



Perceived Influence Of Instructional Delivery Strategies Utilized In Teaching Information And Communication Technology In Rivers State Universities

Prof. W.J. Ubulom; Odafe, Ediri & Egbunefu, Chibuike PhD

**Department of Business Education,
Rivers State University, Port Harcourt, Nigeria**

ABSTRACT

The main purpose of the study was to examine the Perceived influence of Instructional Delivery Strategies Utilized in Teaching Information and Communication Technology in Rivers State Universities. The descriptive survey design was adopted which enabled the researchers to collect and analyze data from a sample of the entire population without any manipulations. The target population consists of 94 post graduate students in two government owned Universities, Ignatius Ajuru University and Rivers State University. The sample size of the study consists of 100 percent of the total population. The instrument that was used for the study is a self-structured questionnaire developed by the researcher. The instrument is designed in Likert scale with the following options: Very high extent to low extent (Very high extent = 4, High extent = 3, Moderate extent=2, low extent=1). The instrument was validated by the researcher's supervisor and other two experts in the field of study from the faculty of Education, Rivers State University. Corrections and inputs made by the researcher's supervisor and the experts was used by the researcher before the final instrument was produced for administration to the respondents. In order to establish the reliability of the instrument, test-re-test method was used in this study with the reliability coefficient score of 0.92. The researcher employed the services of two researcher assistants that assist the researcher to administer and retrieved the questionnaire from the respondents. Data collected for this study was analyzed using Mean and standard Deviation to answer the research questions posed in chapter one, while the hypotheses were tested using t-test. It was revealed that Interactive instructional strategy helps me share ideas with other students, encourage students to analyse record and tabulate the results of their observation and that direct instructional strategies makes learning objectives/targets to be clear and specific. Direct method is also good for introducing other teaching methods like problem-solving, that students will be engaged in learning. It also makes students to be aware of content's importance and it was recommended that There should be continuous training and ICT skills upgrading for teachers and that lecturer should be trained in the use of direct instructional strategy to improve intellectual functioning of the students and ensure better performance in their studies etc.

Keywords: Perceived, Instructional, Delivery, Strategic, Utilized

INTRODUCTION

Education lies at the heart of every society. It is a key and a vital element in the broad development of every nation. Education forms the basis for the proactive and positive economic, social and political changes in the society. Education remains the key to empowerment of the people and the nations as a whole (Olawolu & Kaegon as cited in Anderson, 2013). Education is a way of making people fit to live and fit to live with; it is a desirable change in human behaviour as well as a process that change the

learner (Oduma as cited in Trucano, 2015). The process of education therefore, occurs whenever any influence produces a change or changes in the physical or mental behaviour of the recipient. Abhimanyi in Ibeh, Adamu and Owoseni (2017) noted that education contributes to the individuals 'personal development, increases his/her productivity and income at work; and facilitates participation on economic and social life.

According to Stiggins in Anderson (2013), there are several kinds of assessment which facilitates effective teacher-learning process. These assessments form part of the continuous assessment process that could be used in the schools to determine students' understanding, knowledge, performance levels and success in the educational sector. The author stressed that examinations and assignments are the two most commonly used approaches to assessment in education, particularly higher education; adding that negotiated and computer-based assessment are emerging approaches that are gaining popularity among some disciplines. Amesi (2011) however argued that strategy is all about competitive position, about differentiating yourself in the eyes of the students or customer as the case may be, about adding value through a mix of activities different from those used by competitors. Amesi also opined that strategy is a combination of the ends (goals) for which the firm or institution is striving and the policies by which it is seeking to get. Strategies are high level plans set out to achieve one or more goals under conditions of uncertainty. Strategies are important because the resources available to achieve these goals are usually limited.

Teaching and learning being two faces of the same coin presupposes that teaching leads to learning. Many methods and strategies have been variously used in the learning situation to achieve the desired objectives of classroom instruction. Mostly used in the Universities in Nigeria is the traditional mode of delivery which is the face to face mode. This mode of delivery has been variously viewed as not being able to meet the challenges of learning in a technology driven age. The student in this learning situation is passive (Anderson, 2013; Thiagarajan, 2015), as it is the job of the teacher to present the content. In this learning setting, what is promoted is shallow learning in the sense that assessment is usually based on memorization and regurgitation of facts.

The coming of ICT into instruction is supposed to mark a paradigm shift signaling the end of the teacher being perceived as the sole repository of knowledge especially with the availability of numerous amount of information on the Internet and the worldwide web. Gone should be the days of "hypodermic needle" method of teaching when teachers and academic practitioners saw themselves as knowledge oracles and sage of the stage delivering data, information and knowledge to eager learners whose minds are empty vessels that needed to be filled (Ajayi, 2008). However, a close observation of the manner in which lecturers carry out their instructional delivery in the colleges today shows that we are far from achieving effective teaching and learning using ICT.

The coming of ICT into teaching and learning have necessitated a paradigm shift from the traditional method that was teacher centered to the modern method which is learner centered (Trucano, 2015).

Effective instructional delivery embraces all human interactive skills employed by the teacher to promote/facilitate learning in the classroom situation thereby leading to improved performance on the part of the learner. It is a process in which teachers apply repertoire of instructional strategies to communicate and interact with the learners around academic content, and to support student engagement for better learning outcome.

One of the most vital contributions of ICT in the field of education is- Easy Access to Learning. With the help of ICT, students can now browse through e-books, sample examination papers, previous year papers etc. and can also have an easy access to resource persons, mentors, experts, researchers, professionals, and peers-all over the world. This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (Young in Anderson, 2013). Wider availability of best practices and best course material in education, which can be shared by means of ICT, can foster better teaching. ICT also allows the academic institutions to reach disadvantaged groups and new international educational markets. As well as learning at any time, teachers are also finding the capabilities of teaching at any time to be opportunistic and able

to be used to advantage. Mobile technologies and seamless communications technologies support 24x7 teaching and learning. Choosing how much time will be used within the 24x7 envelope and what periods of time are challenges that will face the educators of the future (Young in Anderson, 2013). Thus, ICT enabled education will ultimately lead to the democratization of education.

ICT has made a very profound and remarkable impact on the quality and quantity of teaching, learning and research in the educational institutions (Yusuf in 2008). Information and communication technology has the potentials to accelerate, enrich, and deepen skill; to motivate and engage students in learning to help relate school experiences to work practices; to help create economic viability for tomorrow's workers, contribute to radical changes in school; to strengthen teaching and provide opportunities for connection between the school and the world. Information and Communication Technologies (ICTs) have become key tools and have a revolutionary impact on how people see and live in the world. The place of ICTs in education and the world in general cannot be ignored. Modern day businesses are conducted and facilitated through the use of telephones, fax machines and computer communication networks through the internet. This phenomenon has given birth to the contemporary ecommerce, e-government, e-medicine, e-banking and e-education among others. Bandele in Nwachukwu (2005) summed up that ICT is a revolution that involves the use of computers, internet and other telecommunication technology in every aspect of human endeavour. He posited that ICT is simply about sharing and having access to data with ease. It is regarded as the super highway through which information is transmitted and shared by people all over the world.

Ozaji as cited in Ajayi, (2008) perceived ICT as the handling and processing of information (texts, images, graphs, instruction) for use, by means of electronic and communication devices such as computers, cameras, and telephone. ICT as electronic or computerized devices, assisted by human and interactive materials that can be used for a wide range of teaching and learning as well as for personal use. From these views, ICT could therefore be seen as processing and sharing of information using all kinds of electronic device, an umbrella that includes all technologies for the manipulation and communication of information. Aribisala in Ajayi (2008) notes that ICTs are increasingly playing an important role in organizations and in society's ability to produce, access, adopt and apply information. He also viewed ICTs as the tools for the post-industrial age and the foundations for a knowledge economy due to its ability to facilitate the transfer and acquisition of knowledge. The message can be communicated through the email, telex or telephones particularly the mobile ones. Ajayi (2008) posited that ICT is an indispensable part of educational administration as its application makes institutions more efficient and productive, thereby engendering a variety of tools to enhance and facilitate teachers' pedagogical activities. For instance, eLearning is becoming one of the most common means of using ICT to provide education to students both on and off campus by means of teaching online offered via web-based systems. Although ICT resources have been looked upon as tools for uplifting the standard of education in any nation, the level of compliance in implementing the ICT resources in the instructional development process leaves much to be desired in Nigerian higher education system.

Instructional strategies are decisions about organizing people, materials and ideas to provide learning (Nwachukon, 2005). According to Saskatchewan Education (2009), Instructional skills are the most specific category of teaching behaviours. They are necessary for procedural purposes and for structuring appropriate learning experiences for students. Demonstration is the most widely used instructional method for the acquisition of practical skills as it involves verbal and practical illustrations of a given procedure. Research findings by Ugwuanyi in Diem (2009) on the effects of instructional approaches on students' academic performances indicated that students taught with demonstration performed significantly better than those taught with inquiry method. Inquiry is a technique which involves students in questioning to explore an area of study. It is a process student engages in to investigate and explain problems.

Skills in the selection and utilization of appropriate instructional strategies are required by the teacher for effective teaching. There is no one best approach to instruction. Teaching effectively demands that the teacher must possess some basic ability to organize, co-ordinate and utilize personal qualities, objectives

and competency in lesson preparation, presentation and evaluation. Besides, he must be able to motivate the learners, make students active participants in learning, use appropriate strategies and facilities to enhance effectiveness in instructions. Some researchers recommended eclectic method (combination of strategies). Lecturers are also expected to implement a variety of instructional strategies in order to meet the objectives of the programme as well as to address individual student interest and needs (Saskatchewan Education in Anderson (2013). It is in this light that the training of student teachers, who are expected to drive the new ICT advanced education system, is brought over. The advancement in which ICT resources offer in higher education, can be evidenced through accessibility to quality resource materials and instructional delivery. This can only be attained when it is drastically integrated into the instructional process in the teacher education system. Productive instructional delivery enhances learners' creative and intellectual development through the use of ICT resources, for instance, in the use of multimedia images, graphics, audio, text and motion for high quality learning. In order to build on existing knowledge, ICT today offers new tools for easy content delivery in view of the above, this study became necessary to determine the Perceived influence of Instructional Delivery Strategic Utilized in Teaching Information and Communication Technology in Rivers State Universities.

Statement of the Problem

Education is a basic and fundamental human right, which promotes acquisition of knowledge, skills and development of an individual in a holistic and integrated manner. A cursory look at the tertiary institutions in Nigeria has shown that many lecturers in the system still rely much on the traditional lecture method of teaching rather than embracing the use of ICT. The stage of enlightenment in which ICT could be accessed and utilized in education is still low. Many lecturers hardly access and utilize the benefit of ICT in teacher education. However, it seems that these teacher's ineffective teaching strategies may be considered to be one of the factors that greatly influences the students' academic performance in business education programme in Rivers State. Some teaching strategies used by the Lecturers of business education programme in Rivers State are the teacher-centered teaching strategy and the one-way communication system that does not seek to bring out the best from the students so as to improve their academic performance. Despite various efforts by key educational stakeholders to improve students' performance, by injecting financial resources for improving school infrastructure and provision of subsidized Tertiary institutions to improve access to education and qualified Lecturers, the trend on students' performance in some tertiary institutions in Port Harcourt remains poor. In addition, questions have been raised as to whether Lecturers are putting enough efforts to ensure students' perform highly in academic performance in Rivers State University.

The problem of the study therefore, is: what are the Instructional delivery strategies Utilized Teaching Information and Communication Technology in Rivers State Universities.

Purpose of the Study

The main purpose of the study was to examine the Perceived influence of Instructional Delivery Strategic Utilized in Teaching Information and Communication Technology in Rivers State Universities. Specifically, the study attempted to:

1. Ascertain the extent interactive instructional strategy is utilized in teaching information and communication technology in Rivers State Universities.
2. Ascertain the extent Direct Instructional strategy is utilized in teaching information and communication technology in Rivers State Universities.

Research Questions

The following research questions guided the study.

1. To what extent is interactive instructional strategy utilized in teaching information and communication technology in Rivers State Universities?
2. To what extent is direct instructional strategy utilized in teaching information and communication technology in Rivers State Universities?

Hypotheses

The following null hypotheses were tested at 0.05 levels of significance:

- H₀₁:** There is no significant difference in the mean ratings of Business Education Post-Graduate Students on the extent which Interactive Instructional Strategy is utilized in teaching Information and Communication Technology in their Universities.
- H₀₂:** There is no significant difference in the mean ratings of Business Education Post-Graduate Students on the extent which direct instructional strategy is utilized in teaching Information and Communication Technology in their Universities.

METHODOLOGY

A research design is the structure of research. It holds all the elements in a research study. The descriptive survey design was adopted which enabled the researchers to collect and analyze data from a sample of the entire population without any manipulations. The choice of this particular design was based on the premise that data were collected from a representative sample upon which inferences and generalizations can be made on the entire population. The area covered by this study used Rivers State. The population of the study comprised all Post Graduate Students in the Department of Business Education in Rivers State Universities. The target population consists of 87 post graduate students in two government-owned Universities, Ignatius Ajuru University and Rivers State University. The sample size of the study consists of 100 percent of the total population. The instrument that was used for the study is a self-structured questionnaire developed by the researcher. The instrument is designed in Likert scale with the following options: Very high extent to low extent (Very high extent = 4, High extent = 3, Moderate extent=2, low extent=1). The instrument was validated by the researcher's supervisor and other two experts in the field of study from the faculty of education, Rivers State University. Corrections and inputs made by the researcher's supervisor and the experts was used by the researcher before the final instrument was produced for administration to the respondents. In order to establish the reliability of the instrument, test-re-test method was used in this study. The instrument was administered to twenty (20) post graduate students who were not part of the population in University of Uyo, Akwa Ibom State. The instrument was administered twice at different intervals on the same respondents. The test was administered to the appropriate group on two different intervals, the first test was given to the chosen group and after two weeks' interval, same instrument was administered to the same group, and the two sets of scores were correlated using Pearson's Product Moment Correlation tool was used with the reliability coefficient score of 0.92. This result revealed that the instrument that was employed in this study will be reliable.

A total of 94 copies of questionnaire were administered to Post Graduate Students in the two universities in Rivers State, which 87 copies were retrieved for the analysis. The researcher employed the services of two researcher assistants that assist the researcher to administer the questionnaire to the respondents. The researcher assistant was trained on how to administer and retrieve the instrument for the study. Data collected for this study was analyzed using Mean and standard Deviation to answer the research questions posed in chapter one, while the hypotheses were tested using t-test.

Mean were valued according to scores attached to each option responses. The mean was computed for the average mean response and compared to the acceptance criteria of four-point rating scale of Very High Extent to Very Low Extent. Decision for acceptance and rejection was made by the researcher based on the criterion means of 2.50. Any mean score with 2.50 and above was agreed by the researcher and any mean score below 2.50 was disagreed.

RESULTS

Presentation and Analysis of Data

Research Question 1: *To what extent do interactive instructional strategies utilized in teaching information and Communication Technology in Rivers State Universities?*

Table 1: Mean and Standard Deviation on interactive instructional strategies in teaching information and Communication Technology in Rivers State Universities (N = 87)

S/N	Item Statements	RSU = 59		Remarks	IAUOE = 28		Remarks
		\bar{x}	SD		\bar{x}	SD	
1	interactive instructional strategy helps me share ideas with other students	3.46	0.91	Very High Extent	2.96	0.98	Moderate Extent
2	interactive instructional strategy can be effective in teaching business courses	3.08	0.96	High Extent	2.79	1.11	Moderate Extent
3	Encourage students to analyse record and tabulate the results of their observation	3.03	1.04	High Extent	2.96	1.09	Moderate Extent
4	Make an assignment based on the demonstration	3.20	1.00	High Extent	3.21	0.98	High Extent
5	interactive instructional strategy allows instant access regardless of your location	2.88	1.07	Moderate Extent	3.00	1.00	High Extent
6	It is the most commonly used and accepted method of teaching	3.10	1.07	High Extent	2.39	1.26	Low Extent
Total Mean & SD =		18.75	6.05		17.31	6.42	
Grand Mean & SD =		3.12	1.00		2.88	1.07	

Source: Field Survey, (2021)

The results in table 1 above showed the grand mean scores of the respondents on the extent interactive instructional strategies are utilized in teaching Information and Communication Technology (ICT) in Rivers State Universities, Port Harcourt and scores were 3.12 and 2.88, respectively with added deviation mean of 1.00 and 1.07. These scores are obviously above the decision mean of 2.50. The low value of the standard deviation also emphasized how closely related the individual responses are from the grand mean. This indicates that interactive instructional strategies utilized influence the teaching of information and Communication Technology in Rivers State Universities.

Research Question 2: *To what extent do direct instructional strategies are utilized in teaching information and Communication Technology in Rivers State Universities?*

Table 2: Mean and Standard Deviation on direct instructional strategies utilized in teaching information and Communication Technology in Rivers State Universities (N = 87)

S/N	Item Statements	RSU = 59		Remarks	IAUOE = 28		Remarks
		\bar{x}	SD		\bar{x}	SD	
1	It makes learning objectives/targets to be clear and specific	3.37	0.90	Very High Extent	3.00	0.93	High Extent
2	It makes students to be aware of content`s importance	1.56	0.93	Very low Extent	3.43	0.94	Very High Extent
3	It is used for effective teaching of basic skills and facts	3.37	0.94	Very high Extent	3.18	1.04	High Extent
4	It is helpful in knowledge construction	3.22	0.98	High Extent	3.00	1.00	High Extent
5	It is used for effective teaching of basic skills and facts	3.31	0.89	Very high Extent	2.93	1.00	High Extent
6	Direct method is also good for introducing other teaching methods like problem-solving, that students will be engaged in learning	1.69	0.93	Very low Extent	3.11	0.94	High Extent
7	Consistent use of effective classroom organization and management methods	3.19	0.98	High Extent	3.54	0.82	Very High Extent
Total Mean & SD		=	19.71	5.57		22.19	6.67
Grand Mean & SD		=	2.81	0.80		3.17	0.95

Source: Field Survey, (2021)

The results in table 2 above showed the grand mean scores of the respondents on the extent direct instructional strategies are utilized in teaching Information and Communication Technology (ICT) in Rivers State Universities, Port Harcourt and scores were 2.81 and 3.17, respectively with added deviation mean of 0.80 and 0.95. These scores are obviously above the decision mean of 2.50. The low value of the standard deviation also emphasized how closely related the individual responses are from the grand mean. This indicates that direct instructional strategies utilized influence the teaching of information and Communication Technology in Rivers State Universities.

Testing of Null Hypotheses

Hypothesis 1: There is no significant difference in the mean ratings of Business Education Post-Graduate Students on the extent which Interactive Instructional Strategy is utilized in teaching Information and Communication Technology in their Universities.

Table 3: t–test Analysis of Difference in the mean ratings of Business Education Post-Graduate Students on the extent which Interactive Instructional Strategy is utilized in teaching Information and Communication Technology in their Universities

Respondents	N	\bar{x}	SD	Std Error	DF	P	t-cal	t-crit	Decision
RSU	59	3.12	1.00	0.056	85	0.5	1.04	1.96	Accepted
IAUOE	28	2.88	1.07						

The data in table 5 revealed that the calculated t-test value of RSU and IAUE was 87 and mean scores 3.12 (RSU) 2.98 (IAUE) respectively, while the critical t-value was 1.96 at degree of freedom of 85 at 0.05 significance level. Therefore, the null hypothesis was Accepted.

Hypothesis 2: There is no significant difference in the mean ratings of Business Education Post-Graduate Students on the extent which direct instructional strategy is utilized in teaching Information and Communication Technology in their Universities.

Table 4: t-test Difference in the mean ratings of Business Education Post-Graduate Students on the extent which direct instructional strategy is utilized in teaching Information and Communication Technology in their Universities

Respondents	N	\bar{x}	SD	Std Error	DF	P	t-cal	t-crit	Decision
RSU	59	3.05	1.02	0.051	85	0.5	0.63	1.96	Accepted
IAUOE	28	2.91	0.98						

Source: Field Survey, 2021

The data in table 2 revealed that the calculated t-test value of RSU and IAUE, while the critical t-value was 1.96 at a degree of freedom of 85 at 0.05 significant levels. Therefore, the null hypothesis was Accepted.

Summary of Major Findings

The following summary was achieved from the responses of the respondents.

From the finding, it was revealed that:

1. Interactive instructional strategy helps me share ideas with other students. Encourage students to analyse record and tabulate the results of their observation
2. Direct instructional strategies make learning objectives/targets to be clear and specific. Direct method is also good for introducing other teaching methods like problem-solving, that students will be engaged in learning. It also makes students to be aware of content's importance.

DISCUSSION OF FINDINGS

Findings from table one showed that Interactive instructional strategy helps me share ideas with other students. Encourage students to analyse record and tabulate the results of their observation. Interactive instructional strategy can be effective in teaching business courses. Interactive instructional strategy allows instant access regardless of your location. The result of the first hypotheses on 4.5 shows that there is no significant difference in the mean rating of respondents in Rivers State University and Ignatius Ajuru university of Education on the Business Education Post-Graduate Students on the extent which Interactive Instructional Strategy utilized in teaching Information and Communication Technology in their Universities. The finding is in agreement with the view of Lefebvre, Deaudelin & Loiselle in Ajayi (2008) who opined that Interactive instruction relies heavily on discussion and sharing among participants. The interactive instruction strategy allows for a range of groupings and interactive methods. These may include total class discussions, small group discussions or projects, or student pairs or triads working on assignments together. Interactive lecturing involves an increased interchange between Lecturers, students and the lecture content. The use of interactive lectures can promote active learning, heighten attention and motivation, give feedback to the Lecturer and the student, and increase satisfaction for both.

Findings from table two showed that indirect instructional strategy involves the teacher showing learners how to do something. Indirect instructional strategy has been shown to be effective with both large and small groups. The result of the first hypotheses on 4.6 shows that There is no significant difference in the mean rating of respondents in Rivers State University and Ignatius Ajuru university of Education on the

Business Education Post-Graduate Students on the extent which direct instructional strategy utilized in teaching Information and Communication Technology in their Universities.

The finding is in agreement with the view of Burden, Byrd in Trucano (2015) opined that Direct instruction is effective because it is based on behaviouristic learning principles (obtaining students' attention, reinforcing correct responses, providing corrective feedback, and practicing correct responses), increasing the academic learning time during which students are attending to the task at a high success rate. Students learn basic skills more rapidly when they receive a greater portion of their instruction directly from the Lecturer (Burden, Byrd in Trucano (2015). In line with view of Borich, (2011) who opined that direct instruction strategy is highly Lecturer-directed and is among the most commonly used.

CONCLUSIONS

From the data analysis and findings, conclusions are drawn as follows: Interactive instructional strategy helps me share ideas with other students. Encourage students to analyse record and tabulate the results of their observation. It was concluded that indirect instructional strategy involves the teacher showing learners how to do something. Indirect instructional strategy has been shown to be effective with both large and small groups. The study has revealed that all the equipment, illustrations and other relevant materials are procured in time and kept ready before the demonstration begins. Field trips take students to locations that are unique and cannot be duplicated in the classroom. It was concluded that Direct instructional strategies make learning objectives/targets to be clear and specific. Direct method is also good for introducing other teaching methods like problem-solving, that students will be engaged in learning. It also makes students to be aware of content's importance. It also revealed that the available ICTs are being utilized to a very low extent and it was generally agreed that the given factors are indeed the ones affecting or hindering utilization of the available resources in schools. While these findings may not reveal the status in all schools, most of the high schools, especially in rural areas are worse than this case. Based on these findings, it can be concluded that ICT resources are not available at the school and most tertiary institutions schools in general and where available, they are inadequate, those available are being underutilized and there are numerous factors that favoring underutilization and thus need to be addressed.

RECOMMENDATIONS

In view of this study, perceived influence of E-learning on Business Education Students' Academic Performance in Rivers State Universities, the following recommendations are made;

1. There should be continuous training and ICT skills upgrading for teachers.
2. Lecturer should be trained in the use of direct instructional strategy to improve intellectual functioning of the students and ensure better performance in their studies.
3. School administrator should hold seminar and workshop on direct instructional strategy for teachers so that they can adopt it for effective classroom instruction and students' academic achievement.
4. There should be consistent monitoring and evaluation of government policy on ICTs in education.

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