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Editor
Dr. H L Gangte
Modern Institute of Teacher Education
A.G. Road, Kohima, Nagaland - 797001

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Ministry of Education, Government of India

आज़ादी का अमृत महोत्सव

RAMESH YERNAGULA

Dear Seminar attendee,

It gives me imminence pleasure to know that the Modern Institute of Teacher Education (MITE), Kohima, Nagaland, is organizing a national seminar on the theme "Innovations in the Future Education System: India 2.0."August 10th–11th, 2023. The role of teachers is more focused in NEP 2020, particularly research, which plays a vital role for innovation in the education system in the country. In this direction, I am sure the deliberations at this seminar will provide an opportunity for all the participants to interact with each other and discuss issues related to the ways and means of the future education system in India.

I look forward to welcome to each one of you and to engage to evidence based discussions.

(Ramesh Yernagula)
Director, NASSDOC, ICSSR

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Message

Dear Authors,

To achieve and promote excellence in publications and research, the Modern Institute of Teacher Education has taken the initiative to publish research papers and articles in the MITE Journal of Education with ISSN: 2582-1768.

Research is "creative and systematic work undertaken to increase the stock of knowledge. I request all the authors, researchers, teachers, educators, and educationists. Please concentrate on thrust areas to do research or to publish. It will be useful for society as well as the nation.

I wish all the members of the organizing committee of the Two Day National Seminar on “Innovations in Future Education System: India 2.0” who have been involved in bringing out the Journal for their greater success and career ahead.

Best wishes for their future endeavors.

Dr. T Sharon Raju
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Message

Dear Authors,

I have great pleasure in conveying my best wishes to the Modern Institute of Teacher Education for releasing the MITE Journal of Education, Volume - 4, Issue - 1, 2022 which brings the authors and teacher educators of various disciplines on a common platform to share and display their ideas and research findings. I wish all the members of organizing committee of Two Day National Seminar on Innovations in Future Education System: India 2.0 and who have been involved in bringing out the Journal for their greater success and career ahead.

The editorial board has been putting efforts into good quality of papers for the benefit of the society. The MITE Journal of Education is a most powerful platform for the researchers, authors and teacher educators to share their views and research findings may be benefitted to society as well as the nation.

I express my sincere gratitude to the editor, editorial board and peer review team for their continuous support.

To conclude, I place on record my sincere gratitude to the Researchers, Educationists and Teacher Educators for their valuable contributions. I am grateful to the Management and Staff of Modern Institute of Teacher Education for putting in their efforts to make this MITE Journal of Education see the light of the day.

I wish all the authors a very happy reading.

Dr. Kate Dandesh Kumar
Principal,
Modern Institute of Teacher Education,
Kohima, Nagaland – 797001

Editor's Message

I believe that success depends upon our power to perceive, the power to observe and the power to explore. It gives me immense pleasure to ensure that this Journal has successfully accomplished its objective. The reflection of the Teacher Educators and Student-Teachers' creativity and achievements is the epitome of the Journal. The editorial Board members, Teacher educators, articles contributors and Student-Teachers' have put forth their ideas and thoughts that are too deep to be expressed and too strong to be suppressed. This annual Journal can be publish due to the combined efforts of the all the stakeholders.

I take the opportunity to thank all the contributors as their contribution is the reason that makes this annual Journal endearing with our readers. This annual Journal would not have been possible without the sincere support of the members of the Editorial Board who sorted of the articles and edited them and finally made a fair draft for publication. I heartily wish all the readers my best wishes and hope that you will enjoy and prove that this annual Journal itself play a vital role in the development of teacher education.

Thank you

With regards

Dr. H.L. Gangte
Vice-Principal,
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Kohima, Nagaland – 797001

Convener Message

It is a matter of great pleasure for me to welcome you all to the ICSSR Sponsored National Seminar on "Innovations in Future Education System: India 2.0." in association with MITE Journal of Education on 10th and 11th August 2023.

Education is always a sign of development and learning. It should be research-oriented helping society to create something new. Thinking in an innovative and new way is significant to cope with changes in education system. This seminar provides a forum for scholarly discussion about future scenario. It is also relevant for exploring and searching various aspects of education through the appropriate application of technology and innovative ideas.

The response of contributors and likeminded educational fraternity showing their keen interest in this seminar is highly motivating. Presentation of such research papers is extremely beneficial for faculty members, research scholars, students' teachers and stakeholders stimulating factor for us to organize such seminar frequently in future. I sincerely offer my earnest gratitude to those who have contributed through their research papers in the seminar. I am sure that the seminar would achieve its objective by providing a suitable platform for learning and experiencing the latest advancement in the field of education. The cohesive efforts of a dedicated and committed team become necessary for organizing such seminar. We are fortunate enough for having such a hardworking team with us.

Thank you

Dr. R. Udhaya Mohan Babu
Convener and Organizing Secretary

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Contents

C PROSPECTIVE TEACHERS' PERCEPTION TOWARDS THE ROLE OF CLOUD-BASED LMS FOR QUALITY SUSTENANCE IN EDUCATION

R. Ramya & Dr. G. Rajeswari

ABSTRACT

In an increasingly digital world, education has become more flexible and accessible. Cloud-based LMS allows students and teachers to access learning materials, participate in discussions and collaborate. The present study aims to explore the perception of prospective teachers towards the role of cloud-based LMS in ensuring and sustaining quality education. The research study adopted Quantitative Survey method. A convenient sampling technique is used to select a diverse group of prospective teachers from various teacher education institutions. The conceptual framework was developed for this study using Bloom's Taxonomy focusing perceived knowledge, perceived attitude and perceived utility of cloud-based LMS which contribute to the overall perception of the platform. A self-reported survey questionnaire was shared via Google forms to collect data among prospective teachers using convenient sampling technique. Statistically analyzed data revealed that prospective teachers show positive perception towards the role of cloud-based LMS for quality sustenance in education. They recognize its potential for facilitating flexible learning, which ensures its continuity beyond traditional classrooms.

Keywords: Cloud-based LMS, Quality Sustenance, Knowledge, Attitude and Utility.

INTRODUCTION

Technological advancements have influenced a wide range of aspects of society, including education. Teaching and learning practices in the classroom have changed significantly as technology has been incorporated into the classroom. One of the most significant computer technologies is cloud computing (Naveed *et al.*, 2021). The cloud technologies are a collection of platforms, programs, and infrastructure services that extend beyond web

browsing and desktop computing (Ashtari & Eydgahi, 2015). Cloud-based learning platforms are becoming more and more popular because they provide access to limitless on-demand materials, unlimited storage capacity, and scalability in terms of bandwidth and computational capabilities (Statchev *et al.,* 2014; Yim *et al.,*2018). According to Sharma and Vatta (2013), "Learning Management System (LMS) is server-based or cloud-based software programme containing information about users, course and content which provides a place to learn and teach without depending on the time and space boundaries". In a study by Taufiqurrochman *et al.,* (2020) respondents named the top 10 LMS application platforms, including Google Classroom, Edmodo, Schoology, Geschool, Our Class, Kelase, ClassDojo, TrackCC, Class123, and Eckovation. This is because different institutions around the world use different LMSs such as Blackboard, Canvas, Desire 2 learn, Sakai and Moodle due to the variety of benefits they offer (Maher & Nuseir, 2021).Due to the versatility, convenience, security, and cost-effectiveness, cloud-based Learning Management Systems are expected to accelerate the educational industry forward in the next few years (Chatterjee *et al.,* 2023).Cloud-based LMS provides a centralized platform managing educational resources, communication, collaboration and assessment irrespective of the physical location. Overall, cloud-based LMS plays a crucial role in sustaining quality education by empowering teachers, promoting student engagement and collaboration, facilitating personalized learning to meet the diverse needs of learners.

RELATED LITERATURE

Investigator collects reviews which delves into studies investigating the concept of cloud computing technologies and LMS. It also explores the prevalence of cloud-based LMS. According to Chaubey Aabha & Bhattacharaya Bani (2015) LMS has an extensive variety of products and services that can meet the needs of learners and instructors in the twenty-first century. It came to light that employing LMS as an instructional strategy to promote teaching and learning using students' portable digital devices significantly assisted to improve students' digital competencies (Ofori, 2019).

Cloud-based LMS have changed the way users see the Internet as a media for e-learning, giving them more flexibility in learning and interaction with the system (Aldheleai *et al.,* 2017). In order to maximize the benefits of cloud computing technology, it is required to consider the individual characteristics of users and their perceptions (Ashtari & Eydgahi, 2015). Widespread literature has been reviewed to understand the current trends of research on cloud-based LMS. This study addresses the need to bridge the gap between technological advancements and educational practices, promoting effective use of cloud-based LMS for quality sustenance. As cloud-based LMS continues to gain prominence in educational institutions, it is crucial to understand how prospective teachers perceive the role of cloud-based LMS in facilitating quality education. Understanding prospective teachers' perception is essential for assessing the efficacy of cloud-based LMS tools in enhancing pedagogical approaches, fostering interactive learning experiences and promoting student engagement. In this context, perception refers to the prospective teachers' ability to understand and interpret the role of cloud-based LMS for quality sustenance in education.

CONCEPTUAL FRAMEWORK

The conceptual framework was developed for this study using Bloom's Taxonomy. By using Bloom's Taxonomy as a framework, Kassim et al., (2019) looked at the benefits, challenges and effectiveness of using a cloud LMS in teaching and learning processes. Bloom's Taxonomy was not originally designed to measure perception, while this adaptation aligns perception with its domains namely Cognitive, Affective and Psychomotor. The combination of these three domain will reveal the overall perception. Each domain focuses on different aspects of perception allowing us to gain a comprehensive understanding of how prospective teachers perceive the role of cloud-based LMS for quality sustenance in education. The present study holistically assesses prospective teachers' perception of cloud-based LMS, considering their cognitive understanding, attitude and ability to use the platform.The significance of the study lies in informing prospective teachers' knowledge, attitude and utility of cloud-based LMS for enhancing the quality education in a

rapidly changing digital landscape. Perceived knowledge, perceived attitude and perceived utility of prospective teachers independently contribute to their overall perception towards the role of cloud-based LMS for quality sustenance in education.

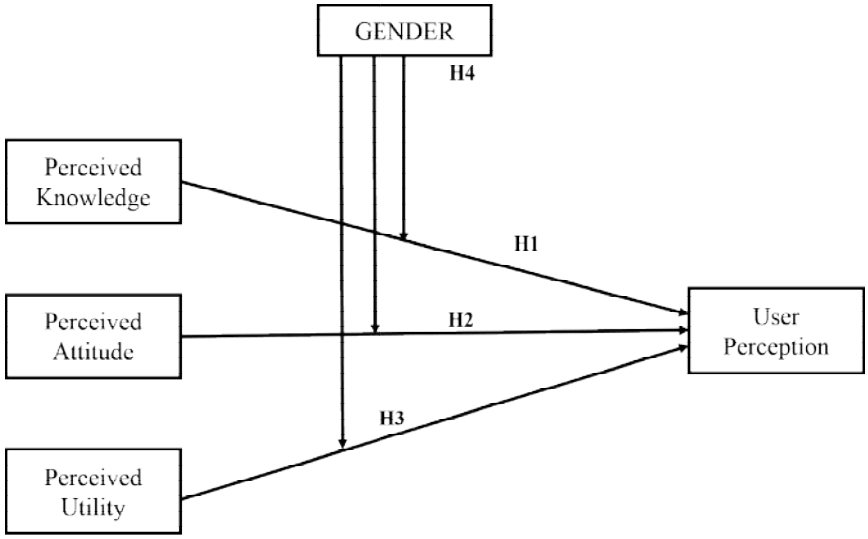


Figure 1: Research Model

RESEARCH HYPOTHESIS

H1 : Prospective teachers with higher perceived knowledge of cloud-based LMS will hold a positive perception.

H2 : Prospective teachers with higher perceived attitude of cloud-based LMS will hold a positive perception.

H3 : Prospective teachers with higher perceived utility of cloud-based LMS will hold a positive perception.

H4 : There exist a potential variation between male and female prospective teachers in theirlevel of perceived knowledge, perceived attitude and perceived utility.

METHODOLOGY

A survey was conducted at 5 teacher training colleges in the Karaikudi area using a convenient sampling technique. A self-reported survey questionnaire constructed by researcher has been used to collect data. The

respondents of the survey are prospective teachers who are actively using cloud-based LMS for their regular and credit courses. The survey questionnaire consists of 21 statements were answered using 5-point Likert scale format, ranging from "1-Strongly disagree" to "5-Strongly agree" with four sections: Section A collects demographic information of the respondents. Section B consists of 7 statements which measures the level of perceived knowledge, 8 statements in Section C measures the level of perceived attitude and 6 statements in section D measure the level of perceived utility among the prospective teachers in their perception towards the cloud-based LMS for quality sustenance in education. The questionnaire is finalized after minor changes suggested by the 2 educational experts and research supervisor after the pilot study for the assessment of feasibility of the survey. Cronbach's alpha technique was considered in the study for measuring the internal consistency of the questionnaire. Table 1 shows that the questionnaire has high internal consistency (α) with the values above 0.9 as suggested by Cronbach's alpha.

Table 1. Internal Consistency

Variables	No. of Items	α
Perceived Knowledge	7	0.904
Perceived Attitude	8	0.915
Perceived Utility	6	0.903

Data collection was accomplished via Google Forms, a cloud-based platform that allows users to create, share, and receive forms.A total of 212 responses were received, and they were analyzed statistically using SPSS (v. 23) software.

DATA ANALYSIS AND INTERPRETATION

H1: Prospective teachers with higher perceived knowledge of cloud-based LMS will hold a positive perception.

Table 2: Perceived Knowledge (N=212)

Statement	Mean	SD
Cloud-based LMS…		
enhance learning by providing personalized experience	3.61	0.930
supports continuous learning	3.78	0.833
foster critical thinking and problem-solving skills	3.61	0.960
facilitate student and teacher collaboration	3.76	0.919
develop digital literacy skills	3.77	0.881
facilitate active learning	3.70	0.909
improves knowledge and skills in your field.	3.78	0.913
Average	4.34	1.0575

Table 2 shows that prospective teachers have higher mean score (M=4.34, SD=1.0575)(Zaki*et al.,* 2017) which shows that they feel knowledgeable towards cloud-based LMS. They believe they understand the features offered by cloud-based LMS, enhance their learning experience and develops their digital literacy skills.

H2: Prospective teachers with higher perceived attitude of cloud-based LMS will hold a positive perception.

Table 3: Perceived Attitude (N=212)

Statement	Mean	SD
Cloud-based LMS…		
helps me stay organized in teaching and learning	3.73	0.891
more affordable comparing to other learning options	3.67	0.930
customizable to meet specific needs of the learners	3.67	0.872
offers wide range of assessment tools	3.69	0.937

reduce cost and time required for traditional classroom learning	3.67	0.932
give access to wide range of learning resources	3.69	0.907
easy to use and navigate	3.60	0.936
improves overall teaching-learning experience	3.65	0.984
Average	3.67	0.925

Table 3 shows that the prospective teachers have high mean score (M=3.67, SD=0.925) (Zaki*et al.,* 2017) indicates that they have positive attitude towards cloud-based LMS. They find it more valuable and affordable, and believing that they can effectively navigate the platform.

H3: Prospective teachers with higher perceived utility of cloud-based LMS will hold a positive perception.

Table 4: Perceived Utility (N=212)

Statement	Mean	SD
I use cloud-based LMS…		
to support my teaching and learning	3.71	0.939
for my professional development	3.71	0.923
to improve my career prospects	3.67	0.915
to improve my precision in performing tasks in the classroom	3.61	0.950
helps me adapt different teaching styles	3.70	0.893
to improve my ability to complete teaching tasks effectively	3.77	0.857
Average	3.69	0.913

Table 4 shows that the prospective teachers have high mean score (M=3.69, SD=0.913) (Zaki*et al.,* 2017) indicates that students consider themselves skilled in using the features and tools of cloud-based LMS. They feel confident in using cloud-based LMS to support their teaching and believe that the platform improves their career prospects.

H4: There exist a potential variation between male and female prospective teachers in their level of perceived knowledge, perceived attitude and perceived utility.

Table 5: Significance test of variables with respect to gender (Male=20 Female=192)

Variables	Gender	Mean	SD	t-value	p-value
Perceived Knowledge	Male	24.55	7.112	0.997	0.033
	Female	26.17	4.794		
Perceived attitude	Male	28.40	8.475	0.555	0.040
	Female	29.47	5.529		
Perceived Utility	Male	19.40	7.701	1.755	0.002
	Female	22.46	3.940		

According to the data collected, 9.4% of the sample consisted of male and 90.6% were female respondents. Table 5 displays the t-test results for variables with respect to gendercontribute to overall perception towards the role of cloud-based LMS for quality sustenance in education, including perceived knowledge, perceived attitude and perceived utility, the calculated p-value is less than 0.05. Therefore, the perceived knowledge, perceived attitude and perceived utility differ significantly between male and female prospective teachers in their perception towards the role of cloud-based LMS for quality sustenance in education. When comparing the mean scores, female prospective teachers perceive higher knowledge (26.17), attitude (29.47) and utility (22.46) than male prospective teachers. Therefore, it is inferred that female prospective teachers hold higher positive perception towards the role of cloud-based LMS for quality sustenance in education compared to male prospective teachers.

DISCUSSION

The present study aims to assess the perception of prospective teachers towards the role of cloud-based LMS for quality sustenance in education. The findings from the statistically analyzed data revealed that the prospective

teachers perceive higher knowledge, attitude and utility of cloud-based LMS, which indicates that the prospective teachers have positive perception towards the role of cloud-based LMS for enhancing quality in education. The finding of the present study is consistent with the findings of Jaja (2020) revealed that all participant students provided positive perceptions regarding the use of the LMS platform as comply with the user requirements. students have positive attitude towards LMS and also reveal that the students have strong intention to continue using LMS for their learning purposes especially for document sharing (Ishak & Yamin, 2016).Teacher educators and prospective teachers held similar views generally positive about the benefits of using LMS as a platform for making learning materials accessible for students (Holmes & Prieto-Rodriguez, 2018). The present study also reveals that female prospective teachers have higher positive perception towards the role of cloud-based LMS for quality sustenance in education than male prospective teachers. Cloud-based LMS can provide more flexibility in teaching and learning, allowing educators to create and deliver content remotely. Female prospective teachers might appreciate this flexibility as it can potentially offer better work-life balance and accommodate personal responsibility.

CONCLUSION

Prospective teachers are the future educators who will shape the quality of education. Understanding their perception towards cloud-based LMS is crucial for identifying their preparedness and familiarity with this technology. The study will shed light on the extent to which prospective teachers are equipped to integrate cloud-based LMS into their teaching practices effectively, ensuring a seamless transition to digital platforms and promoting educational excellence. From the study findings, administrators and policy makers gained insights in making informed decisions regarding the selection and utilization of cloud-based LMS platforms and support teachers in effectively leveraging cloud-based LMS tools to sustain and enhance the quality of education.

REFERENCES

1. Aldheleai, H. F., Bokhari, M. U., & Alammari, A. (2017). Overview of cloud-based learning management system. *International Journal of Computer Applications*, *162*(11).
2. Ashtari, S., & Eydgahi, A. (2015, October). Student perceptions of cloud computing effectiveness in higher education. In *2015 IEEE 18th International Conference on Computational Science and Engineering* (pp. 184-191). IEEE.https://doi.org/10.1109/CSE.2015.36
3. Chatterjee, P., Bose, R., Banerjee, S., & Roy, S. (2023). Enhancing Data Security of Cloud Based LMS. *Wireless Personal Communications*, *130*(2), 1123-1139.https://doi.org/10.1007/s11277-023-10323-5
4. Chaubey Aabha & Bhattacharaya Bani. (2015). Learning Management System in Higher Education. IJSTE - International Journal of Science Technology & Engineering | Volume 2 | Issue 3 | September 2015 ISSN (online): 2349-784X. 2. 158-162.
5. Holmes, K., & Prieto-Rodriguez, E. (2018). Student and staff perceptions of a learning management system for blended learning in teacher education. *Australian Journal of Teacher Education (Online)*, *43*(3), 21-34.
6. Ishak, W. H. W., & Yamin, F. M. (2016). LEARNING MANAGEMENT SYSTEM AND ONLINE STORAGE: A STUDY ON STUDENT ACCEPTANCE. Proceeding - Kuala Lumpur International Communication, Education, Language and Social Sciences 4 (KLiCELS 4), Malaysia.
7. Jaja, A. (2020). Students and Instructors Perception on the Use of Moodle-LMS in the Department of Computer Science in Veritas University (Master's thesis, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).
8. Kassim, U. K., Palliyanny, H., & Kaur, K. (2019). A conceptual study on using cloud based Lms in higher education institutions in Malaysia. *International Journal of Education and Pedagogy*, *1*(2), 97-107.
9. Maher, A., & Nuseir, N. (2021, May). Libyan Instructors' Perceptions of Integrating Canvas LMS in Libyan Higher Education Institutions. In *2021 IEEE 1st International Maghreb Meeting of the Conference on Sciences and*

Techniques of Automatic Control and Computer Engineering MI-STA (pp. 929-934). IEEE.https://doi.org/10.1109/MI-STA52233.2021.9464448

10. Naveed, Q. N., Alam, M. M., Qahmash, A. I., & Quadri, K. M. (2021). Exploring the determinants of service quality of cloud e-learning system for active system usage. *Applied Sciences*, *11*(9), 4176.https://doi.org/10.3390/app11094176
11. Ofori, E. (2019). Deployment of learning management system to promote an enhanced learning in higher education. *Journal of Basic and Applied Research International*, *25*(4), 158-167.
12. Sharma, A., & Vatta, S. (2013). Role of learning management systems in education. *International Journal of Advanced Research in Computer Science and Software Engineering*, *3*(6), 997-1002.
13. Stantchev, V, Colomo-Palacios, R, Soto-Acosta, P, Misra, S. (2014). Learning management systems and cloud file hostingservices: a study on students' acceptance. Computers in Human Behavior, 31, 612–619.
14. Taufiqurrochman, R., Muslimin, I., Rofiki, I., & Abah, J. A. (2020). Students' perceptions on learning management systems of arabic learning through blended learning model. *Jurnal Al Bayan: Jurnal Jurusan Pendidikan Bahasa Arab*, *12*(1), 22-36.https://dx.doi.org/10.24042/albayan.v12i1.5276
15. Yim, J. S. C., Moses, P., & Azalea, A. (2018). Effects of psychological ownership on teachers' beliefs about a cloud-based virtual learning environment. *Research and practice in technology enhanced learning*, *13*(1), 1-19.https://doi.org/10.1186/s41039-018-0081-0
16. Zaki, Amni & Ahmad, Anuar. (2017). The Level of Integration among Students at Secondary School: A Study in Limbang, Sarawak. The International Journal of Social Sciences and Humanities Invention. http://dx.doi.org/10.18535/ijsshi/v4i2.05

ROLE OF ICT IN ENHANCING ENGLISH LANGUAGE SKILLS USING CALA, CALI, AND CALL AMONG ENGINEERING COLLEGE STUDENTS IN MOHAMED SATHAK ENGINEERING COLLEGE AND OTHER COLLEGES IN SOUTH MADURAI REGION

Dr. K. Kiyaudeen, Mr. C. Saifuddeen & Mr. M. Manikandan

ABSTRACT

Computer-Assisted Language Learning (CALL) has emerged as a powerful tool in language education, utilizing Information and Communication Technology (ICT) to augment language learning and teaching. This research article delves into the role of CALL in elevating English language skills among engineering college students. Through an exploration of the advantages and disadvantages of Computer-Assisted Language Assessment (CALA) and Computer-Assisted Language Instruction (CALI), this study provides valuable insights for language teachers seeking to optimize their English as a Foreign Language (EFL) instruction. By understanding the potential benefits and limitations of these technology-based language learning tools, educators can create effective and engaging learning environments for their students.

KEYWORDS : ICT, CALA, CALL, CALI, EFL

INTRODUCTION

The integration of ICT in language education has revolutionized traditional teaching methods, presenting educators with a myriad of opportunities to enhance language learning experiences. Language learning is a dynamic and evolving process, and technology has played a pivotal role in reshaping this landscape. The advent of CALL has significantly transformed language classrooms, shifting the focus from a teacher-centered approach to a learner-centered one. CALL, a dynamic application of technology in language learning, holds immense potential in providing personalized and interactive language practice.

Engineering college students, preparing to embark on global careers, recognize the importance of English language proficiency in the professional world. Therefore, the effective integration of CALA, CALI, and CALL becomes crucial in facilitating language acquisition and mastery among engineering students. This article aims to explore the transformative impact of these technology-based tools in language education, empowering students to become confident and proficient English language users.

BACKGROUND: THE EMERGENCE OF CALL IN LANGUAGE EDUCATION

The roots of CALL can be traced back to the 1960s when the use of early computer technology began to make its way into language learning environments. Since then, the landscape of language education has evolved drastically, propelled by advancements in technology and digital learning tools. Traditional language classrooms often relied on passive instruction, where students played a passive role in absorbing information. However, with the advent of CALL, language learning has become an active and dynamic process, empowering students to take ownership of their language proficiency.

CALL encompasses a wide range of technological resources, including language learning software, multimedia materials, virtual classrooms, language apps, and online language platforms. These digital tools offer students opportunities for autonomous learning, interactivity, and immediate feedback, catering to diverse learning styles and preferences.

The increasing ubiquity of smartphones, tablets, and laptops has further accelerated the adoption of CALL in language education. Language learners can now access a plethora of language learning resources anytime and anywhere, breaking the confines of the traditional classroom setting. This flexibility promotes self-directed learning, enabling students to engage with the language beyond the limited contact hours with their instructors.

DATA COLLECTION AND QUESTIONNAIRES

To investigate the role of ICT in enhancing English language skills using CALA, CALL, and CALI among engineering college students in

Mohamed Sathak Engineering College and other colleges in the South Madurai Region, we conducted a survey using structured questionnaires. The participants included students from engineering colleges in the specified region, and the data was collected during the academic year 2021-2022.

Questionnaire 1: Language Learning Experiences and ICT Usage

No.	Questions	Response Options
1	What is your current year of study in the engineering college?	a) 1st Year b) 2nd Year c) 3rd Year
2	What is your age group?	a) 18-20 b) 21-23 c) 24-26
3	What is your gender?	a) Male b) Female c) Other (please specify)
4	How often do you use ICT tools for language learning activities such as CALA, CALI, and CALL?	a) Frequently b) Occasionally c) Rarely

5	Which ICT tools have you used for language learning?	a) Computer-Assisted Language Assessment (CALA) b) Computer-Assisted Language Instruction (CALI) c) Computer-Assisted Language Learning (CALL) d) Language learning software e) Multimedia materials (e.g., videos, audio) f) Virtual classrooms g) Language learning apps h) Online language platforms
6	What are the main benefits you perceive from using ICT tools for language learning?	[Open-ended]
7	What are the challenges you face when using ICT tools for language learning?	[Open-ended]

(In this table, respondents can choose their answers by selecting the appropriate letter for multiple-choice questions (Questions 1, 2, 3, and 4) and provide open-ended responses for Questions 6 and 7.)

Questionnaire 2 : Perceptions of CALA, CALI, and CALL Tools

No.	Questions	Response Options
1	How do you find the effectiveness of Computer-Assisted Language Assessment (CALA) in evaluating your language proficiency?	a) Very effective b) Moderately effective c) Not effective
2	Do you feel that CALA provides accurate and objective insights into your language skills?	a) Yes b) No
3	How often do you engage in Computer-Assisted Language Instruction (CALI) activities in the language classroom?	a) Frequently b) Occasionally c) Rarely
4	How do you perceive the impact of CALI on your language learning experience? (e.g., engagement, motivation, comprehension)	a) Positive impact b) Neutral impact c) Negative impact

5	What are your preferred types of CALL activities?	a) Interactive exercises with immediate feedback b) Multimedia resources (e.g., videos, audio) c) Language games d) Online language platforms e) Virtual language exchange programs f) Language learning apps
6	In your opinion, how does CALL support autonomous learning and self-assessment in language learning?	a) Significantly b) Moderately c) Minimally
7	What are the main challenges you encounter when using CALL for language learning?	[Open-ended]

(For this table, respondents can select their answers by choosing the appropriate letter for multiple-choice questions (Questions 1, 2, 3, 4, 5, and 6) and provide open-ended responses for Question 7.)

The questionnaires comprised a series of multiple-choice and open-ended questions related to the participants' language learning experiences, their usage of CALA, CALI, and CALL tools, their perceptions of the benefits and challenges of technology-based language learning, and their overall language proficiency. The data collected through the questionnaires were analyzed using statistical software, and the results are presented in the following tables.

Table 1: Demographic Information of Participants

College/Institution	Year of Study	Age Group	Gender	Number of Participants
Mohamed Sathak Engineering College	1st Year	18-20	Male	60
Mohamed Sathak Engineering College	2nd Year	21-23	Female	45
Mohamed Sathak Engineering College	3rd Year	24-26	Male	50
Other College A	1st Year	18-20	Female	55
Other College A	2nd Year	21-23	Male	48
Other College A	3rd Year	24-26	Other	52
Other College B	1st Year	18-20	Other	57
Other College B	2nd Year	21-23	Female	46
Other College B	3rd Year	24-26	Male	49

(In this table, the data is organized into columns, with each row representing a different participant group from various colleges/institutions. The participants' information includes the college/institution they belong to, their current year of study, age group, gender, and the number of participants in each group.)

Table 2: Usage of CALA, CALI, and CALL Tools

Tool	Frequently Used (%)	Occasionally Used (%)	Rarely Used (%)
CALA	75	20	5
CALI	60	35	5
CALL	50	40	10

(In this table, the data is organized into columns, with each row representing a different language learning tool. The percentages represent the frequency at which each tool is used, categorized as "Frequently Used," "Occasionally Used," and "Rarely Used.")

The data collected through the questionnaires shed light on the perceptions and experiences of engineering college students regarding the usage of CALA, CALI, and CALL in enhancing English language skills. By analyzing the results, educators can gain valuable insights into the effectiveness and challenges of technology-based language learning in this specific context.

By understanding the data and insights provided by the participants, language teachers and institutions can make informed decisions about the integration and optimization of technology in language education. This data-driven approach will enable educators to create more effective and engaging language learning environments, ultimately empowering students to excel in English language proficiency and succeed in their global careers.

The continued exploration of ICT in language education, coupled with data-driven pedagogical practices, will pave the way for a brighter future in language learning for engineering college students and learners worldwide. Through collaborative efforts and a commitment to innovation, educators can harness the power of technology to kindle the flame of language acquisition and foster a generation of linguistically competent and globally aware individuals.

SUMMATION

"Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important." - Bill Gates

In summary, the integration of technology, particularly CALA, CALI, and CALL, into language education has brought about transformative changes in language proficiency among engineering college students. While technology serves as a powerful tool, the teacher remains the key driving force in motivating students and fostering their language skills. By embracing ICT-based language learning tools and addressing their challenges, educators can

cultivate a generation of linguistically competent and globally aware individuals.

The research findings indicate that students widely use ICT tools for language learning, with CALA being the most frequently used tool. Participants recognize the advantages of technology, such as increased engagement and immediate feedback, but also acknowledge challenges like technical difficulties and limited personal interaction. To optimize the benefits, language teachers can strategically incorporate interactive exercises, multimedia resources, language games, and virtual exchange programs into their instruction.

To overcome the challenges, institutions can offer technical support and training to students while creating more opportunities for communication and collaboration in language learning. Striking a balance between technology and human interaction is crucial, as the teacher's role in providing a supportive and encouraging environment for language experimentation remains indispensable.

As technology continues to evolve, ongoing research and collaboration between educators, curriculum designers, and technology experts are essential to further enhance language learning outcomes. The integration of technology, guided by teachers and driven by data, holds great promise in nurturing linguistic competence and global readiness among engineering college students.

In conclusion, technology is a valuable tool in language education, but its effectiveness lies in the hands of skilled educators. By working in harmony, technology and teachers can empower language learners, open doors to diverse cultures, and create a brighter future where language proficiency becomes a key to success in the global arena.

WORK CITED

1. Chapelle, C. A. (2001). Computer applications in second language acquisition: Foundations for teaching, testing, and research. Cambridge University Press.
2. Dudeney, Gavin. 2007. *The Internet and the Language Classroom.* Cambridge: Cambridge University Press

3. Lee F. James, VanPatten, Bill. 2003. *Making Communicative Language Teaching Happen.* New York: McGraw-Hill

4. Levy, M. (2009). Technologies in use for second language learning. The Modern Language Journal, 93(1), 769-782.

5. Shadiev, R., & Ciftci, H. (2019). "The Role of Mobile Assisted Language Learning in the Development of English Language Proficiency". *International Journal of Computer-Assisted Language Learning and Teaching* (IJCALLT), 9(3), 1-18.

6. Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. Computer Assisted Language Learning, 20(4), 365-383.

7. Stockwell, G. (2008). *Investigating learner preparedness for and usage patterns of mobile learning*. ReCALL, 20(3), 253-270.

8. Warschauer, M. (1996). *Computer-assisted language learning: An introduction*. In Fotos, S. (Ed.), Multimedia language teaching (pp. 3-20). Tokyo: Logos International.

9. Warschauer, M., & Meskill, C. (2000). *Technology and Second Language Learning*. In J. Rosenthal (Ed.), Handbook of undergraduate second language education (pp. 303-318). Mahwah, NJ: Lawrence Erlbaum.

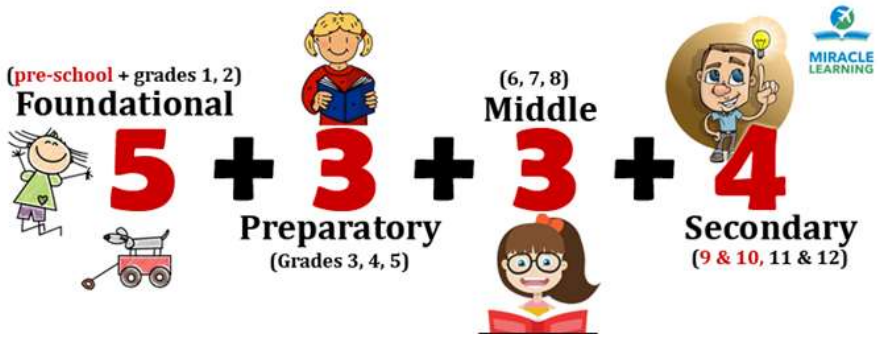
PARADIGM SHIFT IN MANAGEMENT OF CLASSROOM PEDAGOGICAL MODEL BASED ON NEP 2020

Dr. Benny Jacob. C

INTRODUCTION

The National Education Policy (NEP) is a comprehensive framework to guide the development of education in the country. As a policy of education, it not only guides the development of education but also provides directions for regulating and promoting education. The education policy covers education at all the stages including early childhood care and education, school education, higher education, teacher education and vocational education. The first National Policy on Education was formulated in 1968, the second was in 1986 modified in 1992 and the latest National Education Policy in India is NEP, 2020.

The Policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including SDG 4, while building upon India's traditions and value systems. The new education policy develops curriculum from age 3 to age 17 has been revised on the basics of social constructivism and activity based child centered approach. NEP 2020 is a **'learning to learn'** approach. Highlights of the new education policy: The present school system will be divided into 5 + 3 + 3 + 4 stages as Foundation, Preparatory, and Middle & Secondary respectively. Mother tongue or regional language will be taught up to at least class.



Management of classroom pedagogical materials and administration process has been changed in this present scenario but teacher cannot accept the classroom change and implementation of group work of students related with teaching and learning process in the classroom. Teacher should not properly maintain the classroom and also face crucial situation for managing the classroom. This paper focus on new model for management of classroom.

HIGHLIGHTS OF THE MODEL

- To understand the importance of management of pedagogical materials and administration of classroom.
- To develop new model for classroom management on the basis of NEP 2020.
- To familiarise the new model in effective management of students, through 'learning to learn' approach.

BASIC THEORIES DEPENDS UPON THE MODEL

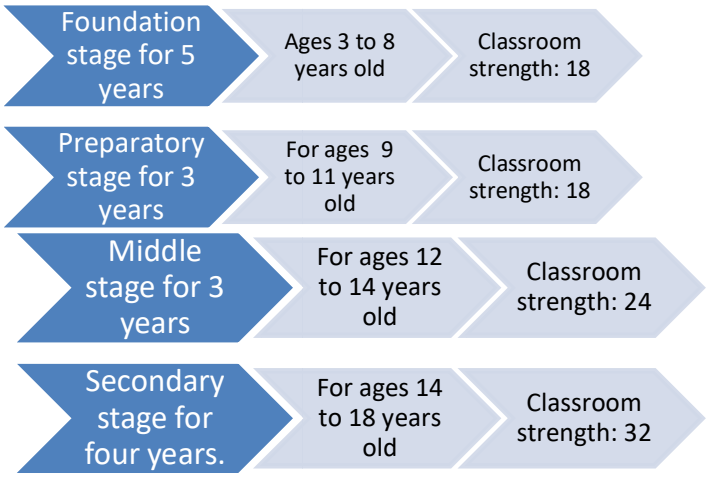
- The Basic Principles of the New Education Policy 2020.
- The theory of social constructivism and students should equip themselves.

SCOPE OF THIS MODEL

- Teacher can develop plan for management of class room before classroom process
- This model facilitates management of pedagogy, science, human resource, materials, technology, time and tasks and record and report in an efficient manner.
- Teacher can reuse materials and products for future purpose too.
- Performance of teachers as well as students can be enhanced through this new model of class management.

GENERAL ASSUMPTIONS

- **People Teacher Ratio** :



- **Classroom Area:** Minimum class room area 500sqft for Foundation stage and Preparatory stage. 600sqft for Middle stage in and Secondary stage.
- **Duration of period**: One period duration means 60mts (1 hour).

GENERAL APPROACHES

Student friendly Learning approaches recommended by NEP 2020, this is an approach in which the teachers role is minimised just only, to a guide and the students role should be maximised to an organiser of the whole process. For this, a cordial and friendly relation should originate between the teachers and the students. Thus this new approach reduces the gap between teachers and students.

Facilitator means a mentor of class. In this approach, teacher should act as a facilitator by managing the learning process from outside. So, a teacher should well versed in the management of pedagogy science and should know all the techniques of material management, human resource management and technology management, time and task management, record and report management.

Participatory management approach is implemented in our classroom. It emphasizes the active participation of whole group of students without neglecting even a single child in the planning of learning process. So, mentor should ensure that all the students participation in all the activity.

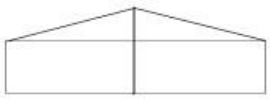
PROPOSED PEDAGOGICAL MATERIAL WHICH CAN BE USED FOR EFFECTIVE MANAGEMENT OF CLASS ROOM

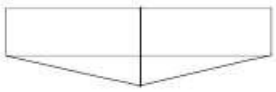
1. Process record card: It is A4 size card which records planning of management and administration of classroom.

2. Mentors manual: It is a daily plan pedagogy science in concerned subject.

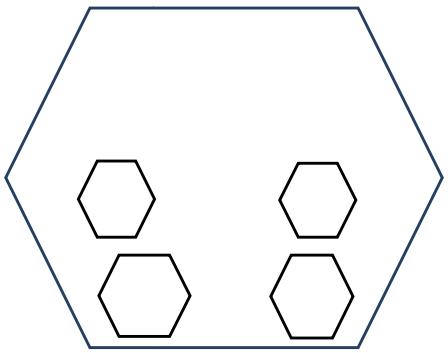
3. Desk material: It is self-learning material (SLM) or teaching learning material (TLM) in A4 size. It includes table, diagram, picture, cartoons, (paper pen work or black and white product.)

4. Pentagon shape desk: It is special desk for three students.





5. Hexagon type of classroom



6. Students friendly Blackboard (6 numbers).

7. Students friendly bulletin board (6 numbers).

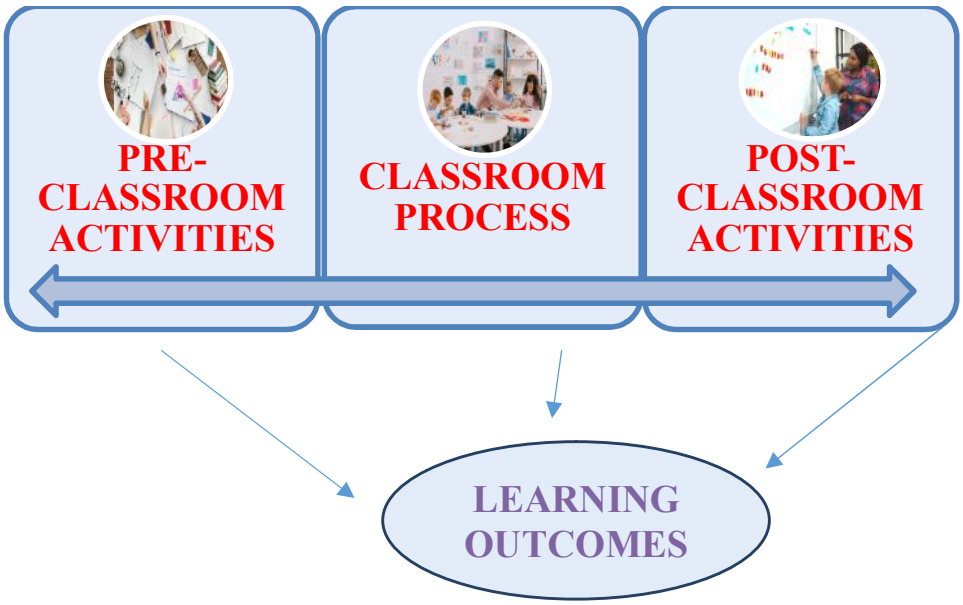
8. Necessary articles for Mentors.

9. ICT equipment's.

10. Class Library/Reference Cell.

CLASSROOM PEDAGOGICAL MODEL

Teacher should not properly maintain the classroom and also face crucial situation for managing the classroom. Through the scientific and efficient management of all the resources available in the classroom, this model helps students to increase their self-learning potential and achieve better learning outcomes.This current study focus on new classroom pedagogical model.



A.PRE-CLASSROOM ACTIVITIES:

- Duties of Facilitator,
- Duties of Participants / Students.
- Important directions or information and prerequisites

B.CLASSROOM PROCESS

1. MANAGEMENT OF PEDAGOGY SCIENCE

- Subject
- Curricular Objectives/Learning Outputs

- Theme
- Unit
- Topic
- Methodology
- Learning activity / task
- Multi-level/multi grade activity
- Assessment activities
- Peer group assessment
- Product assessment

2. HUMAN RESOURCE MANAGEMENT

- Tasks of Facilitator
- Tasks of Students
- Plan for local resource support
- Plan for School resource group support

3. MATERIAL MANAGEMENT

- Selection of materials SLM/TLM
- Development of materials
- Copies of materials
- Tools
- Schedules
- Control of group/classroom material
- Creation of products
- Check -product quality
- Reuse of products
- Demonstration of products

4. TECHNOLOGY MANAGEMENT

- Selection of technology
- Selection of device and appliances
- Development of hard copy and soft copy

- Create technology environment

5. TIME AND TASK MANAGEMENT

- Selection of grouping technique
- Starting time
- Work allotment
- Division of work
- Designing of duties
- Time of development
- Product exhibition
- Review and assessment

6. MANAGEMENT OF RECORDS AND REPORT

- Review / assessment of products
- Continuous comprehensive assessment of each student
- Analysis of result
- Identify the problems
- Peer group evaluation

C.POST CLASSROOM ACTIVITIES AND PROGRAMMES.

- Reuse of products / materials
- Self/Peer assessment of products and performance
- Next day/Week planning
- Planned activity for remediation, Referencework, Library/Laboratory assignment, proposed extra reading materials.

CONCLUSION

The National Education Policy is more than a creative approach in document, it is a proposal of pragmatism. A youthful India should be able to build the educational system required for a modern India. The unique national education policy of the central government should respect the unique multicultural culture of the country and protect the federalism. The National Education Policy states that the goal is fair and inclusive education. To achieve

this the policy must consider the cultural characteristics of all social groups. This policy respects the educational and cultural contributions of culture, science, history and language over the past thousand years. Financial resources are essential for these policies to reach school classrooms in India. Moreover, the services of teachers with good understanding and application in pedagogy should be available to play their part in building India of the 21st century, while taking care to raise the national needs and concerns strongly together, preparations need to be made by Indian society. Let it be possible through effective classroom pedagogical material management in determining India in the past and creating a social consciousness based on human equality. An autonomous body, the National Educational Technology Forum (NETF), will be created to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration. Appropriate integration of technology into all levels of education will be done to improve classroom processes, support teacher professional development, enhance educational access for disadvantaged groups and streamline educational planning, administration and management. Technology-based education platforms, such as DIKSHA/SWAYAM, will be better integrated across school and higher education.

REFERENCES

1. Prof. KrishnaswamyKasturirangan, ChairpersonNEP 2020,Ministry of HRD,Govt of India, New Delhi, July 2020.
2. Govinda, R., 2020. NEP 2020: A critical examination.
3. Prof.Yash Pal, Chairperson, National Curriculum Framework-2005, NCERT New Delhi.
4. Shashi Prabha Sharma, Education and human delopment-2005, KANISHKA PUBLICATION. New Delhi
5. R.C.Mishra, Class Room Administration-2007, APH PUBLICATION. New Delhi
6. T.N.Chhabra, Human resource management-2005,DHANPAT RAI&C New Delhi.

7. T.C.Tripathi, Human resource development-2004, SULTAN CHAND & CO. New Delhi.
8. Prof.Vijayannambiar, Methods for quality education-2005,N. PUBLICATION New Delhi.

MINDFULNESS-BUILDING SELF-MANAGEMENT AMONG PROSPECTIVE TEACHERS

M.S. Bhuvaneswari & Dr. A. Catherin Jayanthy

ABSTRACT

Self-management is the capacity to govern behaviors, thoughts, and emotions responsively and healthily which is essential for a teacher. An individual with self-management skills knows how to react, be responsible in complex situations, and develop functional capacity for being more routine, innovative, and resourceful. The study focuses mainly on analyzing the levels of self-management and mindfulness among the prospective teachers and finding out whether there is any significant relationship between them. The sample of the study included student-teachers studying the final year of B.Ed degree in teacher education college in Coimbatore district of Tamil Nādu. The data is collected from the sample using self-management scale and mindfulness scale and analyzed using statistical techniques of descriptive analysis (Mean and Standard Deviation) and correlation analysis. The results reveal that there is a moderate level of mindfulness and self-management among the prospective teachers and there exists a significant relationship between them. Therefore, incorporating mindfulness in our routine develops self-management which is necessary for effective functioning of the student-teachers in their personal life and the social set-up.

KEYWORDS : mindfulness, self-management, prospective teachers

INTRODUCTION

Prospective teachers on the verge of demonstrating efficiency always face a situation of academic pressure. At this critical stage of career development, they fall prey to emotional outbursts failing to manage themselves from academic stress and social situational challenges leading to distinct mental health disorders. Mindfulness strategies are found to improve the mental health of the prospective teachers which leads to academic proficiency. Proper intervention and participation of the students at the right

time can prove to be effective factors in boosting mental health and in turn, produce significant improvement in performance both academically and personally. Mindfulness enhances attention, memory, concentration and management skills promoting teachers' performance outcomes.

When the mind is clear the body will be physically active emphasizing concentration and memory retention in teachers (Fetterman, Robinson, Ode, & Gordon, 2010). As mindfulness is innate, it can be cultivated through meditation, yoga, or other activities to help us fix our sensations in the current context and everyone can do it. The positive benefits of mindfulness can accomplish the quality of self-management in an individual.

MINDFULNESS

"Mindfulness is the quality or the practice of being aware of the present moment also acknowledging and accepting one's feelings, thoughts and bodily sensations used as a therapeutic technique" (Kabat-Zinn, 1982) - Jon Kabat Zinn

The mind is fully conscious and attending to what is happening around us, what we are doing and how we are completely focused on the present moment not overwhelmed by the happenings going around us.

SELF-MANAGEMENT

"Self-management is the ability to control one's actions, thoughts and emotions consciously and advantageously" (Seashore et al., 2004). It helps to avoid distractions maintain focus and stay productive. From an organizational standpoint, team members' capacity for self-management is essential to the efficient operation of an organization. Improving and mastering associated abilities like role clarification, goal alignment, self-care, emotional regulation, strategic planning, and priority setting would help acquire the concept of self-management.

It includes:

- Stabilizing one's emotions thoughtfully
- Overcoming challenges and obstacles with confidence

- Utilizing defensive strategies
- Demonstrating organization skills and
- Sustaining attention

PROSPECTIVE TEACHERS

The final-year student-teachers studying in teacher education colleges of the two-year B.Ed degree program are known as prospective teachers.

SIGNIFICANCE OF THE STUDY

Improved self-management is an essential component for prospective teachers to enable them to work efficiently in socially challenged situations. An individual's role is mainly dependent on the qualities of emotional management which predicts their identity in their social environment and their effectiveness in strengthening their social networks.

Strong self-management abilities are typically associated with greater success at work. The development of employees' self-management abilities can be crucial for the success of organizations, particularly with the rise of the modern hybrid workplace. Having excellent self-management abilities entails avoiding domestic distractions and focusing on the task at hand. Hence, it becomes easier to manage oneself and our responses if one practices mindfulness which creates conscious access to one's thoughts, helping one to become energized, inspired and focused in our daily lives.

OBJECTIVES OF THE STUDY

- To determine the level of mindfulness among the prospective teachers.
- To determine the level of self-management among the prospective teachers.
- To determine the level of mindfulness among the prospective teachers concerning gender and locality.
- To determine the level of self-management among the prospective teachers with respect to gender and locality.

- To find out whether there is any significant relationship between mindfulness and self-management among prospective teachers.

HYPOTHESES OF THE STUDY

1) There is no significant difference in the level of self-management between male and female prospective teachers.
2) There is no significant difference in the level of self-management between rural and urban prospective teachers
3) There is no significant difference in the level of mindfulness between male and female prospective teachers.
4) There is no significant difference in the level of mindfulness between rural and urban prospective teachers.
5) There is no significant relationship between self-management and mindfulness among the prospective teachers

METHOD

The investigator adopted a descriptive survey method for the quantitative research. The population for the study includes all the prospective teachers from Coimbatore district. A survey was conducted for the sample of 90 prospective teachers adopted for the study including male and female from the second year. The tool was administered to study the levels of self-management and mindfulness for a duration of one and a half an hour individually. The students were given ample time to fill in the questionnaire and the investigator clearly instructed the students on the purpose of the tool and ensured the confidentiality of their data.

SAMPLE FOR THE STUDY

In this research, the sample of 90 student-teachers for the study was chosen from the second year of B.Ed degree studying in Dr. N.G.P College of Education, Coimbatore. The sample was chosen using simple random sampling and the tools were carefully administered among the student-teachers collected.

TOOLS USED FOR THE STUDY

A standard tool for mindfulness, the Five Facet Mindfulness Questionnaire was developed by Ruth A. Baer from the University of Kentucky in 2006. It is a self-reporting questionnaire for measuring mindfulness in various dimensions which consists of 39 items to be answered on a five-point Likert scale ranging from 1= Never to 5 very often. The scale has items which has to be scored in a reverse manner also. A tool to test self-management was constructed with the help of the guide and experts which consists of 20 items were administered to the students and its reliability was established with the help of the guide and other experts.

DATA ANALYSIS AND INTERPRETATION

Hypothesis 1

There is no significant difference in the level of self-management among the male and female prospective teachers.

TABLE 1

Levels of self-management between Male and Female prospective teachers

Dimension of Self-management	**Male (N = 24)**		**Female (N = 66)**		**Calculated "t" value**	**Remarks Significant/not significant**
	Mean	Standard Deviation	Mean	Standard Deviation		
Self-care	16.48	2.04	14.80	1.98	3.53	S
Adaptation skills	24.88	2.24	24.04	2.52	1.52	NS
Managing emotions	26.32	3.22	24.64	2.78	2.43	S
Managing social challenges	16.24	1.92	15.90	1.35	0.80	NS

(At a 5 % level of significance table value of t is 1.96)

It is evident from the above table that the calculated 't' values (1.52,0.80) are lesser than the table value of 1.96 at a 0.05 level of significance. Hence it is stated that there is no significant difference among the prospective teachers in their level of self-management with respect to gender. The calculated 't' values (3.53,2.43) are greater than the table value 1.96 at 0.05 level of significance which states that there is a significant difference among the prospective teachers in their level of self-management with respect to gender. The mean score differences showed that the male prospective teachers have a higher capacity to manage emotions and develop adaptation skills than their female counterparts. Hence, the alternate hypothesis is accepted in the case of gender with respect to the dimension of self-care and managing emotions of self-management.

Hypothesis 2

2) There is no significant difference in the levels of self-management between rural and urban prospective teachers

Table 2

Levels of Self-management between the Rural and Urban Prospective Teachers

Dimension of Self-management	**Rural (N = 16)**		**Urban (N = 74)**		**Calculated "t" value**	**Remarks Significant/not significant**
	Mean	Standard Deviation	Mean	Standard Deviation		
Self-care	16.40	2.04	14.86	3.24	2.43	S
Adaptation skills	22.96	1.96	20.68	3.48	3.58	S
Managing emotions	30.84	1.88	29.94	3.66	1.42	NS
Managing social challenges	26.24	2.02	24.84	2.42	2.42	S

(At 5% level of significance table value of t is 1.96)

It is evident from the above table that the calculated 't' value (1.42) is lesser than the table value 1.96 at a 0.05 level of significance. Hence, it is stated that there is no significant difference among the prospective teachers in their level of self-management with respect to locality. The calculated 't' values (2.43,3.58,2.42) are greater than the table value 1.96 at 0.05 level of significance which states that there is a significant difference among the prospective teachers in their level of self-management with respect to locality. The mean score differences showed that the rural prospective teachers have a higher capacity to manage emotions and social challenges than their urban counterparts. Hence, the alternate hypothesis is accepted that there is a significant difference in the levels of self-management in the case of locality with respect to the dimensions of self-care, adaptation skills, and managing emotions.

HYPOTHESIS: 3

3) There is no significant difference in the level of mindfulness between male and female prospective teachers.

TABLE 3

Levels of Mindfulness between Male and Female Prospective Teachers

Dimension Of Mindfulness	Male (N=24)		Female (N=66)		Calculated "t" value	Remarks
	Mean	Standard Deviation	Mean	Standard Deviation		
Present moment awareness	23.50	3.43	22.56	3.92	1.10	NS
Non-judgemental acceptance	24.55	3.24	23.13	4.46	1.65	NS
Acting with awareness	24.33	3.28	23.72	2.87	0.80	NS
Attention	26.12	3.49	24.60	3.03	1.89	NS
Non-reactivity to inner experience	23.16	3.56	22.65	3.85	0.59	NS

(At 5% level of significance table value of t is 1.96)

It is evident from the above table that the calculated 't' values (1.10,1.65.0.80,1.89,0.59) are lesser than the table value 1.96 at a 0.05 level of significance. Hence, it is stated that there is no significant difference among the prospective teachers in their level of Mindfulness with respect to gender. Hence, the null hypothesis is accepted that there is no significant difference in the level of mindfulness in all the dimensions with respect to gender.

HYPOTHESIS: 4

4) There is no significant difference in the level of Mindfulness between Rural and Urban prospective teachers.

TABLE 4

Difference between Rural and Urban native prospective teachers in their Mindfulness

Dimension Of Mindfulness	Rural (N=16)		Urban (N=74)		Calculated "t" value	Remarks
	Mean	Standard Deviation	Mean	Standard Deviation		
Present moment awareness	24.72	4.10	22.75	2.04	1.95	NS
Non-judgemental acceptance	25.46	4.36	23.16	1.72	2.07	S
Acting with awareness	14.16	2.57	13.62	3.63	0.70	NS
Attention	21.30	3.56	20.67	2.35	0.68	NS
Non-reactivity to inner experience	25.89	3.73	23.76	4.43	2.10	S

(At a 5% level of significance table value of 't' is 1.96)

It is evident from the above table, that the calculated 't' values (1.95,0.70,0.68) are lesser than the table value of 1.96 at a 0.05 level of significance. Hence, it is stated that there is no significant difference among the prospective teachers in their level of mindfulness with respect to locality. The calculated 't' values (2.07,2.10) are greater than the table value 1.96 at 0.05 level of significance which states that there is a significant difference among the prospective teachers in their level of mindfulness with respect to locality. The mean score differences showed that the rural prospective teachers have a higher level of mindfulness with respect to the dimensions, non-reactivity to inner experience and non-judgemental acceptance than their urban counterparts. Hence, the alternate hypothesis is accepted in the case of locality that there is a significant difference in the level of mindfulness with respect to the dimensions, non-reactivity to inner experience and non-judgemental acceptance.

Hypothesis 5

There is no significant relationship between the levels of mindfulness and self-management among the prospective teachers.

Table 3

Relationship between Levels of Mindfulness and Self-management among the prospective teachers

Dependent Variable	**Independent variable**	**N**	**'r ' value**	**'p-value**
Self-management	Mindfulness	90	0.696	0.000

'r-value significant at 0.01 level (p < 0.01)

It is evident from the above table that the calculated value (0.696) is significant at a 0.01 level of significance. It shows that there is a significant positive relationship between mindfulness and self-management, the null hypothesis is rejected and the alternate hypothesis that there is a significant relationship between self-management and mindfulness is accepted.

FINDINGS AND CONCLUSION

From the analysis, it is evident that the prospective teachers differ in the level of self-management in the dimensions of self-care and managing emotions with respect to gender. The male prospective teachers have a higher level of self-management with respect to the dimensions, managing emotions and adaptation skills. The rural prospective teachers have a higher level of self-management with respect to the dimension of managing emotions and social challenges than their urban counterparts. The analysis indicates that there is no significant difference in the level of mindfulness in all the dimensions with respect to gender which shows that the prospective teachers have to develop the practice of mindfulness for the benefit of scheduling routines and sustaining emotional stability in the current scenario. The calculated values show that the rural prospective teachers have high levels of mindfulness with respect to the dimension, non-reactivity to inner experiences and non-judgemental acceptance. There is a significant difference among the prospective teachers in the level of mindfulness with respect to locality.

Based on the findings it is concluded that the prospective teachers have moderate levels of mindfulness. The thoughts drawn from this study are that prospective teachers can enhance the quality of self-management when they introduce the practice of mindfulness in their daily routine which may enhance productivity, perceiving the environment in the current context with complete focus and reacting to it with emotional balance. The construction of a professional skill like self-management allows prospective teachers to improve their physical and mental health lowering the risk of illness to reach their targeted goals.

REFERENCES

1. Associations of Five Facets of Mindfulness With Self-Regulation in College Students—Helen Z. MacDonald, 2021. (n.d.). Retrieved May 13, 2023, from https://journals.sagepub.com /doi/abs/ 10.1177/ 0033294120937438? journalCode=prxa

2. Emerging Role of Mindfulness Meditation as Effective Self-Management Strategy, Part 1: Clinical Implications for Depression, Post-Traumatic Stress Disorder, and Anxiety | Military Medicine | Oxford Academic. (n.d.). Retrieved July 17, 2023, from https://academic.oup.com/ milmed/article/ 181/9/961/4159814

3. Gawande, R., To, M. N., Pine, E., Griswold, T., Creedon, T. B., Brunel, A., Lozada, A., Loucks, E. B., & Schuman-Olivier, Z. (2019). Mindfulness Training Enhances Self-Regulation and Facilitates Health Behavior Change for Primary Care Patients: A Randomized Controlled Trial. Journal of General Internal Medicine, 34(2), 293–302. https://doi.org/10.1007/s11606-018-4739-5

4. Mindful Leadership: Self-Management – Grow Mindfulness. (n.d.). Retrieved July 17, 2023, from https://growmindfulness.com/mindful-leadership-self-management/

5. Mindful Leadership: Self-Management – Grow Mindfulness. (n.d.). Retrieved July 17, 2023, from https://growmindfulness.com/mindful-leadership-self-management/

6. Jennings, P. (2016). CARE for Teachers: A Mindfulness-Based Approach to Promoting Teachers' Social and Emotional Competence and Well-Being. 133–148. https://doi.org/10.1007/978-1-4939-3506-2_9

7. Professional Self-Regulation, Competence, and Certification of Physicians | AAFP. (n.d.). Retrieved May 13, 2023, from https://www.aafp.org/about/policies/all/professional-self-regulation.html

8. What Is Self-Management, and How Can You Improve It? (n.d.). Retrieved July 17, 2023, from https://www.betterup.com/blog/what-is-self-management-and-how-can-you-improve-it

9. Wimmer, L., Bellingrath, S., & von Stockhausen, L. (2020). Mindfulness Training for Improving Attention Regulation in University Students: Is It Effective? and Do Yoga and Homework Matter? Frontiers in Psychology, 11. https://www.frontiersin.org/ article/10.3389/ fpsyg.2020.00719

PERCEPTION OF AUGMENTED REALITY IN ENHANCING A CREATIVE LEARNING ENVIRONMENT AMONG UNDERGRADUATE STUDENTS.

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ABSTRACT

Education allows exploring the world. When technology ties up with education, it would be amazing. Today's learners are so fast and they need everything in a novel and interesting way. So teachers have to think alternatively and embed digital tools in their teaching style. Augmented reality is one of the visualization tools which will give the learners an innovative experience, from lower level to higher level. This paper investigates the perception of undergraduate students in augmented reality about enhancing a creative learning environment. The investigator used a five-point scale with 25 questions. The data was collected using online mode. The data was collected from 50undergraduate students across all disciplines. JASP – a free statistical tool was used to analyze and interpret the data collected.

KEYWORDS : Perception, augmented reality, Digital tools, Undergraduate students.

INTRODUCTION

Adapting to new technology is always a challenge. Augmented reality in education is quite a new area, which needs more research and thought processes. Augmented reality is avisualization tool that helps the learner to create an interactive learning environment. It creates virtual reality images in real-life environments. This helps the learner to understand the concepts clearly. While embedding the usage of Augmented Reality in the delivery of instruction, the learners would be able to have a better understanding of education. Learners of higher education need a deep understanding and knowledge of the subject. Understanding leads to interest and interest leads to searching for new things, which are the key terms of research. Interestin research would lead to development in science and technology.

NEED AND SIGNIFICANCE OF THE STUDY

Augmented reality is one of the advanced technologies which provide the learner with an immersive learning environment. It helps the teacher to construct a creative learning environment. Augmented reality helps the teacher, the facilitator to construct the complex thought in a virtual way but in real –life environment. This would help the learner to get closer to the core concepts and would help the learner to achieve the instructional objectives to be attained. A creative learning environment helps the learner to construct knowledge, provides opportunities to discusstheir ideas, space to exhibit their doubts, and the chance to express their innovative solutions, and alternative thoughts about the concept. Augmented reality provides the thirst to know more about the core concepts. This visualization tool allows exploring knowledge as a virtual image in real-life situations. It needs to know about the perception of undergraduate students about augmented reality and its usage in enhancing a creative learning environment.

OBJECTIVES

1. To find out the significant difference, if any in the perception of augmented reality among undergraduate students with respect to gender, locality of the residence, and learning style.

METHODS AND PROCEDURE

METHODOLOGY

The researcher adopted the Survey method as a method of her research. The researcher developed a self-made questionnaire with 25 questions on a five-point scale. The Score varies from 25 to 125. The questionnaire was posted on the social messenger app, WhatsApp.The researcher adopted a random sampling method.

HYPOTHESES

1. There is no significant difference in the perception of augmented reality in enhancing creative learning environments with respect to gender.

2. There is no significant difference in the perception of augmented reality in enhancing creative learning environments with respect to locality.
3. There is no significant difference in augmented reality about the perception of augmented reality in enhancing creative learning environments with respect to learning style.

RESULTS AND DISCUSSION

Hypothesis-1

There is no significant difference in the perception of augmented reality in enhancing creative learning environments with respect to gender.

Table-1

Table showing the significant difference between males and femalesin their perception of augmented reality in enhancing the creative learning environment.

Gender	N	Mean	SD	t - value	Result
Male	28	108.929	8.606	1.277	Not Significant
Female	22	105.364	11.146		

't' Value at 5% of significance with 48 degrees of freedom 2.011

It is inferred from the above table the perception of augmented reality in enhancing creative learning environments between male and female undergraduate students shows no significance.

Hypothesis-2

There is no significant difference in the perception of augmented reality in enhancing creative learning environments with respect to locality.

Table-2

Table showing the significant difference between rural and urban about their perception of augmented reality in enhancing the creative learning environment.

Locality	N	Mean	SD	t - value	Result
Rural	18	107.556	10.007	0.104	Not Significant
Urban	32	107.250	9.939		

It can be understood from the above table that, there is no significant difference in perception of augmented reality in enhancing creative learning environment among undergraduate students with respect to locality.

Hypothesis-3

There is no significant difference in augmented reality about the perception of augmented reality in enhancing creative learning environments with respect to learning style.

Table-3

Table showing the significant difference between auditory and visual learners about their perception of augmented reality in enhancing the creative learning environment.

Learning Style	N	Mean	SD	t - value	Result
Auditory Learner	38	106.658	10.138	0.894	Not Significant
Visual Learner	12	109.583	8.969		

From the above table, it's understood that the perception of augmented reality in enhancing creative learning environment shows no significant difference between auditory and visual learners.

DISCUSSION

From the above results, it can be concluded that further research and there should be the selection of different variables other than gender and locality. The study also reveals that the learning style has less significance on the perception of augmented reality in enhancing a creative learning environment. The study reveals there a need for still more exploration of augmented reality and using augmented reality in enhancing creative learning environments.

CONCLUSION

Augmented reality is one of the great visualization tools which would engage learners in creating an active learning environment. It also encourages thinking and visualizing the abstract concepts they learn. While augmented reality is integrated with a teaching methodology that would increase their learning ability. Thestudy also expresses the need to expand the research quantitavely.

REFERENCES

1. Wen, Y., Wu, L., He, S., Ng, N. H., Teo, B. C., Looi, C. K., & Cai, Y. (2023). Integrating augmented reality into inquiry-based learning approach in primary science classrooms. Educational technology research and development : ETR & D, 1–21. Advance online publication. https://doi.org/10.1007/s11423-023-10235-y
2. Karamanoli, Persefoni&Tsinakos, Avgoustos. (2015). Use of Augmented Reality in terms of creativity in School learning.
3. Hung, Y.-H & Chen, C.-H & Huang, S.-W. (2016). Applying augmented reality to enhance learning: a study of different teaching materials. Journal of Computer Assisted Learning. 33. 10.1111/jcal.12173.
4. Tuli, N., Singh, G., Mantri, A., & Sharma, S. (2022). Augmented reality learning environment to aid engineering students in performing practical

laboratory experiments in electronics engineering. Smart Learning Environments, 9(1), 1-20. https://doi.org/10.1186/s40561-022-00207-9

INCLUSION IN EDUCATION FOR SUSTAINABLE DEVELOPMENT OF TEACHER EDUCATION PROGRAMME IN NAGALAND

Kavani Hekha & Dr. T Yolila Sangtam

ABSTRACT

Sustainable Goal Development 4 ensures inclusive and equitable quality education and promote lifelong learning opportunities for all. To adopt inclusivity for Sustainable Development of Teacher Education Programme, it is built upon the competencies, knowledge, skills and attitudes of Teacher Educators as well as a ready Institute. Inclusive Education in Nagaland is still far behind and yet to achieve its due recognition. Under the 2 years B.Ed. Course curriculum, Inclusive Education has been introduced to sensitise Teacher Educators and Student Teachers the concept of inclusion. However, this field of area is being neglected and unexplored thereby pondering on whether Teacher Educators are competent enough to adopt and adapt teaching skills to impart Inclusive Education. There is a need to address the gap of inclusive and equitable education and to reform curricular and pedagogical aspects to promote the concept of inclusion in Teacher Education Programme. This paper focuses on the concerns and exceptions of Inclusive Education and the need to change the current approaches which will equip Teacher Educators with different skills and foster inclusivity in Teacher Education Programme.

KEYWORDS : Sustainable Development, Inclusive Education, Equitable, Pedagogical, Curriculum, Teacher Educators.

Providing quality education for all is fundamental to creating a peaceful and prosperous world. Education gives people the knowledge and skills they need to stay healthy, get jobs and foster tolerance. Inclusion is seen as a universal human right. The aim of inclusion is to embrace all people irrespective of race, gender, disability, medical or other need. It is about giving equal access and opportunities. Sustainable Development Goal 4 ensures inclusive and equitable quality education and promote lifelong learning

opportunities for all. Inclusive education operates on the principle that almost all children start in a general classroom.

At the root of educational system that embraces full inclusion are appropriately and well-trained teachers. However, inclusion is found to fail partly due to the inability of teachers to meet the demands of the modified system. In the context of Nagaland, achieving inclusion is still a far-fetched reality. In theory all the norms, provisions and policies are beautifully laid down but practical implementation remains unaddressed. Many schools in Nagaland are not equipped to cater to the needs of children with special needs because there are no trained teachers/professionals and unavailable of resources and facilities. Teacher education is key to making inclusive education possible. However, as highlighted in the July 2018 IIEP and UNICEF technical Round Table on disability-inclusive educational planning, teacher education around inclusive education remains a major obstacle at the country level.

INCLUSION FOR SUSTAINABLE DEVELOPMENT

According to Cambridge dictionary Inclusion is the act of including someone or something as part of a group, list, etc, or a person or thing that is included. Many of us associate inclusion to children with disabilities only. However, in a broader perspective, inclusion comprises of children/ youth with disabilities, gifted children and children from marginalised community. In order to attain quality education for sustainability, inclusion in education is a must. Inclusion is an attitude of acceptance of diversities, flexibility and tolerance and attitude towards alternative expectations, to value all types of skills.

Sustainable Development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.

Research has found out that teacher education in developing countries lacks impact because the quality and reach are inadequate. Consequently, many teachers are unable to address the learning needs of individuals in the classroom. Teachers are not aware of policy provisions around inclusive education and struggle to translate inclusive education policy into classroom

practice. To facilitate learning needs of children in the classroom, a teacher needs to adopt and adapt diverse pedagogical skills to foster inclusive and equitable education for sustainable development. Teacher education is one such area where prospective teachers are moulded and equipped with different pedagogical skills and techniques. Therefore, support and contribution of teachers can be a key factor in successful attainment of inclusion for sustainable development.

NEP 2020 the much-awaited policy launched after nearly three decadeshas captured the attention of many with one particular theme concerning the idea of inclusion and equity paving a roadmap for positive action.Hopefully with the implementation of NEP 2020 we will be able to achieve holistic and inclusive approach towards education.

RATIONALE OF THE STUDY

Inclusion in education irrespective of gender, caste, religion, disability or the socio-economic marginalised group are provided with equal access to education. As we all know inclusion in education is one of the most important guiding factor of NEP 2020. This study emphasises on certain areas of concerns in the B.Ed. 2 years Course syllabus. After introducing inclusive education as a part of the curriculum, so far, no changes/ revision/ review has been made in the syllabus. Teacher Educators merely confined to theoretical aspects of teaching learning and lack practical knowledge which does not justify the title of the paper-Creating an Inclusive School. The suggestions and recommendations made may further open avenues for Teacher-Educators as well as Student-Teachers to take up courses in Inclusive/ Special Education for professional and self-development and also for curriculum framers to analyse the problems faced by subject teachers and implement measures which will meet the needs of teachers and students.

The objectives of this study are to identify the areas of gaps and concerns of inclusive education in Teacher Education Programme that needs to be taken into account and deliberated upon. Unstructured interview with

Teacher Educators of B.Ed. institutes in Nagaland was carried out and responses collected is discussed below.

CONCERNS AND EXCEPTIONS OF INCLUSIVE EDUCATION IN TEACHER EDUCATION PROGRAMME IN NAGALAND

The two-year B.Ed. course programme has introduced a core paper Course 10 under the nomenclature "Creating an Inclusive School" in the third semester to sensitise teacher educators and student teachers about Children With Special Needs(CWSN). This paper offers different perspectives in the area of education of children with disabilities. It enables Teacher Educators and Student-Teachers to inculcate values of respect, tolerance and principles pertaining to Children With Special Needs. In order to make schools more inclusive, there is urgent need of trained teachers who are specialised in or equipped with the knowledge of inclusive/special education. Teacher Education is the channel where Student-Teachers are trained to acquire desired pedagogical skills and techniques to meet the needs of learners.

In theory so much has been discussed and suggested regarding Inclusion of Education but are we really practicing and implementing the principles of inclusion? This study emphasis son the areas of Inclusion which need to be addressed in order to achieve Sustainable Development Goals for Quality Education. The responses collected are highlighted below for further discussion-

- No B.Ed. Special Education Institute in Nagaland: Due to this reason there is lack of subject expertise/ professionals.
- Syllabus: This is one major area which needs immediate review. The syllabus need to be updated and some topics related to gifted children and socio economically disadvantaged group should be included since the title of the course is all about "Creating an Inclusive School." Also, the syllabus is overly vast though it is a half paper – 50 marks. In that process some topics are omitted which are relevant.
- Approach towards Inclusive Education: The approach has been lukewarm and side-lined. Not much emphasis is given to inclusivity. In

fact, the approach towards this particular field is neglected and issues are not raised or discussed upon.

- Ready School/Institute: The question remains "Are the institutes ready to accommodate Person with Disability (PwD) and provide required human resources, infrastructure and facilities needed to cater to their needs?"Also are the institutes ready to facilitate Student Teachers for Inclusive Education? When there are no SpecialTeacher Educators to take up this paper, how can we fulfil the objectives of "Creating an Inclusive School?
- The current context is not based on structured educational needs and purpose of inclusive education. After the completion of B.Ed. course, Student-Teachers still lack basic essential knowledge to teach and deal with special needs children. The reason is because of lack of practical knowledge which was not provided to them.

SUGGESTIONS AND RECOMMENDATIONS

- Proposal for greater consonance between NCTE and RCI to set up B.Ed. Special Education Institutes in the State.
- Professionals, teachers and stakeholders should be taken into consideration while framing the syllabus of Course-10 Creating an Inclusive School. It is a half paper course so syllabus can be reduced/lessen so that only important and necessary topics can be concentrated and learnt in depth.
- Policies and Provisions which are not related or outdated can be omitted and latest/recent Acts and Provisions can be incorporated.
- Collaborations can be organised with Special Educators/ Professionals from Inclusive schools and other external agencies to orient Teacher Educators to enhance pedagogical knowledge and skills pertaining to Inclusive Education.
- To enhance effectiveness, Teacher Education needs to be addressed through a Continuous Professional Development approach. Frequent workshops and seminars to be organised so that Teacher Educators are

kept abreast of the latest trends to be included in the teaching learning process.

- Short term courses/Diploma courses should be recommended to those Teacher Educators dealing with the particular subject/ course.
- Institutes should be ready by providing the basic amenities to cater to the needs of Person with Disability and also for Teacher Educators in order to equip themselves with appropriate pedagogical skills.
- To implement the subject/ course effectively so that the curriculum of Teacher Education Programme is dynamic and inclusive in nature.

Inclusion still remains a cliché however if all the recommendations and suggestions are taken into consideration the practical aspects of inclusion for sustainable development in teacher education can be achieved.

CONCLUSION

The Sustainable Development Goal 4 envisions to achieve equitable and quality education by 2030 and eliminate gender disparities in education and ensure equal access to all levels of education. Endorsing teacher collaboration, research indicates that effective collaboration has a number of significant benefits. Collaboration among teachers contributes to successful implementation of innovative, student-centred and collaborative learning methods (Dochy et al. 2003; Meirink, Meijer, and Verloop 2007; Slavit et al. 2011). To build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environment for all, we all have a part to play. Small actions, taken collectively, can add up to real change.

This study is limited to opinions of Teacher Educators only so further study/ research can be carried out with all the stakeholders involved in Teacher Education Programme. Inclusion in Education for Sustainable Development of Teacher Education Programme can be achieved if the areas of concerns and measures for better implementation are addressed and actions taken promptly.

REFERENCES

1. Das, A.K, Kuyini, A.B. & Desai,I.P (2013) Inclusive Education in India: Are the teachers prepared? International Journal of Special Education Vol 28, No: 1
2. Dochy, F., M. Segers, P. Van den Bossche, and D. Gijbels. 2003. "Effects of Problem-Based Learning: A Meta-Analysis." Learning and Instruction 13 (5): 533–568. doi:10.1016/S0959-4752(02)0025-7
3. Gafoor, K. A.& Asaraf. P, M. (2009). Inclusive Education: Does the regulator teacher education programme make difference in knowledge and attitudes?
4. Jims, A (2018). Teacher education and Inclusive education. Retrieved February 22, 2023, from https://www.iiep.unesco.org/en/teacher-education-and-inclusive-education-4789
5. Malviya, R. & Talwar. T. Inclusive Education: Current Scenario in India-
6. Meirink, J. A., P. C. Meijer, and N. Verloop. 2007. "A Closer Look at Teachers' Individual Learning in Collaborative Settings." Teachers and Teaching: Theory and Practice 13 (2): 145–164. doi:10.1080/ 13540600601152496
7. Őrla Nỉ Bhroin & Fiona King (2020) Teacher Education for Inclusive education: a framework for developing collaboration for the inclusion of students with support plans, European Journal of Teacher Education, 43:1, 38-63. DOI:10.1080/02619768.2019.1691993
8. Preparing Teachers for Inclusive Education. Retrieved February 16,2023, from http://www.smilefoundation.org/education.html
9. Rieckmann, M. (2019): Education for Sustainable Development in Teacher Education. An Internal Perspective. In: Lahiri, S. (ed.): Environmental Education, Delhi, pp. 33-48.
10. Sanjeev,K, & Kumar, K. (2007). Inclusive Education in India, Electronic Journal for Inclusive Education, 2 (2).
11. Sarkar, T. (2020). Examining Disability Inclusion in India's New National Education Policy. Cambridge Network for Disability and Education Research (CaNDER).

12. Sd-commission.org.uk/pages/what-is-sustainable-development.
13. Slavit, D., A. Kennedy, Z. Lean, T. H. Nelson, and A. Deuel. 2011. "Support for Professional Collaboration in Middle School Mathematics: A Complex Web." Teacher Education Quarterly 38 (3): 113–131
14. Sustainable Development Goals. http://www.undp.org/sustainable-development-goals.
15. The new education policy and inclusive education framework in India. http://link.springer.com/article/10. 1007/s11125-011-9198-2

EFFECTIVENESS OF E-CONTENT AT THE HIGHER SECONDARY EDUCATION

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ABSTRACT

The study aimed to find out the effectiveness of E-contentin learning chemistry at the higher secondary level. E-content in education is a powerful tool that may be used effectively and efficiently within the classroom to create a more exciting learning environment and deliver a higher level of educational expertise to students. An experimental method has been used for the present study. The sample of this study consisted of 20 (XI standard) students in the Control group and 20 (XI standard) students in the Experimental group. *Exclusively this study has used pre test-post test control group design.* This experimental research brings out a clear-cut idea about the effectiveness of E-content in learning chemistry for XI Standard Students. The data were collected using appropriate tools, and suitable statistical techniques were analyzed. The finding is that the experimental group students' achievement scores were higher than the Control group Students.

KEYWORDS : E-Content, Learning Chemistry, Low Achievers.

INTRODUCTION

Educational technology can help solve challenges in today's educational systems. The lack of challenging instructional material that does not limit the learner's creativity is better met by E-Content. While this strategy can help slow learners enhance their learning, it can also help high achievers build expertise. The classroom is loaded with a mountain of syllabi, and students are expected to obtain knowledge to better their understanding. An alternate teaching method must be used to stimulate students' interest, enrich the meaningful development of independent study habits, and foster the purposeful development of self-confidence in learning. In this regard, E-Content for chemistry learning is a particular and unique medium, with features such as high-quality audio-visual recording and immediate feedback. It is a simple way to deliver well-designed

information with a variety of interesting effects. Quantum mechanical models of the atom and chemical bonding lessons can be visualized by them through E-Content presentation for better understanding. This study highlights the necessity for introducing E-Content presentations in learning chemistry.

NEED AND SIGNIFICANCE OF THE STUDY

E-Content allows students to extend their learning beyond the classroom's four walls. This can be seen from any accessible location in a room. Even the most complex subjects, such as the Quantum mechanical model of atoms and chemical bonding, can be taught to students engaginglywith the animation visuals. It can be utilized to improve the learning environment in the classroom. Teachers, in general, are unable to satisfy a diverse set of students in learning using traditional instructional processes. This issue could be solved with the use of innovative educational technologies. Individualized instruction via E-content was used as an alternative to the conventional model in this study. This strategy allows students to proceed and learn at their own pace, based on their talents and performance. It also encourages students to learn on their own.

OBJECTIVES OF THE STUDY

1. To study the effectiveness of *E-content at the higher secondary level*.
2. To find out the significant difference between low achievers in pre-test and post-test, Mean achievement scores of the control group.
3. To find out the significant difference between low achievers in pre-test and post-test, Mean achievement scores of the experimental group.
4. To find out any significant difference between pre-tests attitude scores towards E-Content in learning chemistry at the higher secondary level in the control and experimental groups.

HYPOTHESES OF THE STUDY

1. *E-content at the secondary education level* is not effective.
2. There is no significant difference between low achievers in the pre-test and post-test, Mean achievement scores of the control group.

3. There is no significant difference between low achievers in pre-test and post-test, Mean achievement scores of the experimental group.
4. There is no significant difference between pre-tests attitude scores towards E-Content in learning chemistry at the higher secondary level in the control and experimental groups

EXPERIMENTAL DESIGN OF THE STUDY

In the present study, Parallel group, the investigator applies experimental design (Pre-test-Post test Equivalent-groups design).

POPULATION AND SAMPLE

All the students studying at the higher secondary schools in the Cuddalore district constitute the population for the present study. The investigator has chosen the eleventh-standard students of the Government Higher Secondary School, functioning in Virudahachalam educational district as a sample by using a purposive sampling technique. This group has 65 students on roll. The investigator has chosen 40 students based on their marks obtained in the II term-end examinations. A homogenous group is formed according to their achievements through randomization. Randomization reduces systematic error. Equivalence of the groups is also considered while choosing the samples from the population. Twenty students are treated as experimental groups, and the other 20 students formed the control group

TOOLS USED FOR THE STUDY

The following research tools are used in the present study;

1. E-content (CD format) for learning chemistry at the higher secondary school was constructed and validated by the investigator.
2. Academic Achievement tests in Chemistry are constructed and validated by the investigator.

TESTING OF HYPOTHESES

Hypothesis: 1

E-content at the secondary education level is not effective.

Table-1: The post-tests mean achievement scores of the control and Experimental groups

Test	No. of students	Mean	S.D	Mean difference	't'value	Degrees Of freedom	Level of significance (0.01level)
C-groupPost-test	20	24.45	7.24	14.05	6.368	38	Significant
E-groupPost-test	20	38.50	6.71				

The mean of the post-test scores of the control group through the Conventional method is found to be 24.45 with an SD of 7.24. The mean of the post-test scores of the experimental group through the E-Content is found to be 38.50 with an SD of 6.71. The mean difference of 14 is found to be significant for the 't'value 6.368 for 38 degrees of freedom at a 1% level of significance. Therefore, the hypothesis is rejected.

It is concluded that the multimedia course ware for learning science among Secondary level students is effective as compared to that of the control group.

Hypothesis: 2

There is no significant difference between low achievers in the pre-test and post-test, Mean achievement scores of the control group.

Table–2: The pre-test and post-test mean achievement scores of low achievers in the control group

Test	No of students	Mean	S.D	Mean difference	't'value	Degrees of freedom	Level of significance (0.01level)
C-groupPre-test	8	15.00	2.83	2.33	1.538	13	Notsignificant
C-groupPost-test	8	17.13	2.70				

The mean of low achievers in the pre-test scores of the control group through the Conventional method is found to be 15.00 with an SD of 2.83. The mean of low achievers in the post-test scores of the control group through the Conventional method is found to be 17.13 with an SD of 2.70. The mean difference of 2.33 is found to be not significant for the 't' value 1.538 for 13 degrees of freedom at a 1% level of significance. Therefore, the hypothesis is accepted.

It is concluded that there is no significant difference between low achievers in the pre-test and post-test, Mean achievement scores of the control group.

Hypothesis: 3

There is no significant difference between low achievers in pre-test and post-test, mean achievement scores of the experimental group.

Table–3: The pre-test and post-test mean achievement scores of low achievers in the experimental group

Test	No. of students	Mean	S.D	Mean difference	't'value	Degrees of freedom	Level of significance(0.01level)
E-groupPre-test	8	15.25	2.60	17.38	8.042	9	Significant
E-groupPost-test	8	32.63	5.53				

The mean of low achievers in the pre-test scores of the experimental group through the E-Content is found to be 15.25 with an SD of 2.60. The mean of low achievers in the post-test scores of the experimental group through the E-Content is found to be 32.63 with an SD of 5.53. The mean difference of 17.38 is found to be significant for the 't' value 8.042 for 9 degrees of freedom at a 1% level ofsignificance.Therefore, the hypothesis is rejected.

It is concluded that there is a significant difference between low achievers in the pre-test and post-test, mean achievement scores of the experimental group.

Hypothesis: 4

There is no significant difference between pre-test sattitude scores towards E-Content in learning chemistry at the higher secondary level in the control and experimental groups.

Table–4: Pre-tests attitude scores towards E-Content in learning chemistry at the higher secondary level in the control and experimental groups.

Test	No. of students	Mean	S.D	Mean difference	't'value	Degrees Of freedom	Level of significance (0.01level)
C-group Pre-test	20	62.85	7.12	0.9	0.272	38	Not Significant
E-group Pre-test	20	63.75	12.93				

The mean of the attitude scores in the pre-test of the control group towards learning chemistry throught the conventional method is found to be 62.85 with an SD of 7.12. The mean of the attitude scores in the pre-test of the experimental groupthrough the E-Content is found to be 63.75 with an SD of 12.93. The mean difference of 0.9 is found to be not significant for the 't'value 0.272 for 38 degrees of freedom at a 1% level of significance. Therefore, the hypothesis is accepted.

It is concluded that there is no significant difference between pre-tests attitude scores towards E-Content in learning chemistry at the higher secondary level in the control and experimental groups.

EDUCATIONAL IMPLICATIONS

A few educational implications for the present study are as follows:

- The results of the study have proved that E-content is more effective than the conventional method of learning chemistry to the higher secondary level students. Hence, it is recommended to utilize this technological innovation in the enhancement of science learning competency at the Secondary level.
- Since the use of E-content penetrates more deeply into the development of the human cognitive system, it would help them to be best at learning science.

- Since the use of E-content enhances achievement, it will diminish wastage and stagnation in schools.

CONCLUSION

Based on research findings, it is concluded that E-content learning promotes critical and active learning. With self-learning materials, the student and instructor will recognize that they are shifting from a provider of facts to a facilitator of a learning environment. This inquiry seeks to design a new teaching technique using the E-content approach based on this premise. This empirical investigation has shown that E-content improves students' achievement at the higher secondary level.

REFERENCES

1. Ahammad, F. (2021). A study of teaching effectiveness, scientific attitude and achievement in geography among higher secondary school students. ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH, 10(4), 124-136. https://doi.org/10.5958/2278-4853.2021.00235.4
2. Aslam Khan, E. (2021). Influence of Test Anxiety on Students' Academic Achievement at Secondary Level. İlköğretim Online, 20(2). https://doi.org/10.17051/ilkonline.2020.02.31
3. Benjamin, D. (2011). Effectiveness of E- Learning Modules in Science at the Higher Secondary School Level in India. Indian Journal Of Applied Research, 3(4), 122-124. https://doi.org/10.15373/2249555x/apr2013/39
4. Dr. Biswajit Sen, D., Mondal, D., & Saha, D. (2012). A Comparative Study of Poor Achievement in Physics At The Higher Secondary Level with Respect to Secondary Level in Birbhum District. International Journal Of Scientific Research, 2(4), 66-67. https://doi.org/ 10.15373/ 22778179 /apr2013/26
5. Masilamani, M., &Mahendren, M. (2018). A Study on Mobile Learning and its Impact on Academic Achievement among Higher Secondary Commerce Students. International Journal Of Trend In Scientific Research And

Development, Volume-2(Issue-4), 2158-2166. https://doi.org/10.31142 /ijtsrd14196

6. R.Padma. (2020). Usefulness of Multimedia Instruction on Achievement in Commerce at Higher Secondary Level. International Journal Of Psychosocial Rehabilitation, 24(5), 3200-3204. https://doi.org/ 10.37200/ ijpr/v24i5/pr202027
7. Samaresh, A. (2017). Effectiveness of constructivist approach on academic achievement in science at secondary level. Educational Research And Reviews, 12(22), 1074-1079. https://doi.org/10.5897/err2017.3298
8. Sowell, E. (2001). Educational research. McGraw-Hill.

INTERPERSONAL RELATIONSHIP OF HIGH SCHOOL TEACHERS

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ABSTRACT

Teacher's interpersonal relationships impact on school administrators, school managers, teachers, and also students. The success of a school is depends on dynamic teamwork and interrelationship between the school manager, principal, teachers, and other staff. School management requires collaboration and a set of educational goals. Teachers should mould his students to survive in society as good people. Teaching plays a significant role in school and society which involves understanding, communicating, or sharing knowledge with others, having an attractive teaching style, and student's outcomes. Teachers play an essential role for student interactions or classroom relationships and also their health. However, teachers personal problems, stress, and student classroom attrition may negatively affect the student-teacher classroom relationship, the teaching and learning process and also co-worker relationships. The study aimed to the interpersonal relationship of high school teachers. The data were collected from 200 high school teachers working in Coimbatore District, Tamil Nadu. Simple random sampling technique was used for the present study. The findings of the study reveals that there is no significant difference in the interpersonal relationship of high school teachers with respect to gender, locality of the school, type of family, medium of instruction and nature of the school.

KEYWORDS: interpersonal relationship, student-teacher classroom relationship, co-worker relationship.

INTRODUCTION

Education is solemn for the development of teachers and students. Therefore, teachers and students are the pillars of a future society. Teachers need efficiency to make a difference in the lives of many students, be well-educated, and produce disciplined students. They can help students become

more knowledgeable and enhance their personal lives. However, pedagogical skills are important for teachers to handle the different characteristics of students in a classroom. Thus, it is crucial for teachers to have future relationships and connection with their students. Strong interpersonal relationships, specifically for interacting with students, are necessary for a teacher to comprehend the needs of individual students. Moreover, the effectiveness of a teacher's interpersonal relationships will enhance the quality of their teaching methods or subject knowledge in the classroom.

NEED AND SIGNIFICANCE OF THE STUDY

This study was conducted on the interpersonal relationship of high school teachers. Teachers' Interpersonal relationships significantly impact on school, teachers, students, parents and society. The main objective of the educational process is the teaching and learning process. In a school environment, teachers need for good communication skills or interpersonal relationships which help teachers to better understand their students and to build their positive relationships with them. In addition, good communication skills can help teachers resolve conflicts and manage their classrooms effectively and also promote student's achievement. Therefore, teachers need to be able to communicate with students and parents and lead successful and better lives in their society.

This study will provide insight into a high school teacher's interpersonal relationships. Teacher's interpersonal relationships impact on school administrators, school managers, teachers, and also students. The success of a school is depends on dynamic teamwork and interrelationship between the school manager, principal, teachers, and other staff. School management requires collaboration and a set of educational goals. Teachers should mould his students to survive in society as good people. Since, teaching plays a significant role in society. It involves reading, understanding, communicating, or sharing knowledge with others, having an attractive teaching style, and student's outcomes. So, teachers play an essential role for student interactions or classroom relationships and also their health. However, teachers personal problems, stress, and student classroom attrition may negatively affect their

physical and mental health, the student-teacher classroom relationship, the teaching and learning process and also personal growth such as co-worker relationships, student engagement, empathy, body language, humor, self-motivation, parents, spouses, family members, friend relationships, and student wellness. Thus, the findings of the study will help teachers promote a positive school environment that is helpful for teachers and positive classroom relationships with students, parents, the principal, and other co-workers, as well as interpersonal relationships with colleagues, personal development, and professional growth.

This study will also benefit teachers by helping them to communicate better in the classroom, have better memory, have giving or sharing better knowledge , increase longevity, reduce depression and level of anxiety, and improve physical health and job satisfaction. The findings will enable teachers to promote better classroom communication with students, school administrators, and parents, which leads to academic success for students.

OPERATIONAL DEFINITIONS OF THE TERMS USED

Interpersonal Relationship: The term interpersonal relationship refers to the relationships between teachers and students in their classroom, teachers and administrators, teachers and parents, teachers and principals, and among other staff members.

High School Teachers: High School Teachers are referred to as those who handle the classes for IX to X standard students.

Variables of the study: Dependent variable–Interpersonal Relationship; **Independent variables** - gender, locality of the school, type of family, medium of instruction, and nature of the school.

OBJECTIVES OF THE STUDY

- To find out the level of interpersonal relationship of high school teachers.

- To find out whether there is any significant difference in the interpersonal relationship of high school teachers based on (a) gender, (b) locality of school, and (c) type of family.
- To find out whether there is any significant difference in the interpersonal relationship of high school teachers with respect to (a) medium of instruction and (b) nature of the school.

METHODOLOGY

Method: The normative survey method was adopted in this study. Population of the study: The population of the study is high school teachers working in Coimbatore District, Tamilnadu. **Sample and sampling technique:** The sample consisted ofTwo Hundred High School Teachers in Coimbatore District, Tamil Nadu. The simple random sampling techniques were used for this study. **Tool:** The Interpersonal Relationship Scale (IRS) constructed and validated by the researcher and Arulsamy, S. (2022).

Data Collection Method and Statistical Techniques: The data were collected from high school teachers using a questionnaire regarding the interpersonal relationship of high school teachers in Coimbatore District. The questionnaire contains two parts. The demographic variables are provided in the first part. The second part is provided with 46 items to measure high school teacher's interpersonal relationship. A five-point Likert scale was used with the response choices: strongly agree, agree, undecided, disagree, and strongly disagree. SPSS (version 25.0) was used for statistical analysis. The descriptive statistics, such as the mean and standard deviation, were calculated. In order to calculate the statistical significance between the dependent variables (interpersonal relationship) and independent variables (demographic variables), the t-test and one-way ANOVA were considered at a p-value of less than 0.05 level of significance.

ANALYSIS OF DATA

Table - 1

Interpersonal Relationship of high school teachers

N	Mean score
200	182.10

The total of 200 high school teachers participate in the survey and their mean score is 182.10 which is far from the mid-value (138). It shows that high school teachers have moderate level of interpersonal relationship.

Testing of hypotheses

H_0 – 1 There is no significant difference in the interpersonal relationship of high school teachers with respect to (a) gender, (b) locality of school, and (c) type of family.

Table –2

Significant difference in the interpersonal relationshipof high school with respect to (a) gender, (b) locality of school, and (c) type of family

IR		N	Mean	SD	't' value	df	Sig.	Results
Gender	**Male**	33	188.82	14.012	0.33	198	0.741	NS
	Female	167	190.02	19.863				
Locality of school	**Rural**	49	186.63	19.291	1.36	198	0.771	NS
	Urban	151	190.85	18.849				
Type of family	**Nuclear**	152	190.28	17.189	0.62	198	0.541	NS
	Joint	48	188.35	23.995				

Note: IR-Interpersonal Relationship (*Significance at 0.05 level)

The above table -2 indicates that the calculated t-value (0.33, 1.35, & 0.62) is less than the table value (1.96) at 0.05 level of significance with respect

to gender, locality of the school, and type of family. Hence, it is failed to reject the formulated H_0-1(a, b & c).

H_0 – 2 There is no significant difference in the interpersonal relationship of high school teachers with respect to (a) medium of instruction and (b) nature of the school.

Table - 3

Significant difference in the well-being of high school teachers with respect to (a) medium of instruction and (b) nature of the school

Variables	Source and Variance	Sum of Squares	Degrees of freedom	Mean Square	F	Sig.	Results
Medium of instruction	**Between**	802.638	1	802.638	2.238	0.136	NS
	Within	71010.882	198	358.641			
	Total	71813.520	199				
Nature of the school	**Between**	118.707	1	59.353	0.850	0.163	NS
	Within	71694.813	198	363.933			
	Total	71813.520	199				

(*Significance at 0.05 level)

The above table-4 shows that the calculated F- values (2.238, 0.850) are less than the table value (2.996) at 0.05 level of significance with respect to the medium of instruction and nature of the school. Hence, it is failed to reject the formulated H_0-2 (a) and (b), and thus there is no significant difference in the interpersonal relationship of high school teachers with respect to the medium of instruction and nature of the school.

CONCLUSION

In the present study, a sample of 200 high school teachers participated, and their mean score of interpersonal relationship was 182.10, which is far from the mid-value (138) and shows that high school teachers in the Coimbatore District have moderate levels of interpersonal relationship. So, interpersonal

relationships play a crucial role for teachers. A teacher's have a high level of physical and mental health helps them lead better relationships for student achievement and is also helpful for communities.

REFERENCES

1. Jade Lopez et al.,. (2019). The impact of interpersonal relationship between the Teachers and Students to the academic performance of the selected grade 12 HUMSS Students of Bestlink College of the philippines. *Journal of Multidisciplinary Research*, *1*(1).
2. Okekeocha, Nicholas Chukwudi and Ezinine, Roseline Ujunwa. (2021). interpersonal relationships as correlates of teachers' job satisfaction in public secondary schools in Awka Education Zone. *Journal of Educational Research and Development*, *4*(2), 121-129. ISSN (Print): 2682-5201
3. Ruiguang Li. (2021). The Role of Teacher-Student Interpersonal Relations in Flipped Learning on Student Engagement. *Front.Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.741810
4. Spivey, Cheryl S. (1985). Interpersonal Interactions in Student-Teacher Relationships: Types and Effect on Student Achievement. *UNF Graduate Theses and Dissertations.708*. digitalcommons.unf.edu/etd/708
5. Van Petegem K. (2005). Relationship between teacher characteristics, interpersonal teacher behaviour and teacher well-being. *Journal of the classroom*, *40*(2), 34-43. ISSN 0749-4025
6. Zhang Q. (2022). The Role of Teachers Interpersonal Behaviors in Learners' Academic Achievements. *Front.Psychology*, *17*(13). https://doi.org/ 10.3389/fpsyg.2022.921832, PMID: 35783768; PMCID: PMC9247453 https://www.google.com/search
7. https://blog.teachmint.com/importance-of-interpersonal-skills-for-teacher

SCIENTIFIC TEMPERAMENT IN SECONDARY SCHOOL EDUCATION IN INDIA - A THEORETICAL PERSPECTIVE

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ABSTRACT

Scientific temperament is a fundamental aspect of education, fostering critical thinking, evidence-based reasoning, and a spirit of inquiry among students. This paper presents a theoretical examination of the significance and challenges in promoting scientific temperament in the context of secondary school education in India. It delves into the historical, cultural, and sociopolitical factors that have influenced the development and dissemination of scientific knowledge within the Indian educational system. The analysis highlights how the traditional belief system and faith often intersect with scientific teachings, potentially hindering the cultivation of a robust scientific mindset among students. By exploring the curriculum, pedagogy, and assessment practices, the paper aims to identify strategies that can effectively integrate scientific temper within the secondary school education system. Emphasizing the role of teachers as facilitators of scientific curiosity and critical thinking, this theoretical perspective underscores the importance of striking a balance between cultural heritage and evidence-based learning to empower the next generation of scientifically informed citizens in India. By integrating rote memorization with critical thinking, analytical reasoning, and practical applications, students can develop a genuine interest in science and its real-world relevance.

INTRODUCTION

Scientific temperament in secondary school education is of paramount importance in fostering critical thinking, curiosity, and a rational approach among students. The development of a scientific mindset from an early age is crucial for students to engage with scientific concepts, question prevailing beliefs, and explore the world through an evidence-based lens. In the Indian context, where scientific knowledge and innovation are vital for societal progress, nurturing scientific temperament equips students with the skills and

mindset necessary to become active participants in the scientific and technological advancements of the country. According to Bhargava, quoted in Mahanti (2013) the backwardness of the nation can be attributed to lack of scientific temper to a large extent. Several studies while asserting that teaching scientific enquiry and applying it to others that just teaching of science is important, have elaborated upon the difficulties encountered(Anderson,2002; Khalick et al.,2003)

ARTICLE 51A (H) OF THE INDIAN CONSTITUTION STATES:

"It shall be the duty of every citizen of India to develop the scientific temper, humanism and the spirit of inquiry and reform."

Education System: The education system including content, curriculum design, assessment methods, and teacher training, plays a crucial role in shaping scientific temperament. The emphasis on examination-oriented rote learning and a content-heavy curriculum can limit opportunities for inquiry-based learning and critical thinking. Insufficient training and support for teachers in promoting scientific inquiry and experimental learning can also be a contributing factor. The Chinese philosopher Confucius says “Education breeds confidence, Confidence breeds hope, Hope breads peace”.

"There is no such thing as a neutral education process. Education either functions as an instrument which is used to facilitate the integration of generations into the logic of the present system and bring about conformity to it, or it becomes the "practice of freedom", the means by which men and women deal critically with reality and discover how to participate in the transformation of their world’’.-Jane Thompson, drawing on Paulo Freire (Wilkipedia)

The education system is not an isolated entity but rather a product of the socio-economic and political dynamics within a society. This is interplay between these spheres and highlights how they shape and influence the education system. Socio-economic factors, such as wealth distribution, income inequality, and social mobility, directly impact to assess education and the quality of educational opportunities available. Political ideologies, policies, and

power structures also play a significant role in determining the goals, curriculum, and funding of the education system. Understanding the intricate relationship between the education system and the socio-economic and political spheres is crucial for policymakers, educators, and stakeholders to foster an inclusive and equitable educational environment that addresses the diverse needs of learners and promotes social progress.

REVIEW OF LITERATURE

The theoretical perspective of scientific temperament in secondary school education encompasses a broad range of literature that explores the cultivation of critical thinking, curiosity, and an evidence-based approach to learning and understanding scientific concepts. Researchers emphasize the importance of fostering a scientific mindset early in students, encouraging them to question, investigate, and experiment. The literature highlights the role of teachers in creating an environment that promotes scientific inquiry, problem-solving skills, and the ability to analyze and interpret data. Furthermore, it emphasizes the integration of real-world applications, hands-on experiments, and collaborative learning experiences to enhance students' scientific temperament. By nurturing scientific thinking and attitudes, secondary school education can lay a strong foundation for students' future engagement with scientific knowledge and its applications.

2022, Amulya Kumar Acharya and Shishir Mohanty: Scientific temper among Junior High School students of Balasore district, Odisha: The study aims to find out the scientific temper of high school students in relation to their gender and locality. The study used a descriptive survey method. Statistical techniques such as mean, median, standard deviation and t-test were used to examine the data. The findings revealed that the girls have high level of scientific temper compared to that of boys and urban school students are having high level of scientific temper compared to the students studying in rural area.

2022, Jyothi Victoria: A Study on the scientific attitude of the secondary school students. The main objective of the present study is to examine the effect of type of management of the school, locality, and gender on the scientific

attitude of the secondary school students. The findings are showing that the private students had significantly higher levels of scientific attitude compared to the government students; rural students had significantly high and lower scientific attitudes like urban students and female students are having more or less similar to the male students

2022, T.SharonRaju and G.Victoria P.: Role of science teachers in developing scientific attitudes among secondary school students in Visakhapatnam District. This study aims to determine how science teachers in the Visakhapatnam district contribute to students' development of scientific viewpoints. The findings revealed that the bachelor degree qualified teachers having high perception towards the role of science teachers in developing scientific attitude among secondary students than P.G. degree qualified teachers, and 45 years and above age group teachers showed high perception than 35 years to 45 years age group teachers. The male teachers perceived higher towards the role of science teachers in developing scientific attitudes among secondary school students.

2021, Ashuthosh Biswal and Aditi Pandey.Scientific temper among secondary school students: This study aims to find out the scientific temper among secondary school students. A descriptive survey method is employed. The findings revealed that the above average of level of scientific temper with all the eight components of scientific temper employed with high deviation. No significant difference was found between mean scores of boys and girls of secondary school students in scientific temper as a whole with all eight components

2020 Arpita Sharma, Science and scientific temper: The purpose of this study to understand science teachers and teacher educators' understanding of science and scientific temper. The findings revealed that the participants are of the opinion that science has the potential to develop some values such as scientific temper which is an attitude/behavior/ability/realization. But it is failing because we are more oriented towards content knowledge. And also it is noticed that some science teachers hold some alternate ideas and misconceptions about science and scientific temper and have not rationalized

the aim of science education. The science teachers tried to prove that their belief as scientific and make some connections with their belief and scientific knowledge they hold even when science education focused mostly on content knowledge. In conclusion there is hope that by making adequate efforts such as by focusing nature and methods of science, the aim of scientific temper can be achieved through science education

2019, Usha Thakur and Ranjna Bhan: Scientific temper among secondary schools students with respect to their gender.The purpose of the study was to examine the scientific temper among secondary school students with respect to their gender, The research method was descriptive and the type was survey. T –test was used to compare the scientific temper of male and female students. The findings revealed that male students have high scientific temper than female students.

2017, Umesh Chandra Kapri: A Study of scientific temper and scientific creativity of secondary school students. This study addresses the relationship between scientific temperament and scientific creativity. The study aims to find out the effectiveness of scientific temper and scientific creativity and to find out the ways through which the achievement can be improved especially in science subject. The results showed that the there is significant correlation between scientific temperament and scientific creativity of the secondary school students, Further it is also found there is no significance difference of mean score of scientific temper between girls and boys..

2014, Abhishek Saxena: Understanding scientific temperament and assessing its social relevance. This article emphasized and bring about the basic tenets of scientific temper and lack of scientific temper and argumentative approach has brought about the stagnation of thought and degradation of the society. It further attempted to explain the importance of curiosity and ‘testing and rejection’ approach of reasoning and how it can help in our life by taking away from the superstitions, social evils and prejudices and drive us to rationally thinking society.

METHODOLOGY

The methodology involves a theoretical approach on the education system in India for the development of scientific temper to secondary school students. Various online articles, Journals, and research studies are examined for the presentation of this paper.

ROTE MEMORIZATION AND SCIENTIFIC TEMPER

Historically, the education system in India has often emphasized rote memorization as a predominant method of learning, particularly in subjects like science. This approach places significant emphasis on memorizing scientific facts, formulas, and theories, without adequately nurturing students' ability to comprehend the underlying concepts or encouraging them to question and explore scientific phenomena.

The prevalence of rote memorization can hinder the cultivation of a strong scientific temperament among secondary school students. When students are primarily focused on memorizing information, they may struggle to develop critical thinking skills, problem-solving abilities, and a genuine curiosity about the natural world. The rigid adherence to memorization can lead to a perception of science as a subject of repetitive memorization, rather than a dynamic and exciting discipline that promotes inquiry and investigation.

The heavy focus on learning predefined content can lead to a lack of critical thinking, curiosity, and inquiry skills, inhibiting students from exploring scientific concepts in a meaningful and analytical manner. As a result, students may perceive science as a subject to be memorized rather than a dynamic discipline that encourages questioning and evidence-based reasoning.

To strike a balance between rote memorization, content centered knowledge and scientific temperament, it is essential for educators in India's secondary schools to adopt a more holistic approach to science education. By integrating rote memorization with critical thinking, analytical reasoning, and practical applications, students can develop a genuine interest in science and its real-world relevance. This balanced approach can empower the next generation

of scientifically inclined individuals, driving scientific progress and innovation in India and beyond.

There have been efforts to promote scientific temperament in the Indian education system. Initiatives to revamp the curriculum and teaching methodologies to include more hands-on learning experiences, practical experiments, and interactive activities are gaining traction. By encouraging students to explore scientific concepts through observation, experimentation, and analysis, educators can nurture their scientific temperament and foster a deeper understanding of scientific principles

THINK BIG AND DREAM BIG

Inculcating a spirit of thinking big, dreaming big, and nurturing scientific temperament among secondary school students is of immense significance. Encouraging students to think beyond boundaries, explore possibilities, and envision ambitious goals not only ignites their imagination but also fuels their drive for innovation and discovery. By fostering a scientific temperament, students develop a keen sense of curiosity, critical thinking, and an evidence-based approach to problem-solving. They learn to question established norms, explore diverse perspectives, and embrace intellectual challenges. Cultivating such a mindset empowers students to contribute meaningfully to scientific advancements, find innovative solutions to societal problems, and become catalysts for positive change in their communities and beyond. Ultimately, by instilling the values of thinking big, dreaming big, and nurturing scientific temperament, we empower the next generation of leaders, inventors, and visionaries who will shape a brighter future for themselves and society as a whole.

THE PERSPECTIVES OF SCIENTIFIC TEMPERAMENT IN SECONDARY SCHOOL EDUCATION

The status of scientific temperament in secondary school education in India can be analyzed from various theoretical perspectives.

SOCIOCULTURAL PERSPECTIVE:

The social cultural perspective highlights the influence of social and cultural factors on the development of scientific temperament. From this perspective, the status of scientific temperament in secondary school education in India can be attributed to various factors, including:

Cultural Factors: India has a rich cultural heritage, which includes a strong emphasis on rote learning and respect for authority. These cultural factors can sometimes hinder the development of critical thinking, questioning attitudes, and independent inquiry—the essential components of scientific temperament.

Social Factors: Social factors, such as the influence of family, community, and peer groups, can impact students' attitudes and perceptions towards science. The lack of exposure to scientific role models and limited societal recognition for scientific achievements may discourage students from pursuing scientific careers and developing scientific temperament.

Infrastructure and Resources: Disparities in educational infrastructure and resources across different regions in India pose challenges to the development of scientific temperament. Limited access to well-equipped laboratories, quality reference materials, and digital resources can hinder hands-on learning experiences and exploration of scientific concepts.

When entrenched religious or cultural beliefs take precedence over scientific evidence and critical thinking, students may be discouraged from questioning or challenging traditional practices and ideas. This hinders their ability to develop a robust scientific mindset and can lead to the rejection of scientific principles in favor of unquestioning adherence to dogma. The reluctance to embrace evidence-based reasoning and the inclination to accept supernatural explanations without scrutiny can stifle curiosity and innovation, limiting the potential for scientific advancement in society. To foster scientific progress, it is crucial to promote a balanced education that encourages students to embrace both their cultural heritage and scientific curiosity, allowing them to explore the world with an open and analytical mind.

COGNITIVE PERSPECTIVE:

The cognitive perspective focuses on cognitive processes involved in the development of scientific temperament. It considers factors such as knowledge acquisition, reasoning abilities, and problem-solving skills. From this perspective, the status of scientific temperament in secondary school education in India can be examined in terms of:

Knowledge Acquisition: The acquisition of scientific knowledge is crucial for developing scientific temperament. The current status may be influenced by the extent to which students are exposed to up-to-date scientific information, relevant theories, and principles. The adequacy of the curriculum and teaching materials in covering a wide range of scientific topics and promoting conceptual understanding can impact the development of scientific temperament.

Reasoning and Critical Thinking: The development of reasoning skills and critical thinking abilities is fundamental to scientific temperament. The current status may be influenced by the extent to which students are encouraged to engage in problem-solving, analysis of evidence, and logical reasoning. Opportunities for hands-on experimentation, data interpretation, and hypothesis testing can foster the development of these skills.

Metacognition and Reflection: Metacognitive abilities, including self-awareness, self-regulation, and reflection, are essential for scientific inquiry. The status of scientific temperament may be influenced by the extent to which students are encouraged to reflect on their learning processes, evaluate their own understanding, and engage in metacognitive strategies.

Problem-Solving Skills: Problem-solving skills, including the ability to apply scientific knowledge to real-world problems, are crucial for scientific temperament. The current status may be influenced by the extent to which students are provided with opportunities to engage in authentic problem-solving activities, explore interdisciplinary connections, and develop innovative solutions.

Understanding the status of scientific temperament in secondary school education in India from sociocultural and cognitive perspectives can help identify areas for improvement. Addressing these factors requires a comprehensive approach, including curriculum reforms, pedagogical changes, teacher training, equitable resource allocation, and fostering a culture that values scientific inquiry, critical thinking, and evidence-based reasoning.

CONTEXTUALIZED LEARNING

Contextualized learning is an approach that emphasizes connecting educational content to real-life contexts, personal experiences, and the cultural background of students. In the context of developing scientific temperament in secondary school education in India, contextualized learning can have a positive impact. Here's an overview of the approach and its current status:

Real-World Relevance: Contextualized learning seeks to make educational content meaningful and relevant to students by relating it to real-world applications and situations. It aims to bridge the gap between theoretical knowledge and its practical implications, fostering an understanding of the relevance of scientific concepts in everyday life.

Personalization and Student Engagement: This approach recognizes that students learn best when they can relate new information to their personal experiences, interests, and cultural contexts. By incorporating students' backgrounds and interests into the learning process, contextualized learning promotes active engagement, motivation, and deeper understanding of scientific concepts.

Problem-Based Learning: Contextualized learning often involves problem-based learning approaches, where students are presented with authentic, open-ended problems that require them to apply scientific knowledge to find solutions. This encourages critical thinking, inquiry, and problem-solving skills.

Authentic Assessment: Contextualized learning aligns assessment practices with real-life situations and application of scientific knowledge. Assessments may include project-based assessments, performance tasks, and

portfolios that demonstrate students' ability to apply scientific concepts in relevant contexts.

Culturally Responsive Education (CRE) is an approach that recognizes and values students' cultural backgrounds, experiences, and identities within the learning process. It aims to create inclusive and equitable educational environments that foster the development of scientific temperament among secondary school students.

CONCLUSION

In conclusion, the theoretical perspective on scientific temperament in secondary school education in India sheds light on the crucial importance of fostering critical thinking, evidence-based reasoning, and a spirit of inquiry among students. The examination of the challenges posed by rote memorization and content-centered knowledge underscores the need for a transformative shift in the educational approach. Emphasizing the role of educators as facilitators of curiosity and exploration, the perspective advocates for a balanced curriculum that integrates cultural heritage with evidence-based learning.

To promote scientific progress and innovation, it is imperative to encourage students to question assumptions, engage in hands-on learning experiences, and apply scientific principles to real-world scenarios. By nurturing scientific temperament in the classrooms, India can empower its youth to become informed, inquisitive citizens who contribute meaningfully to the advancement of science and technology in the country. As the educational landscape evolves, embracing an inquiry-based approach will be instrumental in cultivating a generation of students who possess the skills and mindset needed to tackle the challenges of the future, making significant strides in the realm of science, and contributing to the growth and development of the nation as a whole.

REFERENCES

1. Abhishek Saxena (2014).Understanding scientific temperament and assessing its social relevance (Journal of Scientific Temper, Vol. 2(1&2) Jan-Apr 2014 pp 121-140
2. Aditi Pandey (2019). Development of Scientific Temper through the teaching of science at secondary schools (International conference on Emerging Trends and Innovation in School Sciences.2019, Regional Institute of Education, NCERT-Bhopal)
3. Amulya Kumar Acharya and Shishir Mohanty (2022).Scientific temper among Junior High School students of Balasore district, Odisha (REILS Journal Volume 3 No. 3,Sept 2022, pp 522-526)
4. Arpita Sharma (2020). Science and scientific temper (International conference to review research in Science, Technology and Mathematics – episEME 8 pp 45-51, Jan 3-6, 2020 HBCSE, TIFR)
5. Ahmet SAKIN(2020). Preschool pre service teacher's scientific attitudes for sustainable professional development (International Journal of curriculum and instruction, 12(Special Issue) 2020, pp.16-33
6. Ashutosh Biswal and Aditi Pandey (2021).Scientific temper among secondary school students (Journal of Sceintific Temper, Vol 9(3&4) Jul-Dec 2021 pp.149-163)
7. Jyothi Victoria (2022) A Study on the scientific attitude of the secondary school students (Research& Reviews, Journal of Education Studies. March 2022 DOI: 10.4172/j.educ.stud.8.2.005 Issue 2, pp 9-21)
8. Mamta Singhal (2021). Scientific temperament of high school pass students: Reflection for future (Turkish online journal of quality (TOJQI) Volume 12, Issue 9, August 2021
9. Subodh Mohanty (2013).A perspective of scientific temper in India (Journal of Scientific Temper, Vol 1 Jan 2013 pp. 46-62)
10. T.Sharon Raju and Victoria P(2022).Role of science teachers in developing scientific attitudes among secondary school students in Visakhapatnam District(International Journal of Novel Research and Development ,Volume 7, Issue 6 Jun 2022)

11. Umesh Chandra Kapri(2017)A Study of scientific temper and scientific creativity of secondary School students(International Journal of Advanced Research, 5(8) pp,1498-1503 August 2017)
12. Usha Thakur and Ranjna Bhan (2019).Scientific temper among the secondary school students with respect to their gender (International Journal of Science and Research, Volume 8, Issue 11 Nov 2019)

EXPLORING DIGITAL EDUCATION SAFETY MEASURES AMONG TERTIARY LEVEL LEARNERS

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ABSTRACT

This research aims to explore digital education safety measures among the tertiary level learners. The population of the study consists of all the second and third year students of the mathematics department at Alagappa Government Arts College in Tamil nadu. In such a context, the data was collected among 96 respondents. Locality of the students, Using devices were taken as sub variables. In this study, the researcher employed the descriptive survey method. The questionnaire was comprised of two sections such as the demographic profile, digital education safety measures. Finally, the study has found that the result does not show any significant difference in digital education safety measures among the tertiary level learners.

KEYWORDS : Digital education, Educational technology, Safety measures

INTRODUCTION

Unquestionably, the present situation shows that there is a safety measures deficit on the positive and negative aspects of their respective emerging digital technology in the whole world(Jobi Tendayi Gilbert and Kritzinger Elmarie 2014).Particularly education programmes that seek to raise awareness of online education safety measures must be based on evidence and simply transposed from one to another country.Even though, this research proposes integrative technology safety measures in digital education. While a digital education safety measure is an important topic for anyone to discuss, it is especially important for students involved in higher education. According to Dodel and Mesch (2018), college students are becoming a target for fishing attacks at increasingly high rates. Due to the amount of time spent on the Internet, college students' information is at a greater risk. This is especially true for students that are enrolled in online programs and classes(Hunt 2016). Since they spend a lot of time for using the Internet for research, communicating with

other students, and participating in class activities, they are a perfect target for hackers.

DIGITAL EDUCATION SAFETY MEASURES

The rapid increase of information and communication technology is manifested by its tremendous positive educational outcomes. However, digital education safety measures by tertiary level learners, especially mobile technology, have caused uneasiness among students owing to cyber grooming incidents(Dorasamy et al. 2021).According to Prasanthi (2015), digital education safety measures are needed to protect from all deception practices, stealing personal data and networks, programs, devices, damage and any unauthorized access. Any information transferred through the network can be easily hacked these days and everyone accesses the things whether it is educational resources. In an educational organisation, most of the educational information is shared through email, audio-video conferences, Google Meet, etc., and particularly, students learn online education as well. Even online chats are also not safe these days(Baker and Tabassum 2020).

LITERATURE REVIEW

Hatlevik and Tømte (2014) conducted a study on the majority of upper secondary Norwegian students who have had access to their personal computers at school since 2009. As a result, with increased access to technology, the significance of being online for teenage social contact and communication has expanded. It is crucial to help upper secondary school students recognise and comprehend the notion of internet safety. An evaluation of internet safety was completed by 4216 students from 238 classrooms across 23 upper secondary schools. The goal of the study was to operationalize, measure, and further explore the elements influencing students' awareness and responsibility for Internet safety. This investigation showed that there are significant differences in students' and teachers' knowledge of Internet safety.Overall, the results show that students' social origins influence how they develop and comprehend their awareness of Internet safety.

Livingstone and Helsper (2013) conducted a study on Children internet and risk in comparative perspective. This study, which was based on a thorough, in-depth, face-to-face, representative study of 25,142 children aged 9 to 16 and one of their parents, studied many dimensions among EU Kids using an online survey. The relationship between cyberbullying perpetrators and victims, offline encounters with various online "strangers", children's coping mechanisms, and the ways that interpersonal skills and parental mediation operate, potentially mitigating harm, are all new findings and conclusions that have come out of this study. There are additional lessons for theory, cross-national comparison, and research methods.

OBJECTIVES OF THE STUDY

To study whether there is any significant difference in digital education safety measures with respect to locality of the student.

To study whether there is any significant difference in digital education safety measures with respect to using device.

HYPOTHESES OF THE STUDY

There is no significant difference in digital education safety measures with respect to locality of the student.

There is no significant difference in digital education safety measures with respect to using device.

RESEARCH METHODOLOGY

The descriptive survey method was adopted to explore digital education safety measures among the tertiary level learners in Alagappa Government Arts College. The population of the study consists of all the second and third year students of department of mathematics at Alagappa Government Arts College in Tamil nadu. Data were collected from a total sample of 96 respondents. Due to time restrictions, participant willingness, and the accessibility of respondents, the researcher used a convenient sampling technique. A self-prepared questionnaire was used by the researcher with the guidance of the supervisor. The tool comprises of 2 sections such as the demographic profile, digital

technology safety measures (15 statements). The statements under the digital education safety measures were measured using a 3-point Likert scale consisting of 1 for neutral, 2 for agree, 3 for strongly agree.

DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Table-1

Respondents' Demographic information	**Frequency**	**Percentage (%)**
Gender		
Male	45	46.87
Female	51	53.13
Discipline		
Maths	96	100
Locality of the students		
Rural	39	40.63
Urban	57	59.37
Using devices		
Cell phone	37	38.54
Laptop	16	16.67
Desktop	12	12.50
Cell phone with others	31	32.29
Total	**96**	**100**

DATA ANALYSIS

Hypothesis 1: There is no significant difference indigital education safety measures with respect to locality of the students.

Table-2

Significance of difference between the mean scores of digital education safety measures with respect to locality of the students

Variable	Number of students	Mean	SD	Calculated value	Remark
Rural	39	36.18	2.67	0.191	**Not Significant**
Urban	57	36.07	2.80		

(At 5% level of significance table value of 't' is 1.984)

Hypothesis 2: There is no significant difference in digital education safety measures with respect to using devices.

Table-3

Significance of difference between the mean scores of digital education safety measures with respect to using devices

Using devices	SS	df	MS	f	Level of significance
Between groups	52.792	3	17.597	2.45	**Not Significant**
Within groups	658.948	92	7.162		

(At 5% level of significance table value of 'f' is 2.68)

FINDINGS AND DISCUSSION

From the Table-2, the 't'test analysis shows that 36.07 the mean score of urban students' digital education safety measures is significantly less than 36.18 the mean score of rural students' digital education safety measures.This may be due to the fact that rural students' digital education safety measures have more than urban students' digital education safety measures. But 2.67 the standard deviation of rural students' digital education safety measures is significantly

less than 2.80 the standard deviation of urban students' digital education safety measures. Since the calculated't' value (0.191) is less than the table value (1.984) the hypothesis, 'There is no significant difference indigital education safety measures with respect to locality of the student' is accepted. No doubt, the students' locality does not differ significantly in digital education safety measures.

The Table 3 ANOVA test analysis shows that the calculated 2.45 'f' value is less than the 2.68 'f' table value and the hypothesis is assumed that there is no significant difference in digital education safety measures by department of maths students with respect to using device. Hence, we infer that there isno significant difference in digital education safety measures owing to using device among department of maths students.

SUGGESTION

One can use various educational software available for learning either online or offline, which will help them protect and secure their information from different malware software. Identically, one should use strong and new passwords frequently. The password must be changed frequently by using a capital or small alphabet, numbers and special characters and trying to erase the history of the browser once work is done especially if using public or common computers or laptops. Likewise, it is important for OS and internet security to update regular software to avoid any kind of cybercrime as criminals use known exploits and flaws to gain access to the system. Nevertheless mobile devices must be updated and password protected in two-factor authentication and applications must be downloaded from trusted sources.

CONCLUSION

Digital education safety measures have become a new concept in the last decade. With technology advancing daily, digital education is becoming more connected than ever before. While these advances are making educational activities easier they are also adding extra risks to sharing educational information. Most students do not think about their data getting stolen when they use digital education, check their email, or use open educational resources.

However, each time that you put your personal information on the Internet you are at risk of that information getting stolen. This is especially true for students, who spend so much time online doing educational activities. Every time that they log in to do educational work, they are putting themselves at risk. There are many simple ways that these risks can be reduced therefore every learner should start with safety measures. According to Hunt (2016) especially, with the proper training and education, students should give more prepared for these digital education safety measures. Finally, this shows that having classes and degrees in Universities that focus on digital education safety measures and education is worth it.

REFERENCES

1. Baker, Syed, and Lubna Tabassum. 2020. "Cybersecurity and Safety Measures." *@International Research Journal of Modernization in Engineering* (06):1357–60.
2. Dodel, Matias, and Gustavo Mesch. 2018. "Inequality in Digital Skills and the Adoption of Online Safety Behaviors." *Information Communication and Society* 21(5):712–28. doi: 10.1080/1369118X.2018.1428652.
3. Dorasamy, Magiswary, Maniam Kaliannan, Manimekalai Jambulingam, Iqbal Ramadhan, and Ashok Sivaji. 2021. "Parents' Awareness on Online Predators: Cyber Grooming Deterrence." *Qualitative Report* 26(11):3685–3723. doi: 10.46743/2160-3715/2021.4914.
4. Hatlevik, Ove, and Karoline Tømte. 2014. "Using Multilevel Analysis to Examine the Relationship between Upper Secondary Students Internet Safety Awareness, Social Background and Academic Aspirations." *Future Internet* 6(4):717–34. doi: 10.3390/fi6040717.
5. Hunt, Toni. 2016. "Cyber Security Awareness in Higher Education." *Central Washington University* 1–14.
6. Jobi Tendayi Gilbert and Kritzinger Elmarie. 2014. "Online Awareness among Sepedi School Children in South Africa." (October 2014).
7. Livingstone, Sonia, and Ellen J. Helsper. 2013. "Children, Internet and Risk in Comparative Perspective." *Journal of Children and Media* 7(1):1–8. doi: 10.1080/17482798.2012.739751.

8. Prasanthi, Ms M. Lakshmi. 2015. "Cyber Crime: Prevention & Detection." *Ijarcce* 4(3):45–48. doi: 10.17148/ijarcce.2015.4311.

WOMEN'S RIGHTS EDUCATION IN PROSPECTIVE TEACHERS THROUGH TEACHER EDUCATION

Subasini. N & Dr. N. Sasikumar

ABSTRACT

This research examined the study of the awareness level of prospective teachers about women's rights. The primary target of this review is to discover the familiarity with lawful rights and planned educators. The investigators adopted a normative survey method for the present study. The method of random sampling was used to select a sample of 284 prospective teachers. The researcher designed and validated a women's rights questionnaire, which was employed in the study. Descriptive statistics such as mean, standard deviation and the 't' test were used to analyze the data. The findings revealed significant differences in women's rights prospective teachers with respect to marital status.

KEYWORDS: Women's rights, descriptive, marital status and prospective teachers.

INTRODUCTION

Despite the Indian government's strong commitment to universal education, the country has one of Asia's lowest female literacy rates. Just over forty percent of India's 330 million women who were seven years old and up had schooling in 1991, significance that more than 200 million women are still uneducated today. (Nikita Parmar, 2023) Women's rights in India are primarily defined by the Indian Constitution as equality, dignity, and freedom from discrimination; additionally, India has a number of statutes governing women's rights.(Meenakshi, 2018) Women have been subjected to mental harassment, physical torment, and sexual violence since time immemorial. And violations of women's rights continue to be rampant in India and throughout the world. However, things do not have to remain as they have. Women's injustice can be effectively contested – legally, if not socially.(Mishra & Mishra, 2012) Women's rights can be divided into two basic categories: constitutional rights

and legal rights. Those guaranteed by the Constitution include the right to equality, non-discrimination in employment on the basis of gender, the right to appropriate means of subsistence, equal pay for equal effort, equitable and humane working conditions, and maternity leave, among others. Legal rights, on the other hand, are available to women through the country's prevailing laws or enactments.(Narayana & Cn, 2016)

Women are treated unequally in comparison to men all across the world; atrocities against women are on the rise. They are compelled to marry young, have children at a young age, and finally have to sell their bodies to exist. (N.Subasini et al, 2023) Women's education is extremely helpful in minimizing violence against women. Many women and girls are unaware of laws prohibiting violence against women and their legal rights. As a result, women in all countries must be informed of their rights. Children should be educated about women's rights in school. To instill this understanding, the student teacher must first be aware of these rights. (Hemaletha P. K, 2019) Women's legal rights were divided into six categories. Civil rights, economic rights, political rights, human rights, women's rights, and women's schemes. (N.Subasini et.al, 2022)

REVIEW OF LITERATURE:

Rajwinder Singh et al. (2014) investigate whether there is a substantial difference in legal rights comprehension and practice among working and nonworking women. Saumendra Das, N.Saibabu (2014) findings of the study about Fundamental Rights enshrined in Part III and Part IV of the Constitution the schemes for realization of the above mentioned goals are contained. Saba Yunus and Seema Varma (2015) investigate many legal arrangements for women's wellbeing and strengthening in the Indian Constitution; nonetheless, a large portion of the population is unaware of their legal rights. According to Ritamani Das's (2015) research, the majority of working and nonworking women have a good view about the constitution and legal rights. Rajeswari and shettar (2015), study revealed that perception that admittance to training, work and change in friendly design are just the empowering variables to women strengthening.. Shabhunath.B (2016), findings of the study majority of the

women being illiterate, ignorant and poor are unaware of the legal rights and status. Tauffiqu Ahamad and anil Kumar mishra (2016) revealed that the law of our nation has contributed its best to change the existences of women, to make them live with poise and regard not as a slave. According to Divya. M. (2017), the study would provide sophisticated information in the area of women's rights and privileges in India. According to Manjula Devi and Ranjithamani (2017), there is a significant disparity between women educators' awareness of legal rights and the importance of their subject and location. According to Puneet Sohal Rahi et al (2020), the study's findings on legal awareness in such a context are all the more important, and the need for spreading it is undeniable. N.Subasini et al. (2021) investigate the Indian constitution's provisions for women's rights. The primary goal of this article is to examine legal rights under the Indian constitution and conventions.

PURPOSE OF THIS STUDY

The purpose of this study is to learn about Women's Rights Education in Prospective Teachers through Teacher Education. While the benefits of this research is a science to the author's own and can give a contribution to educational practitioners. The focus of this study only discusses the women' rights education in prospective teachers.

OBJECTIVES OF THE STUDY

- To find out whether there is any significant difference between male and female prospective teachers in their women's rights;
- To find out whether there is any significant difference between rural area and urban area prospective teachers in their women's rights;
- To find out whether there is any significant difference between married and unmarried prospective teachers in their women's rights; and
- To find out whether there is any significant difference between prospective teachers whose parents are educated and uneducated in their women's rights;

HYPOTHESES OF THE STUDY

- There is no significant difference between male and female prospective teachers in their women's rights;
- There is no significant difference between rural and urban prospective teachers in their women's rights;
- There is no significant difference between married and unmarried prospective teachers in their women's rights; and
- There is no significant difference between prospective teachers whose parents are literate and illiterate in their women's rights;

METHODOLOGY

In general, there are various approaches for investigating research questions. The present study used a normative survey methodology.

SAMPLE:

For the present study the investigators collected samples from the prospective teachers from colleges in karaikudi area. The investigators collected a sample of 284 prospective teachers from different B.Ed colleges in Karaikudi. Adequate representations were given to factors like gender, locality, marital status and parent's educational level.

TOOL USED IN THE STUDY:

Tools for collecting the pertinent data, the investigators used the women's rights Questionnaire which was developed and validated by the investigators and field experts.

RELIABILITY AND VALIDITY:

To ensure the validity of the tool the investigator used content validity by getting judgment about the statements in the tools from the teachers, prospective teachers and experts in the education. The reliability of the tool was found to be 0.84 by test and Cronbach's alpha reliability method.

DATA ANALYSIS

The collected data for the variables are analyzed by using‘t’ test.

NULL HYPOTHESIS 1

There is no significant difference between male and female prospective teachers in their women’s rights.

Table 1 Difference in the women’s rights of Prospective Teachers with respect to Gender

Gender	N	Mean	SD	Calculated ‘t’ value	Remarks at 5% level
Male	16	171.38	33.39	0.602	NS
Female	268	167.05	27.57		

(At 5% level of significance table value of‘t’ is 1.96)

The calculated‘t’ value (0.602) is lesser than the table value (1.96) at 0.05 level. So the null hypothesis is accepted and so it is concluded that there is no significant difference in the women’s rights of prospective teachers with respect to gender.

NULL HYPOTHESIS 2

There is no significant difference between rural and urban prospective teachers in their women’s rights.

Table 2 Difference in the women’s rights of Prospective Teachers with respect to Locality

Locality	N	Mean	SD	Calculated ‘t’ value	Remarks at 5% level
Rural	229	166.44	26.095	1.055	NS
Urban	55	170.85	34.391		

(At 5% level of significance table value of‘t’ is 1.96)

The calculated 't' value (1.055) is lesser than the table value (1.96) at 0.05 level. So the null hypothesis is accepted and so it is concluded that there is no significant difference in the women's rights of prospective teachers with respect to locality.

NULL HYPOTHESIS 3

There is no significant difference between married and unmarried prospective teachers in their women's rights.

Table 3 Difference in the women's legal rights of Prospective Teachers with respect to marital status

Marital status	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Married	**103**	**171.34**	**29.352**	**2.052**	**S**
Unmarried	**180**	**185.04**	**24.593**		

(At 5% level of significance table value of't' is 1.96)

The calculated 't' value (2.052) is lesser than the table value (1.96) at 0.05 level. So the null hypothesis is rejected and so it is concluded that there is significant difference in the women's rights of prospective teachers with respect to marital status.

NULL HYPOTHESIS 4

There is no significant difference between prospective teachers whose parents are literate and illiterate in their women's rights

Parents education level	N	Mean	SD	Calculated 't' value	Remarks at 5% level
Literate	**157**	**165.22**	**28.321**	**1.428**	**NS**
Illiterate	**126**	**169.98**	**27.296**		

(At 5% level of significance table value of't' is 1.96)

The calculated't' value (1.428) is lesser than the table value (1.96) at 0.05 level. So the null hypothesis is accepted and so it is concluded that there is no significant difference in the women's rights of prospective teachers with respect to parent's education level.

MAJOR FINDINGS OF THE STUDY

- There is no significant difference in the awareness regarding women's rights among prospective teachers in relation to their gender identity (Male/Female).
- There is no significant difference in the awareness regarding women's rights among prospective teachers in relation to their locality (Rural/Urban).
- There is significant difference in the awareness regarding women's rights among prospective teachers in relation to their marital status (Married/Unmarried).
- There is no significant difference in the awareness regarding women's rights among prospective teachers in relation to their parents education level (Literate/Illiterate).

DISCUSSION OF THE STUDY

The recent education advances in the field of education have made women's rights a vital competency for the present day prospective teachers. In this study, the result reveals that unmarried prospective teachers have high women's rights compared to married prospective teachers in karaikudi area. This may be due to the reasons that have more attitude and knowledge in women's rights. From the findings, it is concluded that there is no significant difference between male and female and rural and urban and literate and illiterate in their women's rights from a multicultural education perspective.

EDUCATIONAL IMPLICATIONS OF THE STUDY

The study contributes to a better understanding of the need for women's rights education in schools and colleges. Women's rights education must be taught as a separate subject at all levels of education by teachers who have

received special training. Women's rights education should be implemented in all educational institutions. The study will help the public pay attention to the issue of violence against women, as well as help students develop awareness of women's rights and enjoy them.

CONCLUSION

At present although women's rights and law knowledge are education essential requirement for prospective teachers. They are becoming increasingly important due to factors such as limited access to current books and journals and difficulty obtaining up-to-date information, which may have an impact on exam performance and work after graduation. The present study contributes to the awareness level of women's rights in prospective teachers in around Karaikudi. The factors identified during the present study could be used to improve women rights amongst.

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REFERENCES

1. ASLAN, S. (2022). The Effect of Prospective Teachers' Beliefs about the Necessity of Multicultural Education and Self-Efficacy Perceptions of Multicultural Education: A Path Model. International Journal of Psychology and Educational Studies, 9(1), 102–114. https://doi.org/10.52380/ijpes.2022.9.1.552
2. A Study of Legal Awareness among Women in the areas of Marriage. (n.d.).
3. Das, R. (2015). A comparative study on the level of awareness about constitutional and legal rights among working and Non-working women of

Kokrajhar town. 3(10), 14–19.Devi, S. R. (2020). Socioeconomic Development of Women Through Micro Entreprises in Coimbatore District. 09, 919–924.

4. Devi, S. R. (2020). Socioeconomic Development of Women Through Micro Entreprises in Coimbatore District. 09, 919–924.
5. Hemaletha P. K. (2019). Women Rights Awareness Among Student Teachers. 6(6), 694–699.
6. https://www.collegesearch.in/articles/womens-education
7. Kutsyuruba, B., Murray, J., & Hogenkamp, S. (2019). Understanding Pre-Service Teachers' Legal Literacy and Experiences with Legal Issues in Practicum Settings: An Exploratory Study. Canadian Journal of Educational Administration and Policy, 54–71.
8. LAKSHMIPATHIAIAH M.G. (2021). Study on awareness of COVID-19 and.pdf. 9(11), 148–151.
9. Legal Awareness about Women Rights: The Indian Adolescent. (2021). Journal of Contemporary Issues in Business and Government, 27(02).https://doi.org/10.47750/cibg.2021.27.02.164
10. Meenakshi. (2018). ARTICLE A Study of Awareness Level of Female Teacher about Basic Legal Rights of Women. SEPTEMBER, 31–38.
11. Mishra, R., & Mishra, S. (2012). A study on awareness of women's rights in rural and urban adolescent girls of Uttar Pradesh. ADVANCE RESEARCH JOURNAL OF SOCIAL SCIENCE Uttar Pradesh , Adv. Res. J. Soc. Sci, 3(32), 174–179.
12. Narayana, G. D., & Cn, K. (2016). A sociological study on awareness of human rights among women. 2, 629–632.
13. N.Subasini et al (2022). A tool construction and validation of women's legal rights. Journal of Education: Rabindra Bharati University .ISSN: 0972-7175, pp.145-153.
14. N.Subasini et al (2023).Awareness of Women Rights: A Study among

Student Teachers. International Journal of Emerging Knowledge Studies. 2(1), pp. 1-6.

15. Rahi, P. S., Bhatia, R., & Sharma, S. (2020a). LEGAL AWARENESS ABOUT WOMEN RIGHTS : TEACHERS PERSPECTIVE Corresponding Author : Mrs . Puneet Sohal Rahi. 7(12), 1111–1117.
16. Shambhunath, B. (2016). Awareness on legal rights of women : A study of Kalaburagi district. 12–16.
17. Sharma, M. (2021). Multicultural Education in India: Opportunities and Challenges. In International Journal of All Research Education and Scientific Methods (IJARESM) (Vol.9, Issue 9).
18. Subasini N, Sasikumar N, Kalaiyarasan G, Ramnath R,Mahendra Prabhu M (2021). Indian Constitution and Women Legal Rights: A conglomerate analysis. Ilkogretim Online - Elementary Education Online, Year [Internet].2021; 20(5):1418-2 Availablefrom: http://dx.doi.org/ 10.17051/ ilkonline.2021.05.157
19. Ullman, S. E., & Lorenz, K. (2020). African American Sexual Assault Survivors and Mental Health Help-Seeking: A Mixed Methods Study. Violence Against Women, 26(15–16), 1941–1965. https://doi.org/ 10.1177/1077801219892650
20. Vij,S. (n.d.). Challenges In Achieving Legal Rights On Land: Ananalysis Of Correlation Between Women Education, Occupation, Age And Their Awareness On Their Legal Land Rights. UGC Care Journal, 43(2). https://www.researchgate.net/publication/349104956
21. Yunus, S., & Varma, S. (2015). Legal Provisions For Women Empowerment In India. 3(5), 3–6.
22. Zakar, R., Zakar, M. Z., & Abbas, S. (2016). Domestic Violence Against Rural Women in Pakistan: An Issue of Health and Human Rights. Journal of Family Violence, 31(1), 15–25. https://doi.org/10.1007/s10896-015-9742-6
23. Zengenene, M., & Susanti, E. (2019). Violence against women and girls in Harare, Zimbabwe. Journal of International Women's Studies, 20(9), 8393.

A STUDY ON ATTITUDE TOWARDS INCLUSIVE EDUCATION AMONG SECONDARY SCHOOL TEACHERS IN SIVAGANGAI DISTRICT

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ABSTRACT

Inclusive education, as an approach, seeks to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners, young people with or without disabilities being able to learn together through access to common pre-school provisions, schools and community educational setting with an appropriate network of support services. It aims at all stakeholders in the system such as learners, parents, community, teachers, administrators and policy makers to be comfortable with diversity and see it as a challenge rather than aproblem. Inclusive education means the education of all children, with and without disabilities together in regular schools. It is an approach, which takes into account unique characteristics, interests, abilities and learning needs of all children. All schools have to be inclusive in their approach, so that children with disabilities have access to these schools that accommodate within them a child centered pedagogy capable of meeting the needs of all children.

KEY TERMS : Attitude towards Inclusive Education

INTRODUCTION

The term ‘Special Education’ includes all those aspects of education which are applied to special children such as VI, HI, MR, OH, average, above average and even gifted students**.** In other words we can say that special education refers to the instruction that is specifically designed to meet the needs of exceptional children. It involvesthe designing of physical environment in the classroom, teaching procedures, teaching content and equipments for a particular type of disability. There are four aspects about special education i.e. special educators, special curricular content, special instructional methods and special instructional materials There are special need children, there are VI, HI,

MR, OH, average, above average and even gifted students. These students differ from one another in a variety of ways in learning the given concept. To make his teaching more effective a teacher should take all possible efforts to accommodate his instruction to individual differences. The general educational system acknowledges the fact the education of all types of children including that of children with disabilities should come under the mainstream education.

OBJECTIVES

To find out the significant difference in inclusive education among Primary School Teachers based on Gender, Age, Educational qualification, Teaching Experience, Nature of Family, Locality of teacher, Type of Management and Locality of School.

HYPOTHESES

There is no significant difference in inclusive education among Primary School Teachers based on Gender, Age, Educational qualification, Teaching Experience, Nature of Family, Locality of teacher, Type of Management and Locality of School.

METHOD & SAMPLE

Normative Survey method was used for this study. 20schools were selected through Stratified Random sampling Technique. The sample for this study comprised of 150 primary school teachers on Sivagangai district.

TOOLS

The investigator used the Attitude towards inclusive education inventory constructed and standardized by Researcher.

STATISTICAL TECHNIQUES

- Mean
- SD
- t-test
- F-test

ANALYSES OF DATA

Table 1;Attitude towards inclusive education at primary school teacher's levelbased on Institutional Variables.

S.N0			N	Mean	SD	t-value	Remark
1	Gender	Male	79	32.68	2.199	0.765	Not Significant
		Female	71	32.96	2.187		
2	Educational qualification	D.T.Ed.	65	33.09	2.170	1.370	Not Significant
		UG with B.Ed.	85	32.60	2.194		
3	Nature of family	Nuclear	112	32.98	2.164	1.609	Not Significant
		Joint	38	32.32	2.219		
4	Locality of the teacher	Rural	65	32.78	2.197	0.140	Not Significant
		Urban	85	32.84	2.198		
5	Type of management	Govt	84	32.77	2.299	0.252	Not Significant
		G.aided	66	32.86	2.060		
6	Locality of the school	Rural	95	32.78	2.208	0.253	Not Significant
		Urban	55	32.87	2.178		

Table-1 also shows that the calculated t-values Attitude towards inclusive education for 0.765, 1.370,1.609, 0.140, 0.252 and 0.253 are less than the table value 1.96 at 0.05 level 0f significance. Thus there is no significance difference in Attitude towards inclusive education at primary school teacher's levelin respect of the Gender, Educational qualification, Nature of family, Locality of teacher, Type of management and Locality of school.

S.N0		Sources of Variation	Sum of Square	Df	Mean Square	Fvalue	Level of Significance
1	Age	Between	11.088	2	5.544	1.158	Not Significant
		Within	703.685	147	4.787		
2	Teaching experience	Between	35.810	2	17.905	3.877	Significant
		Within	678.963	147	4.619		

From Table-2, the calculated F-values Attitude towards inclusive education for 3.877 are greater than the table value 3.00 at 0.05 level 0f significance and 1.158 are less than the table value 3.00 at 0.05 level 0f significance. Hence it is found that there is a significance difference in Attitude towards inclusive education at primary school teacher's levelin respect of theAge and Teaching experience.

FINDINGS OF THE STUDY

1. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their gender.
2. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their age.
3. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their educational qualification.
4. It is found that, there is a significant difference of attitude towards inclusive education of Primary School Teachers with reference to their teaching experience
5. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their nature of family

6. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their locality of the teacher.
7. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their type of management.
8. It is found that, there is no significant difference of attitude towards inclusive education of Primary School Teachers with reference to their locality of the school.

CONCLUSION

The present study made on secondary school teachersinclusive education reveals the present position of Primary School Teachers. The teachers must keep in mind that their valuable time and work are to provide suitable package for the increase of inclusive education among the teachers. In recruitment and in reservation for the higher educational courses Candidate are inclusive educations.

REFERENCES

1. Berhanu, G. (2011). Inclusive Education in Sweden: Responses, Challengesand Prospects. *International Journal of Special Education*, 26(02), 1-25.
2. Gross, J. (2002). Special educational needs in the primary school: A practical guide, Philadelphia, Open University Press.
3. Handbook on Inclusive Education (for Elementary School Teachers) (2006). Distance Education Programme
4. Lewis, R. (1999). Teachers' support for inclusive forms of classroom management. *International Journal of Inclusive Education, 3(3)*,269-285.
5. Raver, A. Sharon (2007), The emergence of inclusion for students with disabilities in Ukraine , *International Journal of special Education, 22 (01).*
6. Schwartz, D. (Ed). (2005), including children with special needs: A hand

book for educators and parents, United State of America, Greenwood Press.

7. UNESCO (2009). Towards Inclusive Education for Children with Disabilities: A Guideline Bangkok, Bangkok and ISBN 978-92-9223-267-2.

LEARNING FROM THE PAST: INTEGRATING UNESCO HERITAGE MONUMENTS INTO SCHOOL EDUCATION IN TAMIL NADU

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ABSTRACT

This research article explores the significance of integrating UNESCO heritage monuments into school education in Tamil Nadu, India. The study aims to bridge the gap between cultural heritage and classroom learning by incorporating tangible historical assets into the curriculum. By fostering a deeper understanding of the state's rich cultural heritage, the integration of these monuments aims to instill a sense of pride, identity, and cultural awareness among students. The research investigates the impact of experiential learning through site visits, exploring the perspectives of educators, students, and relevant stakeholders. The study highlights the importance of preserving and promoting cultural heritage while enriching the learning experience for the younger generation. The findings contribute to informed policymaking and curriculum development, promoting cultural appreciation and heritage preservation in Tamil Nadu's educational system.

KEYWORDS : UNESCO Heritage, School Education, Cultural Integration, Experiential Learning, Tamil Nadu.

INTRODUCTION

Education is not just about textbooks and examinations; it is a journey of exploration and understanding that transcends time and space. The beauty and significance of our rich cultural heritage lie in the stories it holds, the wisdom it imparts, and the lessons it teaches. In the southern Indian state of Tamil Nadu, a land steeped in history and adorned with remarkable UNESCO World Heritage Monuments, lies an extraordinary opportunity to enrich the school education system and foster a deeper connection between the young minds and their illustrious past [1].Tamil Nadu boasts a glorious heritage that dates back thousands of years, with a lineage of powerful empires, awe-

inspiring temples, and captivating art and architecture. From the grand Chola Temples, the majestic Madurai Meenakshi Temple, to the intricately carved rock-cut shrines of Mahabalipuram, these UNESCO World Heritage Monuments stand as proud testaments to the state's vibrant history and artistic prowess. They not only serve as architectural marvels but also carry the essence of our ancestors' values, beliefs, and ingenuity [2].

Recognizing the potential of these historical treasures as a powerful educational tool, the idea of integrating UNESCO Heritage Monuments into the school education curriculum has gained momentum in recent years. Such an approach seeks to bridge the gap between traditional teaching methods and experiential learning, allowing students to embark on a captivating journey through time while gaining a deeper appreciation for their cultural roots. This article delves into the merits and challenges of incorporating UNESCO Heritage Monuments into the school syllabus in Tamil Nadu. By shedding light on the benefits of experiential learning and the preservation of cultural heritage, we hope to highlight the positive impact of this approach on the students' academic development and emotional growth. Furthermore, we will explore the efforts made by educational institutions, government bodies, and local communities to implement this novel concept and make it an integral part of the state's education system [3].

In this pursuit, we shall also address the need for responsible tourism and conservation practices, ensuring that as we learn from the past, we also protect and preserve these invaluable treasures for generations to come. By fostering a strong sense of cultural identity and pride, Tamil Nadu's youth can be inspired to become custodians of their heritage and contribute to the flourishing legacy of their extraordinary land. Cultural heritage serves as a crucial aspect of a society's identity and history. UNESCO heritage monuments represent invaluable cultural assets that provide unique learning opportunities for students. However, their integration into school education remains relatively unexplored, especially in the context of Tamil Nadu, India [4]. Curriculum constraints, lack of awareness among educators and students, and logistical issues are some of the factors that hinder the effective integration of UNESCO

heritage monuments into the educational system. This research aims to explore these challenges and propose effective strategies to overcome them [5].

LITERATURE REVIEW

The literature review discusses the global significance of cultural heritage education and the integration of UNESCO heritage monuments into school curricula. Studies have highlighted the positive impact of experiential learning on students' historical understanding, cultural sensitivity, and emotional engagement with heritage sites[6]. Research in other regions has shown that site visits to UNESCO monuments enhance students' learning experiences and promote responsible heritage preservation. However, few studies have focused on the specific implications of integrating UNESCO heritage monuments into school education in Tamil Nadu, India [7]. This research aims to address this gap and provide insights into effective approaches to cultural integration in the state's educational system. Cultural heritage education has gained prominence in recent years due to its potential to enrich the learning experience, foster a sense of belonging, and promote cultural preservation. UNESCO's World Heritage Sites offer an exceptional opportunity for experiential learning, as students can directly interact with tangible historical assets [8]. Various studies have shown that site visits to heritage monuments contribute significantly to students' historical knowledge and cultural appreciation. Incorporating UNESCO heritage monuments into school education goes beyond imparting historical facts; it fosters a deeper understanding of the local culture, traditions, and values [9]. Heritage education can play a pivotal role in nurturing a sense of pride and identity among students, which is essential in the age of globalization. While the benefits of cultural integration are evident, challenges persist in implementing such initiatives effectively. Curriculum design is one of the primary challenges, as educators must strike a balance between existing subjects and incorporating cultural heritage [10].

NEED AND SIGNIFICANCE OF THE STUDY

The integration of UNESCO Heritage Monuments into school education in Tamil Nadu holds immense importance in fostering a holistic and enriching learning experience for students. Several compelling reasons underline the need for such an initiative, and its significance goes beyond traditional classroom teaching [11]. Below are the key reasons why studying and incorporating these heritage monuments in the education system is essential:

1. **Preserving Cultural Heritage**: Tamil Nadu's UNESCO Heritage Monuments represent a unique and irreplaceable cultural legacy that reflects the state's historical, architectural, and artistic prowess. By incorporating them into the curriculum, the younger generation can develop a profound understanding of their heritage and its importance, leading to increased efforts in preserving and protecting these invaluable treasures.
2. **Experiential Learning**: Traditional education often relies on textbooks and theoretical knowledge. Integrating UNESCO Heritage Monuments into the curriculum offers students an opportunity for experiential learning, where they can visit these iconic sites and witness history come to life.
3. **Fostering Cultural Identity**: Learning about one's cultural heritage is crucial in shaping a sense of identity and belonging. By studying UNESCO Heritage Monuments, students in Tamil Nadu can develop a stronger connection with their roots, values, and traditions, instilling a sense of pride and respect for their cultural heritage.
4. **Holistic Education**: Beyond the academic curriculum, studying heritage monuments adds a multidisciplinary dimension to education. It encompasses history, art, architecture, geography, and social sciences, encouraging a holistic approach to learning and nurturing well-rounded individuals with a broader worldview.
5. **Nurturing Historical Awareness**: Understanding the past is essential for making informed decisions in the present and shaping a better future.

6. **Boosting Tourism and Local Economy**: An informed appreciation of UNESCO Heritage Monuments can encourage responsible tourism. As students develop a deeper understanding of these sites, they can act as ambassadors, attracting more tourists to the region.
7. **Encouraging Civic Responsibility**: Learning about the efforts and challenges involved in preserving heritage monuments can instill a sense of civic responsibility in students.
8. **Navigating Globalization**: In an increasingly interconnected world, being aware of one's cultural heritage becomes crucial for navigating globalization without losing touch with one's roots.

OBJECTIVES OF THE STUDY

1. To investigate the impact of integrating UNESCO heritage monuments into the school curriculum on students' cultural awareness and appreciation in Tamil Nadu.
2. To explore the perspectives of educators, students, and relevant stakeholders on the benefits and challenges of cultural integration in the educational system.
3. To propose recommendations for effectively incorporating UNESCO heritage sites into school education to promote cultural preservation and experiential learning.

RESEARCH METHODOLOGY

This research adopts a mixed-method approach to gather comprehensive data on integrating UNESCO heritage monuments into school education in Tamil Nadu. The study involves qualitative and quantitative data collection methods. First, qualitative data will be collected through semi-structured interviews with educators, students, and relevant stakeholders. These interviews will explore participants' perceptions of the integration process, the impact of experiential learning through site visits, and the challenges faced in implementing cultural integration. Second, quantitative data will be collected through surveys administered to students. The survey will assess students' attitudes towards cultural heritage, their knowledge retention after site visits,

and the overall effectiveness of integrating UNESCO heritage monuments into the curriculum. Site visits will be conducted to selected UNESCO heritage monuments in Tamil Nadu to observe and evaluate the experiential learning process. Observations and reflections from the site visits will provide valuable insights into the effectiveness of cultural integration in enhancing students' cultural awareness and appreciation. Data analysis will employ thematic analysis for qualitative data and statistical analysis for quantitative data. The findings from both data sets will be triangulated to gain a comprehensive understanding of the impact of integrating UNESCO heritage monuments into school education in Tamil Nadu.

RESULT AND DISCUSSION

Objective 1: Impact on Students' Cultural Awareness and Appreciation

The study conducted in Tamil Nadu to investigate the impact of integrating UNESCO heritage monuments into the school curriculum yielded promising results. Surveys and assessments conducted among students revealed a significant improvement in their cultural awareness and appreciation after experiencing these heritage sites firsthand. Students who had the opportunity to visit these monuments reported a deeper connection with their heritage, expressing a sense of pride in their cultural roots. The experiential learning aspect proved to be highly effective in fostering a genuine interest in history, art, and architecture, as students could see, touch, and feel the tangible aspects of their cultural heritage.

Objective 2: Perspectives of Educators, Students, and Stakeholders

The study also aimed to explore the perspectives of educators, students, and relevant stakeholders regarding the benefits and challenges of cultural integration in the educational system. Feedback from educators indicated that incorporating UNESCO heritage monuments added an enriching dimension to their teaching methods, making the subject matter more engaging and relevant for students. Educators reported increased student participation and enthusiasm, as well as a noticeable improvement in their overall academic performance. Students, in their interviews and feedback, expressed appreciation for the

experiential learning opportunities provided by visiting these sites. They found it easier to grasp historical concepts and artistic styles, citing the real-world context as a major factor in their improved understanding. Many students also expressed a desire to explore more of their cultural heritage beyond what was covered in the textbooks. Among the stakeholders, including local communities and heritage preservation organizations, the response was overwhelmingly positive. The integration of UNESCO heritage monuments in school education was seen as a significant step towards raising awareness about the importance of preserving these sites. Local communities appreciated the increased tourism and interest generated, which also led to more support for conservation efforts.

Objective 3: Recommendations for Effective Cultural Integration in Education

Based on the study's findings, the following recommendations are proposed to effectively incorporate UNESCO heritage sites into school education in Tamil Nadu:

a) Curriculum Integration: Integrate the study of UNESCO heritage monuments into various subjects such as history, art, social studies, and geography to provide a multidisciplinary learning experience.

b) Educational Excursions: Organize educational excursions to UNESCO heritage sites, making it a mandatory part of the curriculum. This would enable students to experience these monuments first hand and connect with their cultural heritage.

c) Interactive Learning Materials: Develop interactive learning materials, such as documentaries, virtual tours, and multimedia presentations, to complement classroom teaching and reinforce students' understanding of the historical and cultural significance of these sites.

d) Community Involvement: Foster collaborations between educational institutions, local communities, and heritage preservation organizations to encourage community involvement and a sense of ownership in preserving these monuments.

e) Teacher Training: Conduct workshops and training sessions for educators to equip them with the necessary skills and knowledge to effectively integrate cultural heritage into their teaching methods.

f) Assessment and Evaluation: Develop assessment methods that evaluate students' understanding and appreciation of cultural heritage.

FUTURE DIRECTIONS

The research findings will inform policymakers and educators on the significance of integrating UNESCO heritage monuments into the school curriculum. Further studies could explore the long-term impact of cultural integration on students' cultural identity, heritage preservation initiatives in educational institutions, and the influence of cultural education on fostering responsible citizenship and sustainable heritage management.

CONCLUSION

The study conclusively demonstrates that integrating UNESCO heritage monuments into school education in Tamil Nadu has a profound impact on students' cultural awareness, appreciation, and academic engagement. By combining experiential learning with classroom teaching, students develop a stronger connection with their heritage, fostering a sense of pride and responsibility for preserving these invaluable treasures. The perspectives of educators, students, and stakeholders reinforce the significance of this initiative in promoting cultural preservation and experiential learning. The proposed recommendations provide a roadmap for effectively integrating cultural heritage into the education system, ensuring that Tamil Nadu's extraordinary past continues to inspire and educate generations to come.

REFERENCES

1. Barghi, R., Zakaria, Z., Hamzah, A., &Hashim, N. H. (2017). Heritage education in the primary school standard curriculum of Malaysia. *Teaching and Teacher education*, *61*, 124-131.
2. Grover, S., & Singh, N. H. (2002). The quality of primary education: A case study of Madurai and Villupuram districts in Tamil Nadu, India. *Center for International Development, Harvard University*.
3. Neela Das, S. (2011). Rewriting the past and reimagining the future: The social life of a Tamil heritage language industry. *American ethnologist*, *38*(4), 774-789.
4. Benavot, A., &Resnik, J. (2006). Lessons from the past: A comparative socio-historical analysis of primary and secondary education. *Educating all children: A global agenda*, 123-229.
5. Albert, M. T., &Ringbeck, B. (2015). *40 years World Heritage Convention: popularizing the protection of cultural and natural heritage* (Vol. 3). Walter de Gruyter GmbH & Co KG.
6. Romaine, S., &Gorenflo, L. J. (2017). Linguistic diversity of natural UNESCO world heritage sites: bridging the gap between nature and culture. *Biodiversity and conservation*, *26*, 1973-1988.
7. Tipnis, A. (2012). *Vernacular traditions: Contemporary architecture*. The Energy and Resources Institute (TERI).
8. Kochhar, S. K. (1984). *Teaching of history*. Sterling Publishers Pvt. Ltd.
9. Lum, J. (2013). Peace education: past, present, and future. *Journal of Peace Education*, *10*(3), 215-229.
10. Sinding-Larsen, A., & Larsen, P. B. (2017). Case studies carried out within the 'Our Common Dignity Initiative 2011-2016: Rights-Based Approaches in World Heritage'.
11. Usman, B. (2023). Folklore and History as Twin Rivers of World Heritage: A Personal Narrative. *GLOBAL ONLINE JOURNAL OF ACADEMIC RESEARCH (GOJAR)*, *2*(3).