

## ASSESSMENT OF THE LEVEL OF INSTRUCTIONAL PERFORMANCE OF ELECTRICAL/ELECTRONICS TECHNOLOGY LECTURERS IN INNOVATION ENTERPRISE INSTITUTIONS IN NORTH-CENTRAL NIGERIA

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**Abstract:** The study assessed the level of instructional performance of electrical/electronics technology lecturers in Innovative Enterprise Institute (IEI) in North-Central Nigeria. Specifically, the study assessed the level of performance of electrical/electronics technology lecturers in instructional planning, mastery of subject-matter and instructional delivery in IEIs in North-Central Nigeria. Three research questions with corresponding three null hypotheses were formulated to guide the study. The study adopted a descriptive survey design and was carried out in the four IEIs in North-Central Nigeria. The targeted population for the study was 271 respondents comprising of 60 Electrical/Electronics Technology (EET) lecturers, 32 management staff and 179 students. A well-structured questionnaire titled "Instructional Performance of EET Lecturers in IEI (IPEETLIEI)" was used for data collection of the study. The instrument was face and content validated by three experts in the Department of Industrial and Technology Education. Its reliability was analysed using Cronbach Alpha formula and an overall index of 0.81 was obtained. The data was computed using mean and standard deviations to answer the research questions while Analysis of Variance (ANOVA) was used to test the null hypotheses at .05 level of significance. Statistical Package Social Science (SPSS) version 26 was used for the computation of the result. Based on the analyses, the findings of the study revealed that the level of performance of EET lecturers in instructional planning was moderate level with a grand mean ( $\bar{X}_R = 3.44$ ). The study also revealed that the level of performance of EET lecturers in mastery of subject-matter revealed that was low with a grand mean ( $\bar{X}_R = 2.48$ ). More so, the study revealed that the level of performance of EET lecturers on instructional delivery was low with a grand mean ( $\bar{X}_R = 2.49$ ). Similarly, the average standard deviations of research questions 1-5 were found to be 0.78, 0.71, and 0.71 respectively. Based on the findings, it was recommended that EET lecturers should take-on professional development courses in their trade areas to improve their subject-matter expertise and instructional planning skills, thereby leading to improved quality of education provided to students. The study further recommended that the management of IEIs should organize instructional delivery workshops and seminars for EET lecturers to gain more exposure to innovative instructional delivery strategies.

**Keywords:** Assessment, Instructional Performance, Electrical/Electronics Technology Lecturers, Innovation Enterprise Institutions

### Introduction

Over the years, there has been a great call on skill-training that will lead to producing individuals with creative, complex and diversified technical skills to serve as the long-lasting solution to the menace of unemployment in Nigeria. It is based on this sense, that vocational-oriented institutions were established by Federal Government of Nigeria to equip youths with relevant skills needed to take up paid or self-paid jobs (Association of Proprietors of Innovation and Vocational Institutions APIVI, 2022). Such vocational-oriented institutions according to National Board for Technical Education (NBTE, 2014) are; technical colleges, polytechnics, Vocational Enterprise Institutions (VEIs) and Innovation Enterprise Institutions (IEIs).

Innovation Enterprise Institutions (IEIs) are post-secondary institutions that offer competency-based programmes through technical and vocational education and training (TVET) in order to equip individuals with practical and innovative skills needed to become functional members in the world of work. According to Seyi (2017), IEIs are private and government owned institutions that train and educate students to think creatively and transform knowledge through technological processes into wealth; hence contributing to nation building. These institutions promote the acquisition of the right mix of creative, commercial, job and lifelong skills in youths upon



graduation (Nigeria's Enterprise Institutions and Education NEIE, 2022). The institutions serve as a one-stop career centre for the professional training of adults seeking opportunities to re-skill themselves for better job placement and promotion (Edokpolor, 2016). According to APIVI (2022), the institutions award National Innovation Diploma (NID) in skill-based programmes such as network and system security, solar energy technology, computer hardware and software engineering technology, oil and gas facilities technology, mechatronics and automation technology and electrical/electrical technology, whose instructors are also regarded as lecturers.

Lecturers are educators who deliver presentations, lectures and instructional materials in higher educational settings such as colleges of education, polytechnics, universities and vocational institutions. Lecturers play a crucial role in inculcating knowledge and skills on learners, fostering critical thinking and facilitating the learning process. In IEs they include; welding and fabrication technology lecturers, mechatronics and automation lecturers, and electrical/electronics technology (EET) lecturers among others. The EET lecturers are technical instructors trained through TVET or engineering education to instill practical skills and knowledge in the area of designing, installing, testing and servicing of electrical and electronics devices. According to Taiwo and Ifeanyi (2020), these set of lecturers are proficiently skilled personnel trained to inculcate practical skills and knowledge in the installation, repairs and maintenance of electrical and electronics appliances. These lecturers work hand-in-hand with instructors to ensure that learners are availed appropriate skills and knowledge needed to gain employment in the labour market (Burger, 2022). Hence, they are required to be adequately skilled in their trade areas in order to bring about effective skill acquisition which depends on lecturers' instructional performance.

Instructional performance can be described as the ethical practice of facilitating learning through appropriate application of pedagogical processes in order to bring about positive change in behaviour. According to Giannikas (2021) instructional performance can be seen as teachers' demonstrated impact on learning as established through pedagogical practices, student's achievement test, employer or student's survey. Benitez, *et al.* (2017) further described it as those pedagogical practices observed in teachers when they express competence related to the expected learning achievements of learners. Lecturers performance in the classroom is one of the most essential issues faced in the educational system around the world (Mustafa & Pinar, 2019). Poor performing lecturers provide unexpected learning outcomes and bring negative behaviours that reduce other staff credibility (Chibunna, *et al.*, 2021). Hence, lecturers are encouraged to always be at their best when performing their pedagogical activities in order to bring about effective learning. Such pedagogical activities according to Benitez *et al.* (2017) are mastery of subject-matter, classroom management, instructional delivery, instructional evaluation and instructional planning. Instructional planning refers to the process of designing and organizing educational activities and strategies to achieve specific learning objectives. It involves careful consideration of the content to be taught, the methods and resources to be used and the assessment of students learning (Bethany & Baynum, 2019). The goal of instructional planning is to ensure that teaching and learning experiences are purposeful, effective and aligned with the desired educational outcomes. It prepares teachers for the uncertainties that occur during teaching-learning process regardless of their teaching experience (Goh *et al.*, 2017). Effective instructional planning takes into the diverse needs and abilities of learners and seeks to create engaging and meaningful learning experiences that support students' achievement. According to Sifawa *et al.* (2020) instructional planning resulted into improved teachers' performance in secondary schools in Sokoto Metropolis as it positively improved lesson and content delivery among students. Hence, lecturers are therefore encouraged to effectively plan their instruction as those that have mastery of their subject matter. Mastery of subject-matter involves the display or possession of great skills, knowledge and principles of a particular discipline or subject area. Walson and Okanu-Igwela (2019) described it as the display of expertise or authority in a particular subject or content area. Mastery of subjects-matter tantamount to effective teaching as it enhances teacher's ability to plan and present instruction. When teachers master their subject-matter, they are able to help students understand the core ideas of various topics and create useful cognitive maps (Cestina & Bertillo, 2022).

However, Baumert, *et al.* (2010) revealed that teachers that do not have grasp of their subject-matter find it difficult to inculcate skills and knowledge on their learners. Hence, lecturers are encouraged to adequately master their subject-matter in order to be effective in their instructional delivery.

Instructional delivery refers to the way in which teachers present and facilitate learning experiences in the classroom. It is the means of guiding learners in securing the amount and quality of experience that would promote optimum development of their potentials as human beings (Rachkham Graduate School RGS, 2022). Instructional delivery is an intentional activity aimed at bringing about meaningful learning and impartation of knowledge and skills into learners by the teachers (Raymond & Owodunni, 2019). Choosing appropriate learner-centred instructional delivery strategy enables effective achievement of educational goals (The Wing Institute TWI, 2021). Exceptional teachers deploy proven instructional strategies and practices that lead to increased mastery of lessons taught (Hattie, 2009). However, Conie (2014) revealed that not all delivered instruction results in adequate dissemination of knowledge, ideas and skills to the learners. Hence, in order to bring about impactful learning and skill acquisition, lecturers are encouraged to master the various instructional strategies required for effective instructional delivery to students in IEs. The quality of teachers' instructional delivery in the classroom determine the extent to which learners acquire their expected learning achievement. In IEs, the quality of instructional performance of lecturers appears to be questionable as graduates of the institutions are seen to be lacking the essential practical skills needed to take-up jobs in the labour market. The skills acquired by these graduates do not correspond with what the labour market requires for employment (International Labour Organisation ILO, 2023). This has resulted in many of them roaming the streets looking for white-collar jobs, while some are involved in criminal activities when they should be providing innovative solution to problems in the society. Hence, in order to bridge the skill gap and reduce unemployment, this study sought to investigate the level of instructional performance of electrical and electronics technology teachers in IEs in north-central Nigeria.

### **Purpose of the Study**

The aim of the study was to assess the level of instructional performance of electrical/electronics technology lecturers in IEs in North-Central Nigeria. Specifically, the study assessed:

1. The level of performance of electrical/electronics technology lecturers in instructional planning in IEs in North-Central Nigeria.
2. The level of performance of electrical/electronics technology lecturers in mastery of subject-matter in IEs in North-Central Nigeria.
3. The level of performance of electrical/electronics technology lecturers in Instructional delivery in IEs in North-Central Nigeria.

### **Research Questions**

Based on the objectives of the study, the following research questions were formulated to guide this study:

- What is the level of performance of electrical/electronics technology lecturers in instructional planning in IEs in North-Central Nigeria?
- What is the level of performance of electrical/electronics technology lecturers in mastery of subject-matter in IEs in North-Central Nigeria?
- What is the level of performance of electrical/electronics technology lecturers in instructional delivery in IEs in North-Central Nigeria?

### **Methodology**

Descriptive survey design was adopted for this study. Ukwuije and Ubow-Adutchay (2019) described descriptive survey research design as a research design that employs the use of questionnaire for collection of data from sample of a given population and making a generalization based on the data collected. The population of the study was 271 respondents consisting of 60 EET

Lecturers, 32 Management Staff and 179 Students sampled from four IEIs in North-Central Nigeria offering Electrical/electronics technology. A well-structured questionnaire consisting of 78 items was used to solicit information from EET lecturers, EET management staff and EET students in IEIs in North-Central Nigeria, for the purpose of generalization. The instrument is designed on a five-point structured scale of Very High Level (VHL), High Level (HL), Moderate Level (ML), Low Level (LL) and Very Low Level (VLL) with numerical values of 5, 4, 3, 2, and 1 respectively. The instrument was subjected to content and face validation by three experts in the Departments of Industrial and Technology Education, in Federal University of Technology Minna, Niger State. The instrument was pilot tested using 5 EET Lecturers, 3 management staff and 15 students of electrical and electronics technology in Nigeria institute of transport technology Zaria, Kaduna State. The Cronbach's Alpha statistical technique was used to calculate the reliability coefficient of the three sections of the instrument, which was found to be 0.78, 0.85 and 0.80. The overall coefficient value of the instrument was 0.81, indicating that the instrument was reliable and considered appropriate for use. The questionnaire was administered by the researcher to respondents with the help of three research assistants through hand delivery. The data collected for the study was analyzed using Statistical Package for Social Sciences (SPSS, Version 26). The data were analysed using mean and standard deviation. The data collected was analyzed using mean, standard deviation and Analysis of Variance (ANOVA). Mean and standard deviation were used to answer the research questions while Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance.

## Results

**Table 1: Mean and Standard Deviation of Respondents on the Level of Performance of Electrical/Electronics Technology Lecturers in Instructional Planning in IEIs in North-Central Nigeria.**  
N = 252

S/N	ITEMS	$\bar{X}_R$	SD	Remarks
1.	Making use of student learning data for proper planning of instruction	3.23	0.60	ML
2.	Adherence to class periods regularly	3.98	0.58	HL
3.	Using virtual aids in the classroom to boost teaching-learning process	2.99	0.81	ML
4.	Applying up-to-date materials to plan lessons for students	3.02	0.86	ML
5.	Formulating appropriate plan for managing classroom activities	3.65	0.74	HL
6.	Planning work-based instruction that covers the practical skill needs of industries	3.23	0.58	ML
7.	Constructing training manual for promoting students skill acquisition and learning	2.86	0.83	ML
8.	Formulation of lesson goals that provides achievable challenges to students	4.21	0.88	HL
9.	Planning questions that accurately reflect on the course objectives	4.04	0.69	HL
10.	Selecting materials that tackle varying needs of learners	3.01	0.66	ML
11.	Creating assignments that link industrial skill-needs with course contents	3.43	0.77	ML
12.	Formulation of learning activities that foster active involvement of students in learning	3.94	0.59	HL
13.	Formulating instruction based on student's industrial needs	2.48	0.72	LL
14.	Sequential planning of instruction using effective teaching strategies	3.84	.074	HL
15.	Preparation of learning expectations and challenges for learners	4.22	0.83	HL
16.	Preparing hands-on activities that provide practical learning experiences	2.87	0.88	ML
<b>Grand Mean/SD</b>		<b>3.44</b>	<b>0.78</b>	

**Key:** N = Number of Respondents;  $\bar{X}_R$  = Mean; SD = Standard Deviation; HL = High Level; ML = Moderate Level; LL = Low Level



The analysis in Table 1 shows the mean and standard deviation of responses of the respondents on 16 items posed to determine the level of performance of EET lecturers in instructional planning in IEs in North-Central Nigeria. A grand mean of 3.44 was obtained indicating that the respondents jointly agreed that the level of performance of EET lecturers in instructional planning is moderate. However, seven items (number; 2, 5, 8, 9, 12, 14, and 15) indicated that the level of performance of EET lecturers in instructional planning is high with the mean of 3.98, 3.65, 4.21, 4.04, 3.94, 3.84 and 4.22 respectively. Also, item number 13 revealed that the level of performance of EET lecturers in instructional planning is low with a mean of 2.48 and standard deviation of 0.72. The standard deviation of the all items ranged from 0.58 – 0.88 which means that 16 items had their standard deviation less than 1.96 indicating that the respondents were close to one another in their responses.

**Table 2: Mean and Standard Deviation of Respondents on the Level of Performance of Electrical/Electronics Technology Lecturers in Mastery of Subject-matter in IEs in North-Central Nigeria**  
N = 252

S/N	ITEMS	$\bar{X}_R$	SD	Remark
1	Sequential presentation of instruction in a logical manner	2.44	0.76	LL
2	Integrating key contents in instruction to facilitate students effective learning	2.43	0.64	LL
3	Relating instruction to experiences needed in the industry	2.47	0.74	LL
4	Sharing ideas related to the subject area during instruction	2.55	0.78	LL
5	Explaining various concepts associated with the field of electrical/electronics technology	2.16	0.69	LL
6	Demonstrating practical skills related to the course work during instruction	2.37	0.63	LL
7	Responding to inquiries made by students during instruction	2.49	0.70	LL
8	Sharing industrial-based knowledge relevant to the teaching of the course work	2.48	0.68	LL
9	Explaining complex ideas to the understanding of students	2.39	0.72	LL
10	Explaining diverse principles associated with the field of electrical/electronics technology	2.16	0.73	LL
11	Entertaining questions during instruction	3.11	0.81	ML
12	Entertaining questions after instruction	3.01	0.76	ML
13	Sharing in-depth knowledge of operating machines in the workshops	2.47	0.69	LL
14	Sharing in-depth knowledge of diagnosing electrical/electronics appliances	2.35	0.75	LL
15	Sharing in-depth knowledge of repairing electrical/electronics appliances	2.38	0.72	LL
16	Keeping up-to-date with latest developments in the field of electrical/electronics	2.47	0.67	LL
<b>Grand Mean/SD</b>		<b>2.48</b>	<b>0.72</b>	

**Key:** N = Number of respondents;  $\bar{X}_R$  = Mean; SD = Standard Deviation; ML = Moderate Level; LL = Low Level

Table 2 shows the mean and standard of responses of the respondents on 16 items posed to determine the level of performance of EET lecturers in mastery of subject-matter in IEs in North-Central Nigeria. The mean of individual items ranged from 2.37 to 3.46 resulting to a grand mean of 2.48. Based on the stated criteria for real limit of numbers, this implies that the level of performance of EET lecturers in mastery of subject-matter is low. However, two items (number; 13 and 14) indicated that the level of performance of EET lecturers in is moderate with the mean of 3.11 and 3.01, and standard deviation of 0.81 and 0.76 respectively. The average standard deviation obtained was 0.72 indicating that the responses were close to each other. No standard deviation was above the normal standard deviate of 1.96.

**Table 3: Mean and Standard Deviation of Respondents on the Level of Performance of Electrical/Electronics Technology Lecturers in Instructional Delivery in IELs in North-Central Nigeria.**  
**N = 252**

S/N	ITEMS	$\bar{X}_R$	SD	Remark
1	Sequential presentation of instruction in a logical manner	2.31	0.92	LL
2	Use of familiar examples in delivering of instruction	2.38	0.76	LL
3	Use of diverse instructional methods when delivering instruction	2.71	0.67	LL
4	Using effective instructional strategies to facilitate learning	2.45	0.81	LL
5	Use of questioning techniques to engage students in the learning process	3.01	0.88	ML
6	Using up-to-date teaching materials to deliver instruction	2.38	0.58	LL
7	Explaining the use of tools before practical engagement of the students	2.43	0.79	LL
8	Leading the demonstration of practical skills to students during instruction	2.47	0.86	LL
9	Regular checking of students' understanding during instruction	2.19	0.49	LL
10	Reinforcing lesson objectives to ensure proper reception	3.15	0.91	ML
11	Using virtual aids to promote effective learning	2.35	0.85	LL
12	Using discussion techniques to engage students in active learning	2.42	0.48	LL
13	Stressing important points to the understanding of students	3.01	0.73	ML
14	Clear communication of ideas to students during instruction	2.44	0.78	LL
15	Providing remedial opportunities for students to acquire knowledge during instruction	1.58	0.83	LL
<b>Grand Mean/SD</b>		<b>2.49</b>	<b>0.76</b>	

**Key:** N = Number of respondents;  $\bar{X}_R$  = Mean; SD = Standard Deviation; HVL = Very High Level; ML = Moderate Level; LL = Low Level

Table 3 shows the means and standard of responses of the respondents on 15 items posed to determine the level of performance of EET lecturers in instructional delivery in IELs in North-Central Nigeria. The mean of individual items ranged from 1.58 to 3.15 resulting to a grand mean of 2.49. Based on the stated criteria for real limit of numbers, this implies that the level of performance of EET lecturers in instructional delivery is low. However, three items (number 5, 10 and 13) indicated that the level of performance of EET lecturers in instructional delivery is moderate with the mean of 3.01, 3.15 and 3.01 respectively. The average standard deviation obtained was 0.76 indicating that the respondents were close to each other in their responses. No standard deviation was above 1.96, which is the normal standard deviate, also indicates the integrity of the means.

**Table 4: One-Way Analysis of Variance Summary Table Showing the Difference in the Mean Responses of EET Lecturers, Management Staff and Students on the Level of Performance in Instructional Planning in IELs in North-Central Nigeria**

	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	1584.906	2	778.453	68.204	.001	SD
Within Groups	4872.777	250	34.523			
<b>Total</b>	<b>6457.683</b>	<b>252</b>				

(P<0.05) SD = Significant Difference

Table 4 revealed that there is significant difference in the mean ratings of the respondents (EET lecturers, management staff and students) as regards the level of performance of EET lecturers in instructional planning. The F value of 68.20 was obtained with a corresponding P-value of 0.001. The null hypothesis was rejected because the P-value is below 0.05. The mean and standard deviation for EET lecturers was 3.93 and 0.31 respectively. Similarly, the mean and standard deviation for management staff was 3.584 and 0.59. In addition, the mean and standard deviation for students was 2.91 and 0.78 respectively. Hence, the null hypothesis was rejected. This mean



that, there was significant difference in the mean responses of EET lecturers, management staff and students as regards level of performance of EET lecturers in instructional planning in IEIs in North-Central Nigeria. Using Post Hoc Turkey HSD test, it was revealed that there is no statistical difference between the mean responses of Management staff and Students ( $P = .072$ ) as well as EET lecturers and Management staff ( $P = .072$ ). However, there was significant difference in the mean responses EET lecturers and students ( $P = .002$ ) as regards the level of performance of EET lecturers in instructional planning. This could be as a result of the fact that students have no or little knowledge about the way lecturers plan their instructional activities before going to the class.

**Table 5: One-way Analysis of Variance Summary Table Showing the Difference in The Mean Responses of EET Lecturers, Management Staff and Students on the Level of Performance in Mastery of Subject-Matter in IEIs in North-Central Nigeria**

	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	874.548	2	415.453	32.542	.001	SD
Within Groups	5894.612	250	38.527			
<b>Total</b>	<b>6769.1683</b>	<b>252</b>				

( $P < 0.05$ ) SD = Significant Difference

Table 5 revealed that there is significant difference in the mean responses of EET Lecturers, Management Staff and Students on the level of performance of EET Lecturers in mastery of subject-matter. The F value of 1007.54 was obtained with a corresponding P-value of .001. The null hypothesis was rejected because the P-value is below 0.05. The mean and standard deviation for EET lecturers was 3.95 and 0.34 respectively. Similarly, the mean and standard deviation for management staff was 3.74 and 0.48. In addition, the mean and standard deviation for students was 2.79 and 0.68 respectively. Hence, null hypothesis two was rejected. This mean that, there was significant difference in the mean responses of EET lecturers, management staff and students as regards level of performance of EET lecturers in instructional planning in IEIs in North-Central Nigeria. Post Hoc Turkey HSD test showed that there was no significant difference between the mean responses of Management staff and Students ( $P = .066$ ); as well as EET Lecturers and Management staff ( $P = .066$ ). However, there was significant difference in the mean responses EET lecturers and students ( $P = .008$ ) as regards the level of performance of EET lecturers in mastery of subject-matter. This could be as a result of the way EET lecturers explain concepts and principles related to the programme in the class.

**Table 6: One-Way Analysis of Variance Summary Table Showing the Difference in the Mean Responses of EET Lecturers, Management Staff and Students on the Level of Performance in Instructional Planning in IEIs in North-Central Nigeria**

	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	3435.831	2	1617.453	58.624	.002	SD
Within Groups	3992.169	250	27.597			
<b>Total</b>	<b>6457.683</b>	<b>252</b>				

( $P < 0.05$ ) SD = Significant Difference

Table 6 revealed that there is significant difference in the mean responses of EET lecturers, management staff and students as regards the level of performance of EET lecturers in instructional delivery. The F value of 58.62 was obtained with a corresponding P-value of .002. The null hypothesis was rejected because the P-value is below 0.05. The mean and standard deviation for EET lecturers was 4.21 and 0.14 respectively. Similarly, the mean and standard deviation for management staff was 3.96 and 0.19. In addition, the mean and standard deviation for students was 2.96 and 0.13 respectively. Hence, null hypothesis four was rejected. This mean that there was significant difference in the mean responses of EET lecturers, management staff and students as regards level of performance of EET lecturers in instructional delivery in IEIs in North-Central Nigeria. The Post Hoc Turkey HSD test showed that there was no statistical difference between the mean responses of Management staff and Students ( $P = 0.12$ ); as well as EET

Lecturers and Students ( $P = 0.12$ ). However, there was significant difference in between the mean responses of EET Lecturers and Students ( $P = .001$ ) as regards the level of performance of EET Lecturers in instructional delivery. This could be as a result of dissatisfaction from the angle of students as regards the way EET lecturers deliver their instructions in the class.

### **Discussion of Findings**

The major findings of the study were discussed in the order of the research questions and hypotheses formulated for study.

Findings on research question one with its corresponding hypothesis revealed that the level of performance of EET lecturers in instructional planning is moderate level. This finding is in agreement with the findings of Chibunna et al. (2021) which revealed that the quality of lesson preparation among pre-service teachers of college of education in Alvan Ikoku were at moderate extent. Similarly, the finding supports that of Alam et al. (2018) which revealed that teachers placed less emphasis on instructional planning because of the stress associated with large class size and the desire to cover the syllabus. The finding of this study on research question one shows that there is room for improvement in the instructional planning practices of EET lecturers in IEs in North-Central Nigeria. The finding highlights the need for enhancing teaching methodologies which can ultimately improve the quality of education provided to students.

Findings on research question two revealed that the level of performance of EET lecturers in mastery of subject is low. The finding is in agreement with the findings of Obiekezie and Timothy (2019) which revealed that students perceived their teacher's knowledge of subject-matter and reading comprehension to be low in Cross Rivers State. The finding also ties with the findings of Onyefulu et al. (2019) which revealed that the level of performance of student-teachers in mastery of subject-matter is low in University of Technology Jamaica. Onyefulu stated that student-teachers who do not have a grasp of their subject-matter perform poorly during their teaching practice. The findings however, does not conform to the findings of Akram (2019) which found that the factor of subject mastery was perceived by the principals, teachers themselves and students to be at the highest level among the four (attitude, subject mastery, teaching methodology and personal characteristics) factors of teachers' job performance. Therefore, the finding is a true reflection of the level of performance of EET lecturers in mastery of subject-matter.

Findings on research question three revealed that the level of performance of EET lecturers in instructional delivery is low. However, the finding does not support the findings of Punongbayan and Bauyon (2015) which revealed that the performance of lecturers in instructional delivery in one state university in the Philippines is satisfactory. In support of this, is a study carried out by Sifawa et al. (2020) which revealed that the instructional delivery strategies of secondary schools' teachers in Sokoto Metropolis were at low extent. Similarly, this finding corresponds with the findings of Urrutia-Aguilar et al. (2018) which revealed that the performance of medical lecturers in instructional delivery is low. Therefore, the finding is truly reflection of the level of performance of EET lecturers in instructional delivery. This implies that there is need for EET lecturers to improve the quality of education provided to EET students in IEs in North-Central Nigeria since improving instructional delivery techniques have reasonable impact on student learning outcomes.

### **Conclusion**

The result of this study reveals that the level of performance of EET lecturers in instructional planning was at moderate in IEs in North-Central Nigeria. In the same vein, the study also found out that the level of performance of EET Lecturers in mastery of subject-matter and instructional delivery were low. The aforementioned was confirmed by EET Lecturers, Management staff and Students of EET in IEs in North-Central Nigeria. Hence, this study therefore concludes that the level of instructional performance of EET lecturers in IEs in North-Central Nigeria is low. This study shows that there is urgent need for EET Lecturers to improve their pedagogical skills in order to bring about improvement in students skill acquisition in innovation enterprise institutions



in North-Central Nigeria, thus leading to the production of well-rounded graduates who can easily gain employment after graduation.

### Recommendations

The following recommendations were made for EET Lecturers and Management of IEIs implementation based on the findings of this study;

- i. EET lecturers should take-on professional courses in their trade areas in order to improve their instructional planning skills, thereby leading to improved quality of education provided to students in the institutions.
- ii. The management of IEIs should organize specialized training and professional development programmes for EET lecturers to enhance their subject-matter expertise.
- iii. The management of IEIs should organize instructional delivery workshops and seminars for EET lecturers to gain exposure to innovative instructional delivery strategies.

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