



From Experience to Excellence: A Journey through Experiential Learning

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Abstract: *The paper addresses how experiential learning has transformed teaching learning process, emphasizing the way it has progressed from a supplementary tool for instruction to a critical element of academic success. The paper looks at significant advancements and trends in experiential learning, showing how these methods have spread throughout academic fields and educational institutions globally. It explores the Indian and worldwide contexts, contrasting and comparing the application of experiential learning in various educational situations. The emerging paradigm of experiential learning is reviewed with a focus on the transition to more holistic and immersive educational experiences that bridge the gap between academic knowledge and practical application. The paper highlighted the innovative approaches and tools that improve learning outcomes and student engagement. Discussing the wider ramifications of expanding experiential learning opportunities in education indicates that these activities promote critical thinking, creativity, and lifelong learning abilities in addition to improving academic achievement and employability. Institutions can better prepare students for the complexities and challenges of the modern world by incorporating experiential learning into the curriculum. The review concludes by highlighting the role that experiential learning plays in developing both academic achievement and professional preparedness, and by promoting the integration and innovation of this approach in higher education institutions around the world.*

Keywords: Experiential Learning, Education, Inquiry based learning

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1. Introduction

Benjamin Franklin once said, "Tell me, and I forget, Teach me, and I remember, Involve me, and I will learn." This timeless remark perfectly captures the philosophy of experiential learning, an approach that has become incredibly popular in educational circles all over the world. When we explore the depths of this cutting-edge approach, we embark on a journey where learning becomes an immersive experience, where knowledge travels beyond the confines of textbooks and classrooms, and where passive observation becomes active involvement. [1]Van der Zwan, Reitsma, and Visser-Wijnveen (2018) observed that experiential learning promotes deeper learning outcomes for students than typical didactic methods. Additionally, learners enjoy learning more. Employers, [2] as emphasized by Bowes, King, and White (2020), recognized the importance of experiential learning and often prefer to graduates who have engaged in such activities. Despite these benefits, Indian higher education institutions still do not fully utilize experiential learning [3].

With the advent of National Education Policy (NEP 2020) there has been a resounding drive to transform the country's educational landscape, with a renewed emphasis on holistic and experiential learning approaches. This

innovative approach is driving a significant revolution in the Indian educational landscape. Experiential learning enables learners to play an active role in shaping their education. Students become active participants in their educational journeys when they are actively involved and encouraged to invest directly in their learning experiences (Kolb, 2014) [4]. Experiential learning is now widely recognized and welcomed in a variety of fields, including education, training, facilitation, and organizational development. It is a robust resource for helping children develop and learn skills. Its use is relevant for various educational, individual, and professional objectives, and it is used from children with special education needs to university learners, from special education interventions to business training purposes [5]. also underlined the significance of experiences in learning underlining the importance of experience as a major factor in the learning process. As observed by Bandura, individuals may possess vast amounts of knowledge in forms of concepts, but they may be reluctant or lack the needed self-efficacy to get involved in activities where this knowledge can be put into practical use in the first place unless they had an opportunity to learn it in the past. Experiential learning makes it easier to bridge this gap since the learners are immediately required to apply theory taught to them in the real world.

Learning by doing is a highly-transforming tool devised to enhance knowledge and personal development. Experiential learning differs significantly from traditional classroom learning in several ways, one of them being that classroom teaching is often a one-way process in which the information received is often passively received as compared to experiential learning which involves the learner in a direct encounter with materials and surroundings. This is an engaging method that enhances learning and builds critical thinking and problem-solving skills as well as emotional intelligence. Students thus need to be allowed some openness in their learning so that they can play, learn and even think critically about experiences through practical learning. They gain valuable information that is directly transferrable to a range of aspects of their lives, from studying and curriculum content and to their work and personal lives, by being in the field and actively participating in the real world. Viewed in this way experiential learning is, as [6]Kolb and Kolb (2006) highlighted a specifically exact and potent kind of instructional approach. It can work effectively to increase students' meta-learning or using knowledge in living conditions, and contribute to the development of students and independent learning.

Experiential learning promotes a sense of autonomy over one's learning path. This self-directed method encourages a lifetime love of

learning in addition to increasing motivation and engagement. Experiential learning bridges traditional disciplinary lines and allows chances for collaborative exploration and the blending of many ideas. Learners gain a more advanced perception of the connections between knowledge and their surroundings by directly interacting with complex and multifaceted issues.

Essentially, experiential learning promotes resilience, empathy, adaptability, and intellectual curiosity, all of which are essential components of complete human development. Learners who adopt an immersive, hands-on learning style are better prepared for success in a rapidly changing global community by developing the required skills and mindset.

A variety of terms have been used to describe learning from experience [7] "learning by doing," whereas [8], created the term "experienced-based learning." "Trial and error" learning is the term used to describe inductive learning processes. In 1986, the AACSB Task Force established the term "applied experiential learning," which blends learning from "real-world" events with the requirement of applying concepts, ideas, and theories to an interactive environment.

1.1 Experiential Learning in Global and Indian Context

Experiential learning, a concept first introduced by 4th-century scholars. It has roots in various



disciplines, including Aristotle, Buddhism, biology, and daily life. Psychologists like Watson, Piaget, Dewey, and Lewin believed that learning occurs through conditioning and an interactive learning environment. John Dewey an 'experientialist' a major proponent of experiential learning stated the principle of 'learning by doing' or 'learning by experience'. He used the democratic setting to argue that the setting is ideal for the flow of ideas that then gave rise to knowledge and experience. Dewey's pragmatic philosophy also recorded different aspects in which individuals can be molded according to the demands of the environment [9]. Lewin, also adduced to social constructivism and he stated how participants of learning process shape the learning environment. [10] Sternberg and Williams (2010) noted the relevance of group learning and social contacts for problem-solving attitudes and creativity. The relevant thoughts of Dewey are pragmatic in nature, which can still be used as the principle for learning by experience today. Both stressed the importance of good learning atmosphere and positive classrooms while the latter focused on the application of different teaching aids to make learning practical and fun. Kolb's experiential learning presented the most comprehensive way of learning through experience, where the learner is constantly in direct contact with the physical and social environment.

The National Education Policy (NEP 2020) of India aims to make experiential learning practice in schools, where students actively engage in discussions, exchange ideas and learn by practising. Experiential learning is any learning done through action, discovery, exploration or practice. Moreover, CIEEL India, initiated experiential-learning platform in 1992, provides experiential-based learning activities which are highly innovative and that focus on the development of knowledge, attitudes, skills and behavioral changes. The purpose of this is bridging the gap between theoretical knowledge and hands-on experience. Students run community-related activities so that they can put into practice the knowledge acquired [11]. The Yash Pal Committee (1993) also highlighted the removal of textbook based rote learning and emphasises the child-centered, constructive approach in educational system. The National Curriculum Framework and the Right to Education promotes a positive and comprehensive approach to education in which students get involved with projects, activities, and exploration that make use of local knowledge. With a variety of features for evaluating these activities according to performance, the National Council for Educational Research and Training (NCERT) has placed emphasis on the development of an effective framework of Continuous and Comprehensive Evaluation (CCE) to be utilized in conjunction with experiential learning.

Furthermore, specific frameworks emphasizing skill and subjective areas were developed for teacher preparation at the elementary and secondary levels. Activity-based learning is emphasized by programs under the District Primary Education Programme (DPEP) and Sarva Shiksha Abhiyan (SSA), including master trainers, key resource persons, and the State Resource Group (SRG). Periodically, comprehensive evaluations are carried out at various levels to pinpoint areas of weakness in the knowledge of certain student groups in a class. These evaluations aid in the development of methods for curriculum and teacher preparation program reviews [12].

1.2 Evolving Landscape of Experiential Learning

The general area of enquiry that is associated with the learning through experience still remains a dynamic area as the learning phenomenon and the related educational paradigms keeps on changing and as the concept of learning through experience keep gaining more importance in shaping the learners. Carnival or exhibition learning approaches have been the most popular learning strategies in educational organizations in the recent past. This is because it is now well established that real learning does not simply involve the learner to be a passive recipient of content but rather one that is very much involved and puts

knowledge into practice. This evolution includes schools of various scopes from project-based learning through apprenticeships to placements in simulation environments as well as partnerships with business partners. Moreover, technological advancement has already significantly widened the area of practical training, as it became possible to immerse learners in real-life scenarios using virtual and augmented reality or special simulation software. In addition, it is possible to mention that the use of experiential learning as an integral part of educational programs helped not only in the improvement of academic performances but also in the development of critical skills such as critical thinking, creative planning, and interpersonal communication. This is because, the learners who are equipped with the right skills, in the future, will move in an increasingly complex and connected world. As we move around in this dynamic environment, it is evident that experiential learning is more than just a teaching philosophy; it is a transformative paradigm that is driving the next phase of education.

1.3 Innovations in Experiential Learning

Over the years, a number of innovative approaches to experiential learning have emerged. These include project-based learning, internships, service-learning, and simulation. These approaches have shown to be successful in raising students' participation and equipping

them with skills for both their future personal and professional lives, in addition to encouraging a deep knowledge (Lewis & Williams, n.d.). Innovations in experiential learning have transformed the educational landscape, making learning more engaging, practical, and effective. Some key innovations include:

Hands on Projects: One of the primary elements of experiential learning is hands-on projects, which provide students the chance to apply their academic knowledge to actual situations. Through the development of practical skills, these projects promote critical thinking, creativity, and problem-solving. These projects closely resemble real-world scenarios, they offer a safe space for students to make mistakes, grow from them, and modify. Let us, for instance, imagine a chemistry class where students are assessed to carry out a set of experiments. This project, being the hands-on activity, enables students to gain knowledge about chemical reactions and at the same time, it helps them to improve their observation and analytic skills. Likewise, in a business course, a project might consist of the creation of a mock marketing campaign, thus, students will learn how to apply marketing theories and at the same time work in a team and develop leadership skills.

Service Learning: Through the process of service learning, students will apply what they

have learned in the classroom to local initiatives that benefit the community [13] (Stoecker, 2016). Service learning is a style of learning that combines classroom instruction with community service at the same time. The mediation, the constructive work, and the reflection are some of the essential elements. Students will flourish in this not just in terms of their academic performance but also in terms of their social skills, involvement in the community, and other diverse elements of their profile [14] (Finley & McNair, 2013). Additionally, because systems are in place to assist with specific challenges and foster strong partnerships between local businesses and academic institutions, it has a positive impact on communities.

Internships and Apprenticeships: Students can get practical, career-related experience through internships and apprenticeships, which improve their academic learning and get them ready for the job. While fieldwork and mentoring are the main benefits of short-term internships, longer-term apprenticeships combine classroom learning with on-the-job training and frequently result in certification. These courses aid students in developing their professional networks, applying their theoretical knowledge, and learning new skills. Companies benefit from having access to efficient staff and new inventions, whereas schools benefit from having greater educational programs. Such programs

must be commercially viable, professionally structured, and in line with academic aspirations. Overall, they benefit the student, the employer, and society as a whole by addressing the issue of the education-to-employment relationship.

Role-playing and simulations: Role-playing and simulations immerse students in everyday scenarios, encouraging them to see things from a variety of perspectives. Individuals who actively participate in these exciting exercises can gain a better understanding of tough concepts and situations [15]. This is a very practical method which enables them to analyze and reinforce a theoretical knowledge and fosters critical and problem solving skills. Moreover, when assuming other people's roles, students learn to understand others' feelings and emotions, which is beneficial for students themselves and is going to be helpful for students in the future. Taking into account the above-mentioned perspectives, the role-playing and simulations can be considered as adequate teaching methods, which contribute to intensive learning and the formation of soft skills, which have to be fostered for successful professional practice in various areas.

Outdoor Education: This method blends fun with educational opportunities by providing students with up-close and personal encounters in natural settings. By engaging in outdoor

activities like hiking, field studies, and ecological projects, students can get a hands-on understanding of their environment [16] (Eaton, 2000). Through this, the activities enhance the concept of experiential learning where students can learn to relate theoretical information to real-life situations that allow them to practically learn concepts such as biology, ecology, and environmental science. Furthermore, outdoor education enhances the spirit of inquiry and discovery, as well as the participants' desire for an active and healthy lifestyle. It also helps in enhancing resolute life skills such as resilience, leadership and team work. Another education approach that can shape learners' attitude towards nature is outdoor education because learning in the natural environment increases learners' appreciation for the environment as well as their academic performance.

Project-Based Learning (PBL): In this learning environment students spend a lot of time working on a task – they focus intensely on a complex question or significant problem in the world. Students use their knowledge and skills acquired in different subjects in studying the project: language arts, math, and science, social studies are used to obtain the complete knowledge on a subject. PBL is ideal for developing critical thinking and active inquiry as well as fostering collaboration among the students since they all have to take part in planning their project as well as its

implementation [17]. Learners that are involved in this process learn how to prioritize their time effectively, structure tasks, and convey their findings in different ways, from reports to presentations and live prototypes. There is a focus on the reflective skills in PBL, which helps to assess development, identify challenging situations, and learn from experiences. Ultimately, this learner-focused, hands-on approach does not just enhance performance in class.

Peer teaching and collaboration: Also called group teaching method, this teaching method involves students in helping each other to learn while at the same time they teach one another in fulfilling a mutual objective. When students undertake the role of the instructor they make summaries and answer questions and thus they enhance their understanding of the area of study. The student learns more while at the same time the teacher realizes the real meaning of the teaching profession [18]. On the other hand, collaboration requires students to work together in completing tasks or addressing certain problems hence building critical skills such as peer negotiation, teamwork, and expression. Students are encouraged to share ideas with their counterparts and teachers and this enables them to learn from others' perspectives and strategies that may invoke criticality and creative thinking. Additionally, students rely on each other for success in

academics; the type of classroom also creates a learning environment and a class of students that rely on one another. Overall, using peers as teachers and assigning group tasks contributes to creating a dynamic and inclusive classroom where participants are actively involved in learning and growth.

Reflection and Debriefing: In reference to knowledge construction, students are asked to engage in reflection or debriefing sessions that are aimed at deepening their understanding of a topic after performing an experiential learning assignment. Reflection is the process in which students critically evaluate their experiences and includes an assessment of their behavior, emotional responses, and outcomes. They are able to identify some of the critical things that were learnt and specific aspects of the experience that is different from others through this self-reflective process. Students during debriefing undertake group discussions where they share their reflections listen to the views of other people and discuss learning [19]. The students are also able to articulate their thoughts, ask questions and even clear up any confusion they might be having during these talks. Learners can enhance future experiences by relating theorised ideas or constructs to real situations through group reflection of the learners' experiences. Moreover, reflection and debriefing raise the students' awareness of themselves, teach them to think critically, and

improve their ability to use knowledge in different settings. Taking all these things into consideration, these methods are important in experiential learning as they code to the principles of lifelong learning and help students in the process of engaging actively with the material and internalizing the process [20].

Besides enhancing education provision these innovations are also shaping up students ready for these changes by availing them some very important and critical skills such as creativity, understanding problems, interpersonal relationship skills and even conflict resolution. They are gradually getting recognized as the added value that institutions offer. Besides enhancing education these innovations are also training students for life ahead by providing necessary skills like being creative, being able to solve a problem, being able to handle relationships and conflicts. Colleges are increasingly recognized as a supplementary form of support.

In the midst of all the innovative teaching approaches, one thing remains clear – the heart of the matter is the experiential learning. Such activities involve giving students practical things to do that allow them to transfer and relate the knowledge gained in class to real life scenarios in order to enhance their understanding and retention of concepts learnt in class [21]. With the help of this approach the students are motivated and they actively

involved in class with critical thinking while researching on contemporary issues with an option of coming up with solution as a group.

In conclusion, experiential learning is a fairly new sphere, which is constantly inventing new ways to bridge the gap between theory and practice for the best quality of learning.

1. Key Trends and Development

The ever-changing educational landscape identifies experiential learning as a critical way of teaching that extends beyond the classroom limits. It is a learning process in which information and action intersect, theory and practice are linked, and learning becomes a dynamic and immersive experience. Some important characteristics of trends and developments in experiential learning include:

Integration with online learning: The construct of experiential learning has also evolved to meet the needs of the increasingly popular online and virtual environments. The contemporary higher education institutions continue to embrace new advanced and technologies as well as combine a number of forms of online WBL approaches. These adaptations include; methods like virtual service-learning, case methods, simulations, organizational consultation, scholarship, and virtual internships. The objective is the provide students engaging and meaningful experiences in immersive environments [22].

The Kolb's Model: Kolb made a significant input to learning through experience that is valued today. His book "Experiential Learning: "Learning and Development as Experience" offers the most detailed and up-to-date explication of the key concept of the theory. This is a cutting edge research which presents a systematic analysis of the concept of experiential learning and the way in which it can be applied to a variety of contexts such as adult development, work and learning environments as well as education [23].

Transcending traditional boundaries: Expansive learning is a new concept of learning that changes traditional approaches to learning and can be considered not just rhetoric, but a completely new paradigm of education and skills development. It helps to develop the critical thinking and problem-solving skills of pupils by offering those tasks that are related to both assignments and actual difficulties [24]. This method promotes reflection among students, which results in a greater comprehension and retention of the learning material. Additionally, this type of learning method also blends with social interaction and teamwork among students. The collaboration forms the foundation for a learning community where they work together on their issues, thus, preparing them for future teamwork in the work environment that is challenging and dynamic. This's where social dimension of learning goes

had as an integral part of giving students the skills to be successful beyond the classroom [25].

Life long Learning: The ability to draw conclusions from the variety of events in life is essential to lifelong learning. This idea is consistent with the theory of experiential learning, which holds that information is acquired by firsthand interaction with events and is supported by a learning cycle that strikes a balance between experience and abstraction as well as action and reflection. We offer an examination of the diverse aesthetic choices arising from the interaction of these modalities of learning as well as the settings in which learning takes place. The progression through these settings and modes weaves one experience into the next, creating a learning spiral that directs lifelong personal development. Furthermore, learning partnerships, which promote mobility within the learning process, and an individual's learning identity, which includes their belief in their ability to learn, have an impact on lifelong learning.

2. Advancing Higher Education through Experiential Learning Opportunities

The goal of reforming the higher education system over the last 20 years has been to increase students' interest in a wider range of courses and improve their practical knowledge of those fields. The goal of this strategy is to

provide a more interesting and useful learning environment. The findings and suggestions of The National Council of Mathematics Educators [26, 27], and DeCorte, Greer, and Verschaffel [28] have influenced methods to improve students' academic experiences in both scope and depth, assuring that the information they acquire is clear and applicable.

In higher education, there are plenty of possibilities for experiential learning in most fields. As stated by Northern Illinois University OTC [29, 30] and Loretto [31], these experiences give students the opportunity to work in actual work environments, usually with the assistance of an experienced professional mentor. Deep understanding is necessary for effective knowledge transfer; this goes beyond simply remembering and replicating what was taught in class. Knowledge must be gained through relevant experiences in order to be useful; otherwise, it stays isolated and is unlikely to be retained or utilized in novel situations. When content is deeply understood by students, it may be retrieved and applied in a variety of contexts since it is connected to numerous instances and experiences. According to contemporary cognitive scientists, this is known as a failure to transfer knowledge since students are unable to recognize its application or retrieve it when necessary [32]. There are no well-structured chapters in life with quizzes to help you decide which facts to apply. Students will not be able to transfer their knowledge,

which will result in incomplete understanding, unless they are specifically taught how to identify when their knowledge is applicable, recall it, and apply it.

While having experiential learning opportunities is certainly a priority in higher education settings as it turns students into true real world citizens by stopping the gap between theory and practice [33]. This flow of events provides students with chances to work through their knowledge in hands-on situations, gain practical experience, and develop vital problem-solving and critical thinking capacities [34]. Through incorporating work-based education into the curriculum, students are provided with an opportunity they need; making the learning process more interactive. They can identify a particular context where they can apply what they are learning in the university or in the workplace. Besides, this practical knowledge ensuing from deep integration of theoretical learning with real-life experiences enables the students not only have a thorough comprehension of and proper application of the different concepts but also, they become fully prepared to effectively transition into their desired careers. This collaboration, however, is mutually beneficial for academics and industry partners since it creates a situation where students can partake in hands-on projects and thrive after they have completed their undergraduate studies, and industry partners

make donations and sponsorships that improve the quality of students' education. On the other hand, this method not only supports but also generates opportunities for students to collaborate and network with professionals through connecting to a specific field they are studying. In this, workplace-based learning, real-world research and teaching are combined and the tri-factor gives mutual benefits to students, academics, and those associations in the industry. It can be claimed that the factor of performing having a job that goes beyond supplementing theory, is mastery among the merits of practical learning placement.

Thus, it is imperative that higher education institutions adopt experiential learning approaches. It makes sure that students can apply what they've learned to actual work environments, which improves their capacity to transfer and apply knowledge efficiently. Several possibilities for experiential learning exist in higher education in an array of fields. Students gain a deeper knowledge and are more equipped for challenges they will face in the real world. Experiential learning opportunities help them connect classroom theory with real-world application.

3. Conclusion

Experiential learning reflects a pedagogically transformative approach, turning passive acceptance of information into active,

immersive experiences that are the hallmark of fundamental comprehension and expertise cultivation. This article has replayed the stage of experiential learning beginning from its philosophical panorama to being practiced at the global level and in India. Research has shown that scenario-based learning gifted students a range of benefits including that they learned critical thinking, problem solving and to be emphatic.

The National Education Policy (NEP 2020) of India distinguishes itself by proposing to embed experiential learning in educational setup in order to created conditions to bring theory and practice together. Innovation in the educational process means applying something new like project-based learning, service learning, internships and role-playing simulations that have shown good results in student engagement and overcoming the real world problems.

The experiential learning environment is evolving in light of the technology-enhanced pedagogy and is accessible to a greater population and broadens its effectiveness. Virtual reality, augmented reality and simulation environments", in other words, put all learning processes on a new quality level. The effect of game anticipating, continuous improvement of skills, life-long learning, and multidisciplinary cooperation provide the students with a startup point for the global society.

It is crucial for higher education institutions to have learning capabilities that involve students experientially. These institutions achieve a great deal by enabling students to obtain experiential knowledge as well as to apply the learned concepts in practical world cases for the purposes of broadening certitude and retention of knowledge. The consequence also gains students not only but also cultivates

corporations and academia, which fasten the development of both.

The future of education will be largely shaped by the ongoing expansion and integration of experiential learning approaches. This journey from experience to excellence highlights the transforming power of experiential learning and paves the stage for a workforce of the future that is more talented, engaged, and versatile.

References

- [1] Van der Zwan R, Reitsma G, Visser-Wijnveen G. (2018), The impact of experiential learning on student achievement and satisfaction: A meta-analysis, *Educational Psychology Review*, **30(2)**, pp.427-453.
- [2] Bowes R, King L, White S. Employers' perceptions of the value of work-integrated learning and experiential learning. *Higher Education Research & Development*, **39 (1)**, pp.145-160.
- [3] Majumdar P. (2020), Experiential learning: Challenges and prospects in Indian higher education. *International Journal of Scientific Research and Management*, **9 (1)**, pp.1072-1077.
- [4] Kolb, D. A. (2014), *Experiential learning: Experience as the source of learning and development*, FT press.
- [5] Bandura, A. (1991), Human agency: The rhetoric and the reality. *American Psychologist*, **46(2)**, pp.157-162.
- [6] A. Y. Kolb, & D. A. Kolb, (2006). Learning styles and learning spaces: A review of the multidisciplinary application of experiential learning theory in higher education. *In Learning styles and learning: A key to meeting the accountability demands in education* pp. 45-91.
- [7] J. Dewey, (1938), *Experience and education*. New York: Macmillan.
- [8] Wolfe, D. E., & Byrne, E. T. (1975, March), Research on experiential learning: Enhancing the process. *In Developments in Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL conference*, **2**.

- [9] Lewin, K. (1951), *Field theory in social sciences*. New York: Harper & Row.
- [10] R. J. Sternberg, & W. M. Williams, (2010), *Educational psychology*. Upper Saddle River, NJ: Merrill.
- [11] Yashpal Committee Report (1993). <http://14.139.60.153/bitstream/123456789/22/1/122.pdf>.
- [12] Chintan Shivir (2017), *Recommendation for experiential Learning in National workshop*. Department of School Education and Literacy, Ministry of Human Resource and Development, Govt. of India.
- [13] R. Stoecker, (2016), *Liberating service learning and the rest of higher education civic engagement* **10** (1). Philadelphia, PA: Temple University Press.
- [14] A. Finley, & T. McNair, (2013), *Assessing underserved students' engagement in high-impact practices*. <https://vtechworks.lib.vt.edu/server/api/core/bitstreams/c6399970-32b5-4293-918b-801112f1ecd3/content>.
- [15] P. K. Tompkins, (1998), *Role playing/simulation*, *The Internet TESL Journal*, **4(8)**, pp.143-150.
- [16] D. Eaton, (2000), *Cognitive and affective learning in outdoor education* (Doctoral dissertation, University of Toronto), <https://library-archives.canada.ca/eng/services/services-libraries/theses/Pages/item.aspx?idNumber=1006661340>.
- [17] N. Dimmitt, (2017), *The Power of Project Based Learning: Experiential Education to Develop Critical Thinking Skills for University Students*. In *CBU International Conference Proceedings*, **5**, pp.575-579.
- [18] E. Daniels, R. Pirayoff, and S. Bessant, (2013), *Using Peer Observation and Collaboration to Improve Teaching Practices*. *Universal Journal of Educational Research*, **1(3)**, pp.268-274
- [19] T. Winchester-Seeto, and A. D. Rowe, (2019). *Who Is Holding the Mirror? Debriefing and Reflection in Work-Integrated Learning*. *International Journal of Work-Integrated Learning*, **20(4)**, pp.335-349.
- [20] M. K. Fey, D. Scrandis, A. Daniels, and C. Haut, (2014), *Learning through debriefing: Students' perspectives*. *Clinical Simulation in Nursing*, **10(5)**, e249-e256.
- [21] S. Sachs, (2017), *Implementing Experiential Learning in Higher Education: A Comparative Study of Good Practice in Seven Countries*. International Centre for Higher Education Research Kassel (INCHER-Kassel).
- [22] R. Karimi, C. S. Arendt, P. Cawley, A. V. Buhler, F. Elbarbry, and S. C. Roberts, (2010), *Learning bridge: curricular integration of didactic and experiential*

- education. *American J pharmaceutical education*, **74(3)**, 48.
- [23] T. H. Morris, (2020), Experiential learning—a systematic review and revision of Kolb’s model. *Interactive learning environments*, **28(8)**, pp.1064-1077.
- [24] Giles Jr, D. E., & Eyler, J. (2013). The endless quest for scholarly respectability in service-learning research. *Michigan Journal of Community Service Learning*, **20(1)**, 53-65.
- [25] Jacoby, B. (2014). Service-learning essentials: Questions, answers, and lessons learned. John Wiley & Sons.
- [26] National Council of Mathematics Educators. An Agenda for Action: Recommendations for School Mathematics of the 1980s. Reston, VA: National Council of Mathematics Educators; c1980.
- [27] Schmidt, W. H., McKnight, C. C., Cogan, L. S., Jakwerth, P. M., Houang, R. T., Wiley, D. E., & De Mars, C. E. (2002). Curriculum Does Matter. Facing the Consequences: Using TIMSS for a Closer Look at US Mathematics and Science Education, pp.115-162.
- [28] DeCorte E, Greer B, Verschaffel L. Mathematics learning and teaching. *Handbook of educational psychology*. 1996;7:491-549.
- [29] Northern Illinois University, Office of Teacher Certification OTC (2011). Student teaching. https://www.niu.edu/teachercertification/teachercert/tcp_st.shtml
- [30] George Mason University. Center for Teaching Excellence (2011). About teaching: Experiential learning. http://cte.gmu.edu/Teaching/experiential_learning.html
- [31] Loretto, P. (2011). Learning by experience. <https://internships.about.com/od/internships101/p/TypesExperEd.htm>
- [32] Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn (Vol. 11). Washington, DC: National academy press.
- [33] Parr, D. M., & Trexler, C. J. (2011). Students’ experiential learning and use of student farms in sustainable agriculture education. *Journal of Natural Resources and Life Sciences Education*, **40(1)**, pp.172-180.
- [34] Morley, C., Ablett, P., & Noble, C. (2020). Introduction: The imperative of critical pedagogies for social work. In *The Routledge handbook of critical pedagogies for social work* pp.1-16. Routledge.