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IMPACT OF EXPERIENTIAL LEARNING IN THE NEP 2020: AN EMPIRICAL STUDY ON HIGHER EDUCATION INSTITUTIONS IN NAVI MUMBAI

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ABSTRACT

With its emphasis on the importance of experiential learning, the National Education Policy (NEP) brought about a paradigm shift in Indian education. This approach places the learner at the center of the learning process, going beyond rote memory and passive learning. This article looks at the significance of experiential learning according to the NEP and how it has changed education. The NEP places a strong focus on the necessity of switching from a content-centric educational approach to one that is competency-based. This goal is effectively served by experiential learning, which focuses on applying knowledge to actual situations. When concepts are actively engaged with and connected to real-world situations, students learn them more effectively. A key component of the NEP's revolutionary vision for Indian education is experiential learning. Through a focus on knowledge application, active participation, and holistic growth, experiential learning provides students with the skills, mentality, and abilities needed to succeed in the twenty-first century. Through encouraging exploration, experimentation, and application of knowledge in practical settings, it develops students' critical thinking, problem-solving abilities, creativity, and teamwork. By implementing experiential learning techniques in all schools, an educational ecosystem that is dynamic and student-centered will be created, enabling students to flourish in a world that is changing quickly. This study has used SEM model to understand perception of students and teachers and their level of awareness of concept of experiential learning w.r.t NEP

Keywords: Experiential Learning, NEP 2020, Higher Education, SEM Model.

INTRODUCTION

Experiential learning is a process of learning through direct experience or involvement in activities rather than through traditional classroom instruction or rote memorization. It emphasizes hands-on, active participation in real-life situations, which allows learners to engage with the material in a more immersive and practical manner. Experiential learning often involves reflection on experiences, drawing insights from successes and failures, and applying those insights to future situations.

Key components of experiential learning include, Concrete Experience: Learners engage in real-world experiences or activities that are directly relevant to the subject matter. Reflective Observation: After experiencing something, learners reflect on what happened, what they observed, and how they felt during the experience. Abstract Conceptualization: Learners make sense of their experiences by connecting them to broader concepts, theories, or frameworks. Active Experimentation: Learners apply what they've learned to new situations or contexts, testing out their understanding and skills in practice. Experiential learning can take many forms, such as internships, apprenticeships, fieldwork, simulations, role-playing exercises, service-learning projects, and hands-on experiments. This approach to learning is often praised for its ability to foster deeper understanding, critical thinking, problem-solving skills, and practical application of knowledge. It is widely used in various educational settings, from primary schools to higher education, as well as in professional development and training programs.

Literature Review and Hypothesis Formulation

According to Wagner et al. (2011), a review of literature is a vital component of academic research, providing a comprehensive overview of existing knowledge, informing research design and methodology, and contributing to the advancement of scholarly understanding within a particular discipline or field of study. A review of literature,

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often referred to as a literature review, is a critical examination and synthesis of existing scholarly works, research studies, and publications relevant to a particular topic or research question. A literature review provides context by summarizing the current state of knowledge on the chosen topic. It helps readers understand the historical development, theoretical frameworks, and key debates within the field. By analyzing existing literature, researchers can identify gaps, inconsistencies, or areas where further research is needed. This helps to define the rationale and significance of their own study within the broader scholarly conversation. Literature reviews assess the methodologies, research designs, and data analysis techniques employed in previous studies. Researchers can evaluate the strengths and limitations of different approaches and consider how they might inform their own research design. A critical synthesis of the literature allows researchers to identify common themes, trends, and patterns across multiple studies. This synthesis helps to build theoretical frameworks, develop hypotheses, or formulate research questions for further investigation. Literature reviews contribute to the development of theory and practice by synthesizing empirical evidence, theoretical perspectives, and practical implications from existing research. They help researchers understand how their findings relate to broader theoretical concepts and real-world applications.

Student Awareness (SA) and Professional Development (PD)

Coker et al.(2016) said that student awareness about experiential learning involves understanding the concept, actively participating in experiential learning activities, reflecting on experiences, recognizing the development of transferable skills, appreciating personal growth opportunities, understanding career implications, engaging in feedback and assessment processes, and embracing a mindset of continuous improvement. Student awareness about experiential learning is an essential aspect of its successful implementation in educational settings. Experiential learning can also contribute to students' personal growth and development. Educators should highlight how these experiences can help students build confidence, resilience, adaptability, and a sense of responsibility. Students should be aware of how experiential learning experiences can enhance their employability and career readiness. Educators can emphasize how these experiences provide valuable hands-on experience, networking opportunities, and insights into professional roles and industries.

H1: Student Awareness about Experiential Learning has an impact on their Professional Development

Student Willingness (SW) and Professional Development (PD)

Estes (2004) in their study highlighted factors and actively addressing students' concerns and motivations, educators can cultivate a positive attitude towards experiential learning and enhance students' willingness to engage in such transformative educational experiences. Students' willingness to engage in experiential learning often hinges on their perception of its value. They are more likely to participate enthusiastically if they see the relevance of the activities to their academic, personal, or career goals. The level of student engagement can influence their willingness to participate in experiential learning. Activities that are interactive, hands-on, and collaborative tend to attract greater interest.

H2: Student Willingness has impact on their professional development

Institutional Initiatives (II) and Professional Development (PD)

Quinn and Shurville (2009) highlighted that Offering students' choices and autonomy in selecting experiential learning activities can increase their willingness to participate. When students have a say in what they learn and how they learn it, they are more likely to feel motivated and engaged. Creating a supportive and inclusive learning environment is essential for fostering students' willingness to engage in experiential learning. Encouraging risk-taking, celebrating diversity, and providing emotional support can help students feel safe and empowered to explore new ideas and experiences. Offering timely feedback and recognition for students' efforts and achievements in experiential learning activities can reinforce their willingness to participate. Recognizing their contributions, celebrating milestones, and acknowledging their growth and development can boost their confidence and motivation to continue engaging in such activities.

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H3: Institutional Initiatives has impact on the professional development of students

Professional Development (PD) of students and Employability Skills (ES).

Scott et al .(2019), Evidence on academic Professional development of students and employability skills are crucial aspects of education that prepare individuals for success in their careers. Overall, fostering the professional development of students and equipping them with employability skills not only enhances their career prospects but also contributes to the growth and competitiveness of industries and economies. Educational institutions often integrate employability skills development into their curriculum through workshops, career counseling, experiential learning opportunities, and projects. Employability skills are developed through a combination of formal education, hands-on experience, extracurricular activities, and personal development initiatives. Employability skills are the foundational skills, attributes, and attitudes that make individuals attractive to employers and enable them to thrive in the workplace. They go beyond technical knowledge and encompass a broad range of transferable skills and personal qualities. Educational institutions, employers, and professional organizations often play a role in facilitating professional development opportunities for students. Professional development refers to the process of improving and gaining new skills, knowledge, and experiences related to one's chosen profession or field of study. It encompasses various activities such as internships, co-op programs, workshops, seminars, conferences, networking events, and hands-on projects.

H4: Professional Development of Students has Impact on the Employability Skills

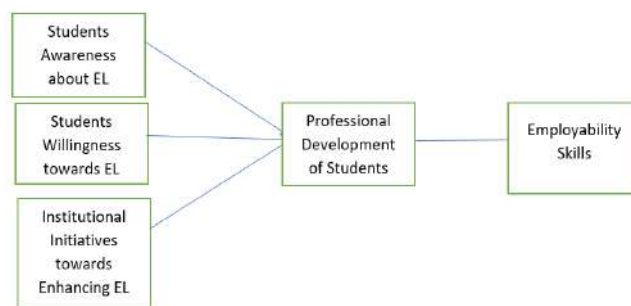


Figure1: Proposed Research Model

RESEARCH METHODOLOGY

Research methodology refers to the systematic process or framework used by researchers to conduct a study, investigate a problem, or answer a research question. It involves the techniques, procedures, and strategies employed to collect, analyze, interpret, and present data in a reliable and valid manner. Through the review of literature, five constructs— Students Awareness about EL, Students Willingness towards EL Institutional Initiatives towards Enhancing EL, Professional Development of Students and Employability Skills—were identified. Over 150 participants rated the constructs from "strongly disagree" (1) to "strongly agree" (5). Data was gathered from undergraduate commerce and management students of first, second and third year in aided and unaided colleges in Mumbai.

Table 1: Demographic Description

Variable	Category	Number	%
Gender	Male	60	40%
	Female	90	60%
Program	BCom	30	20%
	BMS	40	27%
	BCom (A&F)	40	27%
	BCom (B&I)	30	20%
	BCom (FM)	10	7%

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ANALYSIS AND RESULTS

The sample adequacy score (MSA) calculated by Kaiser-Meyer-Olkin is 0.856. In order to identify the most important factors among all the other components, I utilised the Kaiser-Meyer-Olkin (KMO) and Bartlett's Test. Bartlett's test of sphericity is found to be pertinent for factors influencing experiential learning. Students Awareness about EL, Students Willingness towards EL Institutional Initiatives towards Enhancing EL, Professional Development of Students and Employability Skills. Once the factor analysis is conducted, confirmatory factor analysis (CFA) is used to validate the factors identified in the exploratory factor analysis (EFA). Structural equation modeling (SEM) is then employed to analyze the relationships between latent variables and test hypotheses. The Kaiser-Meyer-Olkin (KMO) measure assesses the adequacy of the sample for factor analysis. A score of 0.856 indicates that the data are likely suitable for factor analysis.

Table 2: Fitment indices of measurement model

Indices	Saturated model	Suggested value
Chi-square value /df	1.011	< 5.00 (Hair et al , 2013)
P value	0.051	> 0.05 (Hair et al , 2013)
GFI	0.950	> 0.90 (Hu and Bentler, 1999)
AGFI	0.930	> 0.90 (Hair et al , 2013)
NFI	0.964	> 0.90 (Hu and Bentler, 1999)
CFI	0.985	> 0.90 (Daire et al, 2008)
RMR	0.08	< 0.08 (Hair et al , 2013)
RMSEA	5.00	< 5.00 (Hair et al , 2013)

Table3: Measurement Model (CFA)

Factor & Items	Factor Loading	Critical Ratio	Alpha	Average Variance Extracted	Construct Reliability
Students Awareness about EL (SAEL)			0.879	0.762	0.883
SAEL1	0.881	12.472			
SAEL 2	0.877	14.422			
SAEL 3	0.820	13.079			
SAEL 4	0.821	Fixed			
Students Willingness towards EL (SWEL)			0.871	0.642	0.889
SWEL1	0.831	12.231			
SWEL2	0.899	Fixed			
SWEL3	0.834	12.223			
SWEL4	0.881	11.434			
Institutional Initiatives towards Enhancing EL (IIEL)			0.893	0.778	0.892
IIEL1	0.812	13.479			
IIEL2	0.822	14.429			
IIEL3	0.865	12.313			
IIEL4	0.863	Fixed			
Professional Development (PD)			0.810	0.622	0.811
PD1	0.842	8.850			
PD2	0.840	8.831			
PD3	0.880	8.223			

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PD4	0.725	Fixed			
Employability Skills (ES)			0.812	0.699	0.820
ES1	0.833	8.850			
ES2	0.840	8.852			
ES3	0.879	8.233			
ES4	0.823	Fixed			

The provided table indicates that all elements within the measurement model exhibit factor loadings exceeding 0.6 (Netemeyer, Bearden & Sharma, 2003). Following analysis procedures outlined by Field (2013), items with factor loadings below 0.6 are excluded, while those meeting or exceeding this threshold are retained. According to Fornell and Larcker (1981), the average variance extracted (AVE) should surpass 0.5. Furthermore, given Cronbach's alpha values exceeding 0.8, the model's convergent validity is established.

Table 4: Discriminant Validity

Factors	AVE	Squared Interconstruct Correlation (SIC)				
		SAEL	SWEL	IHEL	PD	ES
SAEL	0.762	0.819*				
SWEL	0.642	0.221	0.820*			
IHEL	0.778	0.601	0.312	0.817*		
PD	0.622	0.220	0.042	0.334	0.818*	
ES	0.699	0.515	0.233	0.736	0.557	0.721*

NOTE: The values in * indicate the square root of Average Variance Extracted (AVE) while others indicate correlation coefficients

Structural Equation Model Analysis

Observed, Endogenous Variables

1. Students Willingness
2. Students Awareness
3. Institutional Initiatives

Observed, Exogenous Variables

1. Professional Development
2. Employability Skilla

Unobserved, Exogenous Variables

1. E1: Students Willingness
2. E2: Students Awareness
3. E3: Institutional Initiatives

Table5: Structural Model Estimates.

Variables	Unstandardized co-efficient (B)	S.E of B	Standardized co-efficient (Beta)	t value	P value	Hypothesis
PD<--- SAEL	0.242	0.077	0.152	2.769	***	Accepted at 1%
PD<--- SWEL	0.105	0.029	0.143	2.901	0.003	Accepted at 5%

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PD<--- IIEL	0.511	0.039	0.301	8.862	***	Accepted at 1%
ES<---PD	0.423	0.044	0.012	0.154	***	Accepted at 1%
Goodness of fit indices: P=0.051, CMIN/DF= 2.111; CFI=0.975 ; GFI=0.977 ; AGFI=0.984 ; NFI=0.948 ; IFI=0.924 ; TLI=0.922 ; RMSEA=5.00 , SRMR= .0263						

DISCUSSIONS

The findings of the study validates the findings of (Kolb & Kolb, 2017) who analyzed important predictors of experiential learning. To enhance experiential learning among students, consider implementing the following measures:

To enhance experiential learning among students, consider implementing the following measures:

Project-Based Learning: Assign projects that require students to apply theoretical knowledge to real-world situations. Encourage them to explore, experiment, and solve problems independently or in groups.

Internships and Practicums: Facilitate opportunities for students to gain practical experience in their field of study through internships, practicums, or work placements with industry partners.

Field Trips and Site Visits: Organize visits to relevant businesses, organizations, or sites related to the subject matter. This hands-on experience allows students to see concepts in action and interact with professionals in the field.

Simulations and Role-Playing: Use simulations or role-playing exercises to recreate real-life scenarios in the classroom. This enables students to practice decision-making, problem-solving, and interpersonal skills in a controlled environment.

Service-Learning Projects: Engage students in service-learning initiatives where they apply academic knowledge to address community needs. This fosters civic engagement, critical thinking, and empathy.

Reflective Activities: Incorporate regular opportunities for students to reflect on their experiences, both individually and as a group. Encourage them to analyze what they learned, how they felt, and how they can apply their insights in the future.

Collaborative Learning: Promote collaboration among students through group projects, discussions, and peer feedback sessions. Working together encourages shared learning experiences and the exchange of diverse perspectives.

Experiential Laboratories: Establish laboratories equipped with relevant tools and equipment where students can conduct experiments, simulations, or research projects under supervision.

Guest Speakers and Industry Experts: Invite guest speakers or industry experts to share their experiences, insights, and practical knowledge with students. This provides valuable real-world perspectives and networking opportunities.

Technology Integration: Incorporate technology tools such as virtual reality simulations, online platforms, or educational apps to enhance experiential learning opportunities and engage students in interactive experiences.

By implementing these measures, educators can create an enriched learning environment that fosters hands-on exploration, critical thinking, and practical skill development among students.

REFERENCES

1. Coker, J. S., Heiser, E., Taylor, L., & Book, C. (2016). Impacts of Experiential Learning Depth and Breadth on Student Outcomes. *Journal of Experiential Education*, 40(1), 5–23.

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<https://doi.org/10.1177/1053825916678265>

2. Estes, C. A. (2004). Promoting Student-Centered Learning in Experiential Education. *Journal of Experiential Education*, 27(2), 141–160. <https://doi.org/10.1177/105382590402700203>
3. Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60. <https://doi.org/10.21427/D79B73>
4. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
5. Joseph, F. H., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate Data Analysis* (7th, illustr ed.). Pearson Education Limited, 2013. https://books.google.co.in/books/about/Multivariate_Data_Analysis.html?id=VvXZnQEACAAJ&redir_esc=y
6. Kolb, A. Y., & Kolb, D. A. (2017). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. <https://doi.org/10.5465/Amle.2005.17268566>, 4(2), 193–212. <https://doi.org/10.5465/AMLE.2005.17268566>
7. Quinn, D., & Shurville, S. (2009). From little things big things grow: scaling-up assessment of experiential learning. *Campus-Wide Information Systems*, 26(5), 329–344. <https://doi.org/10.1108/1065074091100476>
8. Scott, F. J., Connell, P., Thomson, L. A., & Willison, D. (2019). Empowering students by enhancing their employability skills. *Journal of Further and Higher Education*, 43(5), 692–707. <https://doi.org/10.1080/0309877X.2017.1394989>
9. Wagner, C. S., Roessner, J. D., Bobb, K., Klein, J. T., Boyack, K. W., Keyton, J., Rafols, I., & Börner, K. (2011). Approaches to understanding and measuring interdisciplinary scientific research (IDR): A review of the literature. *Journal of Informetrics*, 5(1), 14–26. <https://doi.org/10.1016/J.JOI.2010.06.004>