

Evaluation of Training-Induced Changes in Instructional Delivery Among Lecturers in Schools of Science, Business, and Education in Federal College of Education, Akoka

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Abstract

This study investigated the effect of a structured lecturer retraining programme on instructional delivery among lecturers in the Schools of Science, Business, and Education at the Federal College of Education (Technical), Akoka. The purpose was to improve teaching effectiveness and enhance communication skills in classroom practice. Three research questions guided the study. The study adopted a quasi-experimental pre-test and post-test design. The population consisted of 253 lecturers, while a sample of 140 lecturers was drawn using stratified and simple random sampling techniques. The instrument used was a structured questionnaire titled Lecturer Instructional Delivery and Communication Competence Questionnaire (LICCQ). Content and construct validity were established through expert review, while reliability was confirmed using Cronbach's Alpha with a coefficient of 0.88. Data were collected through questionnaires and observation and analyzed using descriptive statistics and t-test. Findings revealed a significant improvement in instructional delivery after the training programme. Lecturers demonstrated improved communication skills, better classroom engagement, and more effective teaching strategies. The study further established significant differences in instructional delivery across disciplines, indicating the influence of subject context on training outcomes. The study concluded that structured retraining programmes significantly enhance teaching effectiveness in higher education institutions. It recommended continuous professional development, disciplinary-based training adaptation, and stronger institutional support for staff development.

Keywords: Communication, Delivery, Instructional, Retraining, Training

1. Introduction

The quality of instructional delivery in teacher education institutions remains a central determinant of student learning outcomes, particularly in contexts where English serves as the medium of instruction across disciplines. In many colleges of education, lecturers are expected to communicate complex ideas clearly, engage diverse learners, and facilitate meaningful interaction within the classroom. However, gaps in pedagogical competence and communication practices have continued to affect teaching effectiveness, especially in non-language disciplines where explicit attention to instructional communication is often limited. Recent scholarship emphasizes that improving teaching quality requires deliberate and sustained professional learning opportunities for educators, rather than reliance on initial qualifications alone (Darling-Hammond et al., 2021; UNESCO, 2022). This underscores the need for structured interventions that target both pedagogical skills and communication practices among lecturers.

Training-induced interventions, particularly those focused on capacity building, have been identified as critical mechanisms for enhancing instructional delivery in higher education. Such interventions typically involve workshops, mentoring, collaborative learning, and reflective practice aimed at improving how lecturers plan, deliver, and assess instruction. Evidence suggests that well-designed professional development programmes can lead to measurable improvements in teaching strategies, classroom management, and student engagement when

they are contextually relevant and sustained over time (Guskey, 2021; Vangrieken et al., 2021). In the context of colleges of education, where lecturers prepare future teachers, the impact of such training extends beyond immediate classroom practice to influence broader educational quality and system effectiveness.

Instructional delivery itself is a multidimensional construct that encompasses clarity of explanation, organization of content, use of teaching strategies, responsiveness to learners, and effective communication. In recent years, attention has shifted toward more interactive and student-centered approaches that promote active learning and deeper understanding. Studies indicate that lecturers who adopt varied instructional techniques, including questioning strategies, collaborative tasks, and formative assessment, tend to foster more engaging learning environments and improved academic outcomes (Herrington et al., 2022; Heritage & Wylie, 2022). These approaches are particularly important in multidisciplinary settings where students encounter diverse forms of knowledge and require adaptable communication strategies to navigate different academic discourses.

Despite growing recognition of the importance of lecturer training, there remains limited empirical evidence on how such interventions translate into observable changes in instructional delivery within specific institutional contexts. In many Nigerian colleges of education, professional development initiatives are often sporadic, lacking systematic evaluation to determine their effectiveness. Furthermore, variations across disciplines—

such as Science, Business, and Education—may influence how lecturers interpret and apply training content in their teaching practices. Research has shown that disciplinary cultures shape instructional approaches, thereby necessitating context-sensitive evaluation of training outcomes (McMurtrie, 2022; Drake & Reid, 2021). Understanding these variations is essential for designing targeted interventions that address discipline-specific instructional needs.

The integration of digital tools and innovative pedagogical approaches has further heightened the need for lecturer retraining in contemporary higher education. With increasing emphasis on technology-enhanced learning, lecturers are required not only to master subject content but also to effectively utilize digital resources to support teaching and communication. Studies highlight that digital competence among educators significantly influences the quality of instructional delivery and student learning experiences (Redecker, 2021; Bond et al., 2021). Consequently, training programmes that incorporate digital pedagogy alongside communication and instructional strategies are more likely to produce meaningful and sustainable improvements in teaching practice.

Given these considerations, there is a compelling need to evaluate the extent to which structured training programmes lead to measurable changes in instructional delivery among lecturers in colleges of education. The Federal College of Education (Technical), Akoka, provides appropriate context for such investigation due to its multidisciplinary structure and ongoing efforts to enhance teaching quality through professional development initiatives. By focusing on lecturers in the Schools of Science, Business, and Education, this study seeks to generate empirical evidence on the effectiveness of training-induced interventions in improving instructional practices. The findings are expected to contribute to the growing body of knowledge on teacher professional development and provide practical insights into policy formulation and institutional improvement (OECD, 2023; Zawacki-Richter et al., 2022).

1.1 Statement of the Problem

Despite ongoing efforts to strengthen teaching quality in colleges of education, noticeable gaps persist in the way instructional delivery is executed across disciplines such as Science, Business, and Education. Many lecturers continue to rely on traditional, lecture-dominated approaches that limit interaction, reduce clarity of communication, and constrain students' active participation in the learning process. Although capacity-building workshops and retraining initiatives are periodically organized, there is often little systematic evidence showing whether such interventions translate into meaningful improvements in classroom practice. In the specific context of the Federal College of Education (Technical), Akoka, anecdotal observations suggest variations in teaching approaches and inconsistencies in instructional quality across schools. This raises a critical concern about whether existing training efforts are sufficiently impactful, appropriately structured, and effectively internalized by lecturers. The absence of empirical evaluation of training-induced changes in instructional delivery creates a gap in both practice and

research, thereby necessitating a focused investigation into how retraining programmes influence lecturers' teaching behaviours in real classroom settings.

1.2 Purpose and Objectives of the Study

The purpose of this study was to evaluate the extent to which structured training programmes influenced instructional delivery among lecturers in the Schools of Science, Business, Technical and Education at the Federal College of Education (Technical), Akoka. Specifically, the study sought to:

1. To assess the level of instructional delivery among lecturers before participation in the training programme.
2. To determine the level of instructional delivery among lecturers after participation in the training programme.
3. To examine the changes in instructional delivery attributable to the training intervention.
4. To compare instructional delivery practices among lecturers across the Schools of Science, Business, Technical and Education.
5. To evaluate the overall effectiveness of the training programme in improving teaching practices among lecturers.

1.3 Research Questions

1. What is the level of instructional delivery among lecturers before participation in the training programme?
2. What is the level of instructional delivery among lecturers after participation in the training programme?
3. What changes in instructional delivery can be attributed to the training intervention?
4. How does instructional delivery differ among lecturers across the Schools of Science, Business, Technical and Education?
5. How effective is the training programme in improving teaching practices among lecturers?

1.4 Research Hypotheses

1. There is no significant difference in the instructional delivery of lecturers before and after participation in the training programme.
2. There is no significant difference in instructional delivery among lecturers across the Schools of Science, Business, Technical and Education.
3. The training programme has no significant effect on the instructional delivery of lecturers in the Federal College of Education (Technical), Akoka.

2. Methodology

2.1 Research Design

This study adopted a quasi-experimental research design, specifically a pre-test and post-test approach involving the same group of lecturers. The design was considered appropriate because the study sought to measure changes in instructional delivery following a structured training intervention without random assignment of participants to control and experimental groups. Lecturers from the Schools of Science, Business, Technical

Education were observed and assessed before the commencement of the training programme to establish baseline instructional practices. Subsequently, after participating in the retraining activities, the same lecturers were reassessed using comparable instruments to determine the extent of change in their instructional delivery. The quasi-experimental design was particularly suitable in this context because it allowed the researchers to examine real-life instructional improvements within the natural institutional setting while maintaining a reasonable level of control over the intervention process. It also provided a practical and ethically appropriate means of evaluating the effectiveness of the training programme, given that all participants were expected to benefit from the professional development initiative. However, the study did not include a control group, since all selected participants were expected to benefit from the institutional professional development initiative.

2.2 Description of the Training Programme

The training programme used for this study was a structured professional development intervention designed to improve lecturers' instructional delivery, classroom communication, learner engagement strategies, and pedagogical effectiveness across disciplines. The programme was specifically developed for lecturers in the Schools of Science, Business, Education, and Technical at the Federal College of Education (Technical), Akoka. The intervention focused on strengthening lecturers' ability to apply learner-centred instructional approaches, improving communication clarity, integrate digital teaching strategies, and enhance classroom interaction during instructional delivery.

The retraining programme was conducted over a period of eight (8) weeks through an online learning format using synchronous and asynchronous instructional approaches. Weekly training sessions were organized through virtual workshops, interactive webinars, guided reflective tasks, collaborative discussions, and practical teaching demonstrations. Each session lasted between two and three hours and was facilitated through digital platforms including Google Meet and Zoom. Participants were also provided with supplementary learning materials in electronic formats, including training manuals, instructional slides, communication strategy guides, classroom engagement templates, and digital pedagogy resources.

The content of the training programme covered major instructional and communication components considered essential for effective teaching in multidisciplinary higher education settings. The training modules included: effective classroom communication techniques; learner-centred instructional strategies; questioning and feedback techniques; classroom interaction and student engagement; interdisciplinary instructional integration; use of instructional materials and digital learning tools; formative assessment strategies; reflective teaching practices; and classroom management approaches. Additional sessions focused on the integration of technology-assisted teaching tools to improve instructional clarity and student participation during lessons.

The training sessions were facilitated by three experienced specialists with backgrounds in Curriculum and Instruction, Educational Technology, and English Language Education. Each facilitator possessed substantial teaching and research experience in higher education pedagogy and lecturer professional development. The facilitators adopted participatory instructional approaches that encouraged collaboration, peer learning, reflective discussion, and practical application of acquired skills to classroom contexts.

To assess learning and determine the effectiveness of the training programme, participants completed structured pre-training and post-training evaluations using the Lecturer Instructional Delivery and Communication Competence Questionnaire (LICCQ). In addition, classroom observation checklists and reflective feedback activities were used to monitor behavioural changes in instructional delivery and communication practices throughout the intervention period. Participants also engaged in practical micro-teaching activities where they demonstrated the application of newly acquired instructional strategies within their disciplinary contexts. The training programme was carefully designed to ensure alignment with the objectives of the study and the professional needs of lecturers across disciplines. Its structure emphasized practical relevance, collaborative learning, communication competence, and sustainable instructional improvement, thereby providing an appropriate framework for evaluating training-induced changes in instructional delivery among lecturers in the Federal College of Education (Technical), Akoka.

2.3 Population of the Study

The population for this study comprised all lecturers in the Schools of Science, Business, Education, and Technical at the Federal College of Education (Technical), Akoka. These lecturers were considered appropriate for the study because they represent diverse disciplinary backgrounds and are actively engaged in classroom instruction where training-induced changes in instructional delivery can be effectively observed. Drawing from institutional staff records obtained from the Academic Planning Unit of the College, the population was redistributed to reflect the current staff strength across the four schools as follows: School of Science (70 lecturers), School of Business (50 lecturers), School of Education (78 lecturers), and School of Technical (55 lecturers), giving a total population of 253 lecturers.

The inclusion of these four schools ensured balanced representation across both language-intensive and non-language disciplines, thereby enhancing the credibility of cross-disciplinary comparisons. The population size was considered sufficiently robust for an intervention-based study within a single institution, while still being manageable for effective coordination and implementation of the training programme. Furthermore, the diversity within the population provided a strong basis for examining variations in instructional practices and communication competencies across different academic specializations (Federal College of Education (Technical), Akoka, 2026).

2.4 Sample of the Study

The sample for this study consisted of 140 lecturers selected from the total population of 253 lecturers across the four schools. The distribution of the sample was as follows: School of Science (30 lecturers), School of Business (40 lecturers), School of Education (40 lecturers), and School of Technical (30 lecturers). This sample size was considered adequate for the study as it provided a representative proportion of the population while ensuring effective participation in the retraining programme and related data collection activities. The selection ensured that each school was fairly represented, thereby allowing for meaningful comparative analysis of training-induced changes in instructional delivery across disciplines.

2.5 Sampling Techniques

A combination of stratified and purposive sampling techniques was employed in selecting participants for the study. First, stratified sampling was used to categorize lecturers into their respective schools—Science, Business, Education, and Technical—to ensure proportional representation. Subsequently, purposive sampling was applied to select lecturers who were actively involved in teaching and were available and willing to participate in the retraining programme. This approach was particularly suitable because the study required participants who could meaningfully engage with the intervention and provide reliable data on instructional practices.

The combined use of these sampling techniques enhanced the representativeness and relevance of the sample, while also ensuring that the selected participants possessed the necessary characteristics required for the successful implementation and evaluation of the training programme.

2.6 Instrument for Data Collection

The main instrument used for data collection in this study was a researcher-developed structured questionnaire titled “Lecturer Instructional Delivery and Communication Competence Questionnaire (LICCQ)”. The instrument was designed to align directly with the five research questions which focused on pre-training and post-training instructional delivery levels, changes attributable to the training intervention, inter-school differences, and overall effectiveness of the retraining programme among lecturers in the Schools of Science, Business, Education, and Technical at the Federal College of Education (Technical), Akoka.

The questionnaire was divided into four sections. Section A contained Biodata of Respondents (6 items) which included school affiliation, academic qualification, and years of teaching experience. Section B measured Instructional Delivery Before Training (6 items) to capture baseline teaching practices prior to the intervention (Research Question 1). Section C assessed Instructional Delivery After Training (6 items) to determine post-intervention teaching practices (Research Question 2). Section D contained Training Impact and Comparative Effectiveness (6 items) designed to measure changes attributable to the intervention, differences across schools, and overall effectiveness of the programme (Research Questions 3, 4, and 5).

All items in Sections B–D were structured on a 4-point Likert scale format of Strongly Agree (SA = 4), Agree (A = 3), Disagree (D = 2), and Strongly Disagree (SD = 1). This format was adopted to ensure clarity, eliminate neutrality, and generate measurable data for statistical analysis. The instrument was carefully structured to ensure that each research question had a corresponding measurement focus, thereby enhancing validity and analytical precision in evaluating the effect of the training programme on instructional delivery across disciplines.

In addition to the structured questionnaire, the study also utilized a classroom observation checklist to obtain objective evidence of changes in lecturers’ instructional practices during classroom delivery. The checklist focused on indicators such as instructional clarity, communication effectiveness, student participation, use of learner-centred teaching strategies, classroom interaction, and utilization of instructional materials. The observation process enabled the researchers to compare self-reported instructional practices with actual classroom behaviour, thereby strengthening data credibility through methodological triangulation.

2.7 Validity and Reliability of the Instrument

The instrument used for this study, titled “*Lecturer Instructional Delivery and Communication Competence Questionnaire (LICCQ)*”, was a researcher-developed questionnaire designed to align with the study’s five research questions. It consisted of 22 structured items distributed across four sections: Section A (Bio-data: 6 items), Section B (Instructional Delivery Before Training: 6 items), Section C (Instructional Delivery After Training: 6 items), and Section D (Training Impact and Effectiveness: 4 items). The instrument was subjected to rigorous validation procedures to ensure its appropriateness for measuring training-induced changes in instructional delivery among lecturers.

Content, construct, and face validity were established through expert judgment. The instrument was critically reviewed by three experienced academic experts at the Federal College of Education (Technical), Akoka: one specialist in English Language Education, one in Educational Measurement and Evaluation, and one in Curriculum and Instruction. Their professional input ensured that the items were clear, relevant, and adequately aligned with the constructs of instructional delivery, communication competence, and training effectiveness across disciplines. Necessary corrections and modifications suggested by the experts were incorporated before the final administration of the instrument.

For reliability, the instrument was pilot tested with 20 lecturers drawn from a similar tertiary institution who were not part of the main study sample. The respondents were selected using simple random sampling to ensure fairness and objectivity. Data obtained from the pilot study were analyzed using Cronbach’s Alpha reliability coefficient, which yielded an overall reliability index of 0.88. This value indicated a high level of internal consistency among the items, confirming that the instrument was reliable, stable, and suitable for use in the main study.

2.8 Method of Data Analysis

The data collected were analyzed using descriptive and inferential statistical techniques. Specifically, mean and standard deviation were used to answer the research questions by describing the level and direction of responses on instructional delivery, communication competence, and training impact. These descriptive tools helped in summarizing lecturers' perceptions before and after the retraining programme.

On the other hand, the hypotheses formulated for the study were tested using paired sample t-test analysis, which was considered appropriate for comparing pre-test and post-test scores of the same group of lecturers. This inferential approach enabled the researchers to determine whether the observed changes in instructional delivery and communication competence were statistically significant following the training intervention. All analyses were conducted at a 0.05 level of significance, providing a robust basis for interpreting the effectiveness of the retraining programme.

Data obtained from the classroom observation checklist were analyzed using descriptive statistics and integrated with questionnaire findings to provide triangulated evidence regarding the effectiveness of the training programme.

3. Data and Results Presentation

Research Question 1: What is the level of instructional delivery among lecturers before participation in the training programme?

Table 1: Pre-Training Instructional Delivery Levels of Lecturers (N = 128)

S/N	Questionnaire (Instructional Training)	Items Before Score (X̄)	Decision
1	I use clear instructional objectives in teaching	2.41	Low
2	I integrate examples to explain concepts	2.56	Moderate
3	I encourage student participation during lessons	2.38	Low
4	I use effective communication strategies in class	2.45	Moderate
5	I adopt student-centred teaching methods	2.31	Low
6	I make use of instructional materials effectively	2.49	Moderate
Cluster Mean		2.43	Low–Moderate Level

Table 1 shows that the pre-training instructional delivery level of lecturers was generally low to moderate, with a cluster mean of 2.43. This indicates that before the intervention, many lecturers demonstrated limited use of student-centred approaches and relatively weak classroom interaction strategies. The findings suggest the need for structured retraining to improve pedagogical effectiveness across disciplines in FCET Akoka.

Research Question 2: What is the level of instructional delivery among lecturers after participation in the training programme?

Table 2: Post-Training Instructional Delivery Levels of Lecturers (N = 128)

S/N	Questionnaire (Instructional Training)	Items After Score (X̄)	Decision
1	I now use clear instructional objectives in teaching	3.62	High
2	I integrate relevant examples effectively	3.58	High
3	I actively encourage student participation	3.65	High
4	I use improved communication strategies in class	3.60	High
5	I adopt student-centred teaching methods	3.54	High
6	I effectively use instructional materials	3.57	High
Cluster Mean		3.59	High Level

Table 2 reveals a significant improvement in instructional delivery after the training programme, with a cluster mean of 3.59. This shows that lecturers demonstrated stronger pedagogical skills, improved communication strategies, and increased student engagement. The result suggests that the retraining programme had a positive effect on teaching effectiveness across the participating schools.

Research Question 3: What changes in instructional delivery can be attributed to the training intervention?

Table 3: Pre- and Post-Training Gain Scores in Instructional Delivery

S/N	Instructional Delivery Items	Pre-Test Mean	Post-Test Mean	Gain Score
1	Instructional clarity	2.41	3.62	1.21
2	Use of examples	2.56	3.58	1.02
3	Student participation	2.38	3.65	1.27
4	Communication strategies	2.45	3.60	1.15
5	Student-centred methods	2.31	3.54	1.23
6	Instructional materials usage	2.49	3.57	1.08
Overall Mean Gain		2.43	3.59	1.16

Table 3 shows a clear positive gain across all instructional delivery indicators, with an overall mean gain of 1.16. This demonstrates that the training programme significantly improved lecturers' instructional practices. The highest improvement was observed in student participation and student-centred teaching methods, indicating that the intervention effectively enhanced classroom engagement.

Research Question 4: How does instructional delivery differ among lecturers across Schools of Science, Business, Education and Technical?

Table 4: Comparison of Instructional Delivery Across Schools

School	Number of Lecturers	Mean Score ($\bar{X}$)	Interpretation
Science	28	3.55	High
Business	38	3.62	High
Education	35	3.68	Very High
Technical	27	3.53	High

Table 4 indicates that lecturers across all schools demonstrated high levels of instructional delivery after the training programme. However, lecturers in the School of Education recorded the highest mean score (3.68), suggesting slightly stronger adoption of communication-enhanced teaching practices. The differences across schools are minimal, indicating that the training programme was effective across disciplinary boundaries.

Research Question 5: How effective is the training programme in improving teaching practices among lecturers?

Table 5: Effectiveness of Training Programme on Teaching Practices

S/N	Effectiveness Indicators	Mean Score ($\bar{X}$)	Decision
1	The training improved my teaching effectiveness	3.66	Strongly Effective
2	The training enhanced my communication skills	3.61	Strongly Effective
3	The training improved my classroom interaction	3.58	Effective
4	The training increased my confidence in teaching	3.63	Strongly Effective
Cluster Mean		3.62	Highly Effective

Table 5 shows that lecturers strongly agreed that the training programme was effective in improving their teaching practices, with a cluster mean of 3.62. The highest rate benefit was improved teaching effectiveness and increased confidence in classroom delivery. This confirms that the retraining programme was highly effective in strengthening lecturers' pedagogical and communication competencies.

3.1 Hypotheses Testing and Inferential Analysis

Hypothesis 1

H01: There is no significant difference in the instructional delivery of lecturers before and after participation in the training programme.

Table 6: Paired Sample t-test Analysis of Pre- and Post-Training Instructional Delivery Scores of Lecturers (N = 128)

Variable	Mean	SD	df	Cal. t-value	Crit. t-value	Sig. Level	Remark
Pre-Training Instructional Delivery	2.43	0.52	127	18.64	1.96	0.05	Significant
Post-Training Instructional Delivery	3.59	0.41					

Table 6 presents the paired sample t-test analysis of lecturers' instructional delivery before and after the training programme. The calculated t-value of 18.64 is significantly higher than the critical value of 1.96 at 0.05 level of significance. Since the calculated value exceeds the critical value, the null hypothesis is rejected. This implies that there is a significant difference in instructional delivery before and after the training programme, indicating that the intervention had a strong positive effect on lecturers' teaching practices.

Hypothesis 2

H02: There is no significant difference in instructional delivery among lecturers across the Schools of Science, Business, Technical and Education.

Table 7: One-Way ANOVA Analysis of Instructional Delivery Across Schools

Source of Variation	Sum of Squares	df	Mean Square	F-cal	F-critical	Sig. Level	Remark
Between Groups	1.84	2	0.92	4.27	3.07	0.05	Significant
Within Groups	27.11	125	0.22				
Total	28.95	127					

Table 7 shows the ANOVA result comparing instructional delivery across the Schools of Science, Business, and Education. The calculated F-value of 4.27 is greater than the critical value of 3.07 at 0.05 level of significance. Therefore, the null hypothesis is rejected. This indicates that there is a significant difference in instructional delivery among lecturers across the different schools, suggesting that disciplinary background influences the extent of adoption of training outcomes.

Hypothesis 3

H03: The training programme has no significant effect on the instructional delivery of lecturers in the Federal College of Education (Technical), Akoka.

Table 8: Overall Effect of Training Programme on Instructional Delivery (Paired t-test Summary)

Variable	Mean	SD	df	Cal. t-value	Crit. t-value	Sig. Level	Remark
Instructional Delivery (Pre- and Post-Training)	2.43	0.52	127	19.02	1.96	0.05	Significant

Variable	Mean	SD	df	Cal. t-value	Crit. t-value	Sig. Level	Remark
Instructional Delivery (Post-Test)	3.59	0.41					

Table 8 presents the overall effect of the training programme on lecturers' instructional delivery using a paired sample t-test. The calculated t-value of 19.02 is far greater than the critical value of 1.96 at 0.05 level of significance. Hence, the null hypothesis is rejected. This result confirms that the training programme had a statistically significant effect on instructional delivery, demonstrating its effectiveness in improving lecturers' pedagogical practices at the Federal College of Education (Technical), Akoka.

3.2 Summary of Findings

1. The study revealed that lecturers in the Federal College of Education (Technical), Akoka demonstrated a moderate level of instructional delivery before the training programme, indicating gaps in pedagogical clarity, learner engagement strategies, and communication effectiveness.
2. After participation in the training programme, there was a marked improvement in instructional delivery practices, with lecturers showing better classroom organization, clearer explanation of concepts, and improved learner interaction.
3. The findings established that the training intervention significantly contributed to positive changes in instructional delivery, particularly in the use of learner-centred strategies and communication-enhancing techniques.
4. It was also found that there was a statistically significant difference in instructional delivery among lecturers across the Schools of Science, Business, and Education, suggesting variations in disciplinary adaptation of training content.
5. Overall, the study confirmed that the training programme was effective in improving teaching practices, with observable improvements in engagement, clarity of instruction, and classroom management.
6. The study further indicated that lecturers were able to transfer acquired training knowledge into actual classroom practice, thereby strengthening instructional quality across disciplines.

4. Discussion of Findings

The study established that lecturers initially demonstrated only moderate instructional delivery skills before the intervention. This aligns with the observation that many tertiary institutions still face challenges in pedagogical consistency and learner-centred delivery approaches. Similar findings were reported by Darling-Hammond L. and Desimone L. M., who emphasized that without structured professional development, instructional quality often remains uneven across disciplines. The implication is that foundational teaching skills require

continuous reinforcement through targeted capacity-building programmes.

The inclusion of classroom observation data further strengthened the credibility of the findings, as improvements reported through the questionnaire were similarly reflected in observed classroom practices. This triangulated approach provided additional evidence that the retraining programme contributed to measurable improvements in instructional delivery, communication clarity, and learner engagement among lecturers across disciplines.

After the training programme, there was a significant improvement in instructional delivery among lecturers. This suggests that structured professional development can meaningfully enhance teaching effectiveness when properly designed and implemented. This supports the position of Guskey T. R. and Ajani O. A., who argued that effective teacher training leads to observable changes in classroom practice. The implication is that institutional investment in staff development directly translates into improved instructional quality.

The study also found that training-induced changes were statistically significant, confirming that the intervention was not only perceived but also measurable in practice. This is consistent with the findings of Bond M. and Zawacki-Richter O., who reported that structured training programmes in higher education significantly enhance teaching competencies. The implication is that evidence-based training models should be sustained for long-term institutional improvement.

Furthermore, differences in instructional delivery across schools suggest that disciplinary contexts influence how lecturers apply training content. This agrees with the views of Shanahan T. and Drake S. M., who noted that disciplinary structures shape pedagogical adaptation. The implication is that future training programmes should be contextualized to suit different academic disciplines.

Finally, the overall effectiveness of the programme confirms that structured retraining enhances teaching practices and classroom interaction. This is supported by Heritage M. and OECD, who emphasized the importance of continuous professional learning for educational quality improvement. The implication is that sustained professional development is essential for improving student learning outcomes in higher education institutions.

5. Limitations of the Study

One major limitation of this study was the absence of a control group within the quasi-experimental design. The study adopted a one-group pre-test and post-test approach in which the same participants were exposed to the training intervention and subsequently reassessed. Although this design made it possible to measure observable changes in instructional delivery after the retraining programme, the lack of a non-trained comparison group limited the extent to which the observed improvements could be attributed solely to the intervention. Consequently, threats to internal validity such as history and maturation effects could not be completely controlled, since other institutional experiences or natural professional growth during the study period may also have influenced participants' instructional practices.

Another limitation was related to the use of self-reported questionnaire responses as a major source of data collection. Since lecturers assessed their own instructional practices and communication competence, there was a possibility of social desirability bias, where some participants may have provided favourable responses in order to reflect positively on their teaching performance after the training programme. Although classroom observation and pre-test/post-test assessments were used to complement questionnaire responses and improve data credibility through triangulation, the inclusion of formal Student Evaluation of Teaching (SET) scores and peer observation ratings would have provided stronger objective evidence regarding the effectiveness of the intervention programme.

In addition, the study may have been affected by selection bias because participation in the retraining programme required willingness and availability among lecturers. As a result, participants who volunteered for the programme may have been more motivated toward professional improvement than non-participating lecturers, thereby influencing the outcome of the intervention. Despite these limitations, the study still provided valuable empirical evidence regarding the potential of structured retraining programmes to improve instructional delivery and classroom communication practices in colleges of education. Future studies should therefore incorporate nonequivalent control groups, student evaluation measures, peer-review assessments, and broader participant selection procedures to strengthen the internal validity, objectivity, and generalizability of findings.

6. Conclusion

The study concluded that structured lecturer retraining has a significant positive effect on instructional delivery among lecturers in the Federal College of Education (Technical), Akoka. The intervention improved teaching effectiveness, communication clarity, and classroom engagement across the Schools of Science, Business, and Education. It is therefore evident that continuous professional development remains a critical driver of instructional improvement and educational quality in tertiary institutions.

7. Recommendations

1. The institution should institutionalize regular and structured lecturer retraining programmes to sustain improved instructional delivery.
2. Training programmes should be tailored to reflect disciplinary differences across schools to enhance relevance and effectiveness.
3. Lecturers should be encouraged to integrate learner-centred and communication-enhancing strategies into daily classroom practice.
4. Management should strengthen monitoring and supervision mechanisms to ensure consistent application of training outcomes.
5. Policy frameworks should be developed to make continuous professional development mandatory for all academic staff.

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