

## Teachers' Concerns about Adopting Experiential Pedagogy under NEP 2020: A CBAM-based Study

Shivangi Tiwari\*<sup>1</sup>, Jahnavi Srivastava<sup>2</sup>, R.N. Sharma<sup>3</sup>

<sup>1</sup>UGC Senior Research Fellow, Faculty of Education, Banaras Hindu University, Varanasi,  
UP, India

<sup>2</sup>UGC Senior Research Fellow, Faculty of Education, Banaras Hindu University, Varanasi,  
UP, India

<sup>3</sup>Professor, Faculty of Education, Banaras Hindu University, Varanasi, UP, India

\*Corresponding Author: [shivangi.edu.2022@bhu.ac.in](mailto:shivangi.edu.2022@bhu.ac.in)

Available at <https://omniscientmjprujournal.com>

DOI: <https://doi.org/10.5281/zenodo.20352524>

---

### ABSTRACT

In Indian education, NEP 2020 focuses on the integration of experiential pedagogy as a core component of curriculum reform. The success of any innovative pedagogy practice depends highly on the readiness and preparedness of teachers to understand it, internalize it, and implement it in their classrooms. The present study was conducted to measure teachers' stages of concern in the context of experiential pedagogy and also identify the dominant concerns of its adoption, which may either hinder or facilitate it. The Concern-Based Adoption Model (CBAM) was used as a guiding framework. The data was collected through a quantitative descriptive survey design from 55 secondary school teachers working in government and private institutions of Uttar Pradesh. Hall and Hall (2011) developed the Stages of Concern Questionnaire (SOCQ), which was linguistically adapted to suit the experiential pedagogy, while maintaining the original structure of seven concern stages: awareness, informational, personal, management, consequence, collaboration, and refocusing. Descriptive statistics were used for the data analysis. A distinct Early-Phase Concern Profile was revealed in the findings. The findings showed that teachers had moderate awareness, high informational, and high management concerns, indicating that they were interested in understanding experiential pedagogy, but at the same time, they felt unsure and anxious about how to implement it in their classrooms. A moderate level of personal concerns of teachers reflected their low self-confidence and mixed feelings about role adequacy. However, consequence and collaboration concerns were low, indicating teachers had not yet reoriented their focus towards student impact or teamwork. The refocusing stage was observed as the lowest concern, signifying minimal inclination toward innovation or pedagogical refinement beyond policy expectations. Comprehensively, Teachers were in the early phase of innovation adoption, reflected by the concern pattern under the CBAM. Though they were operationally constrained, but conceptually optimistic. Teachers understand the concept of experiential pedagogy, but they are struggling with its actual implementation in their real classrooms. So, Teachers are enthusiastic but inexperienced. The study concludes that to help teachers progress towards higher and impact-driven stages of concern and to realize NEP 2020's experiential learning vision in practice, they need focused orientations, continuous mentoring and resource support from institutions.

---

**Keywords:** CBAM; Experiential pedagogy; Innovation adoption; NEP 2020; Science education; Teachers' concerns and readiness.

---

### INTRODUCTION

In Indian education, one of the highly ambitious reform initiatives is the New Education Policy 2020 (NEP 2020), which advocates for a major transformation from rote memorization to experiential and activity-based learning. It conceptualizes a system of holistic, integrated,

enjoyable, and engaging learning. Experience and hands-on-based learning prioritise more than rote and traditional learning (Government of India, 2020). For a long time, experiential learning has been known as a core aspect of meaningful learning, emphasizing learning via direct experiences, active participation, and reflection, not just rote and passive knowledge transmission. Firstly, John Dewey explored the concept of the experiential learning cycle, which was later formalised by Kolb in 1984. There are four stages included in the experiential learning cycle, i.e. concrete experience, reflective observation, abstract conceptualization, and active experimentation. It offers a comprehensive pedagogical framework for aligning theory with practice (Kolb & Kolb, 2008). Deeper conceptual understanding, learner autonomy, and critical thinking are promoted by this approach, which are crucial outcomes of 21<sup>st</sup>-century education (Beard & Wilson, 2018; Hake, 2019).

Through the lens of science education, experiential pedagogy facilitates in-depth conceptual understanding, critical thinking, and long-term learning. Although NEP 2020 vision also focused on learner-centred education, teachers play a significant role in implementing the policy's principles in classroom practice. According to Hall & Hall 2011 and George et al. 2006, the success of any pedagogical transition highly depends on how a teacher understands, views, and effectively incorporates changes into their classroom practices. Several related studies have shown that pedagogical innovations succeed or fail based on preparedness, beliefs, and perceived self-efficacy of the teacher (Trapani & Annunziato, 2021).

Evidence-based studies have consistently demonstrated that teachers often encounter structural and psychological difficulties when they are attempting to implement experiential learning-based instructions in their classrooms. Large class sizes, rigorous schedules, and resource constraints frequently hamper creative classroom experimentation (Apau, 2021; Mushi et al., 2025).

Additionally, teachers often express uncertainty regarding planning, evaluating, and managing experiential activities. They suggest that before expecting behavioural change, their professional issues must be understood systematically. In the Indian classroom context, the ongoing learning divide between policy expectations and classroom realities highlights the need to evaluate the readiness and concern patterns of the teachers.

### **THEORETICAL JUSTIFICATION**

This present study is conceptually framed around the Concerns-Based Adoption Model (CBAM) developed by Hall and Hord (2011), which conceptualizes teacher adoption of innovation as a developmental process. CBAM identifies seven stages of concern- Awareness, Informational, Personal, Management, Consequence, Collaboration, and Refocusing, ranging from self- to impact-oriented focus. This model provides an empirically validated lens for evaluating how teachers perceive, respond to, and internalize educational innovations. These perceptions are quantified by the Stages of Concern Questionnaire (SoCQ), that provide opportunities to researchers to create "concern profiles". The concern profile provides information on which phase teachers are in the adoption process (George, Hall, and Stiegelbauer, 2006).

Previous applications of CBAM implementations have demonstrated efficacy in a variety of reforms, including instructional-design initiatives in the United States (Trapani & Annunziato, 2021), technology-enhanced learning in Europe (Ioannou, 2020), competency-based curricula in Asia (Zhao, 2024), and teacher professional-development programmes in Africa (Mushi et al., 2025). Prior multiple studies have documented that teachers' informational, personal, and management concerns are most dominant during early adoption, while higher-order concerns (consequence, collaboration, refocusing) become apparent only through adequate training and supportive infrastructure.

For designing focused professional-development interventions and training programmes, firstly, it is crucial to understand the concerns of teachers. If teachers remain at lower levels of concern, reforms risk being adopted superficially, as Olson et al. (2020) defined "doing without knowing." Mapping these concerns gives policymakers and teacher educators diagnostic insight into how to better connect training, mentoring, and resource allocation with teachers' actual needs.

Additionally, the comparison of Indian teachers' concern profiles with global evidence brings light on how different types of contextual variables like leadership, resources and cultural dynamics influence the pedagogical trajectories (Apau, 2021; Zhao, 2024; Mushi et al., 2025).

## RESEARCH QUESTIONS

1. What stages of concern do teachers exhibit regarding experiential pedagogy?
2. Which stages are the most prominent (awareness, collaboration, consequence, informational, management, personal, refocusing)?

## OBJECTIVES

1. To assess teachers' stages of concern towards experiential pedagogy.
2. To identify dominant stages of concerns that may hinder or promote the adoption process.

## LITERATURE REVIEW

### Theoretical Foundation of Experiential Learning

Philosophy of experiential learning is rooted in Jean Piaget's constructivism and John Dewey's pragmatism, both of these focusing on learning via reflection and interaction. Dewey's approach focused on inquiry-based experience while Piaget highlighted the cognitive shifts takes place by active participation. Building on the work of Dewey and Piaget, Kolb and Kolb (2008) introduced *Experiential Learning Theory* (ELT), which describes learning as a continuous four-stage cycle including concrete experience, reflective observation, abstract conceptualization, and active experimentation. This iterative process ensures that when students incorporate experience and reflection, learning takes on a meaningful quality. ELT has been used in various fields like management, psychology, and Science education due to its versatile nature. Bartle (2015) suggests that experiential learning goes beyond academic knowledge to build versatile skills like collaboration, critical thinking, flexibility and adaptability. Parahakaran (2017) expands this further by considering experiential learning as a holistic process that includes ethical and emotional development. These ideas are particularly relevant to science education because they align with inquiry-based learning and reflect the investigative nature of the field.

### Experiential Pedagogy in Science and STEM Education

A substantial body of literature highlights the importance of experiential pedagogy in enhancing student engagement and strengthening conceptual understanding in science education. McPherson-Geysler, de Villiers, and Kawai (2020) reported that the students of Life Sciences who participated in hands-on learning activities showed greater conceptual comprehension and motivation compared to those students which taught through conventional instructional methods. However, they emphasized that reflective scaffolding is essential to avoid superficial learning outcomes. Similarly, in a review of two decades of educational interventions, Masyitha et al. (2023) observed that experiential learning strategies significantly promote problem-solving abilities, scientific process skills, and learner autonomy but are often hindered by time constraints and inadequate assessment systems. Likewise, Syafriani, Putra, and Kusumawati (2025) examined STEM classrooms and confirmed the cognitive advantages associated with experiential learning, but also stressed while noting that its long-term sustainability relies heavily on teacher preparedness and institutional backing. Supporting these

findings, a meta-analysis conducted by Burch et al. (2019) also revealed a strong positive relationship between experiential pedagogy and academic performance, with the outcomes influenced by the level of teacher expertise and the quality of implementation. Collectively, these findings indicate that although experiential learning is a highly effective pedagogical approach, its successful application requires strong pedagogical skills and thoughtful reflective facilitation to achieve meaningful educational outcomes.

### **Teacher Readiness and Perceived Concerns**

Teachers are the linchpin of educational reform. While policies may promote innovation, successful implementation depends on teachers' readiness to embrace change. Across contexts, educators express both enthusiasm and apprehension toward experiential methods. Apau (2021) found that Ghanaian teachers valued technology-supported learning but struggled with logistics and unclear role expectations. Similarly, Mushi, Mtitu, and Sakile (2025) observed Tanzanian teachers endorsing competency-based curricula while facing material and time-related management issues.

In the context of India, a similar gap between reform aspirations and classroom realities is shown in the policies and institutional documents. The New Education Policy 2020 is focused on experiential and learner-centred pedagogy. For the effective and successful implementation of these innovative pedagogies, teachers need sustainable professional development. To transform policy's vision into the real classroom practice, the NCERT guidelines for Continuous Professional Development focus on the requirement of pedagogical support, ongoing orientation, and mentoring (NCERT, 2022). Similarly, workload pressures, lack of resources, and institutional readiness are identified in the NIEPA document named Implementation Strategies for NEP 2020 as key and systemic challenges for the effective implementation (NIEPA 2020).

To empower teacher capacity in India, non-governmental organisations also play a significant role in addition to governmental efforts. For pedagogical improvements in education, the Azim Premji Foundation prioritises school-based support, continuous professional development programmes, and reflective practices in reports as essential conditions for teachers (Azim Premji Foundation, n.d.). These institutes highlight the broader ecosystem of support required for teachers to engage meaningfully with pedagogical reforms in their reports, but do not constitute empirical assessments of teacher concerns. Conclusively, it shows that teachers' readiness is a gradual developmental process for experiential pedagogy that is influenced by teacher concerns instead of an immediate result of policy mandates. Teachers try to implement educational reforms in their classrooms but are not able to properly impose it due to operationally constrained by contextual and institutional factors. The concept of gradual development of readiness and concern can be well explained by the Concerns-Based Adoption Model (CBAM). The CBAM conclude that there are several changes during the gradual development of readiness; the teachers slowly shift their focus from their own concerns on adoption of innovative pedagogy to concentrating on the broader impact of the changes (Hall & Hord, 2011).

### **The Concerns-Based Adoption Model (CBAM)**

The CBAM developed by Hall and Hord (2011) is categorised into seven stages of developmental processes of innovation adoption, these stages are Awareness, Informational, Personal, Management, Consequence, Collaboration, and Refocusing. Every stage of CBAM shows a gradual shift from self-oriented questions ("What is this innovation?") to student-centred reflections ("How does this improve learning?"). George, Hall, and Stiegelbauer (2006) constructed the Stages of Concern Questionnaire (SoCQ) to operationalize the seven stages of CBAM to map individual or group concern profiles.

Previous studies also support and validate the cross-cultural relevance of CBAM. In a study, Trapani and Annunziato (2021) reported that U.S. teachers exhibited high informational and personal concerns if they implemented the innovative pedagogy via *Understanding by Design*. Similar patterns were observed by Ioannou (2020) in his study in European technology adoption. However, Zhao (2024) in China and Mushi et al. (2025) in Tanzania observed that management concerns were most common due to heavy workload and limited resources. Conversely, Olson, Reinke, and Malone (2020), in their findings, show advancement toward collaboration and refocusing stages by mentoring or structured institutional support. So these findings can conclude that teacher readiness and guiding targeted professional development across educational settings can be assessed by the diagnostic framework of CBAM's effectiveness.

### **The Indian Scenario and the Emerging Research Gap**

The theoretical foundations of experiential learning were articulated by Dewey and Piaget, who were latterly synthesized by Kolb and Kolb's (2008) Experiential Learning Theory (ELT). Most of the previous studies highlight the pedagogical effectiveness instead of investigating the conditions required for its effective implementation. Although studies by McPherson-Geyser, de Villiers, and Kawai (2020), Masyitha et al. (2023), and Burch et al. (2019), support the favourable influence of experiential pedagogy on learners' conceptual comprehension, motivation, and process skills, these studies primarily focus on learner outcomes and frequently miss the teacher's function as a facilitator of experience processes.

Studies by Apau (2021) and Mushi, Mtitu, & Sakile (2025) found that although teachers have conceptual knowledge about the experiential and competency-based reforms, they face several contextual challenges, such as limited resources, inadequate training, and time constraints.

These findings support that both altitudinal and practical teacher readiness are critical for innovative pedagogy adoption. Moreover, the present studies mainly focused on Western or African educational contexts, while there is very limited attention to the Indian setting, especially in the context of the National Education Policy (NEP) 2020, which clearly advocates experiential pedagogy in school education.

Although the CBAM by Hall & Hord (2011) provides a robust framework to assess teachers' developmental stages of concern toward innovations and its application in studying experiential pedagogy adoption, within the Indian context, the use of the CBAM remains very limited. There are a few studies that systematically assessed how Indian science teachers adopt experiential learning approaches in the context of their experience and interpretation under NEP-driven reforms. Additionally, the intersectionality of CBAM and experiential pedagogy remains largely unexplored in the context of Indian empirical research.

Therefore, there is a significant lacuna in conceptualizing the teachers' readiness, perceptions, and concern profiles regarding experiential pedagogy in the realm of science education. Bridging this research gap not only provides theoretical integration between CBAM and experiential pedagogy but also fills gaps of meaningful insights for designing targeted professional development programs that support sustainable pedagogical transformation.

### **METHODOLOGY**

A CBAM guided quantitative descriptive survey was conducted to assess the teachers' concerns for the adoption of experiential pedagogy.

#### **Participants**

In this study, we have done purposive sampling among 55 secondary school science teachers, and participants are chosen based on specific criteria such as prior orientation to NEP 2020 reforms and a minimum of one year of teaching experience in science subjects (Classes VIII–X). These types of criterion-based sampling ensured that participants were pertinent to the

study context. Studies support that sample size is in line with methodological practices that use the such Stages of Concern Questionnaire (SoCQ) and Concerns-Based Adoption Model (CBAM), where small to moderate samples are frequently used to produce meaningful concern profiles (George et al., 2006; Hall & Hord, 2011). So, the chosen sample is sufficient for identifying patterns of teacher concerns within the defined context.

### **Research Instrument**

An adopted version of the Stage of Concern Questionnaire (SoCQ) was used for data collection, which is developed by Hall, George, and Rutherford (1979) and refined by George, Hall, and Stiegelbauer (2006). The SoCQ consists of 35 items, and all items are equally distributed across the 7 stages. All 35 items were rated on a 5-point Likert scale, in which 0 indicates Irrelevant concern, and 4 indicates High concern. The SoCQ was chosen due to its strong validity and reliability in educational innovations like technology integration and pedagogical reforms (Trapani & Annunziato, 2021; Apau, 2021; Zhao, 2024). In accordance with the fundamental principles of the experiential pedagogy and goals of NEP 2020, linguistic modifications such as innovation term replace by experiential pedagogy were made for situational applicability. For clarity and cultural appropriateness, pilot testing was conducted with 10 teachers.

### **Data Collection Procedure**

Data collection was done through filling out the Google Form questionnaire via email and social media. Participants' electronic consent was ensured. The duration of data collection was between September and October 2025.

### **Data Analysis**

To assess the levels of concern of the teachers across the seven stages, data were collected through the adapted SoCQ-Experiential Pedagogy and were analysed using descriptive statistics. To establish the intensity and variability and offer a nuanced understanding of awareness, readiness, and implementation challenges of teachers, the values of mean and standard deviation were calculated. An Early-phase concern trend with the CBAM is illustrated in a stage profile graph and also reflects dominant informational and management concerns. The graph also proposes that although teachers have limited actionable readiness for experiential pedagogy, they are conceptually very interested.

### **Validity and Reliability**

Four experts evaluated the validity of the tool. Incorporating experts' feedback to enhance wording precision and avoid ambiguities, minor revisions were made. Cronbach's Alpha was used to determine the reliability of the tool. An overall coefficient value of the tool is 0.70, and the value of stage-wise is ranging from 0.792 to 0.897, which evidences internal consistency of the tool is good to excellent. The highest reliability was observed for the Management stage ( $\alpha = 0.897$ ) and the lowest for Collaboration ( $\alpha = 0.792$ ). These results confirm that the tool is both valid and reliable for assessing teachers' concerns regarding experiential pedagogy under NEP 2020.

## **RESULTS**

The *Adapted Stages of Concern Questionnaire (SoCQ-Experiential Pedagogy)* comprised 35 items categorised into seven stages- Awareness, Informational, Personal, Management, Consequence, Collaboration, and Refocusing. Each stage contained five items rated on a five-point scale (0 = Irrelevant concern to 4 = High concern).

**Objective 1:** To Measure Teachers' Stages of Concern Regarding Experiential Pedagogy.

To achieve this objective, the mean and standard deviation of each concern stage were calculated to evaluate the relative intensity of teachers' concerns across the seven stages of the CBAM: Awareness, Informational, Personal, Management, Consequence, Collaboration, and

Refocusing. As shown in Table 1, teachers exhibit the highest concern levels in the Informational (M = 3.37) and Management (M = 3.18) stages, while the lowest concern was reported in the Refocusing stage (M = 1.01). The teachers are conceptually keen to understand experiential pedagogy, but they are opaque how to execute it in the real classroom setting, as reflected by this pattern, which highlights an early phase adoption profile.

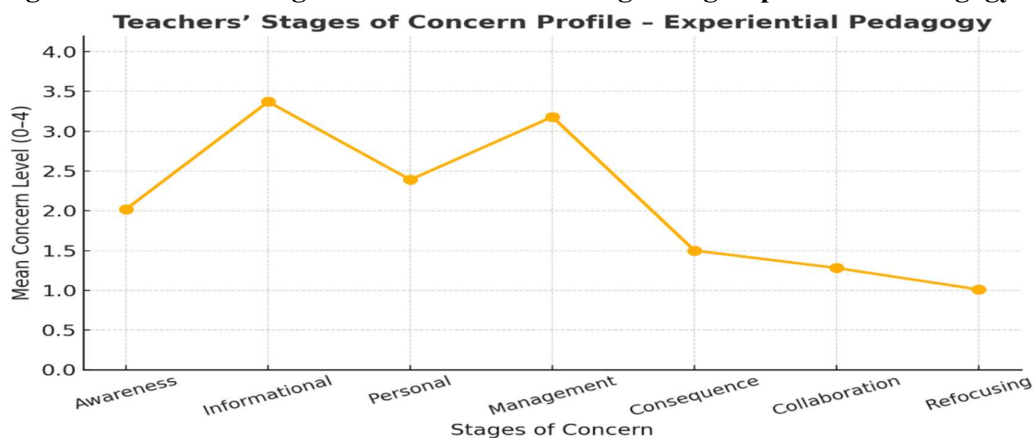
**Table 1: Mean and Standard Deviation of Teachers’ Concern Stages Regarding Experiential Pedagogy-**

Stage of Concern	Mean (M)	SD	Level of Concern
Awareness	2.02	0.54	Moderate
Informational	3.37	0.48	High
Personal	2.39	0.50	Moderate
Management	3.18	0.57	High
Consequence	1.50	0.53	Low
Collaboration	1.28	0.47	Low
Refocusing	1.01	0.55	Very Low

The data reflect that the Informational and Management stages are the primary concerns of the teachers, which showing their interest or curiosity about “what” is experiential pedagogy is and fear or anxiety about “how” to execute it in the real classroom. These concern stages align to the CBAM’s self-and task-oriented phases, which reflecting that teacher’s are in the initial or early pedagogical adoption stages. The Awareness and Personal concerns levels are moderate, which indicate an emerging awareness of experiential pedagogy’s importance but lack of self-confidence in its classroom implementation. However, Consequence, Collaboration, and Refocusing stages levels are low, which reflect that teachers have not yet redirected their attention to evaluating student’s outcomes, engaging in professional collaboration, or innovating beyond the prescribed framework.

**Concern Profile**

**Figure 1. Teachers’ Stages of Concern Profile Regarding Experiential Pedagogy**



Concern profile demonstrating mean stage scores across the seven stages of the SoCQ-Experiential Pedagogy. In the graphical concern profile (Figure 1), the Informational and Management stages are at their peak but continuously waning through Consequence, Collaboration, and Refocusing, which shows a distinct **early-phase concern pattern**. This pattern corresponds to the self-and task-oriented stages of the CBAM.

**Objective 2: To Identify Dominant Concerns that may Hinder or Promote Adoption.**

In order to examine this objective and identify which concern stages serve as the facilitating and hindering factors in adopting experiential pedagogy, the mean scores were rank-ordered.

The mean scores were rank-ordered to determine which stages of concern serve as facilitating and hindering factors in adopting experiential pedagogy. The results, displayed in Table 2, show that the Informational and Management stages are most dominant, representing a dual condition of enthusiasm and constraint.

**Table 2: Rank Order and Interpretation of Teachers’ Concern Stages Regarding Experiential Pedagogy**

Stage of Concern	Mean (M)	Rank	Nature of Concern	Interpretation
Informational	3.37	1	High Facilitating	Teachers are eager to learn about experiential pedagogy and understand its process.
Management	3.18	2	High Hindering	Teachers are anxious about classroom management, resources, and evaluation logistics.
Personal	2.39	3	Moderate Hindering	Teachers feel uncertain about personal competence and confidence.
Awareness	2.02	4	Moderate Neutral	Teachers have basic awareness but limited engagement in practice.
Consequence	1.50	5	Low Limiting	Teachers are not yet focusing on student outcomes or pedagogical impact.
Collaboration	1.28	6	Low Limiting	Minimal peer collaboration or teamwork in implementing experiential pedagogy.
Refocusing	1.01	7	Very Low Limiting	Teachers are not yet considering innovation or improvement beyond policy expectations.

The high level of Informational stage concern indicated that teachers are theoretically or conceptually prepared and motivated to understand experiential pedagogy, constituting a facilitating factor for adoption. In contrast, high Management concern reveals implementation challenges like a lack of adequate resources, heavy workloads, and time constraints, which serve as hindering factors to implementation. Collectively, these patterns show that teachers are in the process of an interim phase between conceptual acceptance and actual application. The high Informational and Management concerns jointly indicate that teachers are in inexperienced but very interested.

**DISCUSSION**

The present study evaluated the concerns in the adoption of experiential pedagogy by the secondary school teachers in Uttar Pradesh. The Concern-Based Adoption Model (CBAM) was used for the interpretation. Considering all the dimensions, concern pattern demonstrated high at informational (M=3.37), and management (M=3.18), moderate at awareness (M=2.02) and personal (M=2.39), and reported low at consequence (M=1.50), collaboration (M=1.28), and refocusing (M=1.01), which shows the self and task- Oriented stages, indicative of the early phase of innovation adoption (Hall & Hord, 2011; George et al., 2006). The concern pattern

highlights that although teachers are conceptually aware and familiar with experiential pedagogy, they face difficulties in practically implementing it in their classrooms.

Teachers' informational concern reflects that they are interested, excited, and open to learning about the theoretical and practical aspects of experiential pedagogy, which includes instructional design and classroom relevance. Magallanes (2022) among Filipino teachers and Apau (2021) among Ghanaian teachers observed similar patterns, and their studies highlighted the openness with a lack of enough practical clarity, a marker of the early awareness-informational phase of CBAM.

Simultaneously, some studies of non-Western contexts also support these findings, such as according to Mushi, Mtitu, and Sakile (2025), resource constraints and workload pressures created major management issues for Tanzanian teachers in implementing the competency-based curricula. It suggests that these concerns are common in the early phases of pedagogical changes rather than being context-specific. Comparable limitations have been found in the previous studies of experiential-based learning across science and technology education (Beida et al., 2023; *Enhancing Access to Experiential Learning in Science*, 2021).

Additionally, Personal concerns are marked at a moderate level, which highlights that effective implementation of experiential pedagogy-based approaches in the classrooms, teachers showed self-doubt about their practical abilities. This is supported by the previous CBAM based researches, which highlights the impact of self-efficacy of teachers on the adoption of innovations (Hall & Hord, 2011; *Measuring Instructional Change using CBAM*, 2019).

However, concerns of consequence, collaboration, and refocusing were low, which reflects that teachers are primarily concerned with how to implement experiential pedagogy in classrooms rather than assessing its effectiveness. Teachers progressively move towards higher stages like collaboration and refocusing with the help of sustained mentoring and institutional support (Olson, Reinke, and Malone, 2020). These comparisons support the CBAM (Concerns-Based Adoption Model) suitability as a strong framework for understanding the teachers readiness in diverse educational contexts.

Similar Early-stage apotion patterns have been noted worldwide (Kolb & Kolb, 2008; Magallanes, 2022; Apau, 2021). This finding reflects that to facilitate teachers' progress from understanding experiential pedagogy approaches to integrating and refining them into their real classroom settings, continuous mentoring and adequate support from institutions are necessary.

## **POLICY AND PRACTICE IMPLICATIONS**

The findings provide practical recommendations and insights for policy and professional development under the New Education Policy 2020. As reflected in high informational concern, teachers are eager to learn, and this eagerness should be channelled through skill-based training and well -structured orientation. According to Hall and Hord (2011), conceptual clarity to classroom application can support progressive adoption rather than stage-specific capacity-building. Institution leaders must provide and ensure structural flexibility by providing adequate resources, reorganised timetables, and collaborative lesson planning to alleviate management concerns (Kolb & Kolb, 2008; *Enhancing Access to Experiential Learning*, 2021). To institutionalize its practice, experiential pedagogy should be incorporated into appraisal and curriculum frameworks.

Collaboration and refocusing concerns were reported as low, which emphasises the necessity for professional learning networks that promote collaborative lesson planning, peer feedback, and reflection (Perceptions on Behavioural & CBAM-based Change, 2017).

Low collaboration and refocusing concerns highlight the need for professional learning communities that foster shared lesson planning, peer feedback, and reflection (Perceptions on Behavioural & CBAM-based Change, 2017). Research affirms that ongoing mentoring networks and experiential learning reviews strengthen lasting pedagogical change

(Applications of Experiential Learning in Science, 2022; Assessing Experiential Learning, 2021).

Overall findings indicate that teachers in Uttar Pradesh are in the intermediate phase of adoption, conceptually convinced but operationally limited. Instead of one-time training or workshop sessions, which are not enough for genuine reform, it needs continuous, context-sensitive mentorship. When systematic rigidity transforms into supportive flexibility, teachers can be in a better position through the CBAM stages. In such settings, experiential learning can be transformed into the real classroom setting from a vision of policy, which is directly aligned with the NEP 2020's goals.

## CONCLUSION

Teachers' stages of concern regarding experiential pedagogy were explored by this study, using the adopted Stages of Concern Questionnaire (SOCQ-Experiential Pedagogy) within the framework of NEP 2020. An early-phase concern pattern was reported. This indicates that while teachers understand the value of experiential pedagogy, they remain uncertain about its practical application.

A gap between NEP 2020's vision regarding experiential learning and the classroom readiness of teachers is reflected by findings. Teachers show interest, eagerness, and willingness to learn about experiential pedagogy, but they struggle with inadequate resources, time management, and restricting their move toward collaborative and innovative practices.

To fill this gap, for conceptual clarity and practical modelling of experiential strategies, targeted capacity-building, mentoring, and training programs should be prioritised. Accessibility of the resources, flexibility, and professional collaboration are prerequisites as a support system from the institution for the sustainable adoption of experiential pedagogy.

In spite of its contributions, the small, context-specific sample size and cross-sectional approach of the study limit its generalization. In summation, the findings reveal that teachers are eager to learn but not yet transformed. The NEP 2020 experiential learning goal can transform from a policy endeavour to the classroom reality via sustained mentoring and systemic support of the institution.

## REFERENCES

- Andrea E. Weinberg, Carole G. Basile & Leonard Albright (2011) The Effect of an Experiential Learning Program on Middle School Students' Motivation Toward Mathematics and Science, *RMLE Online*, 35:3, 1-12, DOI: 10.1080/19404476.2011.11462086
- Apau, S. K. (2021). *Teachers' concerns about the implementation of the standards-based curriculum in Ghana: A case study of Effutu Municipality*. *Educational Research and Reviews*, 16(5), 202–211. <https://doi.org/10.5897/ERR2020.4051>
- Bartle, E. (2015). *Experiential learning: An overview*. Discussion paper prepared for Professor Joanne Wright, Deputy Vice-Chancellor (Academic), The University of Queensland, Institute for Teaching and Learning Innovation.
- Bauerle, T. L., & Park, T. D. (2012). *Experiential learning enhances student knowledge retention in the plant sciences*. *Hort Technology*, 22(5), 715–718.
- Beard, C., & Wilson, J. P. (2018). *Experiential learning: A handbook for education, training and coaching* (3rd ed.). Kogan Page.
- Burch, G. F., Giambatista, R., Batchelor, J. H., Burch, J. J., Hoover, J. D., & Heller, N. A. (2019). *A meta-analysis of the relationship between experiential learning and learning outcomes*. *Decision Sciences Journal of Innovative Education*, 17(3), 239–273. <https://doi.org/10.1111/dsji.12201>
- Coll, R. K., Lay, M. C., & Zegwaard, K. E. (2002). *Enhancing access to experiential learning in a science and technology degree programme*. *Journal of Vocational Education and Training*, 54(2), 197–218. <https://doi.org/10.1080/13636820200200195>
- Conchas, D. M., Montilla, A. R. Y., Romblon, K. D. C., Torion, M. P., Reyes, J. J. R., & Tinapay, A. O. (2023). *Assessing the experiential learning and scientific process skills of senior high school STEM students: A*

- literature review. *International Journal of Multidisciplinary Research and Publications*, 6(2), 81–90.
- Cotič, N., Plazar, J., Istenič Starčič, A., & Zuljan, D. (2020). *The effect of outdoor lessons in natural sciences on students' knowledge through tablets and experiential learning. Journal of Baltic Science Education*, 19(5), 747–763.  
<https://doi.org/10.33225/jbse/20.19.747>
- Falloon, G. (2019). *Using simulations to teach young students science concepts: An experiential learning theoretical analysis. Computers & Education*, 135, 138–159.  
<https://doi.org/10.1016/j.compedu.2019.03.001>
- George, A. A., Hall, G. E., & Stiegelbauer, S. M. (2013). *Measuring implementation in schools: The Stages of Concern Questionnaire (3rd ed.)*. SEDL. (Original work published 1979). ISBN: 978-0-9777208-0-4
- Giac, C. C., Gai, T. T., & Hoi, P. T. T. (2017). *Organizing the experiential learning activities in teaching science for general education in Vietnam. World Journal of Chemical Education*, 5(5), 180–184.  
<https://doi.org/10.12691/wjce-5-5-7>
- Government of India, Ministry of Education. (2020). *National Education Policy 2020*.  
[https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Gorghiu, G., & Santi, E. A. (2016). *Applications of experiential learning in science education: Non-formal contexts. The European Proceedings of Social and Behavioural Sciences*, 7, 321–324.  
<https://doi.org/10.15405/epsbs.2016.11.33>
- Hake, R. R. (2019). *Design-based research in physics education: Active engagement and interactive learning. Journal of the Scholarship of Teaching and Learning*, 19(2), 12–32.  
<https://doi.org/10.14434/josotl.v19i2.24035>
- Hall, G. E. (1974). *The Concerns-Based Adoption Model: A developmental conceptualization of the adoption process within educational institutions*. Research and Development Center for Teacher Education, The University of Texas at Austin. (ERIC Document Reproduction Service No. ED111791).
- Hall, G. E., & Hord, S. M. (2011). *Implementing change: Patterns, principles, and potholes (3rd ed.)*. Pearson Education.
- Ioannou, A., Georgiou, Y., & Ioannou, L. (2021). *Teachers' concerns about adopting technology-enhanced embodied learning and their mitigation through professional development. Computers & Education*, 165, 104145.  
<https://doi.org/10.1016/j.compedu.2021.10.4145>
- Khairati, K., Artika, W., Sarong, M., Abdullah, A., & Hasanuddin, H. (2021). *Implementation of STEM-based experiential learning to improve critical thinking skills on ecosystem materials. Jurnal Penelitian Pendidikan IPA*, 7(4), 752–757.  
<https://doi.org/10.29303/jppipa.v7i4.850>
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). *Why minimal guidance during instruction does not work: An analysis of the failure of discovery learning, problem-based learning, experiential learning, and inquiry-based learning. Educational Psychologist*, 41(2), 75–86.  
[https://doi.org/10.1207/s15326985ep4102\\_1](https://doi.org/10.1207/s15326985ep4102_1)
- Kolb, A. Y., & Kolb, D. A. (2008). *Experiential learning theory: A dynamic, holistic approach to management learning, education and development*. In S. J. Armstrong & C. V. Fukami (Eds.), *The SAGE handbook of management learning, education and development* (pp. 42–68). Sage Publications.
- Kufarimani, N., & Chitanana, L. (2025). *Primary educators' perceptions of adopting indigenous-themed digital games: Insights across career stages. Discover Education*, 4(375).  
<https://doi.org/10.1007/s44217-025-00792-0>
- Lim, R. B. T., Chow, D. W. S., & Zheng, H. (2024). *A scoping review of experiential learning in public health education from the perspective of students, faculty, and community partners. Journal of Experiential Education*, 47(1), 72–110.  
<https://doi.org/10.1177/10538259231171073>
- Masyitha, D., Suyanta, N., Nurohman, S., & Astuti, S. R. D. (2023). *Analysis of science learning based on the experiential learning model: Literature review. Jurnal Penelitian Pendidikan IPA*, 9(7), 234–238.  
<https://doi.org/10.29303/jppipa.v9i7.4009>
- McCreary, T. A., Sr. (2023). *Teachers' perceptions on the implementation of behavioral intervention initiatives in alternative schools: A phenomenological study*

- [Doctoral dissertation, Liberty University].  
Liberty University Digital Commons
- Mc Pherson-Geyser, G., De Villiers, R., & Kawai, P. (2020). *The use of experiential learning as a teaching strategy in Life Sciences*. *International Journal of Instruction*, 13(3), 877–894.  
<https://doi.org/10.29333/iji.2020.13358a>
- Mushi, C. C., Makwinya, N. M., & Kalungwizi, V. (2025). *Secondary school teachers' concern regarding the adoption of competence-based assessment*. *International Journal of Research in Education and Science*, 11(2), 358–374.  
<https://doi.org/10.46328/ijres.1299>
- National Council of Educational Research and Training. (2022). *Guidelines for 50 hours of continuous professional development for teachers and school leaders in the context of National Education Policy 2020*. NCERT.  
<https://ncert.nic.in/pdf/Guidelines50HoursCpd.pdf>
- National Institute of Educational Planning and Administration. (2020). *Implementation strategy for National Education Policy 2020*. NIEPA.  
<https://www.niepa.ac.in/download/NEP%202020%20Implementation%20Strategy%20W.pdf>
- Azim Premji Foundation. (n.d.). *Education and teacher development initiatives*.  
<https://azimpremjifoundation.org/what-we-do/education/>
- Olson, K., Lannan, K., Cumming, J., MacGillivray, H., & Richards, K. (2020). *The Concerns-Based Adoption Model and strategic plan evaluation: Multiple methodologies to understand complex change*. *Educational Research: Theory and Practice*, 31(3), 49–58.
- Parahakaran, S. (2017). *An analysis of theories related to experiential learning for practical ethics in science and technology*. *Universal Journal of Educational Research*, 5(6), 1014–1020.  
<https://doi.org/10.13189/ujer.2017.050614>
- Paramasveran, R., & Nasri, N. M. (2018). *Teachers' concerns on the implementation and practices of i-THINK with Concern Based Adoption Model (CBAM)*. *Creative Education*, 9(14), 2183–2191.  
<https://doi.org/10.4236/ce.2018.914159>
- Remington, T. F. (2025, July 2). *Experiential learning through STEM: Recent initiatives in the United States*. Presentation at Beijing University Summer Program.
- Richard K. Coll, Mark C. Lay & Karsten E. Zegwaard (2002) Enhancing access to experiential learning in a science and technology degree programme, *Journal of Vocational Education and Training*, 54:2, 197-218, DOI: 10.1080/13636820200200195
- Syafriani, D., Suyanti, R. D., & Sutiani, A. (2025). *Systematic literature review: The effect of experiential learning (EL) on learning outcomes*. *Jurnal Penelitian Pendidikan IPA*, 11(7), 48–56.  
<https://doi.org/10.29303/jppipa.v11i7.11274>
- Torres, D. R., Van Wig, A., & Jex, E. (2023). *Perceptions of and readiness for RTI implementation in a P-12 school district*. *Educational Research: Theory and Practice*, 34(3), 1–16.
- Trapani, B., & Annunziato, A. (2021). *Using the Concerns-Based Adoption Model (CBAM) to accelerate Understanding by Design implementation*. *Journal of Instructional Pedagogies*, 21, 1–11.
- Weinberg, A. E., Basile, C. G., & Albright, L. (2011). *The effect of an experiential learning program on middle school students' motivation toward mathematics and science*. *RMLE Online: Research in Middle Level Education*, 35(3), 1–12.  
<https://doi.org/10.1080/19404476.2011.11462086>
- Zhao, G., Fan, B., Wang, Y., Aliyev, M., & Sun, X. (2024). Investigating Chinese in-service teachers' concerns about teaching thinking using the Concern-Based Adoption Model (CBAM). *Journal of Education and Development*, 8(2), 1–17. July Press.  
<https://doi.org/10.20849/jed.v8i2.1426>