

Experiential Learning in the 21st-Century Education System: Importance and Challenges

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ABSTRACT

21st-century education aims at learners' holistic development across the domains of heart (affective), hand (psychomotor), and head (cognitive). Experiential learning is a learner-centered instructional strategy in which pupils acquire knowledge through hands-on and field-based activities. Learners can also evaluate their own learning through reflection and self-assessment. It shifts the focus from teacher-centered instruction to participatory and inquiry-based learning, enabling students to construct knowledge by connecting theory with real-world applications. Rooted in the philosophies of John Dewey, David Kolb, Jean Piaget, and Lev Vygotsky, experiential learning integrates cognitive, affective, and psychomotor development through authentic experiences. This article explores the concept, nature, theoretical foundations, educational significance, and challenges of experiential learning in educational contexts. It highlights the need for experiential learning in academic settings to develop core competencies such as active engagement, higher-order thinking, creativity, teamwork, and problem-solving skills among learners. This paper synthesizes evidence indicating that experiential learning approaches enhance engagement, critical thinking, creativity, collaboration, and professional readiness. However, despite its benefits, the implementation of experiential learning faces multiple challenges, including inadequate resources, rigid curricula, limited teacher training, time constraints, and assessment complexities. Institutional barriers, large class sizes, and resistance to change further restrict its widespread adoption. Addressing these challenges requires systemic reforms, capacity-building programs, and flexible curricular designs that encourage innovation and reflective practice. The study concludes that experiential learning holds transformative potential for modern education. By fostering holistic growth, autonomy, and lifelong learning, experiential learning can enhance the teaching-learning process and better prepare learners for the 21st century.

Keywords: *Experiential Learning, 21st-Century, Importance, Education System, Challenges*

The modern education system aims for the all-around development of children, focusing on their heart (affective), hand (psychomotor), and head (cognitive) abilities. Experiential learning is a hands-on educational approach that highlights the importance of personal experiences in gaining knowledge, skills, values, and attitudes. By engaging in real-life experiences, students can develop greater interest in learning and curiosity about their

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surroundings. This approach places students at the center of the learning process. However, the contemporary education system often places greater emphasis on cognitive development, potentially giving less attention to affective and psychomotor development. Neglecting emotional and motor development can result in unbalanced growth among children and, ultimately, affect society. This may stem from conventional teacher-centered teaching methods. Therefore, it is essential to shift our pedagogical approaches from teacher-led to learner-centered methods. One such innovative approach is experiential learning, which encourages student participation and engagement, placing more importance on the learning process rather than just the results. This creates an environment where learners can reflect on their experiences and relate them to real-world situations. India, recognized for its rich culture and evolving technology, is making strides to enhance its education system and cultivate a skilled workforce. Recently, India's education system has started moving away from rote memorization towards activity-based learning. Experiential learning is a key part of this shift, helping students learn by doing and linking their lessons to real-life situations. This method is transforming the educational landscape in India.

Concept of Experiential Learning

Experiential learning is conceptualized as acquiring knowledge through real-world engagement. This type of learning is called “situated learning” because it happens in real contexts that are relevant to students’ future careers. Famous educators like John Dewey, David Kolb, and Malcolm Knowles developed different theoretically grounded ideas about experiential learning. Although their approaches vary, they share the view that individuals develop knowledge and understanding through their own experiences. The theory is closely associated with constructivist perspectives, which emphasize that learners actively construct their understanding through experience. Social interaction also plays an important role—people learn more effectively when they share and reflect with others. Therefore, experiential learning is closely linked to social learning perspectives, as both highlight the importance of interaction and hands-on activities in the teaching-learning context. Kolb (1984) developed a systematic experiential learning model that conceptualizes learning as a cyclical process. In simple terms, experiential learning involves learning through experience, reflection, conceptualization, and application. After completing an activity, learners gain experiences that can help them address future problems and situations. This process forms an important part of experiential learning. It focuses on hands-on experience. Learners can engage with experiences according to their individual needs, abilities, and learning contexts. (Singh et al., 2025). It is gained from real-life experiences. Here the teacher acts as a facilitator and guides the learner by showing the right approach to deal with a problem. The learner is encouraged to actively engage in solving problems, while the teacher provides guidance and support when necessary. The teacher primarily acts as a facilitator who supports learners throughout the learning process. It is called experiential learning because real-life experiences of an individual play a vital role in the learning process. Another reason is the contribution of John Dewey, Lewin, and Piaget. These theories provide a foundation for developing experiential learning. (Kolb, 1984). Here learners actively participate in the learning process and tackle new situations accordingly (Zhai et al., 2017). It allows learners to learn while doing, reflecting, thinking, and applying (Butler et al., 2019).

Nature of Experiential Learning

Active engagement: Learners gain deeper insights when they actively engage in an activity rather than passively listening. It is an important characteristic of experiential learning.

- Real-world connections: An individual gets experiences from everyday situations only. It is another feature of experiential learning.

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- Self-discovery: A child learns from his choices by experiencing consequences.
- Critical reflection: it indicates self-reflection after completing any task.
- Pedagogical process: it indicates involvement of learner in the cycle of action, introspection and gaining practical experience.
- Learner-centered: it denotes place of pupil is in the center of teaching learning environment.

Components of Experiential Learning

Experiential learning promotes the development of evaluative thinking, imagination, and analytical problem-solving skills. It is not limited to the retention of information; rather, it develops through prior knowledge and experiences. It has four components:

Concrete Experience (CE): It refers to direct engagement in an activity or situation through which learners gain firsthand experience. Reflective Observation (RO): At this stage, learners reflect on and examine their previous experiences. Abstract Conceptualization (AC): After reflection, learners develop concepts or principles based on their experiences. Active Experimentation (AE): After forming concepts, learners apply their newly developed understanding to new situations or environments.

Theoretical Foundations of Experiential Learning

The roots of experiential learning can be traced to the contributions of leading educators and theorists who emphasized active engagement, reflection, and real-world experiences. Central to this framework is David Kolb's experiential learning model, which conceptualizes learning as a four-stage cyclical process. The four stages are concrete experience, reflective observation, abstract conceptualization, and active experimentation, through which learners transform experiences into meaningful knowledge. Learners test their newly acquired knowledge and skills through practical application in real-world or simulated environments. This framework has been applied across various academic settings, ranging from elementary education to tertiary education and professional development programs.

John Dewey's philosophy of "learning by doing" forms the cornerstone of experiential education, stressing practical experience, inquiry, social interaction, and reflective thinking as essential for meaningful learning. Dewey emphasized that students understand ideas better when they engage in real-world tasks, interact with their environment, and reflect on what they do. Dewey believed that individuals learn more effectively when they meaningfully participate in tasks rather than passively receive information. He argued that experiential learning in authentic contexts fosters deeper understanding, decision-making skills, and the application of learned experiences in relevant contexts.

Jean Piaget's constructivist theory explains how learners actively build knowledge through assimilation and accommodation. He signifies four stages, they are sensorimotor stage, pre-operational stage, concrete operational stage and formal operational stage. His theory provides a foundation for understanding intellectual development and designing age-appropriate experiential activities. According to Piaget, learners develop their understanding by integrating new concepts with their existing knowledge to incorporate novel experiences. This constructive process aligns closely with the principles of experiential learning, where students engage purposefully with subject matter and integrate their learning into their personal frameworks of knowledge.

Lev Vygotsky's social learning theory draws attention to the educational significance of community interaction, cooperation and mentored involvement in knowledge construction. His concept of socially mediated learning aligns with experiential approaches where dialogue, peer support, and shared tasks enhance learning. Learners can engage in group-based activities, simulations, or real-world projects, where they can learn from one another, share perspectives, and co-construct knowledge through shared experiences. These theoretical perspectives provide a rationale for experiential learning and explain how it aligns with established principles of cognitive development, constructivism, and social learning. This knowledge provides a blueprint for designing learning opportunities that foster meaningful and transformative experiences for students. Together these perspectives position experiential learning as a dynamic and transformative process that incorporates hands-on activity, introspection, conceptual understanding, and social interaction. They collectively support the design of learner-centered environments that foster critical thinking, problem-solving, autonomy, and lifelong learning.

Importance of Experiential Learning in the Present Education System

Promotes Active Learning: In today's education system, experiential learning encourages students to actively participate rather than passively receive information, leading to deeper understanding and skill development. **Bridges Theory and Practice:** It helps learners connect classroom knowledge with real-life situations, making learning more meaningful and relevant to future professional contexts. **Enhances Critical Thinking and Problem-Solving:** When learners engage in practical activities, they develop opportunities to analyse problems, evaluate alternatives, and make informed decisions—skills that are essential in the 21st century. **Supports Personalized Learning:** When students encounter problems, they can develop new concepts and connect them with their existing knowledge and experiences, thereby addressing individual learning needs and promoting self-directed learning. **Encourages Collaboration and Teamwork:** Working in real or simulated professional settings helps learners develop interpersonal and teamwork skills, which are crucial in today's collaborative work environments. **Develops Transferable and Practical Skills:** Students learn to apply their knowledge across various contexts, gaining practical and adaptable skills that prepare them for future careers. **Fosters Professional Identity and Responsibility:** Providing graded responsibilities and participatory roles helps learners develop confidence, a sense of purpose, and a strong professional identity.

Reduces the Gap Between Education and Employment: By integrating authentic, practice-based experiences into curricula, the education system better prepares students for workplace expectations and real-world challenges. **Boosts Confidence:** By dealing with real-life issues, learners can develop greater confidence in their abilities and a sense of achievement. **Develops Problem-Solving Skills:** Learners can develop a problem-solving mindset by engaging with real-world issues and identifying appropriate solutions. **Increases Learning Effectiveness:** Students actively participate in activities that can make learning more meaningful, memorable, and deepen their understanding of concepts.

Incorporation of Experiential Learning in Academic Settings

Several studies have examined the use of experiential learning across diverse educational contexts, highlighting its relevance to the development of evaluative thinking skills, collaborative engagement, and comprehensive learning outcomes. Desai et al. (2018) reported that the use of experiential learning significantly improved students' performance in innovation, creativity, and motivation to solve problems. Similarly, Jonathan et al. (2017), in their study on business modelling courses, found that students developed essential soft skills

required in the business market. The students also expressed positive feedback, as the experiential learning approach encouraged their active participation throughout the course.

In the field of technology education, Bhajantri et al. (2016) implemented experiential learning in a web technology course and found that participants responded positively, indicating increased motivation and enthusiasm for acquiring new knowledge. Supporting these findings, Burch et al. (2019) concluded that the adoption of experiential learning pedagogies leads to improved academic outcomes compared to traditional learning environments. In addition, Chan et al. (2021) demonstrated that experiential learning interventions in adolescent programs enhanced empathy and well-being more effectively than non-experiential approaches.

More recent studies have further reinforced these outcomes. Malik and Behera (2024) emphasized that experiential learning bridges the gap between theory and practice, fostering social responsibility, creativity, critical thinking, and personal development. Wilson et al. (2024) revealed that students engaged in experiential learning were more actively involved in their studies than those in conventional courses. Their findings also highlighted the significance of incorporating assessment approaches to better capture the depth of student learning. Alabi (2024) asserted that experiential learning promotes deep learning, enhances critical thinking, and facilitates long-term knowledge retention by enabling learners to make meaningful connections between theoretical concepts and practical applications. Bhidodiya and Sharma (2024) identified experiential learning as a pivotal element in government initiatives such as *Skill India*, contributing to the development of a flexible and adaptive workforce. Furthermore, Singh and Rao (2024) observed that experiential learning strengthens the cognitive, affective, and psychomotor domains of learners while promoting active classroom participation. They concluded that experiential learning represents an essential pedagogical approach for 21st-century education, which prioritizes learner-centered teaching and positions teacher as mentor in teaching -learning approach.

Institutional Challenges in Experiential Learning

Despite its benefits in fostering active learning, critical thinking, and the application of knowledge to real-world challenges, the implementation of experiential learning in pedagogical contexts faces numerous challenges across different educational settings. These challenges stem from limitations in resources, teacher readiness, institutional structures, and assessment practices.

Inadequate Resources

A major barrier to implementing experiential learning is the lack of sufficient resources. Rani and Tyagi (2022) reported that scarce materials and infrastructural limitations hinder the incorporation of experiential learning activities, especially in resource-constrained schools. Similarly, Schott (2024) identified that high equipment costs and inadequate technical readiness among teachers pose significant challenges in the context of immersive technologies like virtual reality for K–12 education.

Time-Consuming and Expensive

Experiential learning can be more time-intensive and financially demanding than traditional teaching methods. Aggarwal (2019) highlighted that experiential approaches require more preparation and execution time, making them expensive and logistically challenging. Jaworski (2023) also found that scheduling with external partners, managing faculty workload, and

aligning project guidelines increase the time and effort needed to implement experiential learning strategies in higher education.

Academic Staff Readiness

Teachers play a central role in experiential learning; however, many lack the necessary skills, motivation, and professional development. Rani et al. (2022) observed that a lack of proper training prevents teachers from effectively implementing experiential pedagogies. Chauhan (2024) also found that insufficiently trained faculty, low enthusiasm, and limited instructional time act as key barriers. According to Alabi (2024), successful experiential learning requires skilled facilitators capable of guiding reflective practices—an area where many educators still struggle.

Assessment Difficulties

Assessing experiential learning outcomes remains a complex challenge. Radovic et al. (2021) emphasized that measuring experiential learning outcomes is more difficult than assessing factual knowledge, which may reduce students' motivation for engaging in such activities. Adib (2024) similarly noted that assessment difficulties and simulation costs act as deterrents in experiential business education.

Curriculum Rigidity and Constraints

Rigid curricula and prescribed learning outcomes often restrict the adoption of experiential methods. Rani et al. (2022) pointed out that tight curriculum frameworks do not permit time-consuming experiential activities. Rao et al. (2024) further highlighted that designing projects and field-based tasks requires additional teacher effort and flexibility, which is often constrained by rigid academic structures. Eggiman (2024) identified bureaucratic separation, limited time, and curriculum rigidity as key institutional barriers to implementing interdisciplinary experiential programs.

Resistance to Change

Traditional teaching practices and institutional norms often resist the introduction of experiential methods. Rao et al. (2024) noted that teachers accustomed to lecture-based methods find it difficult to adapt to experiential approaches. JIER (2024) also confirmed that resistance to change remains one of the most pervasive challenges to experiential learning adoption across disciplines.

Institutional and Structural Barriers

Institutional factors such as inadequate guidance, unsuitable assessment systems, and workload pressures can hinder the effective implementation of experiential learning. The Quality Assurance Agency (QAA, 2024) reported that limited institutional direction, credit mapping issues, and inadequate staff capacity impede experiential initiatives in STEM education. Eggiman (2024) also found that staff workload and bureaucratic separation restrict innovative teaching practices.

Large Class Sizes and Classroom Management

In many schools, the implementation of experiential learning can be constrained by large class sizes and inadequate learning materials. Rani et al. (2022) noted that overcrowded classrooms and resource shortages make hands-on learning difficult to manage effectively. Schott (2024) also identified classroom management as a critical challenge when integrating technology-based experiential methods.

Contextual and Facilitation Challenges

Alabi (2024) emphasized that implementing experiential learning in traditional educational environments is often constrained by time limitations, resource availability, and the need for skilled facilitators capable of managing reflective and inquiry-based learning processes. Case studies from science laboratories, business simulations, and environmental fieldwork demonstrate that while experiential learning enhances engagement and skill development, these contextual barriers must be addressed to achieve its full potential.

CONCLUSION

Experiential learning is an instructional framework that aligns with the goals of 21st-century education by fostering holistic development through the integration of cognitive, affective, and psychomotor domains. Drawing on the contributions of John Dewey, David Kolb, Jean Piaget, and Lev Vygotsky, experiential learning emphasizes “learning by doing,” active engagement, and reflective practice. It enables learners to construct knowledge through authentic, real-world experiences while encouraging critical thinking, creativity, and lifelong learning. This learner-centered strategy acts as a bridge between theory and practice, making education more meaningful, practical, and skill-oriented.

REFERENCES

- Adib, H. (2024). Experiential learning in higher education: Assessing the role of business simulations in shaping student attitudes towards sustainability. *The International Journal of Management Education*, 22(2), 100968. <https://doi.org/10.1016/j.ijme.2024.100968>
- Aggarwal, R., & Wu, Y. (2019). Challenges in Implementing Experiential Learning in IB Education. *Journal of Teaching in International Business*, 30(1), 1–5. <https://doi.org/10.1080/08975930.2019.1637807>
- Alabi, M. (2024). Experiential learning: Fostering deep learning through active engagement.
- Bhajantri, V., Sujatha, C., Yaligar, S., & Pawar, M. K. (2016). An experiential learning in web technology course. *Journal of Engineering Education Transformations*, 30(2), 86–91. <https://doi.org/10.16920/jeet/2016/v30i2/105450>
- Bhidodiya, N., & Sharma, V. (2024). Experiential learning in the Indian context: Transforming education and skill development. *International Journal of Research and Analytical Reviews*, 11(1), 337–344. <http://www.ijrar.org/papers/IJRAR1DFP038.pdf>
- Burch, G.F., Giambatista, R., Batchelor, J.H., Burch, J.J., Hoover, J.D. and Heller, N.A. (2019), A Meta-Analysis of the Relationship Between Experiential Learning and Learning Outcomes. *Decision Sciences Journal of Innovative Education*, 17: 239-273. <https://doi.org/10.1111/dsji.12188>
- Butler, M. G., Church, K. S., & Spencer, A. W. (2019). Do, reflect, think, apply: Experiential education in accounting. *Journal of Accounting Education*, 48, 12–21. <https://doi.org/10.1016/j.jaccedu.2019.05.001>
- Chan, H. H., Kwong, H. Y. C., Shu, G. L. F., Ting, C. Y., & Lai, F. H. (2021). Effects of Experiential Learning Programmes on Adolescent Prosocial Behaviour, Empathy, and Subjective Wellbeing: A Systematic Review and Meta-Analysis: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 12, Article 709699. <https://doi.org/10.3389/fpsyg.2021.709699>
- Chauhan, A., Begum, J., Lavanya, K. M., Gupta, A., Ghosh, S., & Kulkarni, S. (2024). Experiential learning of active learning strategies in mentor learner web-based discussions: A perceptions study. *International Journal of Applied and Basic Medical Research*, 14(4), 258–265. https://doi.org/10.4103/ijabmr.ijabmr_277_24

- Desai, P., Bhandiwad, A., & Shettar, A. S. (2018). Impact of experiential learning on students' success in undergraduate engineering. In *2018 IEEE 18th International Conference on Advanced Learning Technologies (ICALT)* (46–50). IEEE. <https://doi.org/10.1109/ICALT.2018.00018>
- Eggiman-Ketter, J., Derrough, B., Wolfe, D. L., & Unger, J. (2024). Enablers and barriers to implementing an interdisciplinary experiential learning program for health and rehabilitation university students in a Canadian rehabilitation centre. *Archives of Physical Medicine and Rehabilitation*, 105(4), e176. <https://doi.org/10.1016/j.apmr.2024.02.612>
- Jaworski, J., & Cho, M. (2023). Implementation of an experiential service-learning course in biomedical engineering design for undergraduate students. *Biomedical Engineering Education*, 3(2), 243–251. <https://doi.org/10.1007/s43683-022-00103-1>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-hall.
- Malik, P., & Behera, S. (2024). *The transformative power of experiential learning: Bridging theory and practice*. *International Journal of Indian Psychology*, 12(2), 55–63. <https://doi.org/10.25215/1202.007>
- Mandal, B. (2024). Transformative approaches to teaching and learning: Integrating theory with practice. *International Journal of Creative Research Thoughts*, 12(11), H198–H208. <https://doi.org/10.1729/Journal.42420>
- Nhlumayo, B. S., & Eze, I. R. (2024). Experiential learning in classrooms. In E. O. Adu, B. I. Omodan, C. T. Tsotetsi, & B. Damoah (Eds.), *Pedagogical strategies for 21st-century classrooms* (pp. 92–99). ERRCD Forum. <https://doi.org/10.38140/obp1-2024-13>
- Prasada Rao, S. S., Chandra Sekhar, S., Chandrasekhar Yadav, T., & Praveen Kumar, V. (2024). Implementing experiential learning strategies for enhanced business education in India: Challenges and opportunities. *Journal of Informatics Education and Research*, 4(2), 202. <http://jier.org>
- Prasada Rao, S. S., Chandra Sekhar, S., Chandrasekhar Yadav, T., Praveen Kumar, V., & Hari Haran, B. M. (2024). Implementing experiential learning strategies for enhanced business education in India: Challenges and opportunities. *Journal of Informatics Education and Research*, 4(2), 202. <http://jier.org>
- Quality Assurance Agency (2024). *Experiential learning in STEM – literature review (QAA collaborative enhancement fund report)*.
- Radović, S., Hummel, H. G. K., & Vermeulen, M. (2021). The challenge of designing more experiential learning in higher education programs in the field of teacher education: A systematic review study. *International Journal of Lifelong Education*, 40(5–6), 545–560. <https://doi.org/10.1080/02601370.2021.1994664>
- Rani, K., & Tyagi, T. K. (2022). Experiential learning in school education: Prospects and challenges. *International Journal of Advance and Applied Research*, 10(2), 378 <https://doi.org/10.5281/zenodo.7652609>
- Schott, C., Milligan, A., & Marshall, S. (2024). Immersive VR for K–12 experiential education—Proposing a pedagogies, practicalities, and perspectives-informed framework. *Computers & Education: X Reality*, 4, 100068. <https://doi.org/10.1016/j.cexr.2024.100068>
- Singh, T., & Rao, T. (2024). Experiential learning: A Systematic review of approach and learning models. *Library Progress International*, 44(3), 1403–1411.
- Wilson, J., Yates, T., Gobeil, M., Aitken, A., & Lewis, K. (2024). Experiential learning assessment in post-secondary education. *The Canadian journal for the scholarship of teaching and learning*, 15(3). <https://doi.org/10.5206/cjsotlrceaa.2024.3.16934>

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- Yardley, S., Teunissen, P. W., & Dorman, T. (2012). *Experiential learning: AMEE Guide No. 63. Medical Teacher*, 34(2), e102–e111. <https://doi.org/10.3109/0142159X.2012.650741>.
- Zhai, X., Gu, J., Liu, H., Liang, J.-C., & Tsai, C.-C. (2017). An experiential learning perspective on students' satisfaction model in a flipped classroom context. *Educational Technology & Society*, 20(1), 198–210.

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Conflict of Interest

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