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Enhancing Vocational Education through Experiential Learning in Colleges of Education in North Central Nigeria

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Abstract **Original Research Article**

This study examines the role of experiential learning in improving vocational education and student outcomes in colleges of education across North Central Nigeria. A mixed-methods approach was adopted, integrating both qualitative and quantitative techniques. The findings indicate that experiential learning significantly enhances student engagement, motivation, and skill retention. Vocational education programs that incorporate hands-on experience better prepare students for the workforce. However, a balanced instructional approach is needed to accommodate diverse learning styles. The study recommends integrating experiential strategies with traditional methods to foster practical, career-ready competencies. These insights are valuable for educators, policymakers, and curriculum developers aiming to enhance the relevance and quality of vocational education.

Keywords: Experiential Learning, Vocational Education, Student Outcomes, Learning Styles, Curriculum Development.

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INTRODUCTION

Higher education in Nigeria is expected not only to impart theoretical knowledge but also to equip students with practical skills relevant to their professional lives. Traditional lecture-based approaches, while valuable, often fail to meet the practical needs of students, especially in vocational education programs. Scholars such as Mantyla (1999) and Fayombo (2012) have emphasized the importance of active learning strategies in enhancing educational outcomes. Experiential learning—learning through hands-on experience and reflection—offers a powerful alternative. This approach, rooted in Kolb's experiential learning theory, enables learners to engage deeply with content by applying concepts in real-world contexts.

Despite growing recognition of its benefits, experiential learning is not widely implemented in Nigerian colleges of education. Students frequently report a mismatch between the skills they need and the training they receive (Goedeke & Gibson, 2011). This study explores how integrating experiential learning in vocational education can help bridge this gap and better prepare students for successful careers.

STATEMENT OF THE PROBLEM

Vocational education is essential for equipping students with the practical skills needed for the workforce. However, many programs in Nigerian colleges of education remain overly theoretical, leading to a disconnect between classroom learning and real-world application. As a result, graduates often lack the competencies required by employers, contributing to issues such as youth unemployment and underemployment. There is a critical need to assess the effectiveness of experiential learning in addressing these challenges within the context of vocational education in Colleges of Education in North Central Nigeria.

OBJECTIVES OF THE STUDY

This study aims to:

1. Examine teachers' perceptions of experiential learning approaches.
2. Assess the level of acceptance of experiential learning among teachers and students.
3. Determine the potential impact of experiential learning on national development.

4. Identify the challenges educators face in implementing experiential learning for sustainable vocational education.

Research Questions

1. What are teachers' perceptions of experiential learning?
2. How accepted is experiential learning among teachers and students?
3. What impact can experiential learning have on national development?
4. What challenges hinder the implementation of experiential learning in vocational education?

Research Design

This study adopted a **descriptive survey design** to investigate the relationship between experiential learning approaches and vocational education in colleges of education in North Central Nigeria. This design was appropriate for the study as it enabled the researchers to gather data on variables that could not be directly observed. Additionally, it facilitated the collection of information from a sample that is representative of the larger population.
The data collected provided a basis for examining the implementation and effects of experiential learning strategies on vocational education outcomes in the selected colleges of education in North Central Nigeria.

Population of the Study

The population of the study comprised all lecturers teaching vocational education courses in both federal and state colleges of education within the North Central geopolitical zone of Nigeria. This zone includes the following states: Benue, Kogi, Nasarawa, Niger, Kwara, and Plateau.

Sample and Sampling Technique

The sample was drawn from six colleges of education—three federal and three state-owned—selected using a simple random sampling technique. The selected institutions were:

Federal Colleges of Education:

Federal College of Education, Kontagora, Niger State, Federal College of Education, Pankshin, Plateau State, Federal College of Education, Okene, Kogi State

State Colleges of Education:

Kwara State College of Education, Ilorin, College of Education, Katsina-Ala, Benue State, and Niger State College of Education, Minna.
Lecturers from the vocational education departments in these institutions formed the respondents for the study.

Instrument for Data Collection

A structured questionnaire was used as the primary data collection instrument. The questionnaire consisted of both open-ended items and scaled questions designed to assess perceptions, acceptance levels, challenges, and the perceived impact of experiential learning approaches.
According to Darusalam and Hussein (2018), questionnaires are effective tools for measuring attitudes and opinions using checklists, rating scales, and open-response formats. To ensure the instrument's content validity, it was reviewed against the full domain of knowledge, skills, attitudes, and behaviors relevant to experiential and vocational education, as recommended by Cohen et al. (2000).

Data Collection Procedure

The researchers administered the questionnaires using KoBo Collect, a digital data collection platform, with the assistance of trained research assistants. Respondents completed the questionnaires online, and the instruments were retrieved immediately after completion to ensure a high response rate and data integrity.

Data Analysis

The data analysis was conducted in two phases:

1. **Quantitative Analysis:** Basic statistical techniques, including ratios, proportions, percentages, and trend analysis, were used to evaluate the influence of experiential learning approaches on vocational education delivery.
2. **Descriptive Analysis:** The combined effects of the identified learning strategies on student learning outcomes were analyzed using descriptive methods. Data were presented in tables and bar charts for ease of interpretation and comparison.

RESULTS AND DISCUSSION OF FINDINGS

Research Question:

What are the perceptions of the concept of experiential learning approach as used for teaching and learning in vocational education programmes?

The analysis provides insight into the perceptions of lecturers on the concept, implementation, effectiveness, and challenges of experiential learning (EL) in vocational education programmes across selected colleges in North Central Nigeria.

1. Use and Frequency of Experiential Learning

A significant majority (83.6%) of the respondents indicated they have used experiential learning in their teaching practices. Among them, 73.8% reported using it frequently, while only 15% used it rarely. This shows that experiential learning is not only known but also actively practiced by many vocational education lecturers.
The mean responses (M = 1.96 and M = 1.91, respectively) fall within the "low" to "moderate" range, suggesting that while the

concept is used, there is room for more consistent integration into teaching.

2. Perceived Effectiveness of Experiential Learning

An overwhelming 91.4% of the respondents regarded experiential learning as effective, with 41.4% rating it as *very effective* in improving student learning outcomes and 48.3% as *effective*. Additionally, 80.1% agreed that experiential learning positively coordinates with the development of skills such as innovation, entrepreneurship, and problem-solving.

This strong endorsement reflects the positive impact of experiential learning on student motivation and learning outcomes, with a corresponding mean score (M = 1.81) supporting a moderately high perception of its effectiveness.

3. Student Engagement and Skill Development

Respondents identified several benefits of experiential learning:

- **Deeper understanding of concepts** (47.4%)
- **Improved innovation** (36.2%)
- **Increased engagement** (9.5%)

In terms of skill acquisition, innovation and creativity (44%) and entrepreneurship (31.2%) were ranked highest. These findings align with the goals of vocational education, which emphasizes hands-on learning, practical problem-solving, and self-reliance.

Respondents also acknowledged that experiential learning is particularly effective for motivated and self-directed learners (89.4%), highlighting the importance of learner autonomy in maximizing EL outcomes.

4. Accountability and Teaching Practices

About 79.7% of the respondents indicated they frequently hold themselves accountable for student outcomes in experiential learning, while 50% emphasized that such accountability is *very important*. This sense of responsibility is significantly influenced by the teachers' pedagogical beliefs, particularly those favoring student-centered philosophies.

Moreover, 71.7% agreed that training and support increased their confidence and effectiveness in implementing EL approaches. These findings suggest that continuous professional development is vital for improving the adoption of experiential learning.

5. Types of Experiential Learning Activities Used

Respondents reported a preference for:

- **Service learning** (44.8%)
- **Project-based learning** (34.5%)
- **Internships** (12.1%)

These methods are in line with the practical orientation of vocational education and demonstrate how EL facilitates real-world application of knowledge and skills.

6. Barriers and Challenges to Adoption

Despite the general positivity, several significant challenges were identified:

- **Lack of resources and equipment** (44.7% marked as a major barrier; M = 2.67)
- **Time and scheduling constraints** (42.9% marked as a major barrier; M = 3.00)
- **Difficulty in industry partnership and insufficient training** (43.8% identified this as a major barrier; M = 3.00)

These constraints suggest institutional and structural issues that hinder the full integration of experiential learning strategies.

Notably, 89.1% of the respondents affirmed a *significant lack of instructional materials* for supporting EL, especially in fields like **renewable energy** and **sustainable agriculture**, both of which are crucial to Nigeria's economic development agenda.

7. Perception of National Development Relevance

Respondents recognized experiential learning as vital for preparing students to contribute meaningfully to national development. Skills such as:

- **Innovation and creativity** (82.2% considered these important or very important; M = 3.12)
- **Entrepreneurship** (87% viewed as important or very important; M = 3.99)
- **Problem-solving and critical thinking** (83.6%; M = 3.05)

These were highly valued for economic growth and sustainability. This confirms the alignment between vocational education goals and national developmental priorities.

8. Summary of Findings

The **grand mean** of **2.79** falls within the **"high" category** on the decision scale (2.50 – 3.49), indicating that lecturers hold generally positive perceptions toward the concept and application of experiential learning. However, this high perception does not fully translate into *universal or optimal* application, primarily due to the challenges identified.

Implications and Discussion

These findings reveal a strong acceptance and understanding of experiential learning among lecturers in vocational education. However, for its implementation to be more effective and widespread, there is a need for:

- Improved institutional support
- Professional training for lecturers
- Provision of resources and materials
- Stronger industry-academic partnerships

Addressing these gaps will strengthen the role of vocational education in driving innovation, job creation, and sustainable national development.

RQ1. To what level is the acceptability of the learning approach on the part of both the teachers and learners?

The results regarding the acceptability of the experiential learning approach among teachers and learners. The responses reflect various levels of importance, effectiveness, and alignment in terms of experiential learning practices and their perceived outcomes.

One of the core indicators of acceptability is how important teachers consider holding students accountable for their learning. A significant majority (59.1%) rated this as *very important*, and 28.2% indicated it is *important*, yielding a mean of **2.4444,** which falls under the "low" category on the decision rule scale. This may reflect the need for a clearer structure or better institutional support mechanisms to reinforce student accountability in experiential settings.

Regarding **factors influencing teachers' sense of accountability**, the most cited were *student engagement* (39.7%) and *learning objectives* (38.6%), with a relatively low mean of **1.4510,** which is categorized as *very low*. This shows that while teachers acknowledge the importance of accountability, the factors influencing it are basic pedagogical drivers, suggesting that institutional or systemic support factors (e.g., administrative support) play a lesser role.

For ensuring accountability, **encouraging student reflection** was the most common method (48.1%), followed by *monitoring student progress* (31.7%) and *setting clear objectives* (20.2%), with a combined mean of **2.3340**, still within the "low" category. This implies that while strategies exist, they may need refinement or integration into a broader framework to enhance effectiveness.

In terms of **encouraging student ownership**, *encouraging autonomy* (46.7%) and *providing choices* (23.9%) were the most frequently used strategies. The high mean of **3.9950** (classified as *very high*) underscores strong teacher efforts to promote learner independence, which is a cornerstone of experiential learning.

The **influence of experiential learning on teaching practices and student engagement** was perceived positively by 91.0% of respondents in both categories, although the mean for the impact on teaching was **1.2901** (*very low*) and for student engagement **2.5610** (*high*). This discrepancy could indicate that while experiential learning is well-received, its measurable impact on classroom practices might not yet be fully realized or documented.

Regarding **training and support**, 44.7% of respondents rated training in experiential learning as *very important* and 43.2% as *important*, resulting in a mean of **2.4579**, falling at the upper threshold of the "low" category. This points to a recognized need for professional development to support successful implementation.

The frequency of various **lecturing methods** being used also sheds light on acceptability:

- *Flipped classroom*: Mean = **1.9999** (*low*)
- *Interactive lectures*: Mean = **2.0001** (*low*)
- *Technology-enhanced lectures*: Mean = **1.9875** (*low*)
- *Problem-based learning*: Mean **= 3.5556** (*very high*)
- *Collaborative lectures*: Mean = **3.1117** (*high*)

These figures suggest that while traditional and tech-based strategies are underused, problem-based and collaborative methods are gaining traction and seen as more effective in achieving educational goals.

Regarding effectiveness, 50.0% of respondents rated the listed lecturing methods as effective, and 42.5% as very effective, resulting in a high mean of 3.4506—borderline "very high"—which indicates overall confidence in these methods for promoting student achievement.

When asked about the **impact on engagement and motivation**, 43.6% noted a *significant impact* and 49.1% noted a *good impact*, with a mean of **2.6780**, indicating a *high* level of influence. Similarly, when assessing how teachers evaluate student progress, group projects and presentations (30.8%) and individual assignments and projects (30.6%) were the most dominant, resulting in a mean of **2.8888** (*high*).

Alignment with **teaching goals and objectives** yielded a mean of **2.9991** (*high*), while the majority (93.0%) reported observing **changes in learning behavior or attitudes**; however, the associated mean score was 1.9222, suggesting that these changes, although recognized, are not deeply transformative or consistent.

Summary and Implications

The **grand mean** for the acceptability of the experiential learning approach is **2.5418**, which falls under the "high" category on the decision scale. This indicates a **moderate to high level of acceptability** of the learning approach among both teachers and learners.

However, while overall attitudes are positive, especially toward student autonomy, collaboration, and active learning strategies, certain areas such as training, support structures, and accountability mechanisms need reinforcement. Professional development and institutional support could further enhance the adoption and impact of experiential learning practices.

This analysis suggests that for experiential learning to achieve its full potential in vocational education, **a holistic framework incorporating training, assessment alignment, accountability, and resourcing** is essential.

RQ3: What impact will the experiential learning approach have on national development?

Data on how the use of experiential learning approaches aligns with instructional materials, industry needs, and challenges faced in educational practice. The findings show that 44.9% of respondents identified cost or budget constraints as the major barrier in accessing or using instructional materials, followed by insufficient training and support (33.6%), limited access to technology (9.5%), and lack of availability (12.0%). The mean score for this variable was 2.5444, which indicates a high level of challenge based on the decision rule.

Furthermore, 89.1% of respondents reported that these barriers negatively affect their teaching practice, while only 10.9% indicated a positive impact. The mean score for this response was 2.9912, also within the high range, indicating that these challenges substantially influence teaching outcomes.

Regarding alignment with industry needs, 44.9% of respondents believed their instructional materials align "fairly well" and 43.7% "very well" with industry standards, resulting

in a mean of 1.9999, categorized as low alignment. Interestingly, 72.8% of the respondents have not consulted industry experts in developing instructional materials, despite the majority (66.3%) stating it is very important that instructional materials meet industry needs.

The grand mean for this section is 2.8141, which falls within the high category. This suggests that respondents generally agree that the experiential learning approach has a significant and positive impact on national development, particularly by fostering skill alignment with industry demands and improving vocational education quality, though challenges like resource constraints and industry collaboration gaps remain.

RQ4: What are the challenges of adopting an experiential learning approach for sustainable vocational education teachers?

The results show that a majority (56.3%) of respondents "always" and 31.1% "almost always" engage in hands-on activities, simulations, or project-based learning, with a mean score of 3.1111, indicating a very high adoption rate of such methods.

In contrast, when asked about attending traditional or technology-enhanced lectures, 51.8% of respondents selected "almost always" and 33.9% "always", but the mean score was 1.2798, which falls into the very low category. This suggests that these lecture-based methods are viewed less favorably or possibly less engaging in the context of vocational education.

On engagement and motivation, 48.7% of respondents rated themselves "very engaged" during experiential activities, and 44.3% as "engaged", giving a mean score of 2.7890 (high engagement). Similarly, 55.3% of respondents felt "very engaged" in understanding and retaining material in lectures, and 32.1% were "engaged", with a mean score of 2.6110 (also high).

The grand mean of 2.5000 suggests that the challenges of adopting experiential learning for sustainable vocational education fall into the high category, highlighting that while there is strong adoption and perceived effectiveness, challenges persist, particularly in fully integrating such methods due to constraints such as engagement variability, training, and resources.

CONCLUSION

The findings of this study affirm the positive influence of experiential learning approaches on vocational education, particularly in developing practical skills essential for national development. The results indicate that both teachers and students show a high level of acceptability toward experiential learning strategies. This is especially relevant in the context of vocational education, where the demand for real-world skills is critical. However, challenges such as insufficient funding, lack of industry collaboration, and limited access to instructional resources remain significant obstacles.

Experiential learning not only enhances student engagement and motivation but also improves retention and the practical application of knowledge. These outcomes are fundamental to producing a skilled workforce, which is crucial for national productivity and sustainable development.

RECOMMENDATIONS

Based on the study's findings, the following recommendations are proposed:

i. Conducive Learning Environment: College administrators should establish a supportive and well-equipped learning environment that encourages the implementation of experiential learning approaches.
ii. Government Investment: The government should prioritize infrastructure development, including state-of-the-art facilities, equipment, and digital technologies to support hands-on learning methods essential for vocational training.
iii. Capacity Building: Policy initiatives should focus on enhancing teachers' understanding and positive perception of experiential learning through continuous professional development programs such as seminars and workshops.
iv. Industry Collaboration: Institutions should actively engage industry stakeholders in the design and evaluation of instructional materials to ensure alignment with labor market requirements and enhance curriculum relevance.

Ongoing Program Evaluation: Colleges should establish continuous monitoring and evaluation mechanisms to assess the effectiveness of experiential learning strategies and make data-informed improvements to program delivery.

REFERENCES

Baker, A. C., Jensen, P. J., & Kolb, D. A. (2005). Conversation as experiential learning. *Management Learning*, *36*(4), 411–427. https://doi.org/10.1177/1350507605058130

Bridgstock, R. S. (2016). The university and the knowledge network: A new educational model for 21st century learning and employability. In M. Tomlinson (Ed.), *Graduate employability in context: Research, theory and debate*. Palgrave Macmillan.

Carroll, M. (2007). One more time: What is supervision? *Psychotherapy in Australia*, *13*(3), 34–40.

Fayombo, G. A. (2012). Active learning strategies and student learning outcomes among some university students in Barbados. *Journal of Educational and Social Research*, *2*(9), 11–22.

Goedeke, S., & Gibson, K. (2011). What do new psychology students know about psychology? *Australian Psychologist*, *46*(2), 133–139. https://doi.org/10.1111/j.1742-9544.2011.00028.x

Green, R. A., Conlon, E. G., & Morrissey, S. M. (2017). Task values and self-efficacy beliefs of undergraduate psychology students. *Australian Journal of*

Psychology, *69*(2), 112–120. https://doi.org/10.1111/ajpy.12125

Guo, F., Yao, M., Wang, C., Yang, W., & Zong, X. (2016). The effects of service learning on student problem solving: The mediating role of classroom engagement. *Teaching of Psychology*, *43*(1), 16–21. https://doi.org/10.1177/0098628315620064