skills can be applied ensures relevancy and aids in the practical understanding of concepts (Barrett, 2018). Multimedia elements, such as videos, podcasts, and interactive simulations, can enrich the curriculum, making the learning experience more engaging and dynamic (Mayer, 2009).

Aligning Life Skills with Educational Standards

Aligning life skills education with national and international educational standards ensures the curriculum is comprehensive and meets the expected learning outcomes. This alignment also facilitates the integration of life skills with other subject areas, promoting a holistic approach to education (Trilling & Fadel, 2009). By mapping life skills to competencies and standards, educators can ensure that learners acquire skills relevant to their personal and professional development.

Pedagogical Strategies

Adopting effective pedagogical strategies is essential for implementing life skills education through ODL. Blended learning approaches and collaborative learning environments can enhance learner engagement and skill development.

Blended Learning Approaches

Blended learning, which combines online and face-to-face interactions, offers a flexible teaching of life skills. This method integrates digital resources and personal interaction, catering to diverse learning styles and needs (Garrison & Kanuka, 2004). Blended learning facilitates a balance between self-paced online learning and collaborative, in-person sessions, which can be particularly effective for developing interpersonal and communication skills.

Collaborative Learning and Peer Interactions A sense of community and collaboration among learners is vital in an ODL environment. Collaborative learning activities, such as group projects, discussions, and peer review, encourage the development of social and emotional competencies, including teamwork, empathy, and communication (Laal & Ghodsi, 2012). These interactions enhance learning outcomes and prepare learners for collaborative work settings.

Assessment and Evaluation

Assessment and evaluation in ODL should encompass both formative and summative approaches to measure learner progress and provide feedback for continuous improvement.

Formative and Summative Assessments Online

Formative assessments, such as quizzes, discussions, and reflective journals, offer ongoing insights into learners' understanding and application of life skills, allowing for timely intervention and support (Black & Wiliam, 1998). On the other hand, summative assessments evaluate the overall achievement of learning outcomes at the end of a course or module. Incorporating various assessment methods caters to different learning styles and comprehensively evaluates life skills development.

Feedback Mechanisms for Continuous Improvement

Feedback is a critical component of the learning process, offering learners constructive insights into their performance and areas for improvement. In an ODL context, timely and

personalised feedback can be facilitated through digital platforms, enabling continuous engagement and motivation (Nicol & Macfarlane-Dick, 2006). Effective feedback mechanisms, including automated responses, peer feedback, and instructor comments, support the iterative learning and skill development process.

Challenges in Delivering Life Skills Education via ODL

Delivering life skills education through Open Distance Learning (ODL) involves unique challenges that educators and institutions need to address to achieve effective learning outcomes. These challenges include addressing the digital divide, maintaining learner engagement and motivation, and ensuring the quality and accreditation of programs. This section explores these issues and proposes strategies for overcoming them, supported by scholarly references.

Digital Divide and Access Issues

The digital divide describes the disparity between individuals who have access to modern information and communication technology (ICT) and those who do not. This divide impacts access to ODL, making it a significant challenge in delivering life skills education.

Technological Infrastructure and Accessibility

Limited access to reliable internet and digital devices can severely hinder the effectiveness of ODL. In many regions, especially in developing countries, the need for technological infrastructure poses a substantial barrier to accessing educational resources online (Selwyn, 2013). This situation exacerbates educational inequities as disadvantaged learners are further marginalized.

Strategies to Mitigate Access Inequities

To address these inequities, institutions can adopt a multi-modal approach to content

delivery, including offline resources, such as printed materials and broadcasts on radio or television, which can reach learners without internet access (Unwin, 2009). Additionally, providing community learning centres with necessary technological resources can help bridge the gap for learners facing access issues.

Maintaining Engagement and Motivation

Engagement and motivation are crucial for the success of ODL programs. However, the remote nature of online learning can lead to feelings of isolation and disconnection among learners, challenging their motivation and engagement.

Strategies to Enhance Student Engagement

Engagement can be enhanced through interactive and collaborative learning activities, including online discussions, group projects, and peer feedback sessions, as these foster a sense of community among learners (Moore, 2012). Additionally, incorporating gamification elements like badges and leader boards can motivate learners by making the learning experience more enjoyable and competitive.

Addressing the Isolation of Distance Learners

Creating opportunities for synchronous interactions, such as live webinars or virtual classrooms, can help reduce feelings of isolation by allowing real-time communication among learners and instructors (Anderson, 2008). Social media and other online platforms can also facilitate informal interactions and support networks, mitigating isolation.

 $Quality\,Assurance\,and\,Accreditation$

Ensuring the quality and accreditation of online life skills programs is paramount to their credibility and effectiveness. However, maintaining high standards and meeting accreditation criteria can be challenging in an ODL context.

Ensuring the Quality of Online Life Skills Programs

Developing rigorous curriculum standards, adopting effective pedagogical strategies, and implementing comprehensive assessment and evaluation methods are essential to ensuring the quality of online programs (Vlachopoulos & Makri, 2017). Continuous professional development for educators in online teaching methodologies can also enhance program quality.

Meeting National and International Standards

Collaboration with accreditation bodies and adherence to national and international quality standards are critical for recognising and validating online programs. Institutions should engage in continuous improvement processes, including regular program reviews and updates, to ensure alignment with the latest educational standards and best practices (Jung & Latchem, 2012).

Case Studies and Examples of Successful ODL Life Skills Programs

Exploring the landscape of Open Distance Learning (ODL) reveals several impactful case studies and examples of successful implementation of life skills education. These case studies not only showcase the potential of ODL in diverse contexts but also offer valuable insights into practical strategies, methodologies, and the challenges overcome. Below are two real-world examples that illustrate the successful application of ODL in life skills education.

Global Case Studies

The Open University, United Kingdom

Description of Programs: The Open University (OU) in the UK is renowned for its distance learning programs, offering a wide range of life skills education, such as critical thinking, communication, and self-

management. Their innovative use of online platforms, multimedia content, and interactive tools has set a benchmark in ODL (Tait, 2018).

Impact and Outcomes: The OU has demonstrated a significant impact by providing flexible learning opportunities to over 2 million students globally, many of whom are adult learners balancing education with work and family commitments. Graduates have reported enhanced employability, personal growth, and improved life skills as key outcomes of their learning experience (The Open University, 2020).

Indira Gandhi National Open University (IGNOU), India

Description of Programs: IGNOU, one of the world's largest open universities, offers a variety of programs that integrate life skills education, including leadership, digital literacy, and environmental awareness. Through a blend of printed materials, online resources, and broadcast media, IGNOU reaches learners across India, especially in rural and remote areas (Kanwar, Balasubramanian, & Umar, 2010).

Impact and Outcomes: IGNOU's programs have profoundly impacted social and economic development in India, empowering millions of learners with the life skills needed for personal and professional success. The university has played a critical role in enhancing access to education, with notable achievements in increasing literacy rates and supporting community development projects (Kanwar, Balasubramanian, & Umar, 2010).

Lessons Learned and Best Practices

Effective Strategies and Methodologies

The success of the OU and IGNOU underscores the importance of flexibility and accessibility in ODL. Both institutions have employed a learner-centred approach, utilising a mix of synchronous and asynchronous learning, multimedia resources, and real-world applications to engage students. Personalised feedback and support services have also enhanced learner engagement and motivation (Bates, 2005; Moore, 2012).

Challenges Overcome

One of the common challenges faced by both institutions was the digital divide. To address this, they implemented multi-modal content delivery and established local study centres to ensure broader access. Another challenge was maintaining the quality and relevance of their programs. Continuous curriculum review, professional development for faculty, and engagement with industry and community stakeholders have been critical strategies in maintaining high standards and ensuring the programs remain aligned with learners' needs and global trends (Bates, 2005; Tait, 2018).

Future Directions for Life Skills Education through ODL

The future of life skills education through Open Distance Learning (ODL) is poised for transformative growth, driven by emerging technologies and innovations, alongside crucial policy and framework support developments. As educational landscapes evolve, integrating advanced technologies and collaborative policy frameworks will be pivotal in enhancing and expanding life skills education globally.

Emerging Technologies and Innovations Artificial Intelligence and Personalized Learning

Artificial Intelligence (AI) has the potential to revolutionise life skills education through ODL by providing personalized learning experiences. AI can analyze learners' interactions, performance, and feedback to tailor educational content, pacing, and learning pathways to meet individual needs (Zawacki-Richter, Marín, Bond, & Gouverneur, 2019). Personalized feedback mechanisms powered by AI can offer real-time insights and support, significantly enhancing learning outcomes.

Furthermore, AI-driven chatbots and virtual assistants can provide learners with instant assistance, creating a more supportive and interactive learning environment.

Virtual and Augmented Reality for Experiential Learning

Virtual Reality (VR) and Augmented Reality (AR) technologies provide immersive learning experiences that greatly enhance the development of life skills. By using VR and AR, learners can participate in realistic simulations and scenarios that mimic real-world challenges. These technologies offer a safe environment to practice and improve essential life skills like problem-solving, communication, and teamwork (Freina & Ott, 2015). These technologies foster experiential learning, allowing learners to explore complex concepts interactively and engagingly, thus improving the retention and application of knowledge.

Policy and Framework Development

Developing Supportive Policies for ODL in Life Skills Education

Developing supportive policies is crucial for sustaining and expanding life skills education through ODL. Governments and educational institutions need to recognize the value of ODL in providing accessible and flexible learning opportunities and develop policies that support its implementation and growth. This includes funding for technology infrastructure, research into effective online pedagogies, and developing quality standards for ODL programs (Bozkurt et al., 2015). Policies should also address equity and access issues, ensuring that all learners, regardless of background or circumstances, can benefit from life skills education through ODL.

Strengthening Collaborations among Stakeholders

The future success of life skills education through ODL will depend on the strength of collaborations among various stakeholders, including educational institutions, technology providers, government agencies, and the private sector. Collaborative efforts are essential for sharing resources, expertise, and best practices and for developing innovative solutions to challenges faced by ODL programs (Zawacki-Richter & Naidu, 2016). Partnerships can also facilitate the integration of life skills education into broader educational and developmental agendas, ensuring that learners are equipped with the skills needed to thrive in the 21st century.

CONCLUSION

Exploring life skills education through Open Distance Learning (ODL) presents a compelling narrative of innovation, challenge, and opportunity. As educational landscapes evolve, integrating life skills into ODL frameworks emerges as a pivotal strategy in addressing the multifaceted demands of the 21st century. This conclusion synthesizes key findings, underscores the importance of life skills education through ODL, and offers a call to action for stakeholders.

Summary of Key Findings

The examination of life skills education via ODL has highlighted several key findings:

Accessibility and Flexibility: ODL breaks down traditional barriers to education, offering flexible learning opportunities to diverse and often underserved populations, thereby democratizing access to vital life skills (Bates, 2005; Tait, 2018).

Technological Integration: The effective use of technology, including AI, VR, and AR, enhances the delivery and engagement of life skills education, providing personalized and experiential learning experiences (Freina & Ott, 2015; Zawacki-Richter et al., 2019).

Challenges and Solutions: The digital divide, engagement and motivation, and quality assurance are notable challenges in ODL. However, strategic approaches, such as multimodal content delivery, interactive

learning activities, and adherence to quality standards, offer viable solutions (Selwyn, 2013; Moore, 2012).

Impactful Outcomes: Case studies from institutions like The Open University and IGNOU illustrate the transformative impact of ODL on life skills education, emphasizing improved employability, personal development, and community empowerment (Kanwar, Balasubramanian, & Umar, 2010; The Open University, 2020).

Reiterating the Importance of Life Skills Education through ODL

The significance of life skills education in today's complex and rapidly changing world cannot be overstated. By fostering critical thinking, emotional intelligence, communication, and other essential competencies, life skills education equips individuals with the tools necessary for personal and professional success. ODL, with its inherent flexibility, accessibility, and innovative use of technology, offers a powerful means to expand and enhance the delivery of life skills education to global audiences. The adaptability of ODL to diverse learning needs and contexts makes it an indispensable modality in the contemporary educational ecosystem.

Call to Action for Educators, Policymakers, and Communities

The call to action for enhancing life skills education through Open Distance Learning (ODL) demands a comprehensive and collaborative approach from educators, policymakers, and communities. To fully harness the transformative potential of ODL in life skills education, concerted efforts and strategic initiatives are essential across various stakeholders.

Educators

Educators play a pivotal role in shaping the effectiveness of life skills education delivered through ODL. They are encouraged to:

Adopt Innovative Pedagogies: Engage with and apply innovative teaching methods and technologies to enhance the learning experience. Active learning, problem-based learning, and multimedia resources can significantly improve engagement and retention (Bonk & Zhang, 2008; Bates, 2005).

Pursue Professional Development: Continuous professional development in online teaching and learning methodologies is crucial. Participating in workshops, webinars, and courses on digital pedagogies and instructional design can equip educators with the skills required to deliver effective ODL life skills education (Ko & Rossen, 2017).

Policymakers

Policymakers have the authority to create an enabling environment for life skills education through ODL by:

Facilitating Infrastructure and Access: Invest in technological infrastructure and initiatives that reduce the digital divide, ensuring that all learners, regardless of their geographical location or socioeconomic status, can access ODL (Selwyn, 2013).

Implementing Supportive Policies: Develop policies that support the growth and sustainability of ODL, including funding, quality assurance standards, and recognition of online qualifications. Policies should also promote equity and inclusivity in access to education (Zawacki-Richter & Naidu, 2016).

Communities

The engagement of communities, including learners, families, and local organisations, is vital for the success of life skills education through ODL:

Advocacy and Participation: Communities should advocate for and participate in developing and implementing life skills education programs. This involvement ensures that the programs are relevant and tailored to the needs of the learners (UNESCO, 2014).

Building Partnerships: Establishing

partnerships between educational institutions, local businesses, and community organisations can facilitate the practical application of life skills and enhance the relevance of education to local contexts and the global economy (Vrasidas, 2015).

In navigating the complexities of the 21st century, the role of life skills education, mainly through the expansive reach of Open Distance Learning (ODL), cannot be overstated. As we have explored, the intersection of technology, accessibility, and pedagogy offers a unique and powerful platform to equip individuals with the essential skills needed for personal growth, professional success, and active citizenship in a rapidly evolving global landscape. While significant, the challenges faced are not insurmountable but stepping stones towards innovative solutions that further the democratization of education. The collective efforts of educators, policymakers, and communities, fuelled by a shared vision for a more inclusive, adaptable, and skilled society, are critical in this endeavour. As we look to the future, let us embrace the potential of ODL in life skills education as a beacon of hope and a catalyst for change. Together, we can transform challenges into opportunities, fostering a world where every individual has the tools to navigate life's complexities with confidence and resilience. Let this research not be our efforts' conclusion but a call to action—a charge to innovate, collaborate, and educate for a brighter, more inclusive future.

REFERENCES

Anderson, T. (2008). The theory and practice of online learning. *Athabasca University Press*.

Bandura, A. (1977). *Social Learning Theory*. Prentice Hall.

Barrett, H. C. (2018). We are researching and evaluating digital storytelling as a deep learning tool. In *The Society for Information Technology & Teacher Education International Conference* (pp. 647-654).

Bates, A. W. (2005). Technology, e-learning and

distance education. Routledge.

Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.

Bonk, C. J., & Zhang, K. (2008). Empowering Online Learning: 100+ Activities for Reading, Reflecting, Displaying, and Doing. *Jossey-Bass*. Bozkurt, A., et al. (2015). Trends and patterns in massive open online courses: Review and content analysis of research on MOOCs (2008-2015). *International Review of Research in Open and Distributed Learning*, 16(5), 133-176.

Dabbagh, N., & Kitsantas, A. (2012). Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education*, 15(1), 3-8.

Daniel, J. (2012). Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility. Journal of Interactive Media in Education.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of schoolbased universal interventions. *Child Development*, 82(1), 405-432.

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). Promoting Social and Emotional Learning: Guidelines for Educators. *ASCD*.

Freina, L., & Ott, M. (2015). A literature review on immersive virtual reality in education: State of the art and perspectives. *The International Scientific Conference eLearning and Software for Education*.

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.

Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. Jossey-Bass.

Goleman, D. (1995). *Emotional Intelligence*. Bantam Books.

Jonassen, D. (1994). Thinking Technology: Towards a Constructivist Design Model. Educational Technology, 34(4), 34-37.

Jung, I., & Latchem, C. (2012). Quality assurance and accreditation in distance education and e-learning: Models, policies and research. Routledge.

Kanwar, A., Balasubramanian, K., & Umar, A. (2010). Towards sustainable open and distance learning in India: The IGNOU case. Distance Education, 31(2), 233-250.

Knowles, M. S. (1975). Self-Directed Learning: A Guide for Learners and Teachers. Association Press.

Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2005). The Adult Learner: The definitive classic in adult education and human resource development. Elsevier.

Ko, S., & Rossen, S. (2017). Teaching Online: A Practical Guide. Routledge.

Kolb, D. A. (1984). Experiential Learning: Experience as the Source of Learning and Development. Prentice-Hall.

Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. Procedia - Social and Behavioral Sciences, 31, 486-490.

Mangrulkar, L., Whitman, C. V., & Posner, M. (2001). Life Skills Approach to Child and Adolescent Healthy Human Development. Pan American Health Organization.

Mayer, R. E. (2009). Multimedia learning: Guiding visuospatial thinking with instructional animation. Applied Cognitive Psychology, 23(8), 1179-1191.

Moore, M. G. (1993). Theory of transactional distance. In D. Keegan (Ed.), Theoretical principles of distance education (pp. 22-38). Routledge.

Moore, M. G. (2012). Handbook of distance education. Routledge.

Moore, M. G., & Kearsley, G. (2011). Distance Education: A Systems View of Online Learning. Wadsworth Publishing.

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good

feedback practice. Studies in Higher Education, 31(2), 199-218.

Rumble, G. (2004). Papers and debates on the economics and costs of distance and online learning. Oldenburg: Bibliotheks- und Informationssystem der Universität Oldenburg. Selwyn, N. (2013). Education in a digital world:

Global perspectives on technology and education. Routledge.

Tait, A. (2018). Open universities: A vision for the public university in the twenty-first century. Open Learning: The Journal of Open, Distance and e-Learning, 33(2), 81-94.

The Open University. (2020). Annual Report 2019/2020. The Open University.

Trilling, B., & Fadel, C. (2009). 21st-century skills: Learning for life in our times. Jossey-Bass.

UNESCO. (2014). Teaching and Learning: Achieving Quality for All. EFA Global Monitoring Report. UNESCO.

Unwin, T. (2009). ICT4D: Information and communication technology for development. Cambridge University Press.

Vlachopoulos, D., & Makri, A. (2017). The effect of games and simulations on higher education: a systematic literature review. International Journal of Educational Technology in Higher Education, 14(1), 22.

Vrasidas, C. (2015). The rhetoric of reform and teachers' use of ICT. British Journal of Educational Technology, 46(2), 370-380.

World Health Organization (WHO). (1997). Life Skills Education in Schools. WHO/MSD/PSB/99.11. World Health Organization.

Zawacki-Richter, O., & Naidu, S. (2016). Mapping research trends from 35 years of publications in Distance Education. Distance Education, 37(3), 245-269.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education - where are the educators? International Journal of Educational Technology in Higher Education, 16, 39.

Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration

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Rabindranath Tagore, a multifaceted luminary in literature, education, and philosophy, profoundly influenced environmental education through his holistic and nature-centric vision. Tagore's approach to education emphasized the integration of environmental consciousness into the curriculum, promoting a harmonious relationship between humans and nature. This study explores Tagore's philosophical insights, focusing on his belief that nature is a profound teacher fostering spiritual and intellectual growth. His establishment of Visva-Bharati University exemplified his commitment to an education system that transcends traditional academic boundaries, incorporating environmental awareness and ethical living into its core principles. Tagore's literary works, including poems and essays, often depicted nature as an intrinsic part of human existence, underscoring the interconnectedness of all life forms. This philosophical stance is reflected in his educational practices at Santiniketan, where students engaged directly with the natural environment, learning to appreciate its beauty and complexity. Tagore's vision extended beyond mere ecological awareness; he advocated for sustainable living and the ethical use of resources, aligning closely with contemporary principles of environmental sustainability. The study employs a qualitative approach, analyzing Tagore's literary and educational writings to elucidate his nuanced perspectives on environmental education. It highlights the relevance of his ideas in addressing modern environmental challenges, advocating for the integration of his holistic philosophy into current educational practices. The findings suggest that Tagore's emphasis on experiential learning, ethical values, and cultural relevance provides a robust framework for fostering environmental consciousness in students. His vision encourages a shift from conventional education towards a more inclusive and transformative approach, promoting sustainable development and global ecological awareness. In conclusion, Tagore's contributions to environmental education remain profoundly impactful, offering valuable insights for contemporary educators and policymakers. His holistic approach and deep reverence for nature continue to inspire efforts to integrate environmental consciousness into education, fostering a generation equipped to navigate the ecological challenges of the 21st century.

Keywords: Environmental Education, Sustainability, Educational Philosophy, Intricate Relationship.

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INTRODUCTION

Rabindranath Tagore, born on May 7, 1861, in Calcutta (now Kolkata), India, emerged as a multifaceted luminary in the realms of literature, education, and philosophy. Tagore's ancestral home in Shahzadpur, now Bangladesh, became part of East Pakistan. Despite political upheavals and social

transformations, Tagore's literary works have remained a source of inspiration and solace for generations. Tagore's early education was unconventional, embracing holistic learning. Raised in a culturally rich environment, he was exposed to a variety of intellectual pursuits. His formative years were a blend of Eastern and Western influences, incorporating traditional Indian scriptures, literature, and contemporary Western thought. His education was not limited to formal schooling but was a lifelong journey marked by curiosity, introspection, and a relentless quest for knowledge. Descended from a family of cultural distinction, Tagore's early education in England was marked by an unconventional departure from formal academic structures, as he returned to India without completing his degree. Tagore's literary brilliance came to the forefront with the publication of his seminal work, "Gitanjali" (Song Offerings), in 1910. (Dasgupta, U. 2022) This collection of poems not only garnered him international acclaim but also earned him the prestigious Nobel Prize in Literature in 1913, making him the first Asian recipient of this esteemed accolade. Beyond his literary prowess, Tagore was a fervent advocate for education reform. In 1901, he founded Vishva Bharati University in Santiniketan, West Bengal, envisioning an institution that would harmonize Eastern and Western educational principles. Santiniketan became a crucible for creativity, emphasizing a holistic approach to learning, artistic expression, and a profound connection with nature. Tagore's intellectual pursuits extended into the political arena, where he criticized British colonial rule and ardently championed the cause of Indian independence. His ideological differences with contemporaries like Mahatma Gandhi reflected a nuanced perspective on the path to self-rule. While Tagore's literary acclaim secured him a place in history, his dedication to educational reform and cultural revitalization solidified his legacy. His influence on India's cultural renaissance and his enduring impact on global education remain testaments to the far-reaching implications of his visionary contributions. Rabindranath Tagore's life story is one of intellectual brilliance, artistic innovation, and a profound commitment to shaping a more enlightened and harmonious world. In the later years of his life, Rabindranath Tagore continued to demonstrate his versatility as a creative force, engaging in painting and music that reflected his philosophical and spiritual reflections. His vibrant and symbol-laden paintings became an extension of his intellectual depth. Despite global acclaim for his literary and artistic works, Tagore's commitment to education remained a focal point. Vishva Bharati University, founded by Tagore, evolved into a hub for cultural exchange, embodying his vision of a holistic education that transcended national boundaries. Today, Shantiniketan is a prominent center for education and cultural exchange, hosting over 10,000 students from India and around the world. The university offers a wide range of programmes and is a hub for research and scholarship. The motto, "Where the mind is without fear and the head is held high," embodies Tagore's belief in the transformative power of education for individuals and society. The Institute of Rural Reconstruction was established in 1922 in Surul to help villagers solve their own problems. In 1923, Visva-Bharati's second campus was established in Sriniketan. A new school, Siksha-Satra, was created for children from neighbouring villages to contribute knowledge for the community's welfare. In 1936, Lok-Siksha Samsad was established to promote non-formal education, and Siksha-Charcha was established to train village school

teachers. (Quayum, Mohammad, 2014) Rabindranath Tagore's educational vision, Sriniketan, emphasized the harmonious relationship between human endeavour and the natural world. He envisioned Sriniketan as a sanctuary for individuals to commune with nature, fostering appreciation for the environment while pursuing intellectual and artistic pursuits. Tagore's works often incorporate nature themes, symbolizing profound philosophical insights. Tagore's dedication to universal values and transformative education was evident in his global dialogues on peace and understanding between cultures. His enduring legacy is not only seen in his literary and artistic masterpieces but also in the continued influence of his educational philosophy. Emphasizing holistic development, the integration of tradition and modernity, and a global perspective in education, Tagore's ideas inspire educators and institutions worldwide, highlighting his timeless impact on literature, education, and the pursuit of a more enlightened and interconnected world. Rabindranath Tagore, often referred to as the Bard of Bengal, was not only a literary luminary but also a visionary philosopher with a keen understanding of the intricate relationship between humans and their environment. Rabindranath Tagore, the eminent poet, philosopher, and Nobel laureate, stands as a beacon in the realm of educational philosophy, particularly concerning environmental education. This comprehensive exploration seeks to unravel the profound insights embedded in Tagore's visionary perspectives on the intricate relationship between humanity and the environment.

Tagore's founding of the Visva-Bharati University in Santiniketan was not merely an academic exertion but a bold venture into holistic education, transcending conventional boundaries to integrate environmental consciousness into the very fabric of learning. Tagore's educational philosophy emanated from a deep-seated understanding of nature as more than a mere backdrop to human existence; it was a wellspring of inspiration and spiritual nourishment. His literary works, including poems and essays, underscore the intrinsic connection between humans and the natural world. In this context, the abstract delves into Tagore's profound belief that nature is not only a source of sustenance but also a profound teacher, fostering a sense of awe and reverence that enriches the human soul. Central to Tagore's vision was the conviction that education should surpass the mere acquisition of information and skills; it should instill values that promote sustainable living. This exploration investigates how Tagore's educational philosophy aligns seamlessly with the principles of environmental sustainability, advocating for an educational paradigm that not only imparts knowledge but cultivates a deep-seated respect for the environment. The establishment of Visva-Bharati University marked a watershed moment in Tagore's pursuit of holistic education. This article delves into how the university became a crucible for nurturing environmental consciousness, fostering a community that not only values nature but also integrates its principles into creative activities and ethical living. It examines the unique pedagogical approaches and initiatives within the university that embody Tagore's vision of an education deeply rooted in environmental ethos. As the exploration unfolds, it sheds light on the enduring legacy of Tagore's ideas in contemporary environmental education. It scrutinizes how his principles can inform and invigorate modern educational approaches, particularly in addressing the urgent ecological challenges of the present era. Moreover, the abstract underscores the adaptability and contextualization of Tagore's philosophy in diverse educational settings, providing a framework for its integration into mainstream environmental education. While celebrating Tagore's invaluable contributions, the abstract acknowledges potential challenges and critiques associated with the integration of his ideas into mainstream educational discourse. It invites a nuanced discussion on overcoming obstacles and, in doing so, advocates for the continual reexamination of Tagore's educational philosophy to inspire innovative approaches to environmental education in the 21st century. This research article explores Tagore's perspectives on environmental education, shedding light on the relevance of his ideas in the contemporary context of environmental challenges and sustainability.

REVIEW OF RELATED LITERATURE

The review of related literature which the researcher has been done as follows:

Garai (2023) explored the impact of Gandhi's, Ambedkar's, and Tagore's environmental thoughts on Indian environmentalism. Tagore's environmental philosophy differs from other philosophers by promoting a holistic view of the environment. Tagore's environmental thought recognizes the intrinsic value of all living beings and emphasizes a

spiritual and conscious transformation in humans' relationship with nature. Ambedkar's ideas are crucial to the dominant discourse, which is characterized by a concern for transforming the natural world to address social issues.

Berebon (2023) critically examined Tagore's conceptualization of the interplay between humanity and the environment, as well as the broader cosmos. The primary objective of this analysis was to elucidate how Tagore's poetic and philosophical comprehension of the interconnectedness between humanity and the natural world, as well as the person and the cosmos, enables him to cultivate a profound perspective on the world. The paper concluded that Tagore's humanism transcends the plane of so-called anthropocentrism and goes deeper into the core of man-nature interrelationships. Bhattacharya (2020) explored Rabindranath Tagore's humanistic approach to education and its implications for contemporary educational practices. Tagore's educational philosophy, rooted in humanism and spiritualism, prioritizes the holistic development of individuals over mere academic achievement. His emphasis on cultivating moral and aesthetic sensibilities through exposure to nature, the arts, and literature fosters a well-rounded personality. Through an analysis of Tagore's educational ideals and methodologies, this review highlights his enduring legacy in promoting a humanistic vision of education that transcends conventional boundaries.

Mukherjee (2019) examined Rabindranath Tagore's pioneering efforts in integrating nature into education. Tagore's educational philosophy, deeply influenced by his reverence for nature, emphasizes the importance of direct experience with the natural world in the learning process. His institution, Santiniketan, served as a model for holistic education, where students engage with nature as an integral part of their curriculum. Through an analysis of Tagore's writings and educational experiments, this review elucidates his innovative pedagogical methods and their enduring impact on nature-based education in "Rabindranath Tagore's Pedagogical Innovations: Integrating Nature into Education."

Sen & Das (2017) critically examined Rabindranath Tagore's contribution to environmental education. Tagore's deep connection with nature and his advocacy for environmental consciousness are explored through his literary and philosophical works. His concept of 'man-nature relationship' underscores the interconnectedness between humans and the environment, urging for harmonious coexistence. Through a systematic analysis, this review elucidates Tagore's timeless wisdom and its relevance in fostering ecological awareness and sustainable practices in education.

Sarkar & Ghosh (2015) made an attempt to focus on Tagore's thought on environment and the lessons found in his writings for mutual coexistence of progress and preservation in their paper "Environment and Development: A Visit to the World of Tagore." The paper found that Rabindranath Tagore, a prominent development figure, advocated for ecological balance, focusing on progress without irreparable harm to the environment. He envisions a world that ensures comfortable living for humans and future generations.

SIGNIFICANCE OF THE STUDY

The significance of the study titled "Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration" lies in its potential to contribute to educational theory, inform policy decisions, inspire pedagogical innovation, and promote environmental consciousness globally, all through the lens of Rabindranath Tagore's visionary contributions to environmental education.

OBJECTIVES OF THE STUDY

The objectives of the study titled "Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration" are as follows:

- ❖ To investigate into Rabindranath Tagore's literary and philosophical works, including his poems, essays, and educational writings, to elucidate his nuanced perspectives on the intricate relationship between humanity and the environment.
- ❖ To scrutinize Tagore's portrayal of nature as a profound source of inspiration and spiritual nourishment, focusing on his vision of sustainable living and afforestation as a vibrant canvas painted with ecological diversity.
- ❖ To explore how Visva-Bharati University, founded by Tagore, has been instrumental in fostering environmental consciousness and ethical living through its initiatives and pedagogical approaches.
- ❖ To assess the contemporary relevance and enduring impact of Tagore's environmental education philosophy, aiming to identify challenges and critiques associated with the integration of his ideas into mainstream environmental education.
- ❖ To investigate how Tagore's environmental ideals have been integrated into modern educational practices and curricula.

❖ To contribute to the scholarship on environmental education by synthesizing insights from Tagore's rich literary and philosophical legacy, assessing their applicability to current environmental challenges, and exploring their integration into educational frameworks.

These objectives aim to provide a comprehensive understanding of Tagore's visionary contributions to environmental education and their potential to inform and inspire innovative approaches to education for sustainability.

RESEARCH QUESTION OF THE STUDY

Based on the objectives of the study titled "Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration," the following research questions can be framed:

- ❖ How do Rabindranath Tagore's literary and philosophical works, including his poems, essays, and educational writings, elucidate his nuanced perspectives on the intricate relationship between humanity and the environment?
- ❖ In what ways does Tagore portray nature as a profound source of inspiration and spiritual nourishment, and how does this focus on sustainable living and afforestation reflect ecological diversity?
- ❖ How has Visva-Bharati University, founded by Tagore, been instrumental in fostering environmental consciousness and ethical living through its initiatives and pedagogical approaches?
- ❖ What is the contemporary relevance and enduring impact of Tagore's environmental education philosophy, and what challenges and critiques are associated with integrating

his ideas into mainstream environmental education?

- ❖ How have Tagore's environmental ideals been integrated into modern educational practices and curricula?
- ❖ How can insights from Tagore's rich literary and philosophical legacy be synthesized to contribute to the scholarship on environmental education, assessing their applicability to current environmental challenges and exploring their integration into educational frameworks?

These research questions aim to explore the depth and breadth of Tagore's vision on environmental education, assess its practical applications, and understand its relevance in today's educational context.

RESEARCH METHODOLOGY

This analysis focuses on Tagore's ideas and views on education for women, using both theoretical and descriptive approaches. Qualitative research methods were employed, including the analysis of books, autobiographies, personal letters, and speeches related to Rabindranath Tagore. The study also examined significant religious texts that were used to justify harmful practices in Indian society. Historical research data and information were considered to ensure the authenticity of the study. Additionally, secondary sources such as articles, journals, and archives were reviewed to gather further information and clarify complex details from different libraries. The analysis concludes by presenting a comprehensive research study based on the findings from various sources.

DISCUSSION

Philosophical tenets of Rabindranath Tagore's vision of Environmental Education as articulated in his literary and educational writings

Rabindranath Tagore's vision of environmental education is profoundly rooted in a holistic and interconnected worldview, as articulated in his extensive literary and educational writings. At the heart of Tagore's philosophy lies the belief that nature is not just an external entity but an integral part of human existence, with its rhythms and cycles intricately woven into the fabric of life. In his literary works, particularly his poems and essays, Tagore portrays nature as a source of inspiration, a reservoir of spiritual nourishment that transcends its utilitarian value. His vision sees nature as a profound teacher, guiding individuals towards a deeper understanding of the universe and their place within it. Tagore's educational philosophy, exemplified in the founding of Visva-Bharati University, reflects his commitment to a holistic approach that goes beyond traditional academic boundaries. (Garai, 2023) He advocates for the integration of environmental consciousness into the very core of education, emphasizing that true learning extends beyond the mere acquisition of knowledge to encompass a profound sense of responsibility and respect for the environment. According to Tagore, education should not only empower individuals with skills but also instill values that promote sustainable living and ethical engagement with the natural world. Central to Tagore's environmental vision is the idea that humanity's well-being is intricately linked to the well-being of the Earth. He rejects the notion of a dichotomy between humans and nature, urging for a harmonious coexistence where individuals recognize their

interconnectedness with the environment. Tagore's philosophy encourages a shift in perception, fostering a sense of kinship and reverence for the natural world. This transformative approach aims to cultivate a deep ecological consciousness, nurturing individuals who understand their role as stewards of the Earth rather than mere consumers of its resources. Tagore's emphasis on environmental education extends beyond theoretical ideals to practical applications, urging educators to incorporate nature-centric pedagogies and experiential learning. His vision emphasizes the importance of fostering a love for nature from an early age, recognizing the pivotal role of education in shaping attitudes towards the environment. The holistic ethos of Visva-Bharati University serves as a living testament to Tagore's vision, where students engage with nature not only as a subject of study but as an integral part of their overall learning experience. In essence, Rabindranath Tagore's vision of environmental education can be characterized by its holistic, interconnected, and transformative nature. It transcends conventional educational paradigms, advocating for an integrative approach that recognizes the intrinsic relationship between humanity and the environment. His philosophy continues to resonate as a source of inspiration, guiding contemporary discussions on sustainable education and environmental ethics.

Tagore conceptualizes and integrates environmental consciousness into the broader framework of holistic education

Rabindranath Tagore's conceptualization and integration of environmental consciousness

into the broader framework of holistic education were revolutionary, reflecting a departure from traditional academic boundaries. Tagore envisioned education as a holistic attempt that extended beyond the mere transmission of knowledge within the confines of a classroom. Central to his philosophy was the idea that learning should not be divorced from the natural world but rather be intimately connected to it. At Visva-Bharati University, the institution he founded, Tagore sought to create an immersive educational environment where students engaged with nature not as a separate subject but as an integral part of their learning experience. The curriculum at Visva-Bharati was designed to incorporate environmental studies seamlessly, fostering an awareness of ecological interdependence. Tagore believed that by weaving environmental consciousness into the fabric of education, students would develop a profound sense of responsibility towards the environment. Tagore's approach transcended traditional disciplinary boundaries, emphasizing a holistic understanding of the world that integrated scientific, artistic, and spiritual dimensions. The curriculum at Visva-Bharati encouraged interdisciplinary exploration, enabling students to perceive the interconnectedness of various fields of knowledge. Moreover, Tagore advocated for experiential learning, where students actively engaged with nature through field trips, outdoor activities, and direct interactions with the environment. This hands-on approach was instrumental in cultivating a deep-seated environmental consciousness, as students learned to appreciate nature not just as an academic subject but as a living, dynamic entity. Furthermore, Tagore's emphasis on cultivating a love for nature from an early age sought to instill a lifelong commitment to environmental stewardship. He believed that by integrating environmental education into the broader context of holistic learning, individuals would naturally develop a sense of reverence for the Earth. This approach transcended the narrow confines of traditional academic disciplines, fostering an interconnected worldview that recognized the intrinsic relationship between humanity and the environment. In summary, Rabindranath Tagore's conceptualization of environmental consciousness within the framework of holistic education was transformative. Rabindranath Tagore's conceptualization and integration of environmental consciousness into the broader framework of holistic education were revolutionary, reflecting a departure from traditional academic boundaries. Tagore envisioned education as a holistic exertion that extended beyond the mere transmission of knowledge within the confines of a classroom. Central to his philosophy was the idea that learning should not be divorced from the natural world but rather be intimately connected to it. At Visva-Bharati University, the institution he founded, Tagore sought to create an immersive educational environment where students engaged with nature not as a separate subject but as an integral part of their learning experience. The curriculum at Visva-Bharati was designed to incorporate environmental studies seamlessly, fostering an awareness of ecological interdependence. Tagore believed that by weaving environmental consciousness into the fabric of education, students would develop a profound

sense of responsibility towards the environment. Tagore's approach transcended traditional disciplinary boundaries, emphasizing a holistic understanding of the world that integrated scientific, artistic, and spiritual dimensions. The curriculum at Visva-Bharati encouraged interdisciplinary exploration, enabling students to perceive the interconnectedness of various fields of knowledge. Moreover, Tagore advocated for experiential learning, where students actively engaged with nature through field trips, outdoor activities, and direct interactions with the environment. This hands-on approach was instrumental in cultivating a deep-seated environmental consciousness, as students learned to appreciate nature not just as an academic subject but as a living, dynamic entity. Furthermore, Tagore's emphasis on cultivating a love for nature from an early age sought to impart a lifelong commitment to environmental stewardship. He believed that by integrating environmental education into the broader context of holistic learning, individuals would naturally develop a sense of reverence for the Earth. This approach transcended the narrow confines of traditional academic disciplines, fostering an interconnected worldview that recognized the intrinsic relationship between humanity and the environment. In summary, Rabindranath Tagore's conceptualization of environmental consciousness within the framework of holistic education was transformative. (Sarkar & Ghosh, 2015) By transcending traditional academic boundaries, he envisioned an educational paradigm that not only imparted knowledge but also nurtured a deep and abiding respect for nature. His pioneering ideas continue to inspire contemporary discussions on holistic education and the imperative of integrating environmental awareness into the educational experience.

Tagore's portrayal of nature as inspiration and nourishment in his works explores its role in his philosophy of environmental interconnectedness

In Rabindranath Tagore's literary works, nature emerges as a profound source of inspiration and spiritual nourishment, intricately woven into the fabric of his overarching philosophy of environmental interconnectedness. Tagore's portrayal of nature is not confined to a utilitarian perspective but extends into a deeply poetic and philosophical realm. In his poems, such as those found in the collection "Gitanjali," Tagore often personifies nature, attributing it with a vibrant and sentient presence. He describes the natural world as a teacher, a guide, and a source of solace, fostering a spiritual communion between humans and their surroundings. Tagore's poetic verses evoke the beauty of landscapes, the changing seasons, and the interconnectedness of all living beings. Nature, for Tagore, becomes a metaphor for the divine, a manifestation of the universal spirit that binds all existence. These depictions of nature contribute significantly to Tagore's overarching philosophy of environmental interconnectedness by emphasizing the inherent unity between humanity and the natural world. Tagore rejects a dualistic worldview that separates humans from nature, advocating instead for a harmonious coexistence where individuals recognize their integral role within the ecological web. His poetic portrayals of nature evoke a sense of

reverence, urging readers to perceive the environment not merely as a physical backdrop but as a spiritual force that nourishes the human soul. (Shodiq A Kuntoro Supardi, 2018) Furthermore, Tagore's literary works underscore the reciprocity between human emotions and the natural world. He articulates how the moods of nature reflect and influence human experiences, fostering a deep emotional connection between individuals and their environment. This interconnectedness is a central theme in Tagore's philosophy, emphasizing the idea that the well-being of humanity is intimately tied to the health and balance of the natural world. Tagore's literary portrayal of nature, therefore, serves as a vehicle for instilling a sense of environmental consciousness. By depicting nature as a source of inspiration and spiritual nourishment, Tagore encourages a holistic understanding that goes beyond a utilitarian view of the environment. His writings invite readers to transcend the superficial boundaries separating humans from nature, fostering an appreciation for the interconnectedness that defines our existence. In this way, Tagore's literary works contribute profoundly to his environmental philosophy, offering a poetic and philosophical foundation for the recognition of the essential unity between humanity and the natural world.

Tagore's vision of afforestation as a canvas painted with the vibrant hues of ecological diversity

Rabindranath Tagore, the polymath poet, philosopher, and Nobel laureate from India, had a profound understanding of the interconnectedness between nature and human existence. Tagore's perspective on

afforestation, the process of establishing forests, was deeply rooted in his philosophical outlook and his appreciation for the intricate relationship between humans and the environment. He envisioned afforestation not merely as a means to combat deforestation but as a holistic approach to harmonize ecological sustainability with human well-being. Tagore emphasized the spiritual and cultural dimensions of afforestation. He believed that forests were not just repositories of timber but sacred spaces that held intrinsic value for both the environment and human society. (Datta et al., 2010) In his writings and speeches, Tagore often articulated the idea that trees were not commodities to be exploited but living entities with a vital role in sustaining life on Earth. He advocated for afforestation as a means to restore the balance between nature and humanity, recognizing that healthy ecosystems were essential for the spiritual and psychological well-being of individuals and communities. Furthermore, Tagore saw afforestation as a powerful tool for fostering a sense of interconnectedness and responsibility among people. He believed that individuals should view themselves not as isolated entities but as integral parts of the larger ecological web. Afforestation, in his vision, was a collective effort that transcended national and cultural boundaries, requiring collaboration among diverse communities to safeguard the planet's ecological integrity. Tagore's philosophy on afforestation reflected his belief in the universality of environmental stewardship and the shared responsibility of humanity to preserve the planet for future generations. Tagore's advocacy for afforestation was not confined to theoretical

propositions; he actively engaged in practical initiatives to promote tree planting and conservation. At Santiniketan, the educational institution he founded, Tagore implemented afforestation programmes as integral components of the curriculum. He recognized the educational value of involving students in hands-on activities related to afforestation, instilling in them a deep appreciation for nature and a sense of responsibility for environmental conservation. In essence, Tagore's perspective on afforestation transcended the conventional environmental discourse of his time. His vision was imbued with a holistic understanding of the interdependence between humanity and the natural world. Tagore's legacy endures not only in his literary and artistic contributions but also in his timeless wisdom on the importance of afforestation as a means to nurture a harmonious relationship between people and the environment. In a world grappling with environmental challenges, Tagore's insights continue to inspire a reevaluation of our relationship with nature and a commitment to sustainable practices that integrity the intricate dance between humanity and the ecosystems that sustain life (Datta & Seely, 2009).

Tagore's emphasis on education for sustainable living aligns with principles of environmental sustainability and responsible ecological practices

Rabindranath Tagore's beliefs regarding the role of education in promoting sustainable living were deeply embedded in his visionary educational philosophy. Tagore perceived education not merely as a means of acquiring knowledge and skills but as a transformative

force that should instill values and ethics conducive to sustainable living. Central to his philosophy was the idea that education should foster a sense of ecological consciousness, emphasizing the interconnectedness between humans and the environment. (Berebon, 2023) Tagore envisioned a form of education that transcended conventional boundaries, integrating environmental awareness seamlessly into the curriculum. His belief in a holistic educational approach, exemplified by the establishment of Visva-Bharati University, was grounded in the conviction that a wellrounded education should include an understanding of one's responsibilities towards the planet. Tagore's educational philosophy aligns closely with the principles of environmental sustainability and responsible ecological practices. He advocated for an education that went beyond the narrow pursuit of individual success to encompass a broader understanding of human interconnectedness with nature. Tagore's emphasis on experiential learning and direct engagement with the environment at Visva-Bharati sought to nurture a profound connection with nature, cultivating a sense of responsibility for the Earth. His educational ideals encouraged students to appreciate the delicate balance of ecosystems and recognize their role as stewards rather than exploiters of the environment. Furthermore, Tagore's vision of education extended beyond the classroom, emphasizing the need for ethical and moral development. He believed that a sustainable society could only be built on a foundation of ethical values, and education was the catalyst for nurturing these values. Tagore's writings and speeches underscored the importance of

cultivating empathy, compassion, and a sense of responsibility towards all living beings, aligning with the ethical dimensions of environmental sustainability. In essence, Tagore's beliefs regarding education and sustainable living were intertwined with his broader vision for a harmonious coexistence between humanity and nature. His educational philosophy emphasized the integration of environmental awareness, ethical values, and a holistic understanding of the interconnected web of life. Tagore's ideas continue to resonate as a source of inspiration for educators and environmentalists seeking to align education with the principles of sustainability, fostering a generation capable of navigating the challenges of the present while safeguarding the planet for future generations.

Tagore's establishment of Visva-Bharati University to promote environmental consciousness through initiatives and pedagogical approaches

The establishment of Visva-Bharati University by Rabindranath Tagore stands as a crucible for nurturing environmental consciousness and epitomizes Tagore's vision of ethical living and ecological awareness. Conceived in 1921, Visva-Bharati was not merely an academic institution; it was a living embodiment of Tagore's holistic philosophy, where education seamlessly blended with nature and ethical values. The university's campus, Shantiniketan, was designed to be a harmonious coexistence of education and the environment. Tagore believed that a close interaction with nature was essential for the holistic development of individuals. The curriculum at Visva-Bharati incorporated environmental studies as an integral part of education, ensuring that students engaged directly with the natural world. The university implemented innovative pedagogical approaches, such as outdoor classes, nature walks, and experiential learning, to foster a deep connection between students and their surroundings. Tagore's emphasis on arts and crafts as essential elements of education aimed to inculcate an aesthetic appreciation for the environment. Moreover, the celebration of festivals like Poush Mela, where the community came together to appreciate nature's bounty, further reinforced ecological awareness. ("Rabindranath Tagore: His Life and Thought," 2016) Visva-Bharati's educational philosophy was rooted in ethical living, emphasizing values like compassion, empathy, and respect for all living beings. Tagore envisioned an educational environment where ethical considerations were interwoven with academic pursuits. Students were encouraged to live a simple and harmonious life in tandem with nature, promoting sustainability through responsible ecological practices. The university aimed to produce individuals not just equipped with academic knowledge but imbued with a profound sense of ethical responsibility towards society and the environment. The cultural and intellectual milieu at Visva-Bharati played a pivotal role in nurturing environmental consciousness. The annual Basant Utsav, celebrated with joy and fervor, symbolized the rejuvenation of nature and the interconnectedness of life. Tagore's own poetic and philosophical works, infused with ecological themes, were an integral part of the curriculum, inspiring students to reflect on their relationship with the environment.

Through these initiatives, Visva-Bharati became a model for sustainable education, where the nurturing of ecological awareness and ethical living was not a peripheral aspect but a fundamental tenet of the educational experience. The legacy of Visva-Bharati continues to inspire educational institutions globally to integrate environmental consciousness and ethical values into their pedagogical approaches, thereby contributing to the broader discourse on sustainable living and education.

Tagore's ideas on Environmental Education had a lasting impact and shaped current approaches

Rabindranath Tagore's ideas on environmental education have endured and significantly influenced contemporary approaches to environmental education. Tagore's emphasis on the interconnectedness of humanity and nature, ethical living, and a holistic educational approach has resonated across time, finding relevance in the face of pressing environmental challenges. His vision of education as a transformative force that instils values and environmental consciousness has endured as a guiding principle for educators globally. The philosophy of Visva-Bharati University, with its integration of nature into the curriculum and emphasis on experiential learning, continues to inspire modern educational institutions seeking to align education with sustainability. Tagore's belief in the transformative power of literature and the arts to cultivate ecological awareness has found resonance in the integration of environmental themes into various academic disciplines. Contemporary environmental education programmes often echo Tagore's call for a deeper connection with nature, recognizing that fostering a sense of stewardship requires more than scientific knowledge—it demands a profound cultural and emotional shift. (Dasgupta et al., 2017) Moreover, Tagore's ideas have influenced the broader discourse on sustainability and ethics. The recognition of the ethical dimensions of environmental issues and the importance of cultivating values like empathy, compassion, and responsibility align with Tagore's vision of ethical living. In an era marked by global environmental crises, educators are increasingly turning to Tagore's holistic approach to education as a means to nurture a generation capable of addressing the complex ecological challenges facing the planet. Tagore's enduring influence on environmental education is evident in the incorporation of his ideas into international discussions and policies on sustainable development and education. As contemporary society grapples with the need for a paradigm shift towards sustainability, Tagore's philosophy offers a timeless and comprehensive framework that extends beyond the confines of traditional environmental education. In essence, the endurance of Tagore's ideas underscores their resilience and adaptability, serving as a testament to their continued relevance in shaping contemporary approaches to environmental education worldwide.

Tagore's ideas shape modern approaches and impact environmental education by being integrated into current practices and curricula Rabindranath Tagore's ideas have been seamlessly integrated into current environmental education practices and curricula, leaving a lasting impact on shaping

modern approaches to environmental education. His visionary concepts, particularly those embedded in the philosophy of Visva-Bharati University, have inspired educational institutions globally to rethink their pedagogical frameworks. The integration of Tagore's ideas often involves the incorporation of nature-centric themes into curricula, emphasizing experiential learning, and fostering a sense of environmental consciousness. Many educational programmes draw on Tagore's belief in the arts and literature as powerful tools for cultivating ecological awareness, incorporating his poems, essays, and philosophical writings into the study of environmental issues. Additionally, contemporary environmental education practices often echo Tagore's emphasis on ethical living, encouraging students to reflect on the ethical dimensions of environmental challenges and fostering a sense of responsibility for sustainable living. Modern environmental education initiatives inspired by Tagore's ideas often go beyond traditional classroom settings, incorporating outdoor learning experiences, nature walks, and community engagement. These practices aim to create a holistic understanding of the environment, aligning with Tagore's vision of education as a transformative force that extends beyond the mere acquisition of knowledge. (Bandyopadhyay, 2019) Furthermore, the principles of sustainability, cultural integration, and ethical considerations advocated by Tagore have influenced the design of curricula, encouraging educators to adopt interdisciplinary and culturally relevant approaches to environmental education. The impact of Tagore's ideas on modern

approaches to environmental education extends to the global discourse on sustainability. His philosophy has informed international discussions on the role of education in promoting sustainable development, influencing policies and initiatives that recognize the need for a holistic and values-based education to address contemporary environmental challenges. By emphasizing the interconnectedness of humanity and nature, Tagore's ideas continue to shape a paradigm shift in environmental education, inspiring educators, policymakers, and students to adopt a more comprehensive and ethical perspective on environmental issues. In conclusion, Rabindranath Tagore's ideas have been woven into the fabric of current environmental education practices, contributing to a broader understanding of the environment and fostering a generation of individuals equipped to address the complex challenges of the 21st century. His enduring influence underscores the timeless relevance of his vision, offering a profound and transformative framework for shaping modern approaches to environmental education across diverse cultural and educational contexts.

Rabindranath Tagore's vision contributes to academic discourse on Environmental Education through a comprehensive exploration

A comprehensive exploration of Rabindranath Tagore's vision makes a substantial and invaluable contribution to the academic discourse on environmental education. Tagore's holistic philosophy, as manifested in the establishment of Visva-Bharati University, provides a unique lens through which to examine the interconnectedness of humanity

and nature. His insights emphasize the integration of environmental consciousness into education, offering a paradigm that transcends conventional disciplinary boundaries. In the academic discourse on environmental education, Tagore's vision enriches the conversation by highlighting the cultural, spiritual, and ethical dimensions of our relationship with the environment. By recognizing nature as a source of inspiration and spiritual nourishment, Tagore's insights challenge the reductionist perspectives often prevalent in environmental education, fostering a more profound and nuanced understanding of ecological interconnectedness. Moreover, his emphasis on experiential learning, the arts, and literature as vehicles for cultivating environmental awareness expands the pedagogical toolkit for educators, offering innovative approaches to engage students in meaningful and transformative ways. Tagore's vision also has the potential to inform and enrich current educational practices in the field of environmental education. Educators can draw on his philosophy to develop curricula that go beyond the dissemination of scientific facts to implant values such as empathy, responsibility, and a deep respect for the environment. (Roy, 2013) Integrating Tagore's insights into educational practices can encourage a sense of wonder and reverence for nature, fostering a generation of environmentally conscious individuals. His emphasis on ethical living and sustainability aligns with contemporary efforts to address pressing global challenges, providing a foundation for educational programmes that promote responsible ecological practices.

Furthermore, educators can explore Tagore's approach to interdisciplinary learning, emphasizing the integration of environmental themes into diverse academic disciplines. This integration encourages a comprehensive understanding of environmental issues, preparing students to navigate the complex and interconnected challenges of the modern world. In conclusion, a thorough exploration of Rabindranath Tagore's vision significantly contributes to the academic discourse on environmental education by offering a holistic and culturally rich perspective. His insights can inform and enrich current educational practices in the field, providing a blueprint for a more integrated, ethical, and transformative approach to environmental education. As the world grapples with environmental challenges, Tagore's vision serves as a source of inspiration and guidance, encouraging educators to rethink and reshape their strategies for fostering environmental consciousness in future generations.

Exploring the Naturalistic Philosophy of Rabindranath Tagore

Rabindranath Tagore, the eminent poet, philosopher, and polymath of Bengal, held a distinctive perspective on naturalism that was deeply rooted in his profound connection with nature and its intrinsic ties to human life. Tagore's view on naturalism transcended conventional boundaries, blending spiritual insight with a poetic appreciation for the natural world. For him, nature was not just a passive backdrop but an active, dynamic force intertwined with the human experience. He saw nature as a source of inspiration, wisdom, and a reflection of the divine. Tagore's works, such as his poetry collection "Gitanjali," are

infused with vivid imagery and metaphors drawn from the natural world, portraying an intimate relationship between man and nature. He believed that the essence of life could be understood through a harmonious communion with nature. In Tagore's view, naturalism was not a mere artistic movement or a literary style but a way of life, a philosophy that acknowledged the interconnectedness of all living beings. He argued that a deep engagement with nature could lead to spiritual awakening and a greater understanding of the human condition. Tagore emphasized the importance of perceiving the sublime in the ordinary, recognizing the divine in the mundane aspects of nature. His writings often portrayed nature as a teacher, guiding humanity towards a more profound understanding of existence. One of Tagore's notable quotations that encapsulates his view on naturalism is, "The same stream of life that runs through my veins night and day runs through the world and dances in rhythmic measures. It is the same life that shoots in joy through the dust of the earth in numberless blades of grass and breaks into tumultuous waves of leaves and flowers" (Gupta, K. S. 2016). This poetic expression reflects Tagore's belief in the interconnectedness of all life forms and the shared vitality that courses through the human experience and the natural world alike. Tagore's naturalism was not confined to theoretical musings but was deeply embedded in his educational philosophy as well. He founded the Visva-Bharati University, which aimed to cultivate a holistic education system that celebrated the symbiotic relationship between humanity and nature. Through his works and educational activities, Tagore

sought to foster a consciousness that embraced the beauty, vitality, and spiritual resonance of the natural world, inviting individuals to recognize their place within this larger cosmic dance. In essence, Rabindranath Tagore's view on naturalism was a celebration of life's interconnectedness, where the human spirit finds resonance in the harmonies of nature.

LIMITATION OF THE STUDY

Because of the vastness of the subject, the entire dimension cannot be considered within a certain time frame. Hence, this research is conducted exclusively on Rabindranath Tagore's vision of environmental education. The research lacks primary data.

DELIMITATION OF THE STUDY

The study delimits only the philosophical exploration of Tagore's visionary insights into environmental education, examining his literary and educational works.

EDUCATIONAL IMPLICATIONS OF THE STUDY

The educational implications of the study titled "Rabindranath Tagore's Vision of Environmental Education: A Philosophical Exploration" are profound and multifaceted. They underscore the transformative potential of integrating Tagore's holistic and nature-centric educational philosophy into contemporary educational practices. Here are the detailed educational implications based on the study.

Holistic Education Approach: Tagore's vision emphasizes the need for a holistic approach to education that goes beyond conventional academic boundaries. This involves integrating environmental consciousness into the core curriculum, thereby fostering a comprehensive understanding of the

interconnectedness between humanity and nature. By adopting this approach, educational institutions can cultivate a deeper sense of responsibility and respect for the environment among students.

Experiential Learning: Tagore advocated for experiential learning, where students engage directly with nature through outdoor activities, nature walks, and field trips. This hands-on approach helps students develop a tangible connection with the environment, enhancing their ecological awareness and fostering a lifelong commitment to environmental stewardship.

Integration of Arts and Literature: Tagore believed in the transformative power of the arts and literature in cultivating ecological awareness. Incorporating his literary and philosophical works into the curriculum can inspire students to appreciate the beauty and spiritual significance of nature, thereby nurturing their moral and aesthetic sensibilities. This integration helps in developing a well-rounded personality that values sustainability and ethical living.

Interdisciplinary Learning: Tagore's educational philosophy encourages an interdisciplinary approach, blending scientific, artistic, and spiritual dimensions. This approach can help students understand the complexity of environmental issues from multiple perspectives, preparing them to tackle global ecological challenges with a well-rounded, informed mindset.

Ethical and Moral Development: Central to Tagore's vision is the cultivation of ethical values and moral responsibility towards the environment. Education systems that incorporate these values can produce individuals who are not only knowledgeable but also empathetic and committed to sustainable practices. This ethical framework is crucial for addressing contemporary environmental crises effectively.

Cultural Relevance and Adaptation: Tagore's ideas emphasize the importance of cultural relevance in education. By adapting his environmental philosophy to diverse cultural contexts, educators can create more inclusive and effective environmental education programs. This cultural sensitivity ensures that the educational practices resonate with students from different backgrounds, promoting a global understanding of sustainability.

Sustainable Living Practices: Tagore's vision aligns closely with the principles of environmental sustainability. By integrating sustainable living practices into the curriculum, educators can teach students the importance of balancing progress with ecological preservation. This includes lessons on afforestation, conservation, and the sustainable use of resources, which are essential for maintaining ecological balance.

Policy Influence and Innovation: The study's insights can inform educational policy decisions, encouraging the incorporation of holistic and environmentally conscious practices into national and international educational frameworks. Tagore's philosophy provides a blueprint for innovative pedagogical approaches that prioritize sustainability, ethics, and holistic development over mere academic achievement.

By embracing these educational implications, modern educational institutions can nurture a generation of environmentally conscious individuals equipped to address the ecological challenges of the 21st century. Tagore's visionary contributions to environmental education offer a timeless and transformative framework for shaping sustainable and ethical educational practices globally.

ETHICAL CONSIDERATIONS

The paper on Rabindranath Tagore's vision of environmental education investigates into ethical considerations centered around the integration of environmental consciousness within educational frameworks. Tagore's philosophy, which advocates for a symbiotic relationship between humanity and nature, emphasizes the moral imperative to foster an educational ethos that not only imparts knowledge but also instills a deep respect and responsibility towards the environment. Ethical considerations also arise from Tagore's critique of traditional academic boundaries, proposing a holistic educational model that incorporates ethical living and environmental stewardship. This approach encourages the cultivation of values that are crucial for sustainable living, highlighting the ethical obligation of educational institutions to nurture environmentally conscious individuals who are equipped to address contemporary ecological challenges responsibly. The study further explores these dimensions by analyzing the practical implementations at Visva-Bharati University, thereby contributing to a broader understanding of ethical education that harmonizes human progress with ecological balance.

CONCLUSION

Tagore's holistic philosophy, exemplified

through the establishment of Visva-Bharati University, enriches the conversation by underscoring the interconnectedness of humanity and nature. His vision emphasizes the integration of environmental consciousness into education, extending beyond the mere acquisition of knowledge to introduce values, ethical considerations, and a deep respect for the environment. This exploration has delved into the ways Tagore's insights, drawn from his literary, educational, and philosophical works, contribute to shaping modern approaches to environmental education. Tagore's belief in the arts and literature as powerful tools for cultivating ecological awareness, his emphasis on experiential learning, and his advocacy for ethical living align seamlessly with contemporary efforts to address global environmental challenges. His vision encourages educators to adopt interdisciplinary and culturally relevant approaches, fostering a comprehensive understanding of the environment. Furthermore, Tagore's influence extends to the global discourse on sustainability, impacting policies and initiatives that recognize the need for a holistic and values-based education to create a generation capable of addressing complex environmental issues. As the world grapples with pressing environmental concerns, Tagore's vision serves as a source of inspiration and guidance for educators, policymakers, and researchers. It prompts a reconsideration of pedagogical approaches, urging a shift towards transformative education that not only imparts knowledge but also nurtures a deep and abiding connection with the natural world. Tagore's insights,

rooted in a rich cultural and philosophical heritage, offer a blueprint for cultivating responsible ecological practices, ethical values, and a holistic perspective that can guide contemporary educational practices towards a more sustainable and harmonious future. Ultimately, Rabindranath Tagore's vision stands as a testament to the enduring power of education to shape the consciousness of individuals and societies, encouraging a profound reimagining of humanity's relationship with the environment.

REFERENCES

Bandyopadhyay, D. (2019). *Rabindranath Tagore*. Rupa Publication.

Berebon, C. (2023). Tagore's Philosophy of Man and Nature: A Study in Environmental Ethics. *International Journal of Environmental Pollution and Environmental Modelling*, *2*, 104–113.

Bhattacharya, S. (2020). Rabindranath Tagore's Vision of Education: A Humanistic Approach. *International Journal of Humanities and Social Sciences*, 9(1), 87-96.

Dasgupta, S., & Banerjee, P. (2018). Rabindranath Tagore's Educational Ideals: Nurturing Creativity and Imagination in Learning. *International Journal of Educational Research and Development*, 7(2), 87-95.

Dasgupta, S., Chatterjee, S., & Chatterjee, A. (2017). *Rethinking of Tagore's Views on Society, Development and Environment*.

Dasgupta, U. (2022). A History of Sriniketan: Rabindranath Tagore's Pioneering Work in Rural Reconstruction. India: Paper Missile/Niyogi Books.

Datta, D., Guha, P., & Chattopadhyay, R. N. (2010). Application of criteria and indicators in community based sustainable mangrove management in the Sunderbans, India. *Ocean &*

Coastal Management, 53(8), 468-477. https://doi.org/10.1016/j.ocecoaman.2010.06.007

Datta, R., & Seely, C. (2009). *Celebrating Tagore:* A *Collection of Essays*. Allied Publishers.

Garai, A. (2023). Environmental Thought of Other Philosopher vs. Tagore's thought. *Journal of Advances in Education and Philosophy*. https://doi.org/10.36348/jaep.2023.v07i10.00 3

Gupta, K. S. (2016). *The Philosophy of Rabindranath Tagore*. Routledge.

Home, D., & Robinson, A. (1995). Einstein and Tagore: Man, nature and mysticism. *Journal of Consciousness Studies*, *2*(2).

Lopresti, M. S. (2007). The Philosophy of Rabindranath Tagore (review). *Philosophy East a n d W e s t* , 1 , 1 4 7 – 1 5 2 . https://doi.org/10.1353/pew.2008.0006

Quayum, Mohammad. (2014). Rabindranath Tagore: A Biographical Essay.

Rabindranath Tagore: His Life and Thought. (2016). In *The Philosophy of Rabindranath Tagore* (pp. 1-17). Routledge. http://dx.doi.org/10.4324/9781315554709-1 Roy, P. (2013). *Educational Thoughts and Philosophy of Rabindranath Tagore*. LAP Lambert

Sarkar, S., & Ghosh, C. (2015). Environment and Development: A Visit to the World of Tagore. *International Journal of Inclusive Development*, *2*, 23–27.

Academic Publishing.

Sen, S., & Das, P. (2017). Rabindranath Tagore's Influence on Environmental Education: A Critical Analysis. *Journal of Environmental Education*, 48(3), 206-214.

Shodiq A Kuntoro Supardi. (2018). Ki Hadjar Dewantara and Rabindranath Tagore's thought about education. *JSS: Jurnal Studi* Sosial, 14(1), 48-62. https://doi.org/ 10.21831/jss.v14i1.21653 Tagore, S. (2008). Tagore's Conception of Cosmopolitanism: A Reconstruction. University of Toronto Quarterly, 77(4),

1070-1084. https://doi.org/10.3138/ utq.77.4.1070 Tagore. (2010). Inspiring Thoughts By Rabindranath Tagore.

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Bishnupriya Manipuri Language a Dialect or Creole of Bengali: An Analytical Overview

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The study is done with an objective whether the Bishnupriya Manipuri language is a creole or dialect of Bengali and for that purpose some secondary sources of data were explored and along with that a linguistic comparison was done for verifying the structure of both the languages. To give an extended look into the Bishnupriya Manipuri language some other languages Hindi and Marathi were also explore to a limited extent. In the study it was explored and found that the language has no similarities in terms of structure and vocabulary except for the fact that both the languages are of similar Indo-Aryan linguistic group, hence the inclusion of some Sanskrit words or modified or corrupted Sanskrit words are seen commonly used in both the languages. Hence, it prominent from the study that the Bishnupriya Manipuri is not a creole of Bengali or any other language and it's an independent language of its own type.

Keywords: Bishnupriya Manipuri, Language, Creole, Bengali, independent.

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INTRODUCTION

The Bishnupriya Manipuri language is an endangered language spoken by the endangered Bishnupriya Manipuri community people in India and Bangladesh. The Bishnupriya Manipuri Language is an Indo-Aryan Language group and Bengali is also of the same stock. The study here refers to the word creole used after the Bishnupriya Manipuri language in the UNESCO's list of endangered languages. If it is assumed that the Bishnupriya Manipuri Language is a creole or dialect of Bengali then the study here explores some aspects of both the languages and some comparative cultural backgrounds that both of these communities belong to. As the study is related to studying about Bishnupriya Manipuri endangered language, hence more emphasis is given on the Bishnupriya Manipuri language. Again, from some primary investigation it is also seen that the Bishnupriya Manipuri language is recognized

by the government of Assam and Tripura. $^{\text{\tiny WL\,1&3}}$ The honorable Supreme Court of India on its landmark judgment on 08.03.2003 recognizes Bishnupriya Manipuris to use the Manipuri as suffix or prefix to Bishnupriya. WL6 The term Manipuri is not merely a language but it is about the culture that the term Manipuri refers to and also about its historical connection with the Mahabharata and Pancha Pandav's (Nath R.M. 1948). As both the languages belong to the similar stock of language group, hence they have some commonality in them but due to their origin of development both the languages have their own significance.

REVIEW OF THE RELATED LITERATURE

Nath R.M. (1948) in his book "Background of Assamese Culture" mentioned about Bishupriya Manipuris as the 1st ruling race of Manipur (P. 83) and he also mentioned about the historical connection of Manipur with the 3rd Pandava Prince Arjuna, descendent of whom is Babrubahana (P.85). It is needless to

say that the mentioned Bishnupriya or Kala Chai language of the then Manipur is now known as Bishnupriya Manipuri Language.

Sinha K.P. (1986) studied the Bishnupriya Manipuri language closely and published a dictionary of the language having more than 30,000 words of which most of the words are Tatbhava and Tatsama. The dictionary also contains pure Bishnupriya Manipuri words. In his work he explained the nature of the language with influence of several languages such as Bengali and Assamese on the Bishnupriya Manipuri language.

Sinha B.G. (2020) in his study observed the struggle of the Bishnupriya Manipuri freedom fighters from India and Bangladesh. He studied not the contribution of the people of the community in the freedom struggle of India but also studied the struggle and contribution of the community in Bangladesh freedom struggle from the clutches of Pakistan. Among the freedom movements no tax movement. non-cooperation movement etc. are significant across the land of India and current Bangladesh.

Sinha & Sinha (2022) in their study observed that Shyamakanta Sinha, teacher by profession was among the significant freedom fighters from Patharkandi, Assam also hails from the Bishnupriya Manipuri community.

Sinha R. (2022), in his book "Bishnupriya

Manipuri Bhashatattar Yari" on Page No 65 studied that the Bishnupriya Manipuri language has 8000 pure Bishnupriya Manipuri words which has no relation or similarity with Assamese, Bengali and Oriya. He also gave several important references and reviewed many important literature related to the language and the community history. In his book he compared many words of Bishnupriya Manipuri origin with that of Sanskrit, Prakrit, Udiya, Marathi, Bengali and Assamese and claimed and placed the language as totally an independent language and not any dialect or creole of Bengali or Assamese or any other language. In his book cited an interesting comparison of Bengali and Bishnupriya Manipuri language for a similar sentence to show the difference of both the languages which were taken from the book of renowned Historian and Linguist Suniti Kumar Chattapadday. The sentences are as stated below:

Ancient Bengali: Gaan Gahiya Naw Bahiya Ke Aishai Parahi.

Medieval Bengali: Gaan Gyaya Nao Baya ke Ashye pore.

Modern Bengali: Gaan Geye Tari Beye ke Aase

Bishnupriya Manipuri: Ela Diya Nou Beya Kungo Aaher Pargot.

Rabikanta Sinha also presented some comparative sentences of Brajabhasha Souroshreni and Bishnupriya Manipuri as stated below:

Brajabhasha (Souroshreni)

1. Nun Diyo Nek So

2. Kit Kun Jaar He?

3. Tu Kob Awego?

4. Ghar Kon Kon He Re?

Bishnupriya Manipuri

Nakkhani Nun De.

Kurang Jargatahe?

Ti Kumbaka Aiteigo?

Ghore Kungo Kungo Asigohe?

OBJECTIVE

The objective of the study is:

To study the Bishnupriya Manipuri Language is a dialect or creole of Bengali.

Research Questions:

- 1. Is the Bishnupriya Manipuri community a sub-group of Bengali community?
- 2. Is the Bishnupriya Manipuri language a dialect or creole of Bengali?

RESEARCH METHODOLOGY

For comparison of Bengali, English, Hindi, Marathi and Bishnupriya Manipuri languages a table is used which is divided into three groups based upon three main tenses. The languages Hindi an Marathi are also taken into consideration to understand the structure of the Bishnupriya Manipuri language in a more

suitable way. In the first two sentences the subjects are different only representing Masculine and feminine gender. In the 3^{rd} and 4^{th} sentences Singular and Plural Subjects are used and in the 5^{th} and 6^{th} sentences two interrogative sentences with Masculine and feminine genders as subjects are used. This table is made to identify and show the basic structural difference and the difference in the words used in all these languages in a small but self-explanatory style.

RESEARCH DISCUSSION

Language Analysis and Interpretation:

Some linguistic connections of the Bishnupriya Manipuri language with Hindi and some dissimilarities with Bengali are provided in the below table:

Table - 1

Sl. No.	BENGALI	ENGLISH	HINDI	BISHNUPRIYA MANIPURI	
1	Se Jacche (Man)	Ta Jarga			
2	Se Jacche (Woman)	She is going?	Wo Ja Rahi Hain	Tei Jeiriga	
3	Ami Jacchi (Singular)	I am going?	Mein Ja Raha Hu	Me Jawriga	
4	Amra Jacchi (Plural)	We are going?	Hum Ja Rahe Hain	Ami Jiyarga	
5	Tumi Ki Korcho? (Singular)	What are you doing?	Tum Kya KarRahe Ho?	Ti Kita Karorta?	
6	Tumra Ki Korcho? (Plural)	What are you doing?	Tumlog Kya Kar Rahe Ho?	Tumi Kita Karoraita?	
		PAST TE	NSE		
1	Se Jacchilo (Man)	He was going	Wo Ja Raha Tha	Ta Janat asil	
2	Se Jacchilo (Woman)	She was going	Wo Ja Rahi Thi	Tei Janit asili	
3	Ami Jacchilam (Singular)	I was going	Main Ja Raha Tha	Me Janit Asilu	
4	Amra Jacchilam (Plural)	We were going	Hum Ja Rahe The	Ami Janit Asilang	
5	Tumi Ki Karchile?	What were you	Tum Kya Kar Rahe The?	Ti Kita Karat Asileta?	
	(Singular)	doing?			
6	Tumra Ki Karchile? (Plural)	What were you doing?	Tumlog Kya Kar Rahe The?	Tumi Kita Karat Asilaita?	

	FUTURE TENSE							
1	Se Jabe (Man)	He will go	Wo Jayega	Ta Jitaiga				
2	Se Jabe (Woman)	She will go	Wo Jayegi	Tei Jitaiga				
3	Ami Jabo (Singular)	I shall go	Main Jayunga	Me Jitauga				
4	Amra Jabo (Plural) We will go		Hum Jayenge	Ami Jitangaiga				
5	Tumi Ki Karbe? What will you		Tum Kya Karoge?	Ti Kita Kartei?				
	(Singular) do?							
6	Tumra Ki Karbe? What will you		Tumlog Kya Karoge?	Tumi Kita Kartarai?				
	(Plural)	do?						

In the 1st and in the 2nd sentences of the 1st table, different genders are used as subjects and the pattern shows that in Bengali two words are used, in English 3 Words, in Hindi 4 words and but in Bishnupriya Manipuri only 2 (two) words are used.

Though in both Bengali and Bishnupriya in both the 1st and 2nd sentences two words were used but it is clearly visible that the verbs became different with the change in the gender in the Bishnupriya Manipuri sentences but not in Bengali. Moreover, the verbs remain the same in both English and Bengali languages, but in Hindi and Bishnupriya Manipuri only the verbs changes with the change in the gender.

In the 1st and the 2nd sentences, in both present and past forms, the verbs are again changing similar to Hindi and different from Bengali and English, whereas in the case of future tense, the verbs are not changing like Bengali and English and different from Hindi in this case.

In the 3rd and the 4th sentences also a change in the verbs is visible when the subjects are changing from Singular to plural in all three forms of tenses. The change in the verbs due to the change in the number of the subject is visible only in Hindi and Bishnupriya Manipuri whereas in English and Bengali the verbs remain the same. Whereas the numbers

of words used for these sentences in case of Present tense in Bengali is 2, in English 3, in Hindi 4 and in Bishnupriya it is 2 only. In Past tense, the numbers of words used are: 2 in Bengali, 3 in English, 4 in Hindi and 3 in Bishnupriya Manipuri. In Future tense the numbers of words used are: 2 in Bengali, 3 in English, 2 in Hindi and 2 in Bishnupriya Manipuri.

In case of the 5th and the 6th sentences, in all the forms of tenses, the verbs are not changing in Bengali and English. But again in Hindi and Bishnupriya Manipuri, the verbs are changing. The numbers of words used in present tense are: Bengali 3, English 4, Hindi 5 and 3 in Bishnupriya Manipuri. In the Past tense, the numbers of words used in Bengali are 3, English 4, Hindi 5 and Bishnupriya Manipuri 4. From the study of the above basic sentences of the four languages it is prominent that the words used in all of those sentences are totally different from each other, the use of verbs of Bishnupriya Manipuri language are somewhat showing similar changing patterns with Hindi in accordance with gender, tense and number. But the number of words used for expressing a meaningful sentence with similar meaning the Bishnupriya Manipuri language uses quite less number of words than the other three languages.

Table - 2

S. No.	BENGALI	ENGLISH	BISHNUPRIYA MANIPURI
		PRESENT TENSE	
1	Se Jacche (Man)	He is going?	Ta Jarga
2	Se Jacche (Woman)	She is going?	Tei Jeiriga
3	Ami Jacchi (Singular)	I am going?	Me Jawriga
4	Amra Jacchi (Plural)	We are going?	Ami Jiyarga
5	Tumi Ki Korcho? (Singular)	What are you doing?	Ti Kita Karorta?
6	Tumra Ki Korcho? (Plural)	What are you doing?	Tumi Kita Karoraita?
		PAST TENSE	
1	Se Jacchilo (Man)	He was going	Ta Janat asil
2	Se Jacchilo (Woman)	She was going	Tei Janit asili
3	Ami Jacchilam (Singular)	I was going	Me Janit Asilu
4	Amra Jacchilam (Plural)	We were going	Ami Janit Asilang
5	Tumi Ki Karchile? (Singular)	What were you doing?	Ti Kita Karat Asileta?
6	Tumra Ki Karchile? (Plural)	What were you doing?	Tumi Kita Karat Asilaita?
		FUTURE TENSE	
1	Se Jabe (Man)	He will go	Ta Jitaiga
2	Se Jabe (Woman)	She will go	Tei Jitaiga
3	Ami Jabo (Singular)	I shall go	Me Jitauga
4	Amra Jabo (Plural)	We will go	Ami Jitangaiga
5	Tumi Ki Karbe? (Singular)	What will you do?	Ti Kita Kartei?
6	Tumra Ki Karbe? (Plural)	What will you do?	Tumi Kita Kartarai?

In the 2nd table same sentences with same tense, gender and number patterns are used with a change and inclusion Hindi to see any similarity or differences with Bishnupriya Manipuri language with Bengali. Moreover, the words of Bishnupriya Manipuri in both the tables are not matching with the words of other languages. But one cannot ignore the fact that languages are dynamic or changeable with place and time. Inclusion and exclusion of words from the same language as per the locality of the population is visible across the

globe. Similarly, as a non-recognized language with very much less speaking population of the language with orthodox and very strict social norms, it is always hard to survive all the features, specially the words of the language in long term and that is also when one after another persecutions, executions, discriminations were done (from religious conversion movements done majorly by Muslims and Christians in Mughal and British rules respectively) by the rulers on the community from time to time which even force

them to migrate from one state to another even nations. To declare such a language dialect or creole of any language without proper depth study is totally unfair.

Another comparative study of some more sentences of Marathi and Bishnupriya Manipuri language with the translation of the meaning in English is as stated below:

Table - 3

S. No.	Category	Marathi	English	BISHNUPRIYA MANIPURI
1	Singular Number with 1 st person	Me Jaat Osen	I will keep going.	Me Jitega Thaitou
2	Plural Number with 1st person	Omohi Jaat Osu	We will keep going.	Ami Jitega Thaitangai
3	Singular Number with 2nd person	Tu Jaat Ososhil	You will keep going.	Ti Jitega Thaitei
4	Plural Number with 2 nd person	Tumahi Jaat Osal	You will keep going.	Tumi Jitega Thaitarai
5	Singular Number with 3 rd person and Masculine gender	To Jat Osel	He will keep going.	Ta Jitega Thaitoi
6	Singular Number with 3 rd person and Feminine gender	Ti Jat Osel	She will keep going.	Tei Jitega Thaitoi
7	Plural Number with Neutral gender	Te Jat Osel	He/She will keep going.	Ugo Jitega Thaitoi

From the above table 3 it is clearly visible that all the sentences are intentionally chosen in the Future Tense form, All the sentences of Marathi and Bishnupriya Manipuris have exactly same number of words. The change of verbs simultaneously with the change of subject in accordance with number and gender do have similar patterns. But at the same time no words in the sentences are exactly matching with each other. From these it can easily be said that the structure of both the languages are quite similar but their words are not matching.

Hence, it can be said that both the languages are of similar class with independent identity. So, if the Marathi language and Bengali are independent languages then the Bishnupriya Manipuri language also an independent language based upon the above study. Moreover, the commonness in physical appearance and the language gives a strong evidence of the community belonging to a nearby race to the northern and western parts of India and with other Aryan races exist in the country.

Table - 4

Category	Bengali	Bishnupriya Manipuri
Language	The dialects of Bengali are quite similar	The structure, number of words,
	with the original Bengali in terms of the	words of the Bengali language and
	use of number of words, similarity in	that of Bishnupriya Manipuri
	words specially the subjects, verbs etc.	language in all the compared
	the structures are also similar among	sentences are different from each
	the dialects. Various majorly known	other. Moreover, Bishnupriya
	dialects of Bengali are: Kantapuri,	Manipuri itself has two dialects of its
	Chatgayya, Sylethi, Dhakaiya,	own called Madaigang (Queens
	Nuakhali, Kelu or pure Bengali.	Language) and Ranirgang (Kings
		language) language.
Caste	Available as Brahman, <i>Ksatriya</i> , <i>Sudra</i>	Only Brahmins and Ksatriyas are
system	and <i>Baisya</i> . All caste categories like	prevailed. Only one caste category for
	General, OBC, MOBC, SC are present.	both Brahmins and Ksatriyas i.e. OBC.
Worshipping	Chanting of Harinam sankirtan at Kali	Daily <i>Arti</i> at early morning named as
Style	Mandirs. Major religious places are	Mangal arti and Arti (Prayer Song) at
	Kali Mandirs and now Ram Krishna	the evening known as <i>Sendha Arti</i> .
	Missions, Satsanga Ashrams.	
Marriages	Purahit chants only Sanskrit Mantras in	In marriages and death ceremonies
and	marriages and Funerals. Funeral or	i.e. the Sraddhas of Bishnupriya
Funerals	Shraddha is usually after a month but	Manipuris usually takes place on the
	now some start practicing it on the 13 th	13 th day from the day of death along
	day as Bishnupriya Manipuris do from	with chanting respective Mantras and
	the starting. Inter-caste marriages are	Slokas by the Purohit or Brahman,
	allowed in Bengali community.	and Harinam Sankirtan.
Major	Shiv, <i>Durga</i> and Kali.	Shiv, Durga, Bishnu, Krishna and
Deities		Jagannath.
Major	Durga Puja, Kali Puja.	Rathyatra, Rasleela, Rakhalleela,
Cultural		"Kartik Niyam Seva of Bhagavat Path",
Practices		Janmastami, Pritwi Pakkho Tarpan,
		Hari Utthan, Gobordhon Puja, Durga
		Puja (Basanti Puja), Bihu (Bohag, Kati,
		Magh).
Food Habits	Eats vegetables, fruits, fish, meat and	Eats only vegetables and limited types
	almost everything.	of fish depending upon different clans.

Clothing	Dhuti for men and saree for women, western clothes and gamcha.	Pehichom (Dhuti), Khuttei or Erufi or Big Gamcha for Men. Western clothes, Angaluri or Langou or Tolofuti and Enafi for women.
Traditional crafts	Agriculture and fishing.	Agriculture and weaving.
Religion	Hindu and Muslim, Christian.	Only Sanatani Hindu Baishnav.
Sports	No significant community special sporting activities prevailed in the community.	Daspachis or Pasha, Narikol Khela and Gilla Khela.

Table 4 Shows some significant and important difference between Bengali and Bishnupriya Manipuri communities in different aspects.



Pic 1: Pulses drying



Pic 2: Preparation for weaving



Pic 3: Traditional Weaving



Pic 4: Daspachis Khela



Pic 5: Gilla in motion1





Pic 6: Gilla in motion2 Pic 7: Players in line for Gilla

Some Pictures depicting the weaving and cultural activites that the Bishnupriya Manipuuri women perform in their day to day lives, the craft of weaving, playing 'Daspachis' or 'Pasha' by aged persons to spent time is not visible in Bengali community or any sub-groups of Bengalis.

In all the above comparative tables the Bishnupriya Manipuri language was compared with English, Bengali (ancient, medieval and modern), Hindi, Marathi and *Prakrit* and in all the cases the language is showing some significant individual characteristics of its own which are quite different than the other compared languages in the case of number of words used in each sentences, structure of the sentences in accordance with the tenses, number, words and gender. The study reveals that the structure, number of words, words of the Bengali language and that of Bishnupriya Manipuri language in all the compared sentences are different from each other. The

verbs used in the Bishnupriya Manipuri languages change with the change in the number, person and gender of the subjects in the sentences and that important pattern is totally missing in Bengali. Hence, from the study it can easily be established that the Bishnupriya Manipuri language is neither a dialect nor a creole of Bengali in any logical sense. But due to fulfilling some personal agendas of some group of people for their political untoward aims they criticize this language and try to underrate and prove it as a dialect or a creole. Some other important things to be cited is that the culture of Bishnupriya Manipuris include the practices of Rathyatra, Rasleela, Rakhalleela, Kartik Niyam Seva of Bhagvat Gita Path. Apart from that the Bishnupriya Manipuri traditional clothe for men is Khuttei or Erufi and that of women is Angaluri or Langou and Enafi which are totally different than that of Bengalis who wear Dhuti for men and share for women. The major Bhagwan that the Bishnupriya Manipuris worship is Bhagwan Bishnu after whom their community is named as Bishnupriya Manipuri. Moreover, Bishnupriya Manipuris worship Bhagwan Bishnu as they follow Baishnavism which means they believe in peace and harmony and for this reason only no terrorist outfits of Bishnupriya Manipuris are seen till date. But Bengalis and the people who speak Bengali dialects such as Nuwakhali, Dhakaiya, Kantapuri, Chatgaiya, Moimonsinghi, Kelu (original form of Bengali), all worship Goddess Durga and Kali as their major deity as they follow or worship Shakta or Shakti for gaining strength and power. In the Bengali and Bengali dialect speaking communities across the states the caste system prevails but it is

totally absent in Bishnupriya Manipuris as all Bishnupriyas are Ksatriyas by 'Borno'. Bishnupriya Manipuris are expert in dancing, singing, arts, crafts like weaving of Bed sheets, Gamchas etc. and these skills are general among Bishnupriya Manipuris. The Bishnupriya Manipuris are Pescatarians irrespective of time and place. On the other hand, the Bengali community and all its sub-groups are Omnivores irrespective of their place and dialect. Bishnupriya Manipuris for their livelihood majorly depend on agriculture in earlier days but now a day's are depending on government jobs, business and agriculture. But the Bengali community is mainly associated with so many professions as per their castes, from fishing to hair cutting to business to sweepers to agriculture to government jobs. The traditional weaving practice at Bengali people households is seen only at the 'Tanti' sub-groups of Bengalis but this practice is not general among all Bengalis. Among the various dialect speakers of Bengalis, they resemble among themselves in case of worshipping, caste system, food habits, clothes and traditional craftsmanship. So, having all these stated differences from the language perspective to culture, cultural practices to worshipping processes and deities. Apart from that the community has some major sporting activities which are generally not visible in major communities across the globe.

Apart from the above cited differences some more differences are observed in the study which adds up some more difference in the structure of the language are the use of words starting with the letter 'nga' which comes after the letter 'gha'. In Bishnupriya Manipuri some words starts with 'nga' such 'ngakkhi' means

clean or 'Parishkar' in Bengali, 'ngal' means bright or in Bengali 'Ujjal' and another word 'ngakorani' means to forgive in Bengali 'kshama'. But in Bengali and its dialects no such words is there which starts with the letter 'nga'. Apart from those some words such as to describe the "human feeling of neither hot nor cold", in Bengali they use a full sentence to describe which is "Na toh groom na thanda", but in Bishnupriya Manipuri language it is described with just a single word "Umahija". Again the spouse feelings about one another extramarital affair can be stated in Bengali as "Swami strir parakiya samporko bepare sandeho" but in Bishnupriya it is described with just a single word "Khalpal". There are many more examples related to the uniqueness and richness of the language which is yet to be explored. Thus from the study it is easily understandable that the basic structure of Bishnupriya Manipuri language has no resemblance with Bengali and the cultures of both these communities are hugely different from each other. Thus, it establishes the fact that the Bishnupriya Manipuri is a different community by itself and not a sub-group of Bengali community in any sense and also the Bishnupriya Manipuri is totally a different language than Bengali in every sense, the only similarity both these languages share is the source of origin i.e. Sanskrit. The Bishnupriya Manipuris and the Bengalis in most of the states are sharing similar geographical locations, interchange of words are seen in certain limit is visible in both languages. This exchange of words is also visible in other northeastern and eastern languages like Bengali-Assamese, Assamese-Naga, Bengali-Odiya, Odiya-Hindi and in other northern languages

like U.P. Bihari, Hariyanvi, Punjabi, Marwari and Marathi connecting India.

CONCLUSION AND SUGGESTIONS FOR POLICY IMPLICATIONS

As *Prakrit* then the Sanskrit is the mother of all the major languages spoken in India and if the interchange or the exchange of words is considered among the languages then the connections established a major link between Bishnupriya Manipuri-Assamese-Bengali-Odiya-Bihari-Bhojpuri-Hariyanvi-Punjabi-Rajasthani-Gujrathi-Marathi as native Indians, thus establishing Bishnupriya Manipuri as an ethnic group of India. In the list Bishnupriya Manipuri establishes stronger link with Hindi and Marathi than Assamese or Bengali. This is obviously due to the source of origin of all these languages is Sanskrit and Prakrit and also the historical origin of the community. The comparative study expresses one more significant similarity of the Bishnupriya Manipuri with Marathi about the same number of words usage to the change of verbs in accordance with the change in number, gender and person of the subjects involved in the sentences. But even though the number of words used in Marathi sentences and that of Bishnupriya Manipuri are quite same in all cases even then each and every words used in both the languages are different in spelling and pronunciation and this difference is establishing Bishnupriya Manipuri as a separate independent language and not a creole or dialect of Bengali in any sense.

SUGGESTIONS

(i) To protect the ethnicity and the indigenousness of the community the respective state and central government can make some arrangement of their land and

cultural security.

- (ii) Making some arrangements of teaching learning of the Bishnupriya Manipuri language from lower primary to university level can be beneficial in protecting their language and culture.
- (iii) By giving some political reservation status also or by upgrading the Bishnupriya Manipuri Development Council (BMDC) to a satellite council for the Bishnupriya Manipuris in areas where this ethnic endangered group is concentrated can also lead to the development of the community.

FURTHER STUDIES

- (i) Ethnic profile of the community can be studied in details.
- (ii) Comparative study of the socio-economic status of the Bishnupriya Manipuri Ethnic community across the nation can be of great importance and benefit for this endangered community.

NOTES AND REFERENCES

Bengali community: In the study Bengali community generally refers to the Bengali Hindu community present in India, and Bangladesh.

Sylhethi: A dialect of Bengali, particularly taken from the area of Patharkandi where both Bishnupriya and Bengalis are residing.

Bishnupriya Manipuri community: In the study Bishnupriya Manipuri community refers to the Bishnupriya Manipuri ethnic endangered community living in India, and Bangladesh.

Daspachis: Daspachis or Pasha specially played in the month of Baishakh during the days of Bohag Bihu.

Gilla: Another game is known as *Gilla*, where a piece of wood exactly oval shaped and approx.

1 ft length and 6-8 inches breadth taken from a wood known as '*Chowr*' and played in 'Mondops' only during special occasions. The game is of aiming objects placed at either sides of the square shaped '*Mondops*'.

Narikol Khela: One more game played during Bihu is 'Narikol Khela', which is quite like Rugby but the difference is here the involved players would try to grasp the oiled Narikol or the coconut with their bare hands and have to hold their grip until all others become tired and stop getting the coconut.

Angaluri or Langou or Tolofuti and Enafi for lower and upper parts of the women body respectively.

Harinam Sankirtan of Bishnupriya Manipuri: It includes depiction of various Leelas or events of Bhagwan are practiced in synchronization with Dhak and Kartan and chorus of Singers in the form of drama and cultural presentation with emotions of prayer to the Bhagwan. In the chorus of singers major roles played by the respective Ishalpa and Dwars. Bishnupriya Manipuri follows endogamy in their marriages.

Pescatarians: People who eat only vegetables, fruits and selective fish.

Bishnupriya Manipuri language authors published two dictionaries of their language: (1) "Bishnupriya Manipuri-English" by Dr. Kaliprasad Sinha bearing ISBN- 978-81-955378-3-9 in 2022. Of this dictionary the author studied and compiled 30,000 words of Bishnupriya Manipuri (in the h-page of the introduction part). Moreover, the author also mentioned that out of these 30,000 words, 8000 words of Bishnupriya Manipuri are neither used in Assamese and Bengali. Rather it has its own two dialects from a long time past. He also

mentioned about G.A. Grierson about the wide difference of the Bishnupriya Manipuri language from both Assamese and Bengali (in the I-page of the introduction part).

(2) "Bishnupriya Manipuri Jatiyo Abhidhan" edited by Dils Lakshindra Sinha, Dr. Santosh Sinha and Anita Sinha bearing ISBN: 978-81-959418-2-7 in the year 2023. The dictionary covers almost 16000 words approximately which are of Bishnupriya Manipuri origin and some Sanskrit origin Tatbhava and Tatsama words.

Declaration

This analysis is based on secondary data and conclusion is based on personal understanding.

REFERENCES

Dunn, M. E. (1992). Gazetteer of Manipur.

Hodson, T. (1975). The Meitheis. Guwahati: Western Book Depoo.

Nath, R. (1948). The Background of Assmese Culture. Calcutta.

Shore, S. J. (1896). My Experience in Manipur and Naga Hills. London: William Clowes and Sons Limited.

Sinha, B. (2020). Bishnupriya Manipuris in Freedom Struggle and Other Movements. Dullavcherra, Sribhumi, Assam: Puspa Publication.

Sinha, D. K. (1986). An Etymological Dictionary of Bishnupriya Manipuris. Calcutta: Culcutta Publication.

Sinha, M. (1968). Manipurer Prachin Itihas. Silchar: Cachar Press.

Sinha, P. N. (2006). History of Manipur. Bishnupriya Manipuri Text book production committee.

Sinha, R. (2022). Bishnupriya Manipurir Bhashatattar Yari. Guwahati.

Sinha, S. (2022). Significant Role of an Eminent Teacher Shyamakanta Sinha from Bishnupriya Manipuri Community in the Freedom Struggle Movement of India. International Journal of Research and Analytical Reviews.

WEBLINKS

https://scert.assam.gov.in/sites/default/file s/swf_utility_folder/departments/scert_med hassu_in_oid_6/how_do_i/level_1/compreh ensive_list_of_textbooks_for_the_academic_y ear_2024-25.pdf

www.https//youtube.be/vk-_bDMON6k (Manipuri & Bishnupriya Manipuri: 100 Years Down the History.

https://kokborokoml.tripura.gov.in/sites/de fault/files/2023-10 / SCHOOL% 20NOTIFICATION%20ALL%20LANGUAGE S.pdf

https://www.google.com/search?q=similarit y+percentage+of+Bengali+with+Sanskrit&sca _esv=24ffb5f5e02c9e2b&sxsrf=ADLYWIJNEZ OsDQ08W5opJSl6QquX8CjrmQ%3A17248580 84182&ei=5D7PZs7cCpmgnesP_rDj0AU&ved =0ahUKEwjO3pSL_ZeIAxUZUGcHHX7YGF oQ4dUDCBA&uact=5&oq=similarity+percen tage+of+Bengali+with+Sanskrit&gs_lp=Egxn d3Mtd2l6LXNlcnAiLnNpbWlsYXJpdHkgcG VyY2VudGFnZSBvZiBCZW5nYWxpIHdpdG ggU2Fuc2tyaXQyBRAhGKABSOZbUPEFWI07cAF4AZABApgB3wKgAZ4tqgEIMC4xNS45 LjO4AQPIAQD4AQGYAgugAoAQwgIKEA AYsAMY1gQYR8ICBxAjGLACGCfCAggQA BiABBiiBMICCBAhGKABGMMEwgIKECEY oAEYwwQYCsICCBAAGKIEGIkFmAMAiA YBkAYIkgcFMS42LjSgB7Ri&sclient=gwswiz-serp

https://www.theguardian.com/news/databl og/2011/apr/15/language-extinctendangered

https://indiankanoon.org/doc/1609634/

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A Co-relational Study of Teaching Experience and Attitude of Teacher Educators Regarding Use of Hardware Educational Technology (H.E.T.) Equipments

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Abstract

It is the fact that present era is the era of technological advancement, where we are using technology in every sphere of life. The field of teachinglearning is no exception to it, where the modern day teaching institutes are using different forms of ICT equipments for communication, creation, dissemination, storage and management of information. It is common to see students using their smart phones for learning during their periods in school and the "flipped classroom" model where learners see A/V lectures at their home and utilize their school time periods for more interactive sessions. Seeking the need and vitality of technology in the modern day teachinglearning process, the National policy on education 2020 has also emphasized on the integration of technology with school curriculum, as well as making teachers well equipped to use it in their classroom teaching.

No technology can lead to advancement in teaching and learning until and unless adopted & integrated adequately by our nation builders i.e. our teachers. This study is also an effort in the similar direction to identify the attitude of teacher educators about Hardware Educational Technologies (H.E.T's) and the co-relation of their teaching experience and attitude regarding using them. The sample consists of N=300 teacher educators' working in various Teacher Training Institutes (T.T.I's) Viz., Govt., University Campus, and Affiliated running B.Ed. courses in U.P. & Uttarakhand. The findings revealed that among the highly experienced (above 15 years of teaching experience), moderately experienced (5-15 years of teaching experience) and low experienced (below5 years' experience), the attitude of moderately experienced teacher educators was found to be most favourable towards use of H.E.T's. It was also revealed that on an average less than 35% of the total teacher educators were utilizing the H.E.T's. The highest rate of utilization was found in the teacher educators belonging to University campus teacher training institutes, where the status of H.E.T's was found to be better than Govt., and affiliated teacher training institutes, this indicates the need of proper availability of these H.E.T's in various other T.T.I's (Teacher Training Institutes).

Keywords: Attitude, Teacher Educators (T.E's), Hardware Educational Technology (H.E.T.), Teacher Training Institute (T.T.I.), Teaching Experience.

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INTRODUCTION

It is generally said that experience makes a person mature in his ideas and brings modifications in his behaviour and attitude. Experience lead to perfection in the job a person is involved; as the experience grow, the person also grow in his thoughts and deeds (Woolsey, 1985). By his growing experience he starts experimentations and reformations in his field of work, which leads to innovations

and explorations in that field. Similarly in the field of teaching, we can say that as a teacher grow in his / her experience; his teaching also gets modified and matured. Experience brings perfection and confidence in the teacher, he starts innovations and experimentations in his teaching to make it more effective and interesting. One of the ways used by the teacher to bring modification and innovation in his teaching is the use of Hardware Educational technologies like Computer, Projector, L.C.D. and OHP etc. (El – H.HA.Q, 1985). By the help of these technologies he desires to make his teaching effective and long - lasting, as it's a well-known fact that the use of H.E.T'S in teaching brings incensement in the learning of students by developing their aural as well as visual senses (Golani, 1982). It was also revealed through studies done in the past that those teachers who used ICT in their classroom teaching were not only able to ameliorate the experience of learning but were also able to aggravate expected outcome through achievements in their pupils (Marshall, 2002). In the same manner it was revealed by (Khan, 2011a77) that e-learning grew as a world phenomenon, hence the teachers using e- learning performed better and thus were required to incorporate the corpus of e- resources lying in any organisation. Khan (2011b, 1252 & 2016, 125-35) paid attention on the requirement of ICT integration and believed that the language laboratory should be considered as a tool for grasping certain language related specific skills, which can be inculcated in the learners through interactive activities. It can be a surplus if the teaching of a teacher is enhanced through the help of sophisticated tools and technology. Even after having the repository of e-resources and rigorous importance paid towards their utilization still several traineeteachers, whether from In-service (Hughes & Huffman, Doering 2008); (Sujo de Montes & Willis 2002) or Pre-service, realize themselves incompetent to incorporate these ICT tools during their classroom hours. The reasons behind these are the incapability and lack of proper training being provided to our preservice, novice, and veteran teachers regarding integrating these technologies in their teaching practices. Gorder (2018) in his study revealed that in the recent past, the main aim of several teachers has been to prepare the students to be aware of using technology, but they themselves were found lacking the skills to do so. Although many factors influence the successful use of technology in teaching but the most crucial among these is the competency and aptitude of our teachers to acquire these ICT related skills as required by their students (Hong, 2021). Several studies are there, where the need for technological proficiency among teacher was given emphasis upon (Rodriguez-Segura & Schueler, 2022; Guillen-Gamez et al., 2020), but the need of professional and technological development do lye, even for teacher educators serving in many Indian Universities. The simplest reason behind the improper orientation and up gradation of these teacher educators is; the concepts and techniques which they have learnt 20 years ago, during their teacher training practices are not relevant to the present social & academic conditions of this rapidly transforming technological society.

It is believed that at the initial stage of his career a teacher usually concentrates more on his topic and hesitates to diverse his attention towards other activities but as he grows in his experience his confidence and command over his topic also gets grown up and he starts moving up towards experimentations and explorations in his classroom. The present study deals in the same direction and is an attempt to trace out the co–relation of teaching experience and attitude of T.E's regarding use of H.E.T. Equipments.

OBJECTIVES

The present study focuses on the following objectives-

i. To trace the attitude of T.E's regarding H.E.T's.

ii. To investigate the co – relation of teaching experience and attitude of T.E's regarding use of H.E.T's.

HYPOTHESES

Taking into consideration the above mentioned objectives, below are the formulated hypotheses:-

(I) There exists no significant difference in the attitude of highly experienced teacher educators and moderately experienced teacher educators regarding use of H.E.T's.

- (ii) There exists no significant difference in the attitude of highly experienced teacher educators and low experienced teacher educators regarding use of H.E.T's.
- (iii) There exists no significant difference in the attitude of moderately experienced teacher educators and low experienced teacher educators regarding use of H.E.T's.

METHODOLOGY

Keeping in view the nature of the study, the descriptive method was chosen for this study. As the study is descriptive in nature the survey method best suits for the collection of the data.

Population

All the teacher educators, teaching in various teacher training institutes viz., Govt., Univ. Campus and Affiliated running B.Ed. courses in Uttar Pradesh and Uttarakhand constituted as the population of this study.

Sample and the Sampling technique

Looking at the adequacy and representative quality of the sample, all the teacher educators i.e. - 300, teaching in the randomly selected 5 Govt. teacher training institutes, 13 University Campus teacher training institutes and 23 affiliated teacher training institutes were drawn as the sample for this study.

Analysis of the data

The data for the analysis was collected by the help of "Hardware Educational Technology Attitude Scale (H.E.T.A.S.)" developed and standardized by the researcher for the present study. The data collected by the relevant tool was analysed by the help of the following tables: -

Table - 1 Mean & S.D. Scores of Highly Experienced T.E's and Moderately Experienced T.E's on Different Dimensions of Hardware Educational Technology Attitude Scale (H.E.T.A.S.)

S.No	Dimensions	High Experienced Teacher Educators (N=90)		Moderately Experienced Teacher Educators (N=114)		ʻt' Value d.f=202
		M	S.D	M	S.D	
1	Attitude towards effectiveness of H.E.T in teaching	24.94	6.95	31.43	7.09	6.56*
2	Attitude towards feasibility of H.E.T	21.91	8.29	30.20	5.72	8.08*
3	Attitude towards utility of H.E.T in education	25.41	9.04	33.91	6.26	7.59*
4	Attitude towards functional convenience of H.E.T	25.10	9.23	33.17	6.33	7.08*
5	Attitude towards physical facilities	19.58	9.61	24.76	8.29	4.05*
6	Attitude towards use of H.E.T in teacher training programme	26.47	5.21	33.99	4.10	11.22*
	Overall Attitude	143.41	38.94	187.46	27.30	9.10*

^{*}Significant at 0.01 level of significance

It is clear from Table-1, that there was significant difference in the attitude of highly experienced T.E's and moderately experienced T.E's on all the different dimensions of hardware educational technology attitude scale. Further analysis of the table show that the mean scores of moderately experienced

T.E's were higher than the mean scores of highly experienced T.E's on all the dimensions, as well as on the overall attitude (t=9.10, p=0.01). It means that the attitude of moderately experienced T.E's was more positive than the highly experienced T.E's towards hardware educational technologies.

Table-2 Mean & S.D. Scores of Highly Experienced T.E's and Low Experienced T.E's on Different Dimensions of Hardware Educational Technology Attitude Scale (H.E.T.A.S.).

S.No	Dimensions	High Experienced Teacher Educators (N=90)		Low Experienced Teacher Educators (N=96)		ʻt' Value d.f=184
		M	S.D	M	S.D	
1	Attitude towards effectiveness of H.E.T in teaching	24.94	6.95	25.30	4.87	0.40
2	Attitude towards feasibility of H.E.T	21.91	8.29	23.70	7.87	1.50
3	Attitude towards utility of H.E.T in education	25.41	9.04	25.91	7.31	0.41
4	Attitude towards functional convenience of H.E.T	25.10	9.23	26.60	7.44	1.21
5	Attitude towards physical facilities	19.58	9.61	21.53	10.62	1.31
6	Attitude towards use of H.E.T in teacher training programme	26.47	5.21	26.65	5.53	0.22
	Overall Attitude	143.41	38.94	149.69	36.35	1.13

A glance of Table-2 clearly depicts that there was no significant difference in the attitude of highly experienced T.E's and low experienced T.E's on all the dimensions of hardware educational technology attitude scale. While compared on the basis of their overall attitude there also existed no significant difference in their attitude (t-1.13, n's.) regarding hardware

educational technologies. It means that the teacher educators belonging to both the groups were having similar attitude regarding effectiveness, feasibility, utility, functional convenience, physical facilities and use of hardware educational technologies in teacher training programme.

Table-3
Mean & S.D. Scores Of Moderately Experienced T.E's and Low Experienced T.E's on
Different Dimensions of Hardware Educational Technology Attitude Scale (H.E.T.A.S.)

	0.0					
		Moderately		Low		
S.No	Dimensions	Experienced		Experienced		't' Value
5.110	Difficusions	Teac		Teac		d.f=184
		Educators		Educators		u.1–104
		(N=114)		(N=96)		
		M	S.D	M	S.D	
1	Attitude towards effectiveness of H.E.T in teaching	31.43	7.09	25.30	4.87	7.39*
2	Attitude towards feasibility of H.E.T	30.20	5.72	23.70	7.87	6.73*
3	Attitude towards utility of H.E.T in education	33.91	6.26	25.91	7.31	8.43*
4	Attitude towards functional convenience of H.E.T	33.17	6.33	26.60	7.44	6.81*
5	Attitude towards physical facilities	24.76	8.29	21.53	10.62	2.42*
6	Attitude towards use of H.E.T in teacher training programme	33.99	4.10	26.65	5.53	10.75*
	Overall Attitude	187.46	27.30	149.69	36.35	8.38*

^{*}Significant at 0.01 level of significance

The data presented in Table-3, reveals that there seems to be significant difference in the attitude of moderately experienced T.E's and low experienced T.E's on all the dimensions of hardware educational technology attitude scale. Further analysis of the table shows that the mean scores of moderately experienced T.E's were higher than the mean scores of low experienced T.E's on all the dimensions of hardware educational technology attitude scale. Significant difference was also observed on the overall attitude of T.E's belonging to both the group (t=8.38, p=0.01). It infers that the attitude of moderately experienced T.E's was more positive than the low experienced T.E's.

FINDINGS OF THE STUDY

The null hypotheses that there exists no significant difference in the attitude of teacher educators towards hardware educational technologies in respect to their experience is partially accepted and partially rejected. The teacher educators were parted in three groups

viz. highly experienced T.E's (15yrs and above) moderately experienced T.E's (5 to 15 yrs.) and low experienced T.E's (below 5 yrs.) according to their length of service. The groups 'wise comparison revealed the following findings.

- (i) Highly experienced T.E's and moderately experienced T.E's differed significantly on their attitude regarding hardware educational technologies. The moderately experienced T.E's were found to be having better attitude towards hardware educational technologies in comparison to their counterparts i.e. highly experienced T.E's.
- (ii) No significant difference was revealed between highly experienced T.E's and low experienced T.E's regarding their attitude on all the dimensions of hardware educational technology attitude scale (HETAS).
- (iii) Significant difference was reported in the attitude of moderately experienced T.E's and low experienced T.E's regarding hardware educational technologies. The attitude of

moderately experienced T.E's was found to be more favourable than the low experienced T.E's.

Among the above - mentioned three groups the attitude of moderately experienced T.E's was found to be the most favourable, towards hardware educational technologies.

DISCUSSION OF THE RESULT

It was found that the attitude of moderately experienced T.E's was more positive than the highly experienced T.E's towards hardware educational technologies. However findings contrary to this were drawn by Woolsey (1985), who found that training and professional experience were the most important elements in attaining a positive attitude towards micro—computers. The reason behind this might be the reluctance of highly experienced teacher educators to use or learn about these technologies due to their growing age factor or due to their inability to bring moderation in their teaching method according to these new technologies.

Whereas no significant difference was observed in the attitude of highly experienced T.E's and low experienced T.E's regarding E.T. equipments, it may be due to the reluctance shown by both the groups toward the use of these E.T. equipments. Whatever the reason may be but both the groups showed similar attitude regarding use of E.T. Equipments.

Findings similar to this were also accredited by Suriyaswongse (1988), who also found that there existed no significant difference in the attitude of faculty members of Open Universities in Thailand towards Media technologies in relation to their teaching experience.

On the other hand, when the moderately experienced T.E's and low experienced T.E's were compared on the basis of their attitude towards E.T. Equipments again the moderately experienced T.E's were found to be having more positive attitude towards E.T. Equipments.

Findings similar to this were also drawn by

Martin (1984) who also found that teaching experience can affect teachers attitude towards the use of computer in the educational process and Chung (1998) who found that teachers who had 2 years or less teaching experience had shown lower attitudes towards the use of computers and watching students to use computers.

It may perhaps be due to the good teaching experience of moderately experienced T.E's on their teaching subjects, which enables them to devote extra time on utilizing hardware educational technologies or learning about these technologies instead of preparing lectures for their classroom teaching unlike the low experienced T.E's who have to devote more time preparing for their class lectures in their respective subjects.

In spite of all this the competency and confidence of moderately experienced T.E's in their classroom teaching, may also had led them to use these technologies more frequently in their classroom and do innovations with these hardware educational technologies, which definitely would have drawn a positive impact on their attitude towards these technologies.

CONCLUSION

Finally we can say that experience may or may not influence the attitude of teacher educators but the thing, which greatly affects the attitude of teachers, is the availability of E.T. Equipments in their departments and the provision of proper training to use them. Similar notions were also given by Zhao et al.(2021) in their studies, who also emphasized on hands on practice and training of teachers for affective technological integration. If these factors are kept in mind and provided to the teachers then there is no doubt that we can make our teachers use these E.T. Equipments and bring moderation in their teaching methods and attitude regarding these equipments. Porter and Graham (2016) also highlighted the issues like lack of resources, training and insufficient time which have

affected technological inclusion by teachers in their respective classrooms. Availability and facility of training regarding use of E.T.Equipments in educational departments can remove the hesitation of teacher educators to incorporate these equipments in their routine teaching-learning process and thus change their negative attitude towards the positive one.

RECOMMENDATIONS

It is therefore recommended to the Government, Eminent Educationists, Policy makers & stakeholders to ensure the proper availability of these Hardware Educational Technologies and other related equipments in all the teacher training institutes with proper training facilities to use them during regular teaching-learning hours, which will make the teachers well acquainted to use these technologies with a positive attitude.

REFERENCES

Chung, K.C., (1998). "An investigation of the application of computers as an educational technology tool in Taiwan senior high schools technology education programs", Ph.D., The Ohio State University, 194p.

EI-Hmaisat, H.A.Q., (1985). "Barriers and facilitators encountered in the use of instructional media by Jordanian General Secondary level teachers in the public schools of Amman", Ph.D., Michigan State University, 225p.

Golani, T.P., (1982). "The use of Audio-Visual aids in the secondary schools of district Thane", Ph.D., Edu., Poona Univ.

Gorder, L., (2018). "A study of teacher perceptions of instructional technology integration in the classroom", Delta Phi Epsil.J., 50(2), 63-76.

Government of India (2020), National Education Policy, Retrieved from https://www.mhrd.gov.in/sites/upload_file s/mhrd/files.pdf

Guillen-Gamez, F.D., Ruiz-Palmero, J., Sanchez-Rivas, E, & Colomo-Magana, E, ICT resources for research: An ANOVA analysis on the digital research skills of higher education teachers comparing the areas of knowledge within each gender. Educ. Inf. Tech., 25(5), 4575-4589.

Hong, X., Zhang, M., & Liu, Q., (2021). Preschool teachers' technology acceptance during the COVID-19: An adapted technology acceptance model, Frontiers in Psychology, 12, 2113, 2021.

Hughes, J.E., & Huffman, D., Doering, (2008). A." Pre-service Teachers: Are we thinking with Technology? Journal of Research on Technology in Education, 35(3), 342-361.

Khan, Intakhab A., (2011). "Challenges of Teaching/Learning English and Management", GJHSS, 11(8), p77.

Khan, I.A., (2011). "Learning difficulties in English: Diagnosis and pedagogy in Saudi Arabia"., Educational Research, 2, 1248-1257,

Khan, Intakhab A., (2016). "Effectiveness of Elearning for the teaching of English: A study of Comparative strategies, Advances in language and literary studies, Vol. 7No.3, pp.125-135 a.

Khan A.I. & Anis Jahan, (2018). "Teacher Educators' need of e-training in India", Review of Research, UGC approved Journal no. 48514, ISSN: 2249-894X, Volume-7, Issue-10, July. www.Ibp world

Marshall, J., (2002). Learning with technology. Evidence that technology can, and does, support learning, 6, 24-76.

Martin, E.P., (1984). "Teacher Attitudes toward the use of computers in the educational process", Ed. D., Texas A & I University, 243p.

Porter, W.W., & Graham, C.R. (2016). Institutional drivers and barriers to faculty adoption of blended learning in higher education, British Journal of Educational Technology, 47(4), 748-762.

Priyamvada and Deepshikha, (2024). "Exploring the perceptions of K-12 teachers towards Ed-Tech tools" Research Article, I.J.E.T, N.C.E.R.T, Vol.6, Issue2, July.

Rodriguez-Segura, D., & Schueler, B.E., (2022). Can learning be measured by phone? Evidence from Kenya, Economics of Education Review, 90, 102-309.

Sujo de Montes, L., Willis, E.M., (2002). Does requiring a technology course in pre-service teacher education affect student teacher's technology use in the classroom? Journal of computing in Teacher Education, 18(3), 76-80.

Suriyaswongse, Suteera, (1988). "Attitudes of faculty members ion the Open Universities in Thailand toward media technologies", Ph. D., University of North Texas, 111p.

Woolsey, Terence M., (1985). "The effect of classroom experience with microcomputers on attitude toward use of microcomputers education in Fairfax country schools, Virginia", Ph. D., University of Virginia, 181p.

Zhao, Y., Pugh, K., Sheldon. S., & Byers, J. L., (2021). Conditions for classroom technology innovations, Teachers college record, 104(3), 482-515.

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Participatory Learning Practices For Life Skill Development: Reflective Review Analysis

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Abstract

Education is an integral part of the life of the society and it should be integrated with community life. To give common man insight through education, a well-balanced, scientifically based education is essential. Life skills are a set of abilities which help individuals to live a fruitful life. Life skills help individuals to decide what they have to do and how to do by translating attitudes, values and knowledge in actual abilities. Group work, brain storming, role play, games, and debates are the different methods normally used to assist acquisition of skills. Intrinsic motivation and intelligence is most effectively fostered through participatory learning. It enables the learner to develop the habits of mind needed to continually reconstruct their understanding and for helping disposition for social cooperation, and an appreciation of aesthetic experiences. The teacher access facilitator in participatory learning process. The facilitator should be expert in team building, planning suitable strategies, using conflict resolution and group dynamics along with subject competency. In setting groups, a facilitator immediately determines what the group knows so the group can proceed to construct on that knowledge. Participatory pedagogical model has a significant effect on the experience of the students (Goria et.al., 2023). Participatory practices plays a vital role in enhancing the achievement of the work in a better way when compared with the individual Participatory Learning has significant impact to students. So, participatory curriculum should be flexible and adaptable and appropriate at different levels of resource availability. It should be based on self-help principle, justice principle, self-reliance principle, partnership principle and basic principle.

Key Words: Participatory Learning Practices, Life Skill.

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INTRODUCTION

Participatory learning includes a set of teaching strategies in which learners actively engage in the learning situations with the assistance of the teacher. Participatory activities include learning games, small group discussions, role-playing and simulations, problemsolving situations, think-pair-share technique, and collaborative learning. Experiential learning is the key point of participatory learning methods that permits the young people feel, thing and out of their comfort zone in order to challenge stereo types and become actively engaged in their personal growth whilst developing key life skills. The essential features of participatory learning are:

- ❖ Active participation and learner initiated.
- $\clubsuit \ \ \, \text{Emphasis on process and holistic approach}. \\$

- ❖ Based on real life situations and experiential learning. Focused on learning by doing, using intercultural connections, and creating empathy.
- ❖ Voluntary involvement and ideally open access.
- Practice values and skills needed for democratic life.
- ❖ Balanced interaction between knowledge, values, attitudes and skills- dimensions of learning.
- ❖ Individual and group learning linking, making connections at local, regional, national, and international level.

Features of Participatory Learning

❖ Enhance learner participation and involvement and so promote their interest and motivation to learn.

- ❖ Involves students in active learning rather than passive listening.
- Frequent and immediate feedback provide to students.
- ❖ Development of higher order thinking skills and competencies such as critical thinking, problem solving, and communication results in deeper learning.
- ❖ Master the concepts and application of what is learnt.
- Monitor own learning and take greater responsibility over it.
- Spirit of team work, collaborative activities, collective responsibility and interpersonal skills get enhanced.
- Makes opportunities for differentiated instruction.
- Promotes deeper understanding of knowledge.

In participatory learning, learners have the opportunity to actively involve in their learning situation. Here learners interact with the learning materials, observe, make decisions explore and share their views and ideas, learn in groups, investigate, and solve practical problems. These are experiential as pupils learn by doing some activities. As participatory learning takes account of learners' abilities, interest, needs, age, background, and experiences, including special needs it is also called learner centered learning or active learning.

Teacher: In Participatory Learning Process
The teacher plays a crucial role in creating
lessons and measuring how much information
the students learn. The teacher access facilitator
in participatory learning process. The
facilitator might not be an expert in a particular

discipline but have special training in group dynamics, planning suitable strategies and building teams. While setting groups, the facilitators can immediately determine what the group knows so the group can proceed to build on that knowledge. The teacher should play the major roles:

- ❖ Make the structure of the learning environment.
- ❖ Assist the learning process viz., raising ❖ probing questions, illustrations, cite relevant examples.
- Connect the teaching to the day to day life experience.
- Use multi medias and materials.
- Use variety of techniques within the lesson such as learning in groups.
- Use pupil's ideas and experiences.
- ❖ Differentiate tasks: structure and organize tasks in relation to the various learning situations.
- Continuous assessment and monitoring of the learners during teaching learning process.
- Provide constructive feedback.
- Encourage pupil participation through warm, friendly, nurturing environment.

Personal and Professional Qualities needed for the Teacher in Participatory Learning

- ❖ Subject competency and passion for teaching.
- ❖ Well preparation and high organizational skills.
- * Have effective skill of communication.
- ❖ Creative and resourceful, reflecting on actions in order to improve.
- Skill of interpersonal relationship to build strong relationships with learners and community.
- ❖ With high professional ethics and moral conduct.

- ❖ Affectionate in character .
- ❖ Have empathy- supportive, understanding and show genuine concern.
- ❖ Humour- create an environment of fun, laughter without any learning compromise.
- ❖ Concern and commitment in profession.

 Attributes of honour: should have honesty, punctuality, cleanliness, and respect of others.

 Guidelines for the Teachers in using the Classroom in Participatory Learning Environment
- Learning styles and strategies: individual and group activities.
- ❖ Experiential learning: Provide opportunity to touch, manipulate, and experiment, this will enable the learner to use their senses to learn effectively.
- Opportunities to learners: ask questions, solve problems and think independently.
- ❖ Differentiated tasks; to help the learner to reach his own pace and realize intended outcomes.
- ❖ Correlate the content across all the learning areas.
- ❖ Extensive discussion: to improve skill of communication and abilities of expression
- Create suitable learning environment.
- ❖ Continuous assessment: to help each learner to make improvement in his learning.

The broad features of participatory learning are well defined objectives, access to a Continuum of Learning Opportunities, Experiencing Real Responsibility, Collaboration beyond the School and Peer Group, Outcomes of Achievement, Regular Review and Evaluation, Connecting to Other Areas of Learning.

Participatory Learning Curriculum
Curriculum development is recognized as a critical element in the success of education.
Curriculum development is more likely to be

effective if it is undertaken using a participatory approach. The participatory curriculum should enhance access and involvement of different state holders in education through the establishment of platforms for negotiation dialogue and collaboration. The curriculum should be flexible and adaptable and appropriate at different levels of resource availability. It should be based on self-help principle, justice principle, self-reliance principle, partnership principle and basic principle.

Studies Related to Participatory Learning Marzano, (2019) made a study on online participatory learning. The findings revealed that online learning and participatory learning have positive effect on learners as increasingly appealing educational approaches. Learners are active throughout the participatory learning programme.

The research article by S Kurt(2022) showed that participatory learning with technology enhances creative construction of learners.

Cahil et.al., (2014) in the study 'Participatory Learning Strategies in Health Education Classes' revealed that participatory learning strategies have maximum student engagement, positive and behavioural outcomes.

Playful practices: Students at Creekview High School Discuss Participatory Learning (Hamilton,2012) showed that students become cognitively and emotionally invested in their learning situation with participatory learning

A Participatory Pedagogical Model for Online Distance Learning (Goria et al; 2023) showed that participatory pedagogical model have a great influence on the experience of the students.

Participatory Learning in Formal Adult Education

Table - 1 Aspects and Author of Literature Related with Participatory Learning and Life Skills

S. No.	Variables/Aspects	Author
1	Participatory practices and leadership skills	Sarawut (2021), Robson et al., (2016)
2	Neighbourhood program and life skills	Obaidalah (2022)
3	Participatory approach and environmental competencies	Anith (2018), Ambili (2010)
4	Self-regulated learning and metacognitive skills	Priti (2020)
5	Cooperative and collaborative learning and thinking skills	Deepa (2012), D'souza, Flavia (2020), Gokhale (1995), Virkar, Saroj (1997), Bhatt, Dipen (2018), Dave Bhavna (2015)
6	Active learning and thinking and social skills	Sugantha (2020), Singh Budh (2016)
7	Participatory approach and life skills	Ritesha (2015), Parmar, Ketan (2019), Nurwalidah (2018), Arunrung (2020), Cahill et al., (2014), Mader (2015), Schulhauser (1990), Ajitoni et al., (2008),
8	Participatory learning program and social skill	Kim, Simon et al., (1996)
9	Participatory learning strategy and social skill	Josiah et al., (2008), Chris Astall (2016)

The above said studies are abstracted to put scenario of participatory learning and life skills related phenomenon as follows.

The research conducted in Saudi Arabia, *Role* of *Neighborhood Programme in Achieving the necessary Life Skills for Adult Learners in Saudi Arabia to Confront of the Covid 19* Crisis (Obaidalah, 2022). Findings of the study showed that the participants in the Learning Program benefited the life skills with high problem solving ability, critical thinking, self awareness and effective communication.

Enhance Students' Leadership Skills Through Teacher Participatory Practices (Sarawut, 2021) aimed at the role of Participatory Action Research to improve leadership skill of students. The study revealed that collaborative working permits for the knowledge transfer and improves the quality of the work in a better way than individual work.

Development of Participatory Learning Activity to enhance life skills for children and youth along the Ladpraow Waterside's community (Arunrung, 2020). The study revealed that media literacy of child and youth in Rimklong Ladpraow is greatly influenced by participatory learning activities.

The study carried out by D'Souza, Flavia (2020) revealed that collaborative techno- enhanced anchored instruction is significantly more

effective than lecturer demonstration method in developing problem-solving skill among Secondary school pupil respective of their references in learning style.

Patel, Priti (2020) made a study on Effect of Self-Regulated Learning Strategies (SRLS). The study revealed that the SRLS programme developed by the investigator was found more effective in enhancing mathematic achievement and metacognitive skills of the experimental group. Sugantha (2020) Impact of Integrated Active Learning (IAL) in Physical Science. The IAL intervention showed a positive statistically significant impact on high and moderate performers' thinking skill ability. The IAL intervention also showed a positive statistically significant impact on social skills in high, moderate, and low performers in Physical Science performance. The IAL constructive learning environment results in positive classroom climate for both early adolescence boys and girls.

Case study among secondary school students in Gujarat on the effect of participatory approaches to English language teaching (Parmar, (2019). The study found that participatory learning tasks were effective in producing authentic communicative situations inside the classroom.

Kumar, (2018) studied *The Effect of Participatory Approach on Developing Environmental Competencies*. Results of the work showed that Participatory Learning Strategies are more effective than Traditional Mode of teaching in enhancing Environmental competencies, Creativity and Problem-Solving skills.

Nurwalidah (2018) found that life skills based strategies on participatory learning were effective in improving writing and reading skills of the subjects of the research.

Bhatt (2018) did a study on activities based on

drama to develop skill of speaking among Secondary level learners. The study revealed that drama based activities to developed speaking skills of ESL learner has proven to be effective in improving skills of speaking of learners keeping in view grammar, fluency, accuracy, and vocabulary.

Chris and Jackie (2016) conducted a study on "Experiences of Using Wiki as a Tool of Participatory Learning. Results of the study indicated that positive relationships, the role of the teacher, and the web2.0 technology are the factors assisting the development of collaborative learning.

Robson et al., (2016) made a study on Participatory Learning in Residential Weekends. The study found that Learning through Participation give immense benefits to students in their learning and career through increased self awareness, team building and leadership skills.

Singh (2016) made a study on ABL on life skill development. The study concluded that there exist significant differences between pretest and posttest of experimental group regarding life skills of students at elementary level. It also showed that development of life skills is greatly influenced by Activity Based Learning.

Vaniya (2015) Enhancement of Creative Writing Ability of Standard IX and found that Approaches using participatory learning was effective in enhancing writing ability of students through revising and revisiting.

Dave, Bhavna (2015) conducted a study on the Effectiveness of Brain Compatible Instructional Intervention on Knowledge Acquisition and Problem-Solving Ability among primary school students. The study revealed the brain compatible intervention program benefitted the students to raise their performance in their physical as well as affective dispositions.

Mader (2015) in his study revealed that generic skills academic performance of the students is greatly influenced by participatory teaching.

Cahill et al., (2014) describes the role of participatory strategies in health education classes and its significant influences on pedagogical choices.

Subita (2013) research article on *Current Educational System Imparting Life Skills Education* revealed that promoting efficient life skills training programme in schools enable individuals to understand their potential and achieve them.

The study conducted by Deepa (2012) on role of co-operative Learning on Problem-Solving, Critical Thinking Ability in Mathematics among Students of Higher Secondary Level revealed that co-operative learning approach is superior to conventional method in developing critical thinking ability, problem solving ability with respect to gender, locality, among high middle and low achievers. The study also revealed that the experimental group had a positive change in attitude towards co-operative learning approach with respect to gender, locality, achievement level.

Meyers (2011) in an Article on Training in Life Skills Through Situated Learning Experiences: An Alternative Model of Instruction. It examined the value and the importance of situated learning over conventional approach of instruction for pre-service teachers. The situated learning mode of teaching have a significant effect and it immerses students in the actual learning settings.

Ambili & Sreejith (2010) In the article they propose participatory learning and action strategy in environmental education and research by reviewing the efficacy of participatory learning and researching model. The approaches and methods to learning and

teaching and research of environmental dimension of any subject must be necessarily active and participatory in nature. This paper also outlined several strategies found effective in engaging students in participatory learning making them experts challenging them to develop their own theory and develop skills in problem solving.

Josiah., Ajiboye and Ajitoni (2008) conducted a study on the topic Effects of Full and Quasi Participatory Learning Strategies on Nigerian Senior Secondary Students' Environmental Knowledge: Implications for Classroom Practice. Participation in small group discussion helped students to learn and remember the material and group activity fostered personal involvement, encouraged cooperation and sensitivity among the participants, and help to clarify knowledge and values.

Ajitoni, et al., (2008) did a research on *Effect of Full and Quasi Participatory Learning Strategies*. Results of the work revealed that learners exposed to participatory learning strategies perform significantly higher than those in the prevailing method. Participatory learning strategies has a potential for effective communication of environmental education message in the classroom.

Virkar (1997) in his study revealed that impact of training through CoRT program on the components of creativity ie., fluency, flexibility and originality was found effective.

Parks et al;(1996) conducted a study on Influence of participatory learning programs. The study revealed learning through Participatory program in school civic education increased self awareness and helped to improve skill of communication among students through actively participating in community services.

In a study conducted and experimented by Gokhale (1995) to find the *role of individual*

learning versus collaborative learning in enhancing critical thinking skills. The study showed that those who involved in participatory learning had showed good performance on the critical thinking test when compared with the students who studied individually.

Schulhauser, C.E (1990) made a study on Critical Thinking Ability and Attitude Towards Reading. The result showed that reading comprehension, attitude towards reading and critical thinking has significantly affected by their participation in literacy discussion groups.

Reflection on participatory learning strategies and attributes of life skills

Participatory learning strategies are the effective tool in enhancing life skills. According to certain studies, participatory learning strategies and practices enhance students' leadership skills, thinking skills and social skills (Sarawt, 2021; Obaidalah, 2022; Robson et al., 2016; Parmar, Ketan 2019; Nurwaladah, 2018; Arunrung, 2020; Cahill et al., 2014; Mader, 2015; Schulhauser, 1990; Virkar, Saroj, 1997; Bhatt, Dipen, 2018). Some studies revealed the effect of cooperative, collaborative, and active learning situations in enhancing life skills (Anith, 2018; Sugantha, 2020; Singh Budh, 2016;

D'souza, Flavia,2020; Gokhale,1995) studies proved that participatory learning is very effective in enhancing life skills among students.

CONCLUSION

The study findings revealed the importance of participatory practices for life skills development. Participatory activities encourage peer tutoring, small group discussions and activities, using concrete materials, open ended questioning, and

learning by doing. Participatory learning practices create joy and fun and voluntary engagement of the learner in the learning situation. Participatory learning practices provides opportunities for each participant of the group for his own learning and the learning of the group. In participatory learning situations, cooperative groups play different roles which lacks in prevailing activity oriented instruction. The teacher's role has changed at the present time, but the importance of teachers and their responsibility of personality building has become more relevant. Without the enhancement of all round abilities and life skills, it is very difficult to walk with the world and to sustain oneself.

REFERENCES

Ambili, G., Sreejith, A. (2010). Efficacy of Participatory Learning and Action for Quality Improvement in Environmental Education and Research. UGC Sponsored National Seminar on Quality Improvement in Educational Research. http://ssrn.com/abstract=1733264 Dipen.P. (2018). Effectiveness of drama-based activities to develop speaking skills of learners at Secondary level. [Doctoral Dessertation, Sardar Patel University]. Shodhganga @ INFLIBNET. http://hdl.handle.net/10603/218534

Dave, Bhavna.(2015). A Study of the Effectiveness of Brain Compatible Instructional Intervention on Knowledge Acquisition and Problem Solving Ability of Students of Upper Primary School. [Doctoral Dessertation, Uiversity of Mumbai]. Shodhganga @ INFLIBNET. http://hdl. handle.net/10603/251059

Deepa, R.P. (2012). Effect of co-operative Learning on Critical Thinking and Problem Solving Ability in Mathematics among Higher Secondary Students [Doctoral Dessertation, Manonmaniam Sundaranar University]. Shodhganga @ INFLIBNET. http://hdl. handle.net/10603/40804

D'Souza, Flavia. (2020). Effect of Collaborative Techno Enhanced Anchored Instruction on Academic Achievement in Physics Problem Solving Skills Among Secondary School Teachers. [Doctoral Dessertation, Manglore University]. Shodhganga @ INFLIBNET. http://hdl.handle.net/10603/340516

Arunrung, Phaphaphasid. (2020). Development of participatory learning activities to enhance life skills for children and youth along the Ladpraow Watersides's community. http://medwelljournals.com/ abstract/doi=ssience.2020.95.102.

Obaidalah, H.A., Sarah, M, A. (2020). The Role of Learning Neighbourhood Programme in Achieving the necessary Life Skills for Adult Learners in Saudi Arabia to Confront Covid19 crisis. Australian Journal of Adult Learning Vol.62, n2, p57-277 Nov.2, July 2022

Mader, Mohamed, J. (2015). Impact of Participatory Teaching on Students' Genetic Skills in Tertiary Education. African Educational Research Journal, v3n3p190-197. http://files.eric.ed.gov/participatory learning/ej1216271

Cahill, Helen., Coffey, Julia., Lester, Leanne., Midford., Ramsden, Robyn., Venning, Lynne. Influences on teachers' use of participatory learning strategies in health education classes. Health Education Journal,v73n6p702-713. http://sagepub.com. ej1044577

Robson, F., Forster, G., & Powell, L. (2016). Participatory Learning in Presidential Weekends: Benefit or Barrier to Learning for the International Student? Innovations in Education and Teaching International, V53, n3, p274-284. https://iopscience. iop.org/ article/10.108

Sarawut., K.& Phrakhru, D. (2021). Teacher Participatory Practices Enhance Students' Leaderships Skills. The Asian Institute of Research, Education Quarterly Reviews Vol.5, No.3,2022:372-386.https://doi.org/ 10.31014/aior.1993.05.03.552

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Flipped Classroom Approach : An Experiment on Teacher Trainees

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Abstract

With the advent of internet, the horizons of academic and pedagogical possibilities have been expanded a lot. One of the advantages is the concept of flipped classroom that appears to fulfil the students' need for autonomy and enhances students' engagement. However, it is necessary to find out whether it really works or it is just an attraction of a novel technology. So, the main objective of the study was to check whether the Flipped Classroom Approach affects academic achievement of the B.Ed. Trainees. The experiment was conducted utilising 'one group, post-test only' design to test the effectiveness of the Flipped Classroom Approach in terms of academic achievement. The sample of the study comprised of 48 B.Ed. Trainees. A teacher-made test was taken at the end of the experiment. The collected data was analysed by employing 'one sampled t-test' by assuming the average score of the whole preliminary examination as the population mean. The results indicate that the Flipped Classroom Approach is effective in the case of the educational achievement of the trainees. The findings and observations of this research conclude that the Flipped Classroom Approach is effective and useful in classroom teaching and bring novelty in traditional teaching. There is a scope of deeper research to investigate the impact of this way of academic discourse on different academic levels and other minute behavioural components.

Keywords: Flipped Classroom, Pre-Service Teacher Training, B.Ed. trainee.

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INTRODUCTION

Numerous studies have shown that the conventional approaches to teaching and learning do not provide substantial results. If the same approach is always employed, then there is no way to establish that any method is important. The teaching and learning process thrives on novel experiences at its core. The phrase "the mediocre teacher tells" was coined by William Arthur Ward (2020), and it is often attributed to him. 'The effective educator offers an explanation, the exceptional educator gives a demonstration and the excellent educator is the one who inspires' William Arthur Ward (2020).

'A conventional course is one in which the majority of the instructions take place within the classroom, and students complete homework exercises outside of class. A flipped classroom, on the other hand, typically begins with students engaging in self-directed online

learning of fundamental ideas prior to the start of class, and then moves on to in-person lessons that place an emphasis on active learning activities such as collaborative group work' Abeysekera & Dawson (2015). 'A search conducted on Google Scholar on July 8, 2020, revealed that the phrases "flipped classroom," "flipped learning," and "inverted classroom" each had around 94,000, 183,000, and 72,000 results, respectively. The flipped classroom technique has seen rapid adoption, notably at institutions of higher education' Lundin et al. (2018). Both the capacities of the flipped classroom; to better handle the issue of student motivation and to foster student active learning contribute to the flipped classroom's theoretical advantage over traditional classes in terms of effectiveness Keengwe et al. (2014). As a result of this, the goals of flipped classrooms are to be both, effective and efficient as well as engaging, so satisfying the

three overarching criteria required of smart learning environments (Spector, 2014).

'According to the idea of self-determination, there are three fundamental universal human cognitive needs: the need for autonomy, the need for relatedness, and the need for competence' (Ryan & Deci, 2000). 'Because flipped students can choose to skip viewing any pre-class content that they have already understood, as well as choose to complete the pre-class work at their own pace and time, a flipped classroom may theoretically satisfy students' need for autonomy better than a traditional classroom does. This is because flipped students have more control over their learning experience' (Sergis et al., 2018). Learners in a flipped classroom also have the freedom to study the material covered in the pre-class as many times as they like before the actual class begins.

'In a flipped classroom, students are encouraged to apply what they have learned in pre-class sessions to solve problems or debate topics during in-person class sessions. This is done in order to maximise the learning that takes place. This has the potential to improve both their sense of competence and their sense of relatedness with their peers, especially when group activities are utilised' (Abeysekera & Dawson, 2015). 'Teachers in flipped classrooms also have extra time during class to provide students with feedback, which helps students comprehend the course material in a more comprehensive manner and boosts students' feelings of competence' (Van Alten et al., 2019). One of these approaches is called "flipping the classroom," and it involves the instructor taking on the role of a guiding mentor while the students learn on their own in their own time and according to their own preferences.

Though the Flipped Classroom Approach is becoming more and more popular, it is necessary to find out whether it really works or it is just an attraction of a novel technology. So,

this research is a humble attempt to find out the impact of Flipped Classroom Approach on the academic achievement of students.

LITERATURE REVIEW

The use of flipped classrooms, as stated by Hosam et al. (2020), has been shown to increase the level of involvement shown by students. It was discovered that the flipped classroom method made it easier for teachers and students to communicate with one another (Mzoughi, 2015). 'The use of high-intensity interaction and collaborative learning formats in a flipped classroom can help students become more adept at problem-solving, as well as encourage the sharing of ideas and participation on the part of the students. As a consequence, it can encourage their growth in all areas' (Feng et al., 2016). According to Xiao, N.; Thor, D.; and Zheng, M. (2021), 'students who preferred the flipped classroom technique spent more time on the assignment, comprehended the material better, and did better on evaluations than students who preferred traditional lectures.' According to Fung et al. (2021), 'the effect of flipping the classroom on students' academic performance and views of the subject remains unclear in mathematics. Additional research revealed that an effective flipped classroom, which resulted in superior academic results than the traditional method, always consisted of discussion, teachers' feedbacks, and peercollaborative work. This was the case regardless of the instructional method being utilised.'

According to the findings of a study that was carried out by Sengul et al. (2021), 'EFL students had favourable attitudes toward both flipped classroom models for writing. However, the students preferred the out-of-class model, and the majority of them stated that they prefer to produce their written work in settings other than classrooms' (Unal et al. 2021) indicated that instructors should increase

their knowledge and abilities regarding utilising flipped classrooms successfully before engaging in a flipped classroom technique in their classrooms. This is necessary before engaging in a flipped classroom method. Saira et al. (2021) conducted a literature evaluation on 33 papers that were published between 2012 and 2020. The statistical findings indicate that there is a range of opinions on the acceptability and applicability of the flipped classroom model in today's contemporary educational setting.

OBJECTIVES OF THE RESEARCH

The main objective of the study was to check whether the Flipped Classroom Approach affects academic achievement of the B.Ed. trainees.

HYPOTHESIS OF THE RESEARCH

The following null hypothesis was carried out to be tested in the present research:

H_{0:} There will be no significant difference between the mean achievement scores of the trainees in 'The Fundaments of Indian Constitution' subject which has been taught using the flipped-classroom approach and the mean achievement score of previous term end examination.

OPERATIONAL DEFINITION OF TERMS USED

Flipped Classroom

In the present research, as a part of implementing Flipped Classroom Approach, trainees were divided into four equal groups; each group needed to prepare their respective topic by their own choice of learning method, then each group presented their topic to their fellow classmates. Three different learning methods were used by four groups as a part of Flipped Classroom Approach which were Model Presentation, Group Discussion and

PowerPoint Presentation. The entire syllabus of the paper was learned by trainees with guidance of faculty members and presentation of fellow classmates.

VARIABLES OF THE STUDY

In the present research, teaching methods consisting teaching through the flipped classroom approach was independent variables.

The achievement scores of the trainees were dependent variables.

OBSERVATIONS OF THE STUDY

The trainees were motivated to learn in the group through the Flipped Classroom Approach.

Learning by Flipped Classroom Approach was found novel as it is less used in the traditional teaching-learning process.

It was observed that trainees can learn by themselves if they are guided and provided with a pleasant learning environment.

POPULATION AND SAMPLE

The flipped Classroom Approach requires certain conditions and study environment like specific time schedule for self study, availability of computer or smart phone to the students, availability of workable quantum and speed of internet, time and so on. Considering such requirements, the researcher has selected the sample purposively as random sample may not fulfil the requirements in the experiment. So, the researcher had selected 48 B.Ed. Trainees of the Institute of Language Teaching, Rajkot as sample of the study.

RESEARCH METHOD

'One group only post-test' design was selected for the experiment in the present research.

'One group only post-test', though, is not

considered to be a strong research design, however, attempt has been made to compute the assumed mean from previous semester results to measure the deviation in the achievement scores.

TOOL USED

The prime objective of the present research was to check the effect of the Flipped Classroom Approach on academic achievement of the B.Ed. trainees. To check this, the researcher has used the question papers of preliminary examination as a research tool. The researcher prepared a 35 marks' question paper having 5 short answered and 6 long answered questions. The question paper matched the

paper style of the regular prelim examinations and the test was also conducted as a regular prelim exam to keep the schedule of the college intact.

EXECUTION OF THE EXPERIMENT

To implement the Flipped Classroom Approach, the trainees who were selected in the sample were assigned different activities and therefore they were divided into four groups, and each group was assigned a topic for self study which was supposed to be presented in front of the whole class as well as other B.Ed. trainees from other colleges. Repeated presentations were the part of flipped classroom action plan. The details are furnished in table below.

Table - 1 Details of Group, Topic and Activities

Group No.	No. of Trainees	Topic	Activity	Duration for Preparation	Presentation frequency
1	12	Indian Constitution: Historical Background and General Introduction	Model Presentation	70 hrs	10 times
2	12	Specific Aspects of the Indian Constitution	Group Discussion	70 hrs	10 times
3	12	The Union Executive and The State Executive of India	Model Presentation	70 hrs	10 times
4	12	The Indian Judicature and Introduction of Constitutional Institutions	PowerPoint Presentation	70 hrs	10 times

Each group needed to prepare their respective topic on their own. The role of the teacher was to guide them once a week. On the final day, all the trainees were to demonstrate their given topic to the rest groups as well as trainees of other B.Ed. Colleges of Rajkot. The trainees learned the whole syllabus on their own and

performed well in the preliminary examination.

DATA ANALYSIS AND INTERPRETATION

After the execution of the experiment, mean, standard deviation and t-value of the data were calculated. The statistical details of the data are given below.

Table - 2 Classification of the Marks Obtained by the Trainees in Preliminary Test on 'The Fundaments of Indian Constitution' Subject

Teaching Approach	Number of Trainees	Mean	Standard Daviation	t-value
Flipped Classroom	48	23.4375	3.8971	5.2129*
Assumed Mean = 20.5052**				

^{*}Significant at 0.01 level.

It can be stated from the above table that the Mean of the scores obtained by the trainees on Preliminary test on 'The fundaments of Indian Constitution' subject taught with the Flipped Classroom Approach was 23.4375 and the Standard Deviation of the same was 3.8971. The assumed Mean counted from the overall achievement of the trainees in the preliminary examination was 20.5052 and t-value was found 5.2129, which is significant at 0.01 level. Thus, the null hypothesis of the study, "There will be no significant difference between the mean achievement scores of the trainees in 'The Fundamentals of Indian Constitution' subject which has been taught using the flippedclassroom approach and the mean achievement score of previous term end examination." was not accepted. This states that the achievement of the trainee taught with a Flipped Classroom Approach was higher. Thus, the Flipped Classroom approach was found effective in comparison to the traditional method of teaching.

FINDINGS

It has been revealed through this research that Flipped Classroom Approach is more effective than the traditional teaching methods in the case of educational achievement of the teacher trainees. Other observations during the experiment indicated that the trainees are capable of learning themselves if provided proper guidance and environment and they feel motivated while learning through this novel approach.

EDUCATIONAL IMPLICATIONS

The following educational implications could be drawn from the findings of the present study.

Flipped Classroom Approach can be effective and useful in class-room teaching to bring novelty.

Flipped Classroom Approach is found useful to increase the interest and concentration of the trainees.

The teachers should be inspired to make some changes from the typical traditional teaching method.

REFERENCES

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom:definition, rationale and a call for research. Higher Education Research & Development, 1-14.

Al_Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: A review of the evidence across disciplines. Educational Technology Research and Development, 68(3), 1017-1051. https://doi.org/10.1007/s11423-019-09718-8

^{**} Assumed Mean is counted from the scores of all the six subjects of the preliminary exam of the B.Ed. Trainees.

Feng, Z. H., Wu, W. C., & Hu, X. Y. (2016). Research on the Coding of Classroom Interaction Analysis in the Flipped Classroom. Journal of Distance Education, 4, 59-64. Retrieved f r o m https://kns.cnki.net/kcms/detail/detail.asp x?dbcode=CJFD&dbname=CJFDLAST2016&f ilename=YCJY201604008&v=kzmv5I3zKgmM dyZ2nyOn9Z0adeS0nW%25mmd2BmSyv%25 mmd2BS1AKow6JTCRwSGPOoZouZldeGG94

Keengwe, S. J., Onchwari, G., & Oigara, J. (2014). Promoting active learning through the flipped classroom model. IGI Global. https://doi.org/10.4018/978-1-4666-4987-3

Lundin, M., Bergviken Rensfeldt, A., Hillman, T., Lantz-Andersson, A., & Peterson, L. (2018). Higher education dominance and siloed knowledge: a systematic review of flipped classroom research. International Journal of Educational Technology in Higher Education, 15(1), Article 20. https://doi.org/10.1186/s41239-018-0101-6

Mzoughi, T. (2015). An investigation of student web activity in a "flipped" introductory physics class. Procedia-Social and Behavioral Sciences, 191, 235-240. https://doi.org/10.1016/j.sbspro.2015.04.558

Ryan, R. M., & Deci, E. L. (2000). Selfdetermination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68

Saira, Fouzia Ajmal, and Muhammad Hafeez. (2021) Critical Review on Flipped Classroom Model Versus Traditional Lecture Method. International Journal of Education and Practice, 9(1), 129-140.

Sengul, F., & Bostanci, H. B. (2021). In-Class versus Out-of-Class Flipped Classroom Models in English as a Foreign Language Writing. Propósitos y Representaciones, 9 (SPE1), 8 5 2 . https://eric.ed.gov/?q=EJ1298354

Sergis, S., Sampson, D. G., & Pelliccione, L. (2018). Investigating the impact of flipped classroom on students' learning experiences: A self-determination theory approach. Computers in Human Behavior, 78, 368-378. chttps://doi.org/10.3102/0034654313500826

Spector, J. M. (2014). Conceptualizing the emerging field of smart learning environments. Smart Learning Environments, Article https://doi.org/10.1186/s40561-014-0002-7

Unal, A., Unal, Z., & Bodur, Y. (2021). Using Flipped Classroom in Middle Schools: Teachers' Perceptions. Journal of Research in Education, 30(2), 90-112. https://eric.ed.gov/?q=EJ1301256&id=EJ130 1256

Van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. Educational Research Review, 28, Article 100281. https://doi.org/10.1016/j.edurev.2019.05.003

Ward, W. A. (2020, January 2).

https://www.brainyquote.com/quotes/william_arth ur_ward_103463. Retrieved from

https://www.brainyquote.com/:

https://www.brainyquote.com/quotes/willi am arthur ward 103463

Xiao, N., Thor, D., & Zheng, M. (2021). Student preferences impact outcome of flipped classroom in dental education: Students favoring flipped classroom benefited more. Education Sciences, 11(4), 150. https://doi.org/10.3390/educsci11040150

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Mobile Phone Addiction and their Psychological Influence on Mental Health

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Abstract

The purpose of this paper to uncover the effect of how mobile phones effect the mental health of a person from a psychological or behavioural or health perspectives. Mobile phone addiction is described as the problematic and excessive use of a mobile phone. Addiction to mobile phones is not a consistent phenomenon, thus some researchers differentiate between addiction to text messages, addiction to voice chats, and addiction to mobile phone features and games. Mental health is a crucial aspect of overall health, and it is essential for maintaining physical health and social effectiveness. It refers to the ability to manage one's emotions, goals, aspirations, and values in everyday situations. It refers to the ability to face and accept life's truths. However, excessive usage of mobile phones causes a variety of psychological, behavioural, and emotional disorders, including restlessness, anxiety, and sadness. So, to overcome the problem of excessive use of mobile phone, we can use many therapies, which can provide good mental health like activity therapies, expressive therapies, Group Therapy and Meditation.

Keywords: Mobile Phone Addiction, Behavioural and Psychological Problems and Mental Health.

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INTRODUCTION

The efficiency of mobile phones in both personal and professional contexts has led to a sharp rise in their use over the past 15 years. Mobile phones have been used for many purposes besides communication, such as playing games and listening to music. Studies have shown that using a mobile phone for email and social networking has helped people meet new people and lessen feelings of loneliness. As a result, people's lives now revolve around their mobile phones. Additionally, mobile phones have been used to help people quit smoking and cure severe mental diseases. However, there are also negative health impacts associated with excessive cell phone use. Some of the negative effects of using a cell phone include headaches, ear pain, warming feelings, migraines, problems concentrating, weariness, dizziness, and face dermatitis, the development of brain

tumours, frustration, and musculoskeletal complaints from prolonged texting. Additionally, it has been hypothesised that electromagnetic radiation can impact an individual's mental well-being. The frequency of traffic accidents has been linked to using a mobile phone while driving. However, other research has recently concentrated on the psychosocial effects of cell phone use. Communication channels have been so dramatically improved that communicating with someone thousands of kilometres away is now a matter of seconds. When the human brain created the portable "mobile phone," the 19th-century invention of the fixed telephone lost its enchantment. The development of mobile phone technology has been phenomenal. The first recognised mobile phone was used by Swedish consumers in 1946. In 1983, Motorola introduced the first cell phone that was actually portable. One

researcher claims that obtaining one billion mobile phone customers took twenty years, obtaining two billion took forty months, and obtaining 3.5 billion took just two years. In 2000, Soderqvist (2008) made an effort to look at the connection between wireless phone use and health issues. Teenagers in Sweden who often used mobile phones reported feeling tired, stressed, having headaches, feeling anxious, having trouble focussing, and having trouble sleeping. Compared to less frequent users, regular wireless phone users reported greater health symptoms and a lower overall health assessment. Agawam (2008) claims that dangerous radiation from cell phones can cause significant alterations in sperm quality, including a reduction in sperm number, viability, motility, morphology, and DNA mutation. Other studies investigated the link between mental health and mobile phone addiction, as well as the factors that contribute to this relationship. The findings demonstrated that mental health was significantly and negatively impacted by cell phone addiction. In other words, there is a higher likelihood of psychological issues among college students who use cell phones. Prior empirical studies have shown that mobile phone addiction is negatively correlated with mental health, which can lead to issues like anxiety, depression, and other psychological disorders (Jun, 2016; Desouky and Abu-Zaid, 2020; Ivanova et al., 2020; Ophir et al., 2020; Perilli et al., 2021; Sümen and Evgin, 2021). These findings are consistent with this one. Thus, our findings add to the body of literature that shows a connection between mental health issues and cell phone addiction. (Yang, Guo, Li, Gan, and Luo, 2023).

MOBILE PHONE ADDICTION

Problematic, functional, and excessive usage of a mobile phone is the hallmark of mobile phone addiction, which is characterised by the following characteristics and symptoms. An overwhelming urge to use a cell phone, make calls, or send texts, manifested as a preoccupation with these activities, along with a need to increase the volume and length of phone conversations and texts. Making longer calls and sending more texts than anticipated, repeatedly trying in vain to reduce or stop the quantity of calls and texts sent, and experiencing withdrawal symptoms like depression, anxiety, and restlessness in response to attempts to reduce or stop the quantity and timing of calls and texts sent, Lying to friends and family about the time and cost of making calls and sending texts, or using the phone as a mood enhancer or to avoid actual issues. Numerous studies differentiate between addiction to voice conversations, addiction to texting and receiving, and addiction to mobile phone games and features since mobile phone addiction is a diverse problem.

MENTAL HEALTH

Mental health is a critical component of one's overall state of health, in addition to being crucial for maintaining physical health and social effectiveness. It has to do with the ability to manage one's emotions, aspirations, goals, and values in daily life. It makes reference to the ability to face and accept life's truths. There are two types of mental health: individual and society. Social factors are ever-changing. Since they are ever-changing, our mental health is impacted by a variety of stressors. The process of adjustment that characterises mental health

includes growth, continuity, compromise, and adaptation. Mental health is defined as an individual's capacity for social and personal adaptability due to the significance of both individual and societal elements. The capacity of a person to adjust to their social and physical surroundings in a harmonious manner is known as mental health. According to Menninger (1945), mental health is the capacity to interact with others and one's environment in a way that maximises satisfaction and efficacy. It is the capacity to maintain composure, alert intelligence, polite social manners, and an optimistic outlook. According to Jahoda and Maria (1958), attitudes towards self-include growth and development, selfactualization, and personality integration. According to Bhatia (1982), maintaining a healthy mental state entails balancing one's sentiments, desires, goals, and ideals in everyday life. Mental and emotional health are essential components of total health in order to successfully manage one's life. According to Agarwal (2007), mental health is a condition of well-being in which people understand their own potential and are able to cope with everyday challenges, boost work productivity, and contribute positively to their communities. According to certain research papers, governments implemented an appropriate health education program in response to the COVID-19 pandemic. Students were forced to study at home or in small groups in their dorm rooms, which boosted their usage of social media and internet time and may have had an impact on their learning and way of life. Although cell phones might make life easier, using them inappropriately can have unfavourable consequences. Take the pervasiveness of cell phone use and the ensuing internet addiction, for example. (Ozturk 2021). According to a different study, students and other community members who use their phones frequently for online purposes experience poor sleep, erratic eating habits, and even feelings of anxiety and depression (Liu et al., 2021). The excessive usage of a phone to avoid reality or generate excitement is known as mobile phone dependence, and its symptoms include withdrawal and salience. (Lam and others, 2019). It included any compulsive behaviour deemed associated with addictions to video games, gambling, retail, or the internet. Oliffe and Chen (2018). Cognitive-emotional control issues, impulsivity, cognitive impairment, social media addiction, shyness, and low selfesteem have all been linked to excessive mobile phone use. (Oviedo-Trespalacios et al., 2019; Volker, 2018).

Additionally, gaining new skills and broadening one's understanding of the inside and outside world require mobile phones. However, overuse of mobile phones can lead to a number of health problems, including headaches, sleeplessness, anxiety, exhaustion, and emotional dysfunction.

SOME RISK FACTOR FOR MOBILE PHONES ADDICTION

There are at superior risk of Mobile Phone addiction are as under:

You suffer from anxiety. You can use the Internet to divert your attention from your uncertainties and worries. Excessive email checking and compulsive Internet and mobile phone use can also be symptoms of an anxiety illness, such as obsessive-compulsive disorder. You are depressed. The Mobile Phone be able

to be a free from feelings of misery, but too much time online may create things not as good as. This addiction additional contributes to pressure, loneliness and being alone.

You have any other addictions Most Internet addicts also have other addictions, such gambling, sex, alcohol, or narcotics.

You lack social support. Social networking sites, direct messaging, and online gaming are common ways for cell phone addicts to make new friends and connect with people more comfortably.

You're an unhappy teenager. You may be unsure of your place in the world, and you may feel more at ease online than with friends in real life.

You are stressed. Although some people use their phones to decompress, this can backfire. Your level of anxiety will increase as you spend more time online.

HEALTH PROBLEMS CAUSED BY MOBILE PHONES

There are adverse health effects of mobile phones as well. Anything that we use excessively has an adverse effect on our health. Overuse of mobile phones can have a number of detrimental effects on one's health. The majority of folks didn't care about their health issues. They were unaware of the negative health effects of cell phone use. The following health issues have been connected to excessive mobile phone use:

Eye Problems: Blue light rays from mobile phones can impair your vision.

Emotional Disability (Anxiety and Depression): An emotional imbalance is caused by excessive cell phone use, which encourages worry and hopelessness.

Sleeplessness: Overuse of mobile phones impairs a person's mental health and results in insomnia.

Physical Problems: Overuse of cell phones can lead to obesity, neck strain, physical discomfort, and illness.

Brain Tumour: Additionally, mobile phones can cause brain tumours; the radiation they emit raises a person's risk of developing a brain tumour.

Hearing Problem: Overuse of mobile phones damages the outer layers of the ear. People have hearing issues as a result

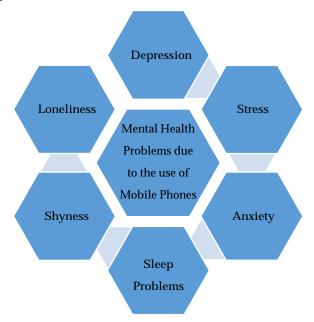


Image - 1 Mental Health Problems due to the use of Mobile Phones (Find out from Google; https://i0.wp.com/babab.net/img/cell-phone-radiation)

THERAPY FOR GOOD MENTAL HEALTH

Activity therapies: Activity therapies, sometimes referred to as occupational therapy and leisure therapy, promote healing through active engagement. One aspect of hobby therapy could be taking walks.

Expressive therapies: Among these therapies are dance therapy, theatre therapy, music therapy, art therapy, and poetry therapy.

Meditation: Emotional conduct and mental health may be affected by a better understanding of mental processes. A 2011 study that integrated three forms of meditation—compassion for others, mindfulness meditation, and concentration meditation—found that meditation enhances one's capacity to recognise one's own emotional patterns as well as those of others, enabling people to handle challenging relationship problems more skilfully.

Biofeedback: Gaining control over physical processes and brainwaves is accomplished through biofeedback. It can be used to improve relaxation, well-being, and other mind-over-body techniques as well as reduce anxiety.

Group therapy: Psychodynamic groups, therapy activity groups, problem-solving groups, support groups (like the Twelve Step program), and psychiatric education groups are a few examples.

Pastoral Counselling: Pastoral therapy, which is administered by religious leaders or other professionals with the necessary training, blends psychological and religious therapies. Psychotherapy: Psychotherapy is the generic term for the scientific treatment of mental health conditions based on current medical knowledge. It includes many different schools, such as dialectical behavioural therapy,

cognitive behavioural therapy, psychoanalysis, and therapy.

CONCLUSION

To conclude, we can say that Mobile Phones also effect the mental being of a person in a positive and negative way. In a positive way, through mobile phones students gain many information from inside and outside the world, communicate with each other and learn many things regarding education which are helpful in long life time. But the excessive use of Mobile Phones, creates many Psychological, behavioural and mental problems like restlessness, anxiety and depression. So, to overcome the problem of excessive use of mobile phone, we can use many therapies, which can provide good mental health like activity therapies, expressive therapies, Group Therapy and Meditation. With the help of these remedies, we can overcome these problems in an effective way. And use the mobile phone in our daily life only in essential fields like for business sector, Education sector or any workplace.

REFERENCES

Agarwal, M. L. (2007). Economical Aspects of the Mental Health System and Mental Health at World place. *Journal of Industrial Psychiatry*, 16 (2), 63-72.

Bhatia, B. D. (1982). Mental Health in Education. *Advanced Educational Psychology*, Sterling Publishers Pvt. Ltd.

Chen, K. H., & Oliffe J. L. (2018). Internet Gaming Disorder: an emergent health issue for men. *Men's Health*, (12), 1151–1159. Doi. 10.1177/1557988318766950.

Dempsey, S., Lyons, S., McCoy S. (2020). Early Mobile Phone ownership: Influencing the Wellbeing of Girls and Boys in Ireland? Children Media, (14), 492-509. Doi: 10.1080/17482798.2020.1725902.

Desouky, D. E. S., and Zaid, A. H. (2020). Mobile phone use pattern and addiction in relation to depression and anxiety. *Journal of East Mediator Health*, 26, 692–699. Doi: 10.26719/emhj.20.043.

Ivanova, A., Gorbaniuk, O., Blachnio, A., Przepiorka, A., Mraka, N., Polishchuk, V., et al. (2020). Mobile Phone Addiction, Phubbing, and Depression among Men and Women: a moderated mediation analysis. *Psychiatry Q.* 91, 655–668. Doi: 10.1007/s11126-020-09723-8. Jahoda and Marie (1958). *Current Concepts of Positive Mental Health*. New York, Basic Books. 8, 45-49.

Jun, S. (2016). The Reciprocal Longitudinal relationships between Mobile Phone Addiction and Depressive Symptoms among Korean Adolescents. *Comput. Human Behaviour*. 58, 179–186. Doi: 10.1016/j.chb.2015.12.061.

Lam, L. T., Peng, Z., & Mai J. (2009). Factors associated with Internet Addiction among Adolescents. *Cyber Psychological. Behaviour*, (12), 551–555.

Liu, S., Zhou W., Wang J., Chen B., & He, G. (2021). Association between mobile phone addiction index and sugar-sweetened food intake in medical college students stratified by sex from Shanghai, China. *Journal of Health and Nutrients*, (13). Doi: 2256. 10.3390/nu13072256. Nehra, R., Kate, N., Grover, S., Khehra, N., & Basu, D. (2012). Does the Excessive use of Mobile Phones in Young Adults Reflect an Emerging Behavioural Addiction? *Journal of Psychology*, 46(4), 177-182.

Ophir, Y., Rosenberg, H., Lipshits, B. Y., and Amichai, H. Y. (2020). *Digital childhood, the*

effects of smartphones and social networking technologies on children's well-being. In ZalkN. Van and C. Monks (Eds.), Online peer engagement in adolescence: positive and negative aspects of online social interaction (pp. 122–139). London: Routledge

Oviedo-Trespalacios, O., Nandavar S., Newton J. D. A., Demant D. (2019). Problematic use of mobile phones in Australia...is it getting worse? *Front. Psychiatry*, 10, (105), 433-440.

Ozturk, F. O. (2021). Internet addiction and psychosocial problems among adolescents during the COVID-19 pandemic: a cross-sectional study. *Arch. Psychiatric Nurs*, (35), 595–601.

Perilli, E., Necozione, S., Bianchini, V., Perazzini, M., Grassi, M., Americo, A., et al. (2021). Mobile phone addiction and mobile phone use in dangerous circumstances: prevalence and correlates in a sample of Italian university students. *Mediterranean J. Clin. Psychol*, 9, 1–16. Doi: 10.13129/2282-1619/MJCP-3014

Shi, M., Zhai, X., Li, S., & Shi Y. (2021). The relationship between physical activity, mobile phone addiction, and irrational procrastination in Chinese college students. *Journal of Public Health*, 18, 5320-5325.

Sümen, A., and Evgin, D. (2021). Social media addiction in high school students: a cross-sectional study examining its relationship with sleep quality and psychological problems. *Child Indic. Res.* 14, 2265–2283. Doi: 10.1007/s12187-021-09838-9.

Thomée, S. (2018). Mobile Phone Use and Mental Health: A Review of the Research that takes a Practical Perspective on Exposure. International Journal of Environmental Research and Public Health, (15) Doi:

10.3390/ijerph15122692.

Volkmer, S. A. (2018). Unhappy and addicted to your phone? - Higher mobile phone use is associated with lower well-being. Journal of Human Behaviour, (93), 210-218. Doi. 10.1016/j.chb.2018.12.015.

Yang, L. L., Guo, C., Li, G. Y., Gan, K. P., and

Luo, J. H. (2023). Mobile Phone Addiction and Mental Health: the Roles of Sleep Quality and Perceived Social Support. Frontiers in Psychology. Doi: 10.3389/fpsyg.2023.1265400. https://i0.wp.com/babab.net/img/cellphone-radiation-facts-about-its-harmfuleffects.jpg

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Innovative Pedagogies in Teacher Education: Teaching Through Literature with Authentic Enrichment and Interactive Engagement

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Abstract

Literature has always been regarded as an effective "organic" tool, used to teach any subject. Authentic enrichment is another significant factor, leading to success in teachers' education. The advent of the internet and higher accessibility towards information resources have made the experience much more integrated for teachers as it has shown to boost active learning methods and cross-cultural interactions and for the same the teachers need to connect more with their students instead of relying on curriculums, especially ones that can be considered as an imitation of Western counterparts. There should be inclusion of reading materials like newspapers, magazine articles, journals outside of the academic sphere, so on and forth and it's evidently clear that teachers and educators need to emphasize grammar, local literary sources, cultural representations and engage personally to break the barriers and stigmas of learning a different language and so it is necessary to structure courses/curriculums with selective readings, ones that motivate personal engagement, enhance reading/writing capabilities and entail the fundamental aspects of the language including grammar, pronunciation, so

Keywords: Authentic enrichment, cross-cultural interactions, cultural representations, personal engagement.

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INTRODUCTION

Literature has always been regarded as an effective "organic" tool, used to teach any subject. Research has previously shown, extensively, as to how literature has the potential of boosting the reader/learner's motivation, when it comes to learning a new topic in an engaging way. It also enhances the language skills & vocabulary of a person, as literature consists of words, phases, idioms, metaphors and other elements, all of which introduces people to the dynamic varieties.

To understand the influence of literature as an innovative pedagogy in teacher education, let us consider literature as a part of an Organic Learning process, as phrased by Michael and Natalie (2011). Organic learning is achieved primarily when the student (teacher) is at the peak of his/her motivation, and places the effort to learn voluntarily. In other words,

research has recorded significant amounts of success when students actually learn for their own gain or benefit, rather than learning for superficial grades or scores. "Dörnyei said the EFL learner imagines an idealized future English-speaking self, based in part on real-life encounters (or lack thereof) with other English speakers and in part on the desire to function in international society.

Dörnyei's framework is based on the 21st Century reality that students (teachers) may need to use their English skills not only with native speakers, but with a wide range of people who speak English as a first or second language" (Michael and Natalie, 2011). This excerpt can be understood in a broader context with literature, as literary texts tend to fictionalize the actual (real) human condition through satire, dramatization, thrills and entertainment. What has been said here is

partly to experience language and secondly to learn it, in order to function in the international community of English speakers.

Authentic enrichment is another significant factor, leading to success in teachers' education. The advent of the internet and higher accessibility towards information resources have made the experience much more integrated for teachers as it has shown to boost active learning methods and crosscultural interactions. "Using the Internet to provide authentic source materials has shown clearly that when the instructional methodology stresses authentic and interactive engagement, it builds confidence and, in turn, produces increases in knowledge on the target culture; and also that studentcentred, active learning, including use of technology and Internet-based cross-cultural interactions, contributes to improvement in learners' English proficiency level (Wu & Marek, 2010)." However the use of literature has invited stark criticism over its efficacy as an organic resource to provide the authentic enrichment or experience. Claudia Ferradas (2009), along with other believers, claims that literature "has little practical application, is often closely connected with a specific cultural context, and it can be idiosyncratic, even subversive."

Even in the Indian context, it is quite vivid to the common observer that Indian people do not talk in the manner portrayed in Western Literature. Words are different and the learning process for many gets complicated as Western literature involves events and ideologies that do not immediately resonate with the Indian mindset. However, after an era of decolonisation, and the adoption of modern elements/culture, Hinglish and some millennial sense of humour, people have gradually shaped the way how English gets used in the Indian context. After an advent of academic development, curriculum (structural) changes and improvements in the functioning educational boards, the learning process for Indian teachers have become much more authentic and exemplary. Research from the Middle East tends to show a prevalent gap in learning, due to the ineffective structuring of English language teaching curriculums. In other words, Middle Eastern institutions have been replicating their curriculums accordingly with the Western dynamic, thus bringing in discourses that do not immediately motivate the Arabian student. "Non -standard use of language and its complex structure lead to the biggest problem particularly if the wrong type of text is chosen" (Yulnetri, 2018). In such aspects, writers like Khaleed Hosseini and Yasmina Khardra were able to break the stereotype and portray the Arab man's identity in a rather realistic fashion, something that Middle Easterners could resonate or relate with. So, it is evident that cultural representation is central to boosting motivation in students, especially for non-English speaking countries, as it welcomes their interest and teaches them the language in an engaging manner.

In this introductory note, we basically addressed the crux of this study, which was to juxtapose the pros and cons of using literature as an organic medium in teachers' education. Our emphasis on the critical aspects shall be derived from findings taken from secondary research material, ones that showcase the gaps in teaching processes (when it comes to non-

English speaking countries. By juxtaposing the benefits of literature, in contrast to the ineffectiveness of teaching curriculums, we can arrive at specific variables that showcase why students lack the skills to learn English, or what obstacles have predominantly been active for students during present times. The study shall further substantiate itself as we proceed with our case study, which is an interview with a group of teachers. The sample-size has been rounded up to 20, ultimately providing us an outlook on how language has flourished within communities ranging from upper to middle-class people. We shall also conclude with suggestive findings, to better understand how literature can be used in teachers' education, acknowledging the difficulties as well as the gaps poised by literature for educating the teachers.

METHODOLOGY

Primary Sources: Interviews were carried out, around the vicinity of our college, wherein both university and school-level teachers including students had participated. A questionnaire was prepared, focusing on the following questions:

- ❖ Do you like reading?
- What are your thoughts about the English language?
- ❖ Does your institution include a programme to teach the language? If yes then what are the major topics, focused in existing curricula?
- ❖ Do you know how to read and write English? If yes, how and where do you learn it from? If so, do you want to learn it for your personal interest?
- Name something about the English language that interests you?
- Are you happy with the way you were

taught?

- If not then what are the changes you would prefer?
- ❖ Lastly, do you think literature is the best way to learn a language?

(Note: while these are the main questions, there are others that have been improvized during the interview sessions, all of which shall be discussed underneath.)

Secondary Sources: Reading-material relating to the topic and research objectives were collected, in an effort to trace out relevant theories and justifications, ones that defend the case of literature being used to teach English. This study places an effort to juxtapose relevant theories with the findings we've gathered through interviews, to arrive at substantial conclusions and in-sights.

LITERATURE AND REAL LIFE

The authenticity of literary texts makes it worthy to be included in academic curriculums. Very often, literature is not created in intent to teach language or grammar, rather to reflect the human condition based on historical facts, empirical evidence and literary theories. As time progressed, real-life contexts have now been displayed in curriculums, by showcasing the use of language in newspapers, articles, and so on. Language learners are often thrilled by how much one can resonate with literary texts. "A reader can discover the way the characters in such literary works see the world outside (i.e. their thoughts, feelings, customs, traditions, possessions; what they buy, believe in, fear, enjoy; how they speak and behave in different settings. This colourful created world can quickly help the foreign learner to feel for the codes and preoccupations that shape a real society through visual literacy

of semiotics" (Murat, 05). Personal involvement coupled by language enrichments further makes students much more proficient in the English language. However, it also begs the question, are students actually getting engaged on a personal level? Are they receiving an authentic learning experience? Can literature be considered an organic tool for teaching the English language in a country like India?

One of the reasons listed by Maley is "Universality" of the language. In other words, universality is a reason why English literature becomes a potent resource for teaching language. However, it can also be argued that universality does not include cultural similarities. Two sisters from the same household were interviewed, where the younger one (who was a literature student) had displayed better command and proficiency over the language. The elder sister mostly learned from the consumption of media and western television programmes. She used apps to learn language as well. The notable difference was that the younger one was wellversed with the use of English in professional contexts. She could also speak clearly, with a better sense of vocabulary and pronunciation. The elder one's dialect resembled the common Indian speaker's, which seemed enough for communication and expressing humour.

The younger one also expresses how difficult old-age English was to learn, especially works when it came to works by Geoffrey Chaucer, Christopher Marlowe and so on. She had developed an interest in Romanticism due to its contemporary relevance with Climate Change and Urbanization, along with Indian crime fiction. She was expressive about how

the usage of Indian texts had fostered a deeper sense of interest in her. If it had only been Western texts, Victorian history and about coloinzation's mission across the world, the course would have become tedious. She acknowledged that while it is important to know such histories through literature, it is also crucial for students to learn language through their own cultural contexts, some keenly observed in Indian crime-fiction and drama/comedy novels. Her elder sister, on the other hand, expressed her interest in the modern way of life and how she was interested in the language due to its popularity.

These interactions reflect that in order to teach language on a holistic level, literature doesn't suffice the individual's expectations. It's worth noting that literature provides subject matter. "One benefit of having literature as the reading content of a composition course is that the readings become the subject matter for compositions. In a composition course whose reading content is literature, students make inferences, formulate their own ideas, and look closely at a text for evidence to support generalizations. Thus, they learn how to think creatively, freely and critically" (Murat, 05). The younger sister had similar claims when she said that she never had a prior interest in literature. It was through her engagement in the course and coming across subjects/papers that were already in the curriculum, that motivated her to learn more. She eventually developed an interest for genres like crimefiction, romantic poetry and Modern European Drama. The same was expressed by a teacher from the same university, who had stated about the convenience of having pre-planned subject matter to teach. Otherwise, for a

country as vast and diverse as India, it becomes quite problematic to shortlist topics that are of holistic significance.

A school teacher, who was interviewed, believed that literature should be included as it already is, however with an emphasis on the language's technicalities, use of grammar, metaphors, similes, literary tools and so on. Schools should be able to teach grammar effectively to students at a younger age. The technicalities of the English language can become quite confusing, which is why there's a greater need for teachers to focus on grammar, communication and practical skills. One interesting observation emerges from an interview, recently conducted between two students of the same age-group, one belonging to a convent school while the other from a government school. The English-speaking skill displayed by the convent-school boy was phenomenal. He in-fact answered that he had learned about four genders (taught in school), the fourth being neuter gender. The government-school student had no idea about the neuter gender. So, it is evidently clear that different curriculums have led to gaps in teaching. "It cannot be denied that having good language competence is essential in conducting a successful literature lesson because it can help students to comprehend literary texts and actively give their own feedback during question-and-answer sessions or class discussions" (Farhanah & Hadina, 22). So, practical and grammatical assessments are essential to enhance the language competency of students.

LITERATURE'S CULTURAL SIGNIFICANCE

Indian literature in English has mostly been

translated works, since colonial and postcolonial times. The advent of modernity led to new designs and perspectives, wherein authors modified the language, in a manner that made it culturally significant for the Indian context. "Once we have broken the barriers that make studying literature seem daunting, we find that literary works can be entertaining, beautiful, funny, or tragic. They can convey profundity of thought, richness of emotion, and insight into character. They take us beyond our limited experience of life to show us the lives of other people at other times" (Wulan, 16). Literature serves a larger-than-life platform where cultures can be united. This union of culture and the similarities in the human condition all across the world is what "Universality" according to Maley, was in her defense. So, because of the efforts placed by modern-day writers, Indian English literature can prove to be useful in enriching personal engagement and motivation. However, in the real-life situation, findings from interactions and interviews have put literature in a rather speculative light.

For the ones who are not enthused about reading, they find Chetan Bhagat to be quite interesting, based on backgrounds explored by the author, which is mostly about caste-based hierarchies, romance, love and drama. People have expressed how the language is "easy to read" and one could easily relate to the author's viewpoint or perception. This opinion was also expressed by teachers who observed the variety of interests displayed by their students in class and books that some preferred reading in contrast to the others. This sheds light on how accessibility of literary Indian English texts enhances personal and public

engagement, altogether shaping the ideological basis of an individual. Schoolgoing students wouldn't express the same way that they did for Chetan Bhagat, when it came to Kamala Markandaya or Anita Desia, both of whom are renowned feminist Indian authors. People aren't aware of their roles in literature and the Indian feminist movement, except for the students who are enrolled in literature courses. This creates a gap in the teaching of literature's primary essence, which is reflective of greater struggles, events and the shaping of human history.

"The language teacher should take into account the needs, motivation, interests, cultural background and language level of the students. However, one major factor to take into account is whether a particular work is able to reveal the kind of personal involvement by arousing the learners' interest and eliciting strong, positive reactions from them. Reading a literary text is more likely to have a long-term and valuable effect upon the learners' linguistic and extralinguistic knowledge when it is meaningful and amusing" (Murat, 05). This excerpt brilliantly narrows down our understanding of this broad topic, by stating how cultural representations become a factor for boosting personal interest to learn a new language. However, it also raises the question: What would people be interested in? Learning the language or learning about the cultural or historical events that the literary work is based upon? If it is the latter, people would simply read translated versions and avoid learning English. One may also argue that it can be both. However, in some rare instances, we have found that students who got well-acquainted

with the technicalities and cultural significance of the language, wish to learn out of their own interest and passion. We need cultural representation to familiarize people with the intricacies of a foreign language.

CONCLUSION

Let us now arrive at the key findings of this research. Firstly, it is evident that a better curriculum can enhance the resourceful nature of literature, in teaching the English language. While curriculums at the school level must focus on the technicalities of the language and the pedagogy of grammar, it is also essential to make students realize how literature is significant for learning the language. Contextual understanding of prose, fiction and poems is necessary to improve one's command over the English language. Moreover, practice with prose, fiction and essays can help students understand how grammar is practically applied. Whereas, at the college, university and higher-education levels, the cultural significance of literature must be emphasized. If the goal of teachers is centered on getting students to read enthusiastically, it would become a great deal of help for learners, as reading would increase vocabulary, teach language specifications, figures of speech, shifts in dialect from ancient to modern period, and so on. A stress in culture and native backgrounds allows students to resonate with the text on a personal level, thus boosting personal motivation, engagement and interest. This also justifies the claim as to how literature's feature of "universality" makes it an effective tool for teaching English, as enlisted by Maley. When culture is emphasized, one would realize that the human condition, or way-of-life, is more or less the same everywhere, when it comes to social, economic and political issues. This makes literature an effective tool to bond as a human being with other cultures. At university-levels such modes of emphasis are required to enhance the learning experience and motivate students to read more. In this regard, curriculums ought to include more texts pertaining to postmodern Indian English fiction.

Teachers need to connect more with their students instead of relying on curriculums, especially ones that can be considered as an imitation of Western counterparts. There should be inclusion of reading materials like newspapers, magazine articles, journals outside of the academic sphere, so on and forth. If students get acquainted with other reading materials, it becomes easier for them to improve communication skills needed for professional interactions. Our interviewees had expressed their contentment, however with a level of hope, that their curriculums would include more to strike personal interest and enhance the learning experience. Government-sector schools also face a problem with teachers who aren't skilled enough to teach language proficiency to students, So, it's evidently clear that teachers and educators need to emphasize grammar, local literary sources, cultural representations and engage personally to break the barriers and stigmas of learning a different language. It is necessary to

structure courses/curriculums with selective readings, ones that motivate personal engagement, enhance reading/writing capabilities and entail the fundamental aspects of the language including grammar, pronunciation, so on and forth. Such assessments or emphasis-points can be deemed as essentials that can holistically enhance the language competency of students.

REFERENCES

Goodwyn, A., (2000). English in the digital age: Information and communications technology and the teaching of English. London & New York: Cassell.

Hi mano lu, Murat, (2005). "Teaching English Through Literature". Journal of Language and Linguistic Studies, vol. 1, no. 1, pp. 53-66.

Hussein, E. T. & Al-Emami, A. H., (2016). "Challenges to Teaching English Literature at University of Hail: the Instructors' Perspective". Arab World English Journal (AWEJ), 7(4), 125-138.

Keshavarzi, Abdollah, (2012). "Use of Literature in Teaching English", Procedia -Social and Behavioral Sciences Volume 46, 554-559.

Maley, A., (1989). "Down from the Pedestal: Literature as Resource" in Literature and the Learner: Methodological Approaches. Cambridge: Modern English Publications.

Yulnetri, (2018). "Obstacles Encountered While Integrating Literature in Teaching English". Jurnal Ta'dib, 21(1), 39-50.

NOTES TO CONTRIBUTORS

- 1. 'Gyankosh-Journal of Educational Research' invites research articles/papers in the area of Educational research. The required articles/papers may be in the area of psychology of education, philosophy of education, economics of education, educational technology, administration and management of education, value education, human rights education, special education distance education, teacher education, higher education, primary education, history of education, early childhood care and education, policy research, etc.
- 2. Each article should not be more than 4000 words. Article should be typed in double space on single side of A4 size paper with appropriate margin in MS Word.
- 3. The final version of the manuscript must show title of the research article, name(s) of the author(s) in proper sequence, designation, institution, e-mail ID, mobile number and address. Except the cover page, name(s) of the author(s) must not appear for the purpose of anonymity with respect to review process.
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- iv) Essay, chapter or section in edited work:
 Hassanien, A. E., & Elhoseny, M. (2019).
 Cybersecurity and Secure Information Systems:
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 Springer.
- v) Wikipedia entry:

Wikipedia contributors. (2023). Nomophobia. Wikipedia.

vi) Website article with author:

Diaz, M. (2023). What is AI? Everything to know about artificial intelligence. ZDNET. https://www.zdnet.com/article/what-is-ai-heres-everything-you-need-to-know-about-artificial-intelligence/

- vii) Dissertation/Thesis:
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