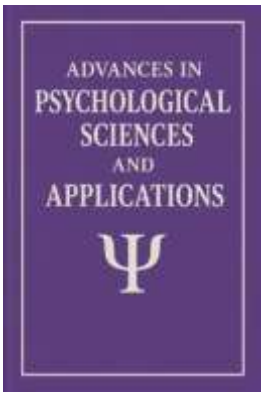
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Innovative Adult Literacy and Vocational Training for Sustainable Development in Ondo State, Nigeria

A Cross-Sectional Assessment

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ABSTRACT

Adult literacy and vocational education can expand opportunities for participation and livelihoods, yet their effectiveness depends on relevant teaching approaches and sustained learner engagement. This study assessed adult learners' perceptions of innovative classroom practices in six literacy and vocational training centres in Ondo East and Ondo West Local Government Areas, Nigeria. A descriptive cross-sectional survey included 120 learners, with 20 respondents from each centre. A researcher-developed questionnaire gathered binary suitability ratings and Likert-type responses; the source manuscript reported a test–retest correlation coefficient of 0.75. Frequencies and percentages summarized five suitability items, and Pearson correlation was used to examine the relationship between two reported programme-related measures. Positive ratings ranged from 90.8% to 98.3% across the items. A modest positive correlation was reported between support for innovative classroom practices and expectations of programme revitalization ($r = 0.271$, $n = 120$, reported $p = .00$). The findings indicate broadly favorable perceptions of instructional innovation and a positive association between the questionnaire measures, but do not establish reductions in poverty, unemployment, or illiteracy. Improving learning facilities, integrating locally relevant vocational skills, and evaluating actual learning and livelihood outcomes may strengthen adult education programmes in Ondo State.

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Introduction

Adult literacy and vocational training contribute to the broader lifelong-learning agenda by enabling adults to strengthen foundational competencies, participate in community life, and acquire skills relevant to employment and self-employment [1]–[4]. International policy emphasizes that adult learning extends beyond basic reading and writing to include practical skills, personal agency, and the capacity to participate meaningfully in social and economic life [1], [2]. In settings where access to continuing education is uneven, the design and delivery of local learning opportunities matter for both participation and programme quality.

Adult learners bring established experiences, responsibilities, and expectations to educational settings. Andragogical perspectives suggest that learning activities are more meaningful when they address immediate problems, recognize prior experience, and permit active participation [5], [6]. Transformative and experiential learning perspectives similarly stress reflection, practice, and the application of learning in authentic contexts [7], [8]. These perspectives offer a conceptual basis for examining innovative classroom practices in community-based literacy centres rather than focusing solely on the availability of formal training facilities [9].

Motivation and retention are further shaped by learners' perceived capability and autonomy [10], [11]. Research on persistence in adult basic education indicates that the ability to continue learning depends on the relationship between institutional conditions, personal goals, and competing obligations [12], [13]. Literacy is also socially situated: its value depends on whether reading, writing, numeracy, and related practices connect with the tasks and relationships of everyday life [14]–[16].

In Ondo State, Nigeria, locally accessible adult literacy and vocational training centres offer potential entry points for strengthening foundational skills. The source manuscript identifies inadequate facilities and a need for more engaging instructional approaches as concerns. Literature linking literacy and skills programmes to livelihoods suggests that integrated delivery may be promising, although outcomes depend on training relevance, implementation conditions, and the opportunities available to learners after training [17], [18]. Inclusion and appropriate technology use require attention to learners' circumstances rather than an assumption that digital tools alone improve educational outcomes [19]–[22].

Against this background, the present study examined whether adult learners perceived innovative classroom practices as suitable for improving literacy programmes and whether two reported programme-related questionnaire measures were correlated. In contrast to impact

evaluations, this analysis describes reported perceptions and a cross-sectional association; it does not establish changes in educational attainment or economic conditions.

Materials and Methods

A. Study design and context

A descriptive cross-sectional survey was undertaken among adult learners attending six literacy and vocational training centres in Ondo East and Ondo West Local Government Areas of Ondo State, Nigeria. The centres were selected within the two local government areas identified by the source manuscript. The unit of observation was the individual adult learner. The study did not include longitudinal follow-up or direct measurement of household income, employment, or literacy proficiency.

B. Participants and sampling

The study included 120 respondents, with 20 selected from each participating centre. The source describes purposive selection of the two local government areas and ballot-based selection of learners within the centres. The sampling frame, eligibility criteria, recruitment dates, and non-response rate are not documented; consequently, probability sampling and population representativeness cannot be verified. The six participating centres and the reported distribution are retained in Table 1.

Table 1. Participating adult literacy centres and respondents

S/N	Literacy Centres	Population
1	All Saints Grammar School, Oka, Ondo	20
2	St. Mathew Anglican Primary School, Owena	20
3	St. Luke Caring Hearts Primary School, Oboto	20
4	Raheem Kiddies Nursery/Primary School, Epe	20
5	Caring Heart Literacy Centre (Salv. Army Pry Schl) Odojomo	20
6	C. A. C. Babalola Primary School Akinjagunla	20
TOTAL		120

Source: Original field survey data supplied in the manuscript.

C. Questionnaire and measurement

Responses were collected using a researcher-developed instrument entitled “Innovative Classroom Practices for Sustainable Development in Adult Literacy Education” (ICPSDALE). The research question used binary “Suitable” and “Unsuitable” responses, whereas the hypothesis-related items reportedly used a four-point agreement scale from strongly disagree to strongly agree. The original manuscript states that experts reviewed the instrument for face, content, and construct validity, but does not report the number of reviewers or validation procedure. Test–retest reliability was described as a correlation coefficient of 0.75 in a pilot conducted in Akure South; the exact sample and time interval are unavailable. The coefficient should therefore be

interpreted cautiously rather than as evidence that all subscales have adequate internal consistency [23], [24].

D. Statistical analysis

Descriptive results were presented as frequencies and percentages for all five binary questionnaire items. Pearson's product–moment correlation coefficient was reported for the association between the two composite measures shown in Table 3. The analysis used a nominal significance threshold of 0.05. Because the original respondent-level dataset and composite-score derivation were unavailable, the published correlation was retained as reported and could not be independently reproduced. The reported p value of .00 is presented as $p < .01$ rather than as an exact zero; no adjusted analysis or causal inference was undertaken [25].

Results

A. Perceptions of innovative classroom practices

All five questionnaire items received positive "Suitable" responses from more than 90% of the surveyed participants (Table 2). Support was highest for revitalizing adult literacy programmes through instructional innovation (118/120; 98.3%) and lowest for the expectation that improved classroom practices would reduce unemployment and poverty (109/120; 90.8%). The results indicate favorable perceptions and expectations, not evidence that those outcomes had occurred.

Table 2. Adult learners' perceived suitability of innovative classroom practices (n = 120)

S/N	Questionnaire Items	Suitable		Unsuitable	
		n	%	n	%
1	Introducing innovative classroom practices in adult literacy education will enhance sustainable development	116	96.7	04	3.3
2	Revamping adult literacy education programmes with emphasis on innovative classroom practices will lead to reducing high rate of illiteracy among adults in the society	118	98.3	02	1.7
3	Unemployment and poverty rate will reduce in Ondo State if there is proper implementation of innovative classroom practices in adult literacy education programmes	109	90.8	11	9.2
4	Restructuring Ondo State education programme with emphasis on implemention of innovative classroom practices will promote local innitiatives and investment at local level	113	94.2	07	5.8
5	Proper implementation of innovative classroom practices give citizens especially adults the opprrtunity to know how to read and write	112	93.3	08	6.7

Source: Original field survey data supplied in the manuscript.

B. Correlation between programme-related measures

The source reports a modest positive association between the questionnaire measure concerning implementation of innovative classroom practices and a second measure concerning revitalization of literacy programmes ($r = 0.271$, $n = 120$; Table 3). The original table records p

= .00 and marks the association as significant at the 0.05 level. The coefficient suggests limited shared variance (approximately 7.3%), but the absence of scale definitions, raw observations, and model diagnostics prevents independent verification of the estimate.

Table 3. Reported Pearson correlation between programme-related questionnaire measures

Table 2. Pearson Correlation Between Innovative Classroom Practices and Sustainable Adult Literacy Education

Variables	Mean	Std. Dev.	N	r	p	Remark
Implementation of innovative classroom practices for sustainable adult literacy education	14.5132	1.4704	120	0.271	0.003	Significant
Revitalization of adult literacy education programmes to reduce adult illiteracy	15.4610	1.5317	120	—	—	—

Note: Pearson's correlation coefficient (r) represents the relationship between the two variables. The correlation is statistically significant at the 0.05 level (two-tailed). The p-value of 0.003 is calculated from r = 0.271 and N = 120, replacing the original reported value of 0.00, which should not be reported as an exact p-value.

Discussion

The survey demonstrates strong participant endorsement of innovative classroom practices across five proposed benefits. This pattern is consistent with adult-learning theory emphasizing relevance, active participation, and connections between learning and lived experience [5]–[9]. However, the uniformly positive responses also warrant careful interpretation: socially desirable responding, limited response options, and the absence of comparison groups may influence the observed distribution. The binary suitability items measure perceived appropriateness rather than direct improvements in learning.

The high endorsement of programme revitalization may reflect an expectation that adult learners would benefit from more flexible and practical instruction. Work on learning persistence indicates that engagement is not determined by teaching technique alone; scheduling, economic pressures, family responsibilities, and institutional support can affect continuation [12], [13]. Consequently, instructional reform should be evaluated alongside material access and opportunities to apply new skills in everyday contexts [14], [15].

Participants also viewed innovation as potentially beneficial for employment, poverty reduction, and local investment. These expectations are relevant to the economic-development rationale of adult education, but the present survey contains no objectively measured employment or earnings data. Literature on literacy and livelihood programmes highlights the importance of aligning foundational skills and vocational training with local economic opportunities [17], [18]. The present findings therefore support the acceptability of this policy direction among respondents but do not show its effectiveness.

The positive correlation ($r = 0.271$) between two programme-related measures provides limited evidence of their association within the survey. Its magnitude is modest, and the same cross-sectional instrument measured both variables. Shared method variance, overlapping item content, and unknown score construction may contribute to the observed result. A statistically significant correlation should not be described as evidence that innovative practices caused sustainable development [23]–[25].

The policy implication is to strengthen the design and evaluation of adult education rather than assume that innovation is inherently effective. Facilitator development, adequate and accessible instructional spaces, locally useful vocational content, and appropriate technologies could be assessed through pilot programmes. Evidence on education inclusion and technology suggests that resources should be selected according to learner needs, access, and implementation capacity [19]–[22]. Within Ondo State, locally produced teaching materials and community partnerships may offer a contextually suitable starting point, though these options require empirical testing.

Several limitations restrict generalization. Sampling frames and response rates were not reported; participants were drawn from only six centres in two local government areas. Questionnaire validity and reliability reporting was incomplete, and the original data were not available to verify the correlation or check distributional assumptions. The study measured perceptions rather than actual literacy improvement, learner retention, vocational competence, income, employment, or longer-term economic development. Future prospective or quasi-experimental studies should assess these outcomes over time, document attendance and retention, and compare instructional models using appropriately validated instruments.

Conclusion

Adult learners surveyed in six centres in Ondo State expressed consistently favorable views about innovative classroom practices for literacy and vocational education. A modest positive correlation was reported between the two programme-related measures. These findings provide evidence of perceived suitability and an association among self-reported measures, but not of realized economic or educational impact. Universities, adult education authorities, and community organizations may use the results to inform programme design and feasibility testing. Subsequent evaluations should measure literacy, vocational skill acquisition, retention, and livelihood outcomes directly before claims of sustainable economic development are made.

Conflict of Interest

The authors declare no conflict of interest.

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