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ASHOK NAGAR, CHENNAI - 600083, TAMIL NADU, INDIA

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Stella Matutina College of Education

Ashok Nagar, Chennai- 600 083, Tamil Nadu, India.

www.smce-chennai.com - E-mail: smcedn@gmail.com

9. Dr. Prabu Shankar, Assistant Professor, Institute of Advanced Study in Education, Saidapet, Chennai - 600 015..

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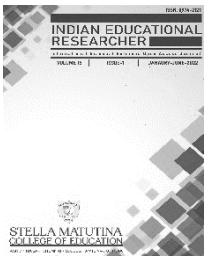

EDITORIAL

Education in the present era is marked by rapid transformation, driven by technological advancements, changing learner needs, and evolving societal expectations. Teaching and learning today extend far beyond the transmission of content knowledge; they encompass learner diversity, emotional well-being, digital responsibility, career preparedness, and innovative pedagogical practices. In this dynamic context, educational research plays a crucial role in offering evidence-based insights and guiding effective educational practices. This issue of the Indian Educational Researcher brings together research and conceptual articles that address key dimensions of contemporary education.

The issue opens with a study by Mrs. C. Sasikala on learning styles among high school students in Kerala, which offers valuable insights into learner diversity and its implications for effective classroom instruction. Recognizing individual learning preferences is essential for creating inclusive and supportive learning environments that enhance student engagement and achievement.

The article by Mrs. Dafini Pinky F. and Dr. Mrs. Joseph Catherine examines the role of parental mediation in shaping students' attitudes towards electronic media. This study highlights the growing influence of digital media on students' lives and underscores the importance of parental guidance in fostering responsible and balanced media usage among learners.

An insightful contribution by Fr. Ebin Christopher Harris on constructivist approaches for empowered classrooms emphasizes learner-centered pedagogies that promote active participation, critical thinking, and meaningful knowledge construction. Such approaches are vital for nurturing independent and reflective learners in contemporary classrooms.

The research article by Mutharasi K and Dr. K. A. Sheeba explores the role of academic support in shaping the career competency of commerce students, drawing attention to the importance of institutional support systems, mentoring, and guidance in preparing students for future career challenges.

Concluding this issue, Sr. Paul Mary presents a forward-looking conceptual article on pedagogical innovations in 2025, which discusses emerging teaching strategies and

transformative practices aimed at enhancing teaching–learning effectiveness in a rapidly evolving educational landscape.

The Editorial Board extends its sincere appreciation to all the contributors for their scholarly efforts and valuable insights. The articles in this issue reflect the commitment of the academic community to advancing educational research and practice. We invite educators, researchers, and scholars to continue contributing empirical and conceptual works that address emerging issues, innovative pedagogies, and holistic development in education.

Editorial Board

Research Article

A Study on Learning Styles among High School Students in Kerala

Mrs. C. Sasikala

Assistant Professor, Stella Matutina College of Education, Chennai, TN, India.

ORCID: https://orcid.org/0009-0003-5913-1005

DOI: https://doi.org/10.34293/0974-2123.v18n1.001

Abstract

This study examines the learning styles of high school students in Kerala, exploring differences based on gender, region, and academic stream (arts or science). Learning styles significantly influence students' ability to comprehend, process, and retain information. Using a standardized tool developed by J.M. Reid (1987), the study collected data from 300 high school students. Statistical analyses, including t-tests and ANOVA, were used to test hypotheses related to demographic variables. The findings indicate that while gender and regional background do not significantly affect learning styles, a notable difference was found between students from arts and science streams, with arts students showing higher learning style scores. These findings emphasize the importance of understanding individual learning preferences to enhance instructional effectiveness and academic achievement.

Keywords: Learning styles, high school students, VARK, stream of study, Kerala, demographic variables

Introduction

In a rapidly changing educational landscape, educators face the challenge of addressing diverse learning needs. One of the most effective strategies is to understand and incorporate students' learning styles into instructional practices. Learning styles represent the preferred ways individuals absorb, process, and retain information. Recognizing and catering to these differences can significantly improve learning outcomes, increase student motivation, and foster deeper understanding.

This study seeks to analyse the learning styles of high school students in Kerala and explore whether these styles differ across gender, region, and stream of study. By examining such variations, educators can design more inclusive and personalized pedagogical approaches.

Review of Literature

The concept of learning styles has been widely studied across disciplines. Keefe (1979) defined learning styles as "characteristic cognitive, affective, and psychological behaviors" that act as relatively stable indicators of how learners interact with the learning environment. Kolb (1984) emphasized experiential learning through a four-stage cycle, while Fleming's (2001) VARK model categorized learners based on sensory preferences.

Gardner (1983), through his theory of Multiple Intelligences, argued that intelligence is not a singular trait but manifests in various forms, such as linguistic, spatial, and bodily-kinesthetic intelligences. These theories have influenced curriculum design and teaching strategies worldwide.

Indian studies, such as those by Geetha & Praveena (2017), and Indu & Vintha (2015), revealed a high preference for kinaesthetic learning among students. Others (Kinjari & Gopal, 2020) reported no significant gender-based differences, emphasizing that learning preferences are dynamic and context-dependent.

Objectives of the Study

- To examine the differences in learning styles among high school students based on gender.
- To determine whether regional background influences learning style preferences.
- To investigate the difference in learning styles between students of arts and science streams.

Hypotheses

- **H_{01}**: There is no significant difference in learning styles between male and female students.

- **H_{02}**: There is no significant difference in learning styles between urban and rural students.
- **H_{03}**: There is no significant difference in learning styles between arts and science students.

Methodology

Sample

The study used a descriptive survey method. A total of 320 high school students from six schools in Kerala were initially approached. After data validation, 300 responses were retained. The sample was stratified based on gender, region, and stream of study.

Demographics:

- **Gender**: 117 males (39%) and 183 Females (61%)
- **Region**: 152 rural (50.67%) and 148 Urban (49.33%)
- **Stream**: 145 arts (48.33%) and 154 Science (51.33%)

Tools Used

- **Learning Style Inventory** by J.M. Reid (1987), a 24-item questionnaire using a 5-point Likert scale.
- **Personal Information Sheet** for collecting demographic data.

Procedure

The researcher visited schools across the Iritty region in Kerala and administered the questionnaires in classroom settings. Clear instructions were provided, and students responded voluntarily.

Data Analysis and Interpretation

Gender and Learning Style

Variables	Gender				t value	P value	Result
	Female		Male				
	Mean	SD	Mean	SD			
Learning Style	129.33	10.215	131.07	9.218	1.490	0.137	NS

Interpretation: The p-value of 0.137 > 0.05 indicates no significant difference in learning styles between male and female students.

Region and Learning Style

Variables	Region				t value	P value	Result
	Urban		Rural				
	Mean	SD	Mean	SD			
Learning Style	129.87	10.357	130.14	9.381	129.87	10.357	130.14

Interpretation: No significant difference was found between urban and rural students (p = 0.811).

Stream of Study and Learning Style

Variables	Stream of Stream				t value	P value	Result
	Arts		Science				
	SD	Mean	SD	Mean			
Learning Style	8.278	128.90	11.043	2.081	8.278	128.90	11.043

Interpretation: A statistically significant difference (p = 0.038 < 0.05) indicates that arts students show a higher preference for learning style diversity than science students.

Major Findings

Gender: There is no significant gender-based difference in learning styles. Both male and female students exhibit similar learning preferences.

Region: Urban and rural students do not differ significantly in their learning styles, indicating regional background has little impact on learning behavior.

Stream of Study: A significant difference was observed between students of arts and science streams, suggesting curriculum structure and subject nature may influence learning styles.

Educational Implications

- **Inclusive Teaching**: Teachers must use diverse instructional techniques (visual, auditory, kinesthetic) to accommodate various learning styles.
- **Stream-Specific Support**: Curriculum planners may integrate varied learning strategies for students in both arts and science streams.
- **Awareness and Training**: Students should be made aware of their learning preferences to enable self-directed learning.
- **Professional Development**: Teacher training should include strategies to identify and adapt to students' learning styles.

Delimitations of the Study

- The sample is limited to 300 high school students from Kerala.
- Only three demographic variables (gender, region, stream) were studied.
- Other influencing factors such as socio-economic status, parental education, or school infrastructure were not considered.

Conclusion

Learning styles remain a critical factor in designing effective learning environments. While personal demographics such as gender and region may not significantly influence learning preferences, academic stream plays a role in shaping how students engage with content. Understanding and incorporating diverse learning styles into classroom instruction can enhance student engagement, performance, and overall academic success.

References

Fleming, N. D. (2001). *Teaching and learning styles: VARK strategies*. Christchurch, New Zealand: Neil Fleming.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. Basic Books.

Geetha, V., & Praveena, P. (2017). Learning styles of secondary school students in relation to their gender and medium of instruction. *International Journal of Research in Humanities, Arts and Literature*, *5*(2), 53–58.

Indu, P. S., & Vintha, R. (2015). Learning style preferences among secondary school students. *Journal of Educational Research and Extension*, *52*(4), 11–19.

Keefe, J. W. (1979). *Learning style: An overview*. National Association of Secondary School Principals.

Kinjari, K., & Gopal, K. (2020). A study on the learning styles of secondary school students in relation to gender and achievement in science. *International Journal of Advanced Education and Research*, *5*(3), 1–5.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, *21*(1), 87–111. https://doi.org/10.2307/3586356

Conceptual Article

The Role of Parental Mediation in Shaping Students Attitude towards Electronic Media

Mrs. Dafini Pinky. F [1] and Dr. Mrs. Joseph Catherine [2]

[1] Research Scholar Stella Matutina College of Education, Chennai, TN, India.

[2] Research Supervisor, Stella Matutina College of Education, Chennai, TN, India.

ORCID: https://orcid.org/0009-0001-8370-6046

DOI: https://doi.org/10.34293/0974-2123.v18n1.002

Abstract

The pervasive influence of electronic media on students has raised significant concerns about its impact on their academic, social, and psychological development. Parental mediation plays a crucial role in shaping students' attitudes towards electronic media, influencing how they perceive, engage with, and respond to it. This essay explores various types of parental mediation—restrictive, active, and co-viewing—and their implications for student behavior and attitudes. Drawing on research and theoretical frameworks, the discussion highlights the benefits and limitations of these approaches, emphasizing the importance of a balanced and informed strategy. The essay also examines the influence of cultural, social, and technological factors on parental mediation practices. By understanding the dynamics of parental involvement, this paper underscores the need for parents to adopt adaptive strategies that promote healthy media use among students.

Keywords: parental mediation, electronic media, restrictive mediation, active mediation, co-viewing

Introduction

The rapid proliferation of electronic media has transformed the way students learn, communicate, and entertain themselves. From educational apps and social networking sites to streaming platforms and video games, electronic media is an integral part of students' lives.

While these technologies offer immense benefits, such as access to knowledge and improved communication, they also pose challenges, including addiction, exposure to inappropriate content, and potential impacts on mental health. Parents, as primary caregivers, play a pivotal role in guiding their children's interaction with electronic media.

Parental mediation refers to the strategies and practices that parents use to manage and influence their children's media use. These interventions aim to maximize the benefits of electronic media while minimizing its risks. This essay explores the role of parental mediation in shaping students' attitudes towards electronic media, examining its types, effectiveness, and influencing factors.

Need for Parental Mediation

Electronic media significantly impacts students' cognitive, emotional, and social development. Unchecked use can lead to problems such as decreased academic performance, reduced attention spans, and exposure to harmful content. Parental mediation addresses these challenges by guiding children in their media consumption, ensuring that it aligns with their developmental needs and family values. Effective mediation fosters critical thinking, media literacy, and self-regulation, enabling students to use electronic media responsibly.

Types of Parental Mediation

Parental mediation can be categorized into three primary types: restrictive mediation, active mediation, and co-viewing. Each approach has its own strengths and limitations in shaping students' attitudes toward electronic media.

1. Restrictive Mediation

Restrictive mediation involves setting rules and limitations on media usage, such as screen time, content restrictions, and device access. For example, parents may prohibit the use of certain apps or enforce time limits on gaming.

- **Advantages**: Restrictive mediation protects students from inappropriate content and excessive screen time. It instills discipline and prioritizes academic and extracurricular activities.
- **Challenges**: Overly strict restrictions can lead to resistance, secrecy, and reduced opportunities for students to develop media literacy. Excessive control may also hinder students' autonomy and critical thinking.

2. Active Mediation

Active mediation entails open discussions between parents and students about media content. Parents engage in conversations to explain the benefits and risks of media use, encourage critical thinking, and address misconceptions.

- **Advantages**: This approach promotes understanding and empowers students to make informed decisions. It strengthens parent-child communication and builds trust.
- **Challenges**: Active mediation requires parents to be well-informed about electronic media, which may be challenging in rapidly evolving technological landscapes.

3. Co-Viewing

Co-viewing involves parents and children consuming media together. This approach allows parents to monitor content, provide real-time guidance, and share opinions.

- **Advantages**: Co-viewing fosters shared experiences, strengthens family bonds, and facilitates immediate discussion of sensitive topics.
- **Challenges**: It is time-intensive and may not always be feasible for working parents. Additionally, the effectiveness of co-viewing depends on the quality of interaction and content.

Influence of Parental Mediation of Students Attitudes

Parental mediation significantly shapes students' attitudes toward electronic media by influencing their perceptions, habits, and decision-making processes.

1. Positive Attitudes

Effective mediation fosters a balanced perspective on media use. Students learn to appreciate educational content, practice responsible usage, and recognize the importance of moderation. For example, students guided by active mediation are more likely to critically evaluate the credibility of online information and avoid harmful behaviors.

2. Resistance and Rebellion

Overly restrictive or inconsistent mediation may provoke resistance. Students might develop negative attitudes toward parental involvement or seek covert ways to access restricted media. This underscores the need for flexible and adaptive strategies.

3. Media Literacy

Active and co-viewing approaches enhance media literacy by encouraging critical thinking and informed decision-making. Media-literate students are better equipped to navigate digital landscapes, evaluate content, and resist manipulation.

Factors Influencing Parental Mediation

Several factors shape how parents mediate their children's media use, including cultural, social, and technological influences.

1. Cultural Factors

Cultural norms and values significantly impact parental mediation practices. For instance, collectivist societies may emphasize co-viewing and shared decision-making, while individualistic cultures may prioritize autonomy and active mediation.

2. Socioeconomic Status

Families from higher socioeconomic backgrounds often have greater access to resources and information, enabling more informed mediation. Conversely, limited access to technology and knowledge may hinder effective mediation in lower-income households.

3. Technological Proficiency

Parents' familiarity with electronic media influences their ability to mediate effectively. Tech-savvy parents are more likely to engage in active mediation, while less proficient parents may rely on restrictive measures.

4. Parent-Child Relationship

The quality of the parent-child relationship affects the success of mediation. Open communication, trust, and mutual respect create an environment conducive to effective guidance.

Challenges in Parental Mediation

Despite its importance, parental mediation is not without challenges. Rapid technological advancements, peer influences, and conflicting work schedules can complicate parents' ability to monitor and guide media use. Additionally, generational gaps in technology usage may lead to misunderstandings and ineffective mediation.

Strategies for Effective Parental Mediation

To address these challenges, parents can adopt the following strategies:

1. **Educate Themselves**: Staying informed about emerging media trends and technologies enables parents to engage meaningfully in their children's media use.
2. **Foster Open Communication**: Encouraging discussions about media promotes understanding and trust.
3. **Set Realistic Boundaries**: Combining rules with flexibility ensures a balanced approach.
4. **Model Positive Behavior**: Parents should demonstrate responsible media use to reinforce desired behaviors.

5. **Collaborate with Schools**: Partnering with educators helps align media guidance with academic goals.

Role of School and Society

While parents play a central role, schools and society also contribute to shaping students' attitudes toward electronic media. Schools can integrate media literacy programs into curricula, and policymakers can regulate content quality. Society, through awareness campaigns, can promote responsible media use.

Conclusion

Parental mediation is a cornerstone of healthy media engagement among students. By adopting adaptive strategies and fostering open communication, parents can shape their children's attitudes toward electronic media in positive ways. Balancing restrictions with guidance ensures that students reap the benefits of technology while mitigating its risks. As electronic media continues to evolve, collaborative efforts between parents, educators, and society are essential to create an environment that nurtures responsible and informed media use.

References

Valkenburg, P. M., & Piotrowski, J. T. (2017). *Plugged in: How media attract and affect youth*. Yale University Press.

Clark, L. S. (2013). *The parent app: Understanding families in the digital age*. Oxford University Press.

Nathanson, A. I., & Cantor, J. (2019). *Parental mediation of media content: Theory, research, and future directions*. Routledge.

Byrne, S., & Lee, T. (2015). *Media effects and beyond: Culture, socialization, and behavior*. Routledge.

Strasburger, V. C., Jordan, A. B., & Donnerstein, E. (2014). *Children, adolescents, and the media* (3rd ed.). SAGE Publications. .

Kirwil, L. (2009). *Parental mediation strategies in digital environments: A cross-national comparison*. Cambridge Scholars Publishing.

Livingstone, S., & Helsper, E. J. (2008). *Children and the internet: Great expectations, challenging realities*. Polity Press.

Buckingham, D. (2007). *Media education: Literacy, learning, and contemporary culture*. Polity Press.

Conceptual Article

TRANSFORMING LEARNING DYNAMICS: CONSTRUCTIVIST APPROACHES FOR EMPOWERED CLASSROOMS

Fr. Ebin Christopher HARRIS

Doctoral Candidate, University of St. Thomas, Houston, Texas, USA.

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Abstract

This article presents an in-depth examination of constructivist teaching approaches and their potential to transform, impact, and make improvements in learning dynamics in contemporary classrooms. Grounded on the foundational theories of Jean Piaget, Lev Vygotsky and John Dewey, and supported by numerous empirical studies and practical insights from contemporary scholars and educators, this paper attempts to explore the theoretical foundations, classrooms strategies, the use of digital tools, and the broader implication of applying constructivism in learning. By synthesizing key literature and research findings, it offers a framework and argues for the importance of empowering students through active and collaborative learning environments.

Keywords: Constructivist Learning, Learning Dynamics, Student-Centered Teaching, Classroom Empowerment, Active Learning

Introduction

In response to the increased need for student-centered learning models which promote self-reflection, deep learning, and problem solving to empower students, the constructivist pedagogy has become a transformative tool in the landscape of today's education. Constructivist pedagogy is driven by data from the works of Piaget, (1952), Vygotskij, (1981) and Dewey (2015). The theory argues that learners are people who construct their own understanding through their innate curiosity, contact with peers, and engagement in the real world. Children learn actively, and their own experiences are essential in internalizing what they learn, whether it be social interaction or real-world application. These insights have evolved into dynamic educational practices that aim at engaging students through active

participation in the learning process (Fosnot, 2015). This philosophical shift in educational theory also brings about changes in the meaning-making process of students and educators.

Recent studies affirm the value of constructivist pedagogy in higher education. When instructional design incorporates reflection, collaborative problem solving and real-world context, students benefit significantly (Borrego et al., 2010). Constructivist principles build students self-confidence and encourage creative problem solving. They are especially, effective in learner centered-classrooms that emphasize inclusivity and reflection, as advocated by Zerda and colleagues (Zerda et al., 2012). Furthermore, culturally responsive teaching, central to constructivism is vital for addressing the diverse expense of underrepresented students, particularly women in engineering (Trenor et al., 2008). The National Education Policy (NEP) 2020 of India calls for a holistic education which is integrated, enjoyable, and engaging (Government of India, 2020). It calls for education that moves away from rote memorization to critical thinking and enquiry-based learning. It advocates a constructivist pedagogy by promoting competency-based education that builds experimental learning into the curriculum. While the constructivist approach to learning empowers students by engaging them and letting them explore, educators are also tasked with prioritizing dialogue and making changes in the educational environment.

Understanding the Theatrical Foundations of Constructivism

Constructivist learning theory argues that students build knowledge by connecting it to their prior experiences through active engagement with the environment in which they are learning. Jean Piaget's theory of cognitive development explains well how children construct knowledge through the process of assimilation and accommodation. Assimilation involves integrating new information into existing cognitive frameworks, while accommodation requires modifying those frameworks to incorporate new experiences. Piaget referred to these mental structures or framework processes as schemas. While Jean Piaget emphasized individual cognitive construction, Leve Vygotsky brought a complementary perspective by highlighting the social and cultural dimension of learning. By introducing the idea of a Zone of Proximal Development (ZDP), he underscored the importance of social interactions or scaffolding in advancing cognitive growth in children (Vygotskij, 1981).

Building on these cognitive and social foundations, John Dewey added a uniquely experimental perspective to constructivism. He affirmed that learning is most meaningful when it comes out of practical experiences and reflective enquiry with real life context (Dewey, 2015). All these important theories collectively inform modern constructivist classrooms, supporting an environment where learning is collaborative, inquiry-driven, and focused on problem solving. According to Fosnot (2015), constructivism challenges traditional ways of transmitting knowledge and focuses more on the role of the learner in meaning-making.

Strategies of Constructivism in the Classroom

Constructivist teaching incorporates strategies such as inquiry-based learning, project-based learning (PBL), and problem solving while also engaging in real world scenarios, all of which improve and increase learner participation. Jonaseen (1999) affirms that these learning methods in classrooms increase critical thinking and metacognition by situating knowledge within meaning-making tasks. However, Dell, Olio and Donk (2007) propose methods that support constructivist teaching that includes cooperative learning, concept mapping, and reflective journaling. These approaches help students engage in deep learning by collective exploration, promoting communication among students, and linking academic learning to real life situations. These methods aim at empowering students to take ownership of their learning process which improves motivation, retention, and learning enjoyment.

Much of the empirical research supports these practices. Cirik et al. (2015) engaged in a study involving 1,830 students and 208 teachers in Turkey and found that students who engaged in constructivist learning environments reported better engagement and perceived quality in learning. Bhattacharjee (2015) confirmed this, saying that active participation, peer collaboration, and context driven tasks all contribute to improved learning outcomes.

Dynamic Classroom and Learning Environment

Constructivist classrooms are, without doubt, dynamic spaces for learning. They promote dialogue and experimentation. Kapur and Ghose (2018) explain that these classrooms function like ecosystems, where knowledge evolves through the interplay of learners, teachers, and contextual resources. Garrison et al. (1998) also add that construction of scientific understanding depends on the opportunities that are given to students to investigate, test hypotheses, and think collaboratively.

Constructivist classroom learning places importance on the environment in which learning takes place. Jonaseen (1999) asserts that learning environment must be deliberately designed to include complex, open-ended tasks that enable learners to be constantly curious in order to construct knowledge. Adding to this, Doolittle (1999) suggests that online platforms and digital resources are extended forms of constructivist space which provide flexible and personalized opportunities for more interaction. These environments foster learner independence while at the same time encouraging collaboration and experimentation in learning which is essential for a student-centered constructivist approach.

Incorporating Technology for an Improved Constructivist Pedagogy

Incorporating technology into constructivist learning is a new opportunity. It offers creativity, engagement, and access. Reyes and Vallone (2008) demonstrated how digital storytelling, virtual collaboration, and multimedia can all be tools to improve language acquisition and cultural expression for English Language learners. These tools can improve intercultural awareness and autonomy. Additionally, the Government of India (2020) also advocates for the use of technology to enrich educational experiences, particularly in underserved areas by promoting equitable access and learner-based pedagogies. When used well, educational technology can become a medium for engagement and a tool for constructing knowledge across diverse learning contexts.

Technology, as a powerful educational tool, holds significant potential for constructivist pedagogy because it allows learners to manipulate variables through simulations, participate in collaborative learning via online forums, and construct knowledge through multimedia portfolios. These tools reinforce the vision of Dewey (2015) as related to experiential learning and provide platforms for formative assessment and feedbacks. The NEP 2020 of the Indian Government also empathizes that use of technology must be student-centric and enquiry-driven, bridging local context and global standards.

Institutional Implication and Teacher Preparedness

Despite its evident benefits, constructivism faces many challenges in its application. Ocak (2012) found that often it is teachers who lack adequate training or institutional support to make the shift from traditional instructional roles to become constructivist facilitators. Fosnot (2015) and Doolittle (1999), argue that comprehensive teacher preparation is essential.

They add that such preparation should also focus on challenging teachers' own epistemological beliefs and the development of constructivist strategies. Additional challenges like the rigidity of standardized curricula, lack of administrative encouragement, and insufficient access to constructivist teaching materials also have implications for teacher preparedness.

It is therefore evident that, for constructivist pedagogy to yield sustained and meaningful outcomes, every school must systematically integrate constructivist principles into curriculum design and development. Above all, administrative commitment is needed to equip teachers and provide them with ongoing opportunities to implement educational policies effectively. Pfadenhauer and Knoblauch (2019) highlight the broader societal role of constructivism, emphasizing the social construction of knowledge, identity, and meaning across cultural and institutional contexts.

Integrating these principles requires aligning the goals of institutions with a culturally responsive pedagogy that addresses the diverse realities of learners. Constructivist reforms need to promote collaboration among educators, policymakers, and families to enhance contextual relevance. The National Educational policy calls for equipping educators with the pedagogical tools necessary for implementing competency-based experiential learning. We have seen that the Government of India's reforms (2020) have revealed a fear of change and a reluctance to explore new approaches. This fear will be overcome by training and ongoing mentoring, policy revision, and investment infrastructure. Greater focus on building infrastructure, particularly in under-resourced schools and providing meaningful incentives to teachers who implement the constructivist innovations, can yield more effective outcomes. Children are naturally inclined to learn because they construct knowledge through active engagement (Piaget, 1952). The key lies in equipping and motivating teachers to cultivate constructivist learning environments that foster active learning. Successful reform requires coordination from multiple levels throughout the education system, including leadership support, peer collaboration, and renewed policymaking.

Conclusion

Constructivist pedagogy transforms learning because it allows students to be co-creators of knowledge. They gain pride in their achievements and are motivated to continue learning. Because constructivist learning is based on cognitive and socio-cultural theories

which are grounded in research, it can become an enduring paradigm for 21 century learning. To fully realize the potential of constructivist approaches and ensure their effective implementation, systemic teacher training, robust digital integration, and administrative commitment are essential. By implementing constructivist strategies and creating learning environments that promote active engagement, educators can encourage learners to think critically and a develop genuine willingness and enthusiasm to learn.

References

Bhattacharjee, J. (2015). Constructivist Approach to Learning– An Effective Approach of Teaching Learning. *International Research Journal of Interdisciplinary & Multidisciplinary Studies (IRJIMS)*, *I*(VI), 65–74.

Borrego, M., Froyd, J. E., & Hall, T. S. (2010). Diffusion of Engineering Education Innovations: A Survey of Awareness and Adoption Rates in U.S. Engineering Departments. *Journal of Engineering Education*, *99*(3), 185–207. https://doi.org/10.1002/j.2168-9830.2010.tb01056.x

Cirik, I., Colak, E., & Kaya, D. (2915). Constructivist Learning Environments: The Teachers' and Students' Perspectives. *International Journal on New Trends in Education and Their Implications*, *6*(2), 30–44.

Dell'Olio, J. M., & Donk, T. (Eds.). (2007). *Models of teaching: Connecting student learning with standards*. Sage Publications.

Dewey, J. (2015). *Experience and education* (First free press edition 2015). Free Press.

Doolittle, P. (1999). Constructivism and online education. [Https://jgregorymcverry.com/readings/Doolittle%20-%201999%20-%20Constructivism%20and%20online%20education.pdf]. *Virginia Tech*. https://edpsych.vt.edu

Fosnot, C. T. (2015). *Constructivism: Theory, Perspectives, and Practice* (2nd ed). Teachers College Press.

Garrison, J. W., Larochelle, M., & Bednarz, N. (Eds.). (1998). *Constructivism and education*. Cambridge University Press. https://doi.org/10.1017/CBO9780511752865

Government of India. (2020). *National Education Policy*. Ministry of Human Resource Development. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

Jonaseen, D. (1999). *Designing Constructivist Learning Environments* (C. Reigeluth L, Ed.; Vol. 2). Erlbaum. https://www.davidlewisphd.com/courses/EDD8121/readings/1999-Jonassen.pdf

Kapur, V., & Ghose, S. (2018). Dynamic learning spaces in education: Rivers and fireworks. *Springer*, 193–205.

Ocak, G. (2012). Teachers' construction of constructivist learning environment. *Eğitim ve Bilim (Translated as Education and Science)*, *37*(166), 25–40.

Pfadenhauer, M., & Knoblauch, H. (Eds.). (2019). *Social constructivism as paradigm? The legacy of The Social Construction of Reality*. Routledge.

Piaget, J. (1952). *The Origins of Intelligence in Children*. International Universities Press.

Reyes, S. A., & Vallone, T. L. (2008). *Constructivist strategies for teaching English language learners*. Corwin Press.

Trenor, J. M., Yu, S. L., Waight, C. L., Zerda, K. S., & Sha, T. (2008). The Relations of Ethnicity to Female Engineering Students' Educational Experiences and College and Career Plans in an Ethnically Diverse Learning Environment. *Journal of Engineering Education*, *97*(4), 449–465. https://doi.org/10.1002/j.2168-9830.2008.tb00992.x

Vygotskij, L. S. (1981). *Mind in society: The development of higher psychological processes* (Nachdr.). Harvard Univ. Press.

Zerda, K.S., de la Rosa-Pohl, D.G., Long, S.A. and Claydon, F.J. (2012). Improving Student Engagement and Outcomes in First-Year Engineering Courses At A Highly Diverse, Multicultural Urban University. *American Society for Engineering Education*. https://peer.asee.org/21528

Conceptual Article

THE ROLE OF ACADEMIC SUPPORT IN SHAPING THE CAREER COMPETENCY OF COMMERCE STUDENTS

Mutharasi K [1] & Dr. K A Sheeba[2]

[1] Ph.D. Research scholar, Stella Matutina College of Education, Chennai, TN, India.

[2]Associate Professor and Research supervisor, Stella Matutina College of Education, Chennai, TN, India

ORCID: https://orcid.org/0009-0004-6936-0079

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ABSTRACT

Indian economy is growing rapidly and it has significant effect in the global scenario. It has the power to influence international affairs and ability to attract investment from MNC and financial market. The rapid pace of development and economic expansion creates more career prospectus in different fields of commerce such as banking, insurance, marketing, advertising, transport, international finance, logistics, supply chain management, artificial intelligence and data analysis, stock market etc. In such a situation commerce education deserves an eminent place in Indian higher education. Despite the availability of numerous opportunities a significant number of commerce graduates face employability challenges due to the gap between their expertise and expectations of the corporate and ever changing business world. In this context the role of higher education becomes vital as they cater the needs of indigenous and emerging industries. When the institutions produce students with theoretical, practical knowledge as well as with career competent skills such as communication, technical, soft skill etc. the commerce graduates become the asset of the country and can contribute significantly to the growth of our nation. Therefore this paper aims to explore the academic support provided by the higher educational institutions to fill the gap between education and employability in the field of Commerce.

Keywords: Indian economy, employability skills, career prospectus, academic support, emerging technologies, global requirement, higher educational institutions, career competency

Introduction

Every student wants to seek immediate appointment in the relevant sectors after the completion of the course. It is one of the main objectives of the education to transfer the students in to valuable human resource. To make the students more productive and career competent the educational institutions should provide various support systems to bring out their hidden potentials. Commerce higher educational institutions should create many opportunities to the students in finding their area of interest and explore different employment avenues. As per the recommendation of Indian Educational Commission, every educational institution should relate education to productivity. The commerce higher educational institutions should shoulder the responsibility of realizing practical, social, cultural, disciplinary, moral and vocational values of imparting commerce education.

Concept of Academic Support

Academic support refers to various services, resources, and strategies designed by the higher educational institutions to help students to succeed in their educational pursuits. Career guidance, internship, workshop, industrial exposure, field visit, skill development programs, are some of the support systems which help the students to thrive in their academic journey and beyond. It also includes mentoring programmes, digital literacy, academic advising in selecting elective papers and supplementary courses to suit with the current industrial requirement. These strategies help the students not only to develop academic strength but also to develop various employability skills such as communication skill, presentation skill, interviewing skill, Positive attitude, team spirit, loyalty, commitment and self- motivation.

Glossary of educational reforms defines “Academic support refers to instructional method or educational services that help students to meet learning standards.

According to University of Auckland “Academic support includes working with students to set educational objectives, clarify course content, assist with assignments and research, provide tutoring, learning, and one-to-one guidance ensuring students to achieve learning outcomes and move successfully in to employment or further study.

Concept of Career Competency

Career competencies are the knowledge, skills, and abilities that individuals need to manage their career development proactively, including reflection on strength and motives, building networks, exploring opportunities, and taking control of career goals. It includes cognitive abilities, technical skills, soft skills and management skills. These competencies are used as bench mark to evaluate the candidates or employees by employers.

Kujipers, Meijers &Gundy define "Career competencies are the skills and attitudes that enable individuals to reflect on their career, communicate about it, and take action to shape it".

According to Frontiers in education "Career competencies refer to reflective, communicative, and behavioral skills that allow individuals to recognize their qualities, build networks, explore opportunities and actively direct their career path".

DevosVander Heijden &Akkermans defines "Career competencies represent a set of personal resources that help individuals to navigate and shape their careers in a changing labor market".

Operational Definition

Academic Support

Academic support refers to all activities provided by the commerce higher educational institutions to bridge the gap between academic learning and real world application and job requirements.

Career Competency

Career competency refers to the measurable combination of knowledge, skills, behaviors and other characters that enable an individual successfully choose, adapt and achieve in their career goals.

Review of Related Literature

Kujipers & Meijers (2017) in their study titled Professional competence and career development aims to conceptualize and measure career competencies in vocational and higher education and examine their link to employability. They identified three core competencies:

reflective, communicative and behavioral and suggested higher level of career competencies lead to better career opportunities and work transitions.

Beatrice Vander Heijde & Vander Heidjen (2018) in their thesis The Employability competencies model Relationship with career success : examine how specific employability competencies contribute to subjective and objective career success. Their findings were career competency significantly predicts career satisfaction and perceived employability. They also emphasis that lifelong learning mindset strengthens this relationship.

Xia, Gu, Huang, Zhu & Cheng (2020) aim to examine how career support affects employability of college students, testing career adaptation as a mediator and proactive personality as a moderator. Findings of the study were career social support positively affects career adaptation and employability.

Dr.M Jagadeeshwaran & Kaleeshwari (2021) in their study titled Employability Skill Gap Analysis of Commerce postgraduate students in Higher Education with reference to Coimbatore District found that Commerce Graduates showed gap in communication, IT and soft skills. They recommended academic support such as internship, placement training to improve career readiness.

Praveena & Thomas (2021) in their empirical study titled career competency of MBA students in Kerala aim to assess career competency of MBA students in Kerala and identify gaps for industry readiness. The findings were MBA students scored well on career motivation but lower on networking and self-profiling. They recommended structured career guidance and mentoring to enhance job competency skill.

Rajeswari & Saranya (2022) aim to measure career competency levels among commerce graduates and explore their correlation with employability skills under the title A Study on career competency and employability skills of commerce graduates in Tamilnadu. Findings of the study were career competency is positively correlated with employability skills like communication, team work and adaptability. Graduates with higher competency levels reported better campus placement opportunities.

Ramasamy & Kumar (2023) under the title Career competencies and work readiness among Indian University students investigated how career competencies influence work readiness in final year undergraduate students. Findings of the study were students with high

self-awareness and networking competency were rated more by recruiters and they suggested integrating competency building modules in to the final year curriculum will increase the career competency of students.

Objectives of the Study

Based on the problem identification and the research title the following objectives are framed

- To explore the different types of academic support system provided by the commerce higher education institutions in shaping the career competency of students.
- To enhance academic support system in commerce curriculum.

Academic Support System

The academic support provided by the commerce higher education institutions to make the students more career competent can be divided in to three main parts. They are curricular support, co-curricular support and career guidance support.

Curricular Support

Updated syllabus - The national education policy 2020 has introduced four year commerce program, providing comprehensive, more-in depth and advanced study of commerce and its related subjects such as management, economics, and statistics.

Encourage inter disciplinary learning - The syllabus encourage students to integrate concepts between different subjects like Economics, politics, psychology, marketing, technology, accountancy with commerce and have a broader understanding of business world.

Alignment of syllabus with industrial needs - The syllabus incorporates academic with the current industrial requirements such as project based assessments, skill demonstrations and portfolio development.

Promote experiential learning – To impart practical knowledge to the students experiential learning is the part of the curriculum. Ex virtual business labs, trading games.

Value added courses- More value added courses such as entrepreneurship development, business ethics, business environment, business correspondence has been offered. It provides

wide variety of choices and enables the students to choose courses according to their need and interest.

Integration of technologies - As this is the digital era to enhance the digital competency of commerce students and to cope up with the exponential growth of current technological world, extensive practical knowledge has been given in the areas such as e-commerce, e-governance, e-learning, e-marketing, e-banking etc.

Co-Curricular Support

These are the support system that complement and enhance the curricular activities. It provides opportunities to apply the learned knowledge in the real world context, making learning more purposive and meaningful. It normally taken place outside the classroom, help the students to develop skills like communication, teamwork, leadership, problem solving in addition to the academic knowledge required. Also it enables the students to find out their area of interest and talents and promotes personal growth. Integration of this support system in the commerce curriculum empowered the students with holistic personality and broad range of skills and experience before enter in to the real corporate world.

Internship - It is a structured work experience provided by an organization for a limited period of time, usually to students. It helps the students to apply the theoretical knowledge in a real world setting and gain practical skills related to their field of study or career interest. It stimulates curiosity, critical thinking, problem solving skills and result in enhanced learning experience.

Industrial visit - It plays a crucial role in shaping the career competency of students. It provides valuable insight in to the market trend, current technological advancement and internal operations of the companies. Industrial visit provides experiential learning opportunities. Students can explore different career paths and gets motivated to select the career according to their interest. Students understand how the theoretical concepts are applied in the real world settings. Industrial visits stimulate curiosity, critical thinking, problem solving skills and result in enhanced learning experience.

Commerce club - It widens the knowledge of students. Seminars on some interesting, important and current topics, discussions on important issues headed by renowned commerce scholars, designing logos, advertisement creation, and power point presentation on important

issues, new policies and amendments, recreational activities are some of the activities organized by the commerce club. It gives practical knowledge to the students and makes the learning an interested one.

Commerce exhibition \ fair - It is an event organized by educational institutions, business organizations or trade bodies to showcase concepts, products, services, business models. It provides platform to the students to exhibit their innovative ideas in commerce and promotes creativity. It inculcates a sense of pride in their talent. The main objective of organizing exhibition is to promote interest in commerce.

Short term certificate courses - It refers to the courses offered alongside the curriculum, designed to enrich the students' knowledge and skill beyond the curriculum. It bridges the gap between the academic learning and professional requirement. GST & Taxation, digital marketing, stock market, insurance are some of the areas where short term certificate course programs are provided by higher educational institutions.

Community engagement - Alumni interaction session, commerce fest, intercollege competitions, professional bodies' membership, case study analysis are some of the programmes organized by colleges to give practical exposure to the students with the society and commercial field.

Career Guidance Support

Career Counseling Sessions - Group counseling or one to one counseling helps the students to identify their strength, interest and career paths.

Placement cell - . A dedicated placement cell can connect students with recruiters and bridge the gap between the job providers and job seekers.

Soft skill - development of soft skills along with academic knowledge provides significant job prospectus. Drafting reports, maintaining records, documents, active participation in meetings such as listening and responding, negotiation, persuasion, verbal and written communication in few languages are the basic soft skill requirements for any graduates. In addition to that analytical, critical thinking skills, problem solving skills, interviewing skills, technical skills, interpersonal and team work skills are very much needed for immediate recruitment in elite

companies. By providing opportunities to students in participating group projects, discussions, seminars, the soft skill proficiency can be increased.

MOU with companies - The higher educational institutions can establish Memorandum of Understanding with reputed companies in banking, insurance, finance, accounting, auditing and taxation sectors and provide hands on training opportunities to students. A dedicated placement cell can connect students with recruiters and bridge the gap between the job providers and job seekers.

Online career resources – Trainings are given to students in using online job portals and digital platforms like Naukri, Linkedin to increase the placement opportunities.

Mentoring programmes - Assigning of faculties and industrial experts as mentors enable the students to know about the job fairs, emerging career opportunities, recruitment drives and expectations of recruiters.

Educational Implications

The following are the educational implications to strengthen the career competency of commerce students

- The policy makers should give more attention to incorporate the academic support system in the commerce curriculum.
- Funds and grants should be allocated for enhancing the career competency programs.
- Faculty members should guide the students beyond the syllabus.
- Staff members should give more practical learning activities.
- Students should be encouraged to utilize and to take active participation in all the academic support system to develop their employability skills.
- Continuous monitoring and updation in the academic support system should be done to meet the current requirement.

Conclusion

There is no doubt, by providing structured and continuous support system adaptability, confidence and career competency among the students will be significantly increased. Though the support systems are effective they are not duly sufficient to meet the demand of the rapidly changing global environment. Commerce higher educational institutions should innovate and

integrate advanced support system as part of their curriculum and strengthen their collaboration between academia and industry. The educational institutions must evolve the support system to equip the commerce students with global competencies.

References

Astin, A. W. (1999). *Student involvement: A developmental theory for higher education*. Journal of College Student Development, 40(5), 518–529.

Brown, D., & Lent, R. W. (2013). *Career development and counseling: Putting theory and research to work* (2nd ed.). Wiley.

Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2010). *Student success in college: Creating conditions that matter*. Jossey-Bass.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). *Toward a unifying social cognitive theory of career and academic interest, choice, and performance*. Journal of Vocational Behavior, 45(1), 79–122. https://doi.org/10.1006/jvbe.1994.1027

Nair, P., & Fahimirad, M. (2019). *A qualitative study on the impact of academic support services on students' career readiness*. International Journal of Instruction, 12(2), 1–16.

Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). Jossey-Bass.

Super, D. E. (1990). *A life-span, life-space approach to career development*. In D. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed., pp. 197–261). Jossey-Bass.

Yorke, M. (2006). *Employability in higher education: What it is – what it is not*. Higher Education Academy.

Conceptual Article

Pedagogical Innovations in 2025: Transforming Teaching and Learning

Sr. Paul Mary

Assist Professor of English, Stella Matutina College of Education, Chennai, TN, India.

ORCID: https://orcid.org/0009-0000-4589-0201

DOI: https://doi.org/10.34293/0974-2123.v18n1.005

Abstract

Pedagogical innovations in 2025 signify a profound and dynamic transformation in global education, shaped by rapid technological advancements, an intensified commitment to student-centered methodologies, and an unwavering emphasis on inclusivity and adaptability. This article examines key innovative approaches including inquiry-led learning, project-based learning, gamification, and flipped classroom models, all of which empower learners to take active ownership of their educational journeys. The strategic integration of digital tools and artificial intelligence facilitates personalized learning pathways, enabling educators to address diverse learner needs while fostering collaboration, creativity, and critical thinking. Hybrid and blended learning modalities extend opportunities for flexible, location-independent education, making quality learning accessible to broader populations. Furthermore, inclusive pedagogical practices ensure equitable participation, valuing diversity as a strength in the classroom. The paper also underscores the importance of continuous professional development for educators, equipping them with the skills to effectively implement and adapt these innovations in rapidly changing contexts. Drawing on practical examples, research insights, and established pedagogical frameworks, this study provides actionable strategies for embedding these methods into teacher training and classroom practice. By aligning technological tools with human-centered educational principles, pedagogical innovations in 2025 pave the way for resilient, future-ready learning environments that not only improve academic outcomes but also nurture lifelong skills essential for thriving in an interconnected, knowledge-driven world.

Keywords: Pedagogical innovations, Innovative teaching strategies, Student-centered learning, Digital tools for teaching, Accessibility in learning

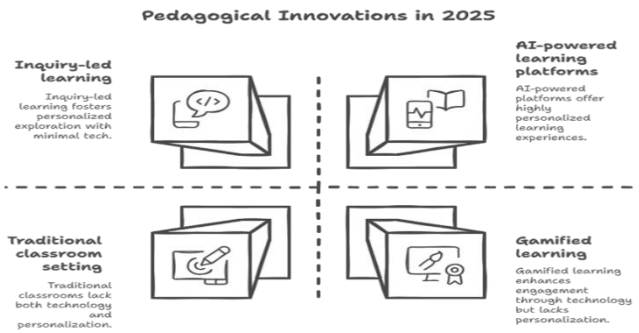
Introduction

Education is the most powerful weapon which you can use to change the world."

– Nelson Mandela

In 2025, education is not merely a process of transferring knowledge; it is a transformative journey that equips learners to navigate uncertainty, embrace complexity, and contribute meaningfully to society. The rapid pace of technological advancement, coupled with evolving societal needs, has catalysed a shift from rigid, teacher-led instruction to fluid, student-centred approaches. These pedagogical innovations are not just trends—they are deliberate responses to the demands of a world where adaptability, creativity, and collaboration have become as vital as literacy and numeracy.

"The mind is not a vessel to be filled, but a fire to be kindled." – Plutarch. The classrooms of 2025 ignite curiosity through inquiry-led learning, project-based explorations, gamified challenges, and flipped models that transform passive learners into active co-creators of knowledge. Digital tools, artificial intelligence, and immersive technologies serve as partners in this process, enabling personalized pathways that address diverse learning needs while dismantling barriers to access. *"Tell me and I forget, teach me and I remember, involve me and I learn."* – Benjamin Franklin. Today's pedagogical landscape is deeply anchored in involvement—designing learning environments where students do not merely absorb facts but engage in authentic problem-solving, critical discourse, and creative production. This evolution reflects a broader vision: education that is inclusive, adaptable, and resilient, preparing learners for professions that may not yet exist and challenges that are yet to be imagined.



1. Key Innovations in Pedagogy

One of the most transformative pedagogical innovations of recent years is **Inquiry-led learning**, a method that shifts the focus from delivering ready-made answers to nurturing the art of questioning. In this approach, students become investigators—formulating thought-provoking questions, engaging in deep exploration, and constructing knowledge through evidence-based reasoning. Rather than being passive recipients of information, they act as intellectual explorers, charting their own learning journeys. This model not only strengthens curiosity but also sharpens analytical and evaluative skills, building a foundation for *lifelong learning* in an era where adaptability is paramount.

Project-based learning (PBL) reimagines education as an active laboratory of ideas. By immersing students in authentic, real-world problems, PBL challenges them to design solutions, conduct research, and collaborate across disciplines. Whether it is developing a sustainable urban plan, creating a social awareness campaign, or building a functional prototype, students are given the freedom to connect theory with practice. This method nurtures creativity, problem-solving, and teamwork—skills that extend far beyond the classroom and into professional and civic life. In PBL, learners move from *absorbing knowledge* to *applying it*, transforming education into a dynamic process of creation and innovation.

The **flipped classroom model** takes this transformation a step further by inverting the traditional flow of instruction. Core content is introduced outside class—through engaging videos, interactive readings, or podcasts—allowing students to absorb material at their own pace. Classroom time is then liberated for rich discussions, collaborative problem-solving, and personalized guidance from the teacher. This model creates a vibrant, interactive learning space where knowledge is not delivered but *co-constructed*, enabling teachers to address varied learning needs and empower students to take ownership of their progress.

Gamification brings yet another dimension to modern pedagogy by infusing the learning process with elements borrowed from games—points, levels, challenges, leaderboards, and rewards. Far from trivializing education, gamification taps into intrinsic

motivation, turning lessons into adventures and assessments into opportunities for achievement. By making learning enjoyable, competitive in a healthy way, and goal-oriented, this approach enhances persistence, engagement, and a sense of accomplishment, particularly in areas where students might otherwise lose interest. In a gamified classroom, the joy of progress becomes as important as the end result, transforming education into an interactive journey rather than a rigid task.

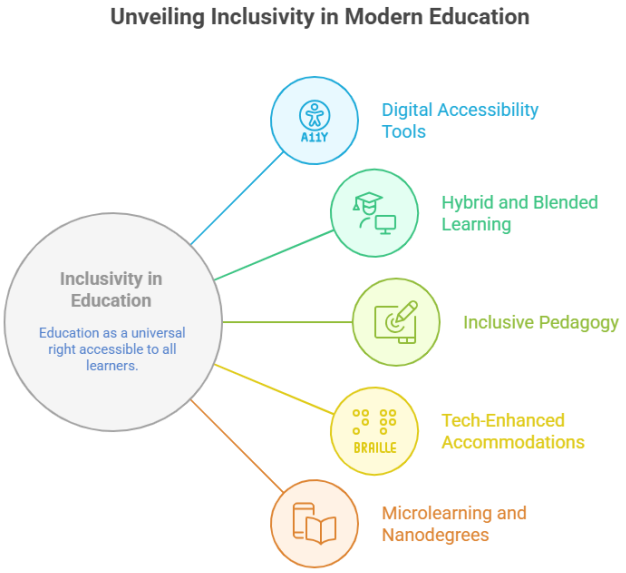
2. Technology and Personalization

- The dawn of 2025 has marked a profound shift in the educational landscape, with technology no longer serving as a mere supplement but as an integral driver of learning personalization. **Artificial intelligence (AI)** and advanced digital tools have redefined how educators approach the diverse needs, learning speeds, and cognitive styles of students. AI-powered learning platforms now operate as intelligent companions, dynamically adapting content, pacing, and complexity to suit each learner's profile. This ensures that students are neither overwhelmed by excessive difficulty nor disengaged by oversimplification.
- **Virtual reality (VR)** and augmented reality (AR) have further revolutionized engagement, transforming classrooms into portals to immersive worlds. Learners can now "walk" through the ruins of ancient civilizations, perform complex chemical experiments in a risk-free virtual lab, or step inside a 3D model of the human heart to understand its inner workings. These experiences transform abstract ideas into concrete, memorable encounters that stimulate curiosity and enhance retention.
- **Adaptive learning software** functions much like a personal tutor, continuously analyzing student performance to adjust the difficulty of exercises in real time. For instance, if a student struggles with a mathematical concept, the platform immediately offers additional examples, alternative explanations, and scaffolded practice. Likewise, VR field trips make geography, history, and science lessons not just informative but unforgettable.
- Beyond engagement, **data analytics tools** empower educators to act with precision. They can detect learning gaps early, predict potential challenges, and design targeted interventions that are both timely and effective. Far from replacing human connection, these technological innovations enhance the teacher's role as a mentor—freeing

educators from repetitive administrative tasks so they can focus on fostering critical thinking, empathy, and collaboration.

In essence, technology-driven personalization does not merely optimize instruction; it democratizes it—offering every learner the opportunity to succeed, regardless of background or starting point.

3: Inclusivity and Accessibility



In the 21st-century educational landscape, **inclusivity is no longer an aspirational ideal but a fundamental imperative**. Modern pedagogical innovations are anchored in the recognition that education is a universal right, and meaningful learning experiences must be accessible to all, regardless of physical ability, cultural identity, linguistic background, or socio-economic circumstance.

Digital accessibility tools have emerged as powerful enablers of this mission. Screen readers and voice recognition systems make it possible for visually impaired learners to interact seamlessly with digital content, while closed-captioning and transcription services empower students with hearing impairments to engage fully with lectures and discussions. Multilingual content platforms ensure that students from diverse linguistic backgrounds can access resources

in their preferred language, thereby dismantling one of the most persistent barriers to participation.

Hybrid and blended learning models have also transformed the accessibility equation. By combining face-to-face engagement with the flexibility of online instruction, these models accommodate students who may be geographically distant, economically disadvantaged, or balancing education with work and family responsibilities. Such flexibility allows learners to pace their studies according to personal needs while still benefiting from community interaction and teacher mentorship.

An **inclusive pedagogy** goes beyond technology to address the cultural and emotional dimensions of learning. Culturally responsive curricula integrate the histories, perspectives, and contributions of diverse communities, fostering a sense of belonging and respect. Flexible learning pathways—such as competency-based progression, modular course structures, and self-directed projects—empower students to demonstrate learning in ways that align with their strengths, interests, and circumstances.

Tech-enhanced accommodations further reinforce inclusivity by reducing disparities for learners with physical, sensory, or cognitive impairments. For example, haptic feedback tools can assist students with visual impairments in STEM experiments, while adaptive keyboards and alternative input devices support those with limited motor control. Digital note-taking tools with AI summarization help students with dyslexia or attention challenges capture and retain key concepts effectively.

The emergence of **microlearning modules** and **nanodegrees** has broadened the scope of lifelong learning. Microlearning delivers content in small, focused bursts—ideal for learners with limited time or attention spans—while nanodegrees offer targeted credentials that align with specific career paths. Together, they open new doors for continuous education, enabling learners to upskill or reskill on demand without the constraints of traditional academic timelines.

In sum, inclusivity and accessibility are no longer supplementary features of education—they are essential markers of quality and equity. Through the integration of digital

tools, flexible pedagogies, and culturally responsive practices, the modern classroom is steadily evolving into a space where **every learner not only has a seat at the table but also a voice that is heard and valued**.

4: Supporting Teachers and Continuous Learning

Effective implementation of innovative pedagogy requires **continuous professional development** for educators. Micro credentials and focused training programs enable teachers to acquire new skills and adapt to emerging trends.

Reflective practice, collaborative learning among teachers, and access to digital resources are critical for sustaining high-quality pedagogy. Professional learning communities and lesson study groups foster sharing of best practices and collective problem-solving.

Educational leaders play a vital role in cultivating supportive environments that encourage risk-taking and innovation in teaching. Fostering a culture of adaptability and openness allows educators to experiment and tailor approaches to meet the unique needs of their students.

Conclusion

Pedagogical innovations in 2025 are reshaping education to be more engaging, personalized, inclusive, and future-ready. By blending technology with student-centred approaches, these innovations prepare learners for a rapidly changing world while supporting educators in delivering effective, meaningful learning experiences. Continued investment in technology, teacher development, and inclusive practices will be essential to advance education systems that meet the needs of all learners.

References

eSchool News. (2023, December 11). *Current trends in education*. https://www.eschoolnews.com/it-leadership/2023/12/11/current-trends-in-education/

GIRT Shodh Sagar. (2025). *The future of education: Trends and innovations in teaching*. https://girt.shodhsagar.com/index.php/j/article/view/110

International School of Ho Chi Minh City. (2025). *Top 8 innovative teaching strategies in 2025*. https://www.ishcmc.com/news-and-blog/innovative-teaching-strategies/

Jaro Education. (2025). *Exploring pedagogy trends for effective learning (2025)*. https://www.jaroeducation.com/blog/pedagogy-techniques-in-modern-education/

Organisation for Economic Co-operation and Development. (2025). *Trends shaping education 2025*.https://www.oecd.org/en/publications/trends-shaping-education-2025_ee6587fd-en.html

ProFuturo. (2025). *10 innovations that will transform education in 2025*. https://profuturo.education/en/observatory/innovative-solutions/10-innovations-that-will-transform-education-in-2025/

Shantha Institution. (2025). *Innovative teaching pedagogy*. https://shanthainstitution.edu.in/wp-content/uploads/2025/04/Renjith-TR.pdf

WeAreDrew. (2025). *Education trends 2025: Innovations transforming the sector*. https://blog.wearedrew.co/en/education/education-trends-2025-innovations-transforming-the-secto