Article 3

Lesson Planning Software Applications' Competency Training Needs of Business Education Lecturers for Instructional Delivery in North-east Nigerian Universities

Suleiman HAYATU

Abstract

The main aim of the study was determining the training needs of business education lecturers on the usage of lesson planning software applications for instructional delivery. The study was carried out in the North-eastern region of Nigeria. The study adopted mixed method design. The population of the study comprises 57 business education lecturers in the region. The entire population was used for the quantitative part of the study, while 3 lecturers were sampled for the qualitative part using purposeful sampling technique. The instruments for data collection were structured questionnaire and interview for quantitative and qualitative parts of the study respectively. The questionnaire was validated by five experts while the interview schedule was validated using members' checking. The reliability (internal consistency) of the questionnaire was determined using Cronbach's alpha, a coefficient of 0.78 and 0.82 for importance and ability dimensions respectively were found. Peer debriefing method was employed in determining the reliability of qualitative data collection instruments. The researcher together with two research assistants administered the instruments to the respondents manually. In quantitative data collection, a total of 48 questionnaires were retrieved. The quantitative research question was analyzed using mean weighted discrepancy score (MWDS) while the hypothesis was analyzed using one-way analysis of variance statistics. The qualitative research question was analyzed using thematic analysis. The finding of the study among others revealed that business education lecturers need training in the usage of lesson planning software applications for instructional delivery. It was also found that a significant difference does not exist among business education lecturers who specialized in accounting, marketing and office technology management on their training needs in the use of lesson planning software applications. The study recommended that business education lecturers should be trained on the effective usage of the software applications for efficient instructional delivery.

Keywords: Training Needs, Lesson Planning, Software Applications, Instructional Delivery.

Introduction

The relevance of Information and Communication Technology (ICT) in instructional delivery cannot be overemphasized most especially in emerging nations such as Nigeria. In the last decade, ICT has influenced innovations in lecturers' instructional delivery practice (Janssen *et al*., 2019) most especially through the use of software applications. Among the ICT resources, lesson planning software applications can assist lecturers in planning and preparing their instructional delivery in time. In view of this, there is need for university lecturers particularly business education lecturers to effectively utilize these software applications in their lesson planning process

Suleiman HAYATU, Department of Vocational Education, Modibbo Adamawa University Yola, Nigeria.

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Business Education refers to education for and about business combining both theoretical and practical knowledge, to expose the recipients to the economic system of their society and equip them with necessary lifelong skills that will enable them to make intelligent judgment as employees, producers or consumers (Agbo, 2018). In other words, business education is the inculcation of relevant competencies needed by individuals to enable them not only teach business concepts, beliefs, ideas, knowledge and skills but also be able to perform effectively and efficiently as accountants, marketers and office managers in the business world (Hayatu, 2025). There are three broad areas of specialization in business education which include accounting, marketing and office technology management education as shown in Figure 1.

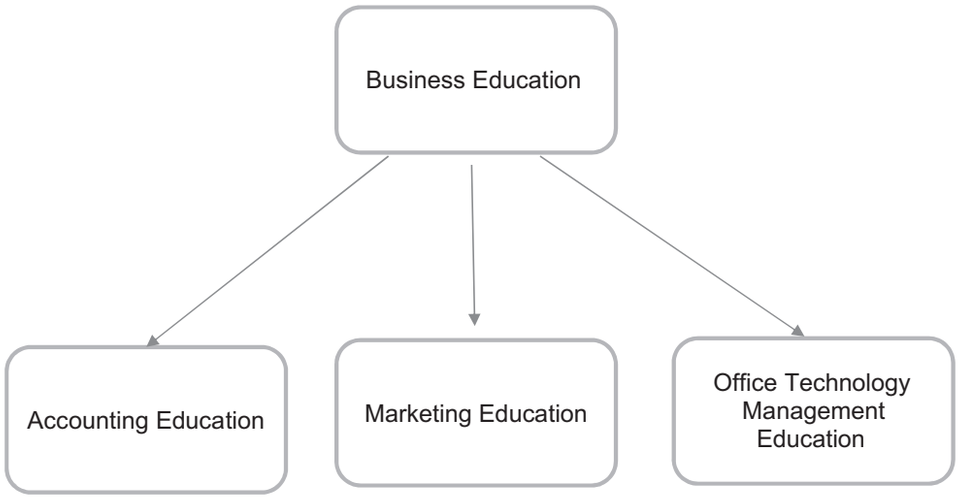


Figure 1: Broad Areas of Specialization in Business Education

It is a well-known fact that most of the business education lecturers in tertiary institutions of learning lack the competencies necessary in meeting up with the emerging technology for instructional delivery (Okanazu *et al*., 2017). Hence the need for ascertaining the required competencies of utilizing software applications for instructional delivery and research among business education lecturers becomes imperative as concurred by Agbo (2018) who stated that business education lecturers are highly instrumental to the integration of ICT driven education in Nigeria. One of the avenues where business education lecturers can utilize software applications is in the preparation of lesson plans.

Preparation of lesson plan is among the relevant practices toward improvement of the quality of instructions since effective planning of the lesson assists lecturers to improve instructional delivery. Lesson planning is a core activity of professional teachers (Konig *et al*., 2020) and also a precondition for effective instructional delivery (Strickroth, 2019). In support of this, Stella as cited by Halala and Seni (2022) argued that the quality of instruction is determined by instructors' preparation and effective use of lesson plans. Similarly, Innocent (2021) asserts that among the benefits of effective lesson planning include improving instructions and consequently improving the students' academic performance. Lesson planning did not only serve as a guide to the teachers in instructional delivery, but also assists them on how learners' abilities are to be distributed in the classroom (Basturk *et al*., 2022). Today, lesson plans were developed using software applications which simplify the complex process of planning the lesson thereby facilitating instructional delivery (Strickroth, 2019). Lesson planning software applications are packages used for the design and preparation of lesson

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plans. Example of these applications include: Planner, Lesson Plan Maker, PlanbookEdu, MyLessonPlanner, Planboard, Lesson Planner Advanced, StarPlanIt, Coach Diary, Common Curriculum, Plan4Me, Lesson Planning System (LPS), Fun 5 Plans, Instructional Planning Assistant System (IPAS), Support for Teachers Enhancing Performance in Schools (STEPS), Eduwiki (EW), Inquiry in Motion Dynamic Lesson Planning Tool (IIM), Smart Lesson Planning System (SLP), The Learning Designer (LDSE), TaskStream (TS), Phoebe Pedagogic Planner (Ph) and many more (Monett & Weishaar, 2015; Common Sense Media, 2020; Strickroth, 2019).

Utilization of computer software applications in instructional delivery has contributed significantly in simplifying and executing teaching and learning processes (Ajunwo, 2017). One of the avenues that university lecturers can utilize software application in the teaching and learning process is in lesson planning. In achieving this, there is need for training the lecturers on how best to utilize lesson planning software applications in planning their lessons, even though Ahmad *et al*. (2019) reported that university lecturers in general are having difficulties in preparing their lectures using ICTs in classroom, this can be attributed to the inadequate training among them. In order to have a successful training of the lecturers, there is need to ascertain their present competency level with regards to the usage of lesson planning software applications which this study investigated.

Literature Review

There are various studies conducted that are relevant to this study; Onajite and Aina (2017) reported that business education lecturers in colleges of education need training in the preparation of lesson plans using computer system; Ahmad *et al*. (2019) reported that university lecturers are having difficulties in preparing their lectures using ICTs in classroom. Ardic and Ciftci (2019) reported that teachers need training in the use of ICTs. Moreover, Anaza (2019) concluded that student-teachers in colleges of education need training in the use of software applications. In the same vein, Hassan and Mirza (2021) argued that 94 percent of teachers need training to support the utilization of ICTs in instructional delivery. Also, the findings of Dlamini and Mbatha (2018) indicated among others that teachers need professional development (training) in the use of ICT in teaching. Similarly, the findings of Dzikite *et al*. (2017) revealed that lecturers of textile and clothing in one university of technology in Zimbabwe need training in the use of software applications for instructions. Based the previous studies, the evidence of training needs in the use of lesson planning among business education lecturers in universities at least in North-east Nigeria is yet to be known to the best of the researchers' knowledge as at the time of reporting this study.

Research Questions

The following questions were raised to guide the study:

i. What are the competency training needs of business education lecturers in the usage of lesson planning software applications for instructional delivery?

ii. What are the views of business education lecturers on their competency training needs in the usage of lesson planning software applications for instructional delivery?

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Research Hypothesis

Ho 1: Significant difference does not exist on the competency training needs in the usage of lesson planning software applications among accounting, marketing and office technology management lecturers.

Methodology

North-eastern region of Nigeria was the area of the study. Explanatory sequential mixed method design was the design of the study. The population of the study consists of 57 business education lecturers in the study area. The total population of the study was used for the quantitative part of the study, while 3 lecturers were sampled using homogeneous purposeful sampling technique for the qualitative part. The instruments for data collection were closed-ended questionnaire and interview for quantitative and qualitative parts of the study respectively. The questionnaire was developed by the researcher with a dual-response format based on McKim (2013) redesigned Borich Needs Assessment model. The questionnaire was validated by four experts from the fields of business education, ICT and measurement and evaluation, the experts were drawn from Abubakar Tafawa Balewa University Bauchi and Modibbo Adama University Yola, while the interview schedule was validated using members' checking. The internal consistency (reliability) of the questionnaire was determined using Cronbach's alpha, coefficients of 0.78 and 0.82 were obtained for importance and ability dimensions respectively.

With the aid of two research assistants, the researcher administered the instruments to the respondents manually because of the manageable size of the sample. In a quantitative data collection exercise, a total of 48 questionnaires were retrieved. The qualitative data collet ion was conducted using a smart phone which is automatically recording the interview, the recordings were later transcribed into three transcripts for effective data analysis. The quantitative research question was analyzed using mean weighted discrepancy score (MWDS) with the aid of MWDS Calculator developed by McKim and Saucier (2011), while the hypothesis was analyzed using one-way analysis of variance statistics with the aid of SPSS software version 25. The qualitative research question was analyzed using thematic analysis.

A positive MWDS was interpreted and considered "training needed" (TN) while a zero or negative MWDS was interpreted and considered "training not needed" (TNN). This is in line with the assertion of Borich (1980) who asserts that higher MWDSs are indication of the competencies that should be targeted through conducting training programme or intervention.

Findings of the Study

The study's findings were presented based on the following quantitative and qualitative aspects of the study:

Findings of the Quantitative Study

The findings of the quantitative study were the results of research question one and the null hypothesis as presented as follows:

Research Question One: What are the competency training needs of business education lecturers in the usage of lesson planning software applications for instructional delivery?

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Table 1	MWDS of the Competency Training Needs of Business Education Lecturers in the usage of Lesson Planning Software Applications for Instructional Delivery		
S/N	**Competencies**	**MWDS**	**Decision**
1	Logging /Signing in	-2.38	TNN
2	Setting date/Creating or switching of school year	4.88	TN
3	Adding class set up and schedule	5.05	TN
4	Editing class set up and schedule	4.70	TN
5	Importing events	4.59	TN
6	Creating lessons	-0.85	TNN
7	Editing lessons	4.51	TN
8	Adding home work	6.11	TN
9	Adding notes and events	5.59	TN
10	Adjusting lesson	5.61	TN
11	Adjusting events and 'no school days'	4.90	TN
12	Sharing lessons with other teachers	6.24	TN
13	Applying standards and standards reporting	6.41	TN
14	Navigating lesson plans	5.64	TN
15	Printing lesson plans	5.87	TN
	Cumulative MWDS	**4.46**	**TN**

Source: Field Survey (2023). KEY: MWDS = Mean Weighted Discrepancy Score, TN = Training Needed, TNN = Training Not Needed

As presented in Table 1, thirteen (13) out of the fifteen (15) competency items for lesson planning software application (LP) show a positive MWDSs indicating that training is needed (TN) on those competency items while only two (2) of the competency items show either zero or negative MWDSs indicating that training is not needed (TNN) on those competency items which are LP 1 and LP 6.

The cumulative MWDS was 4.46 indicating that training is needed among business education lecturers in the usage of lesson planning software application.

Research Hypothesis One: Significant difference does not exist on the competency training needs in the usage of lesson planning software applications among accounting, marketing and office technology management lecturers.

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Table 2 One-way ANOVA on the Competency Training Needs of Business Education Lecturers in the usage of Lesson Planning Software Applications

	Sum of Squares	Df	Mean Square	F	P-value	Decision
Between Groups	0.111	2	0.056	0.036	.964	Accept
Within Groups	69.154	45	1.537			
Total	69.266	47				

Source: Field Survey (2023)

As indicated in Table 2, the result of the one-way ANOVA shows that the p-value (0.96) is greater than the alpha value (0.05), therefore, the null hypothesis one is hereby accepted, this means that significant difference does not exist on the competency training needs in the usage of lesson planning software applications among accounting, marketing and office technology management lecturers.

Findings of the Qualitative Study

In answering research question two, Participants 1, 2 and 3 were asked about their views on their training need in the usage of lesson planning software applications through the following questions:

i. Do you think you need training on the usage of lesson planning software applications?

ii. Could you briefly describe your view on why you think you need training in the usage of lesson planning software applications for instructional delivery?

In response to the interview questions, Table 3 reveals the participants' views, codes, sub-themes and the main theme.

Table 3 Coding Matrix on the Views of Business Education Lecturers on their Competency Training Needs in the usage of Lesson Planning Software Applications

Themes	Sub-Themes	Codes	Interview Transcripts
Lesson Planning Software Application	Training Need, Importance, Accuracy	I need training, Importance and accuracy in planning of lessons	**Participant 1:** Yes indeed. I need training on the use of lesson planning software applications because of their importance and accuracy in the planning of lessons which is one of the prerequisite for effective and efficient instructional delivery.

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	Training Need, Importance, Accuracy	Need for training I think the software will be useful and important to me, will make my lesson planning more accurate	**Participant 2:** Yes I need. My personal view on my need for training is that I think the software will be useful and important to me. Also, I believe that lesson planning software application will make my lesson planning more accurate.
	Training Need, Inadequate Training, Importance	I need training, I was not trained, it is highly important	**Participant 3:** Yes. My opinion is that I need training because I was not trained on how to use the software for instructional delivery practice even though it is highly important.

Source: Field Survey (2023).

Based on the views expressed by the participants in Table 3, all the participants need training on the use of lesson planning software applications for instructional delivery. The participants also indicated the reasons behind their need of training which includes; importance of the software applications, its accuracy in lesson planning, non-availability of the software applications among them and inadequate training on effective usage of the software applications for instructional delivery.

Discussion of Findings

The finding of research question one indicated that training is needed among business education lecturers in the usage of lesson planning software application in North-east Nigerian universities, the finding is in agreement with that of Onajite and Aina (2017) who found that business education lecturers in colleges of education need training in the preparation of lesson plans using computer system, the finding also concurs with that of Ahmad *et al*. (2019) who reported that university lecturers are having difficulties in preparing their lectures using ICTs in classroom, the finding also supports that of Ardic and Ciftci (2019) who reported that teachers need training in the use of ICTs. The finding is in conformity with that of Anaza (2019) who concluded that student-teachers in colleges of education need training in the use of software applications. The finding is in tandem with that of Dlamini and Mbatha (2018) who revealed that teachers need professional development (training) in the use of ICT in teaching. In the same vein, the finding is supporting the findings of Dzikite *et al*. (2017) who concluded that lecturers of textile and clothing in one university of technology in Zimbabwe need training in the use of software applications for instructions.

On the other hand, the finding of the research hypothesis shows that a significant difference does not exist on the competency training needs in the usage of lesson planning software applications among accounting, marketing and office technology management lecturers. The finding supports the finding of Saleh (2018) who reported that there is no significant relationship between the training needs of agricultural extension officers in Central Iraq and their specialization. Similarly, the finding also agrees with that of Haleem (2018)

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who reported that a significant difference does not exist between extension agents' training needs and their specialization. On the contrary, the finding disagrees with the finding of Alotaibi *et al*. (2019) who found that there is a significant relationship between extension agents' training needs and their area of specialization. This difference can be attributed to the differences in population, area of the study and the area of training needs.

Similarly, the finding of research question one (quantitative aspect of the study) was supported by the finding of the research question two (qualitative aspect of the study) which revealed that all the participants need training on the use of lesson planning software application, also revealed that importance of the software, its accuracy in lesson planning, non-availability of the software applications among them and inadequate training on effective usage of the software for instructional delivery were the reasons why business education lecturers need training in the usage of lesson planning software applications for instructional delivery in North-east Nigerian universities. The finding supported that of Bransletter *et al*. (2019) who asserted that software application is highly important. The finding is also in line with that of Walton (2019) who argues that software applications increase accuracy thereby eliminating or minimizing human errors. The finding also corroborates with that of Ezeabii and Okonkwo (2019) who found that inadequate training on the use of modern multimedia tools and their non-availability are among the lecturers' constraints in teaching business education courses in public universities in South-east Nigeria.

Recommendations

i. There is an urgent need for training and capacity building of business education lecturers on the effective use of lesson planning software applications for efficient instructional delivery.

i. Business education lecturers should ensure the effective utilization of lesson planning software applications as they are perceived to be important and accurate in preparation and planning of classroom instructions.

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