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LECTURERS' ATTITUDE TOWARDS, COMPETENCE AND UTILIZATION OF RESULT COMPILER SOFTWARE (RCS) IN NIGER STATE COLLEGE OF EDUCATION, MINNA, NIGERIA

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LECTURERS' ATTITUDE TOWARDS, COMPETENCE AND UTILIZATION OF RESULT COMPILER SOFTWARE (RCS) IN NIGER STATE COLLEGE OF EDUCATION MINNA, NIGERIA

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Abstract

This study was carried out to investigate lecturers' attitudes towards, competence, and utilization of result compiler software in Niger State College of Education Minna, Nigeria. A descriptive survey research design was adopted. One hundred and twenty lecturers form the sample for the study. A combination of proportionate stratified and simple random sampling techniques was used to select respondents for this study. The instrument used for the study was a Researchers-designed questionnaire that was divided into three sections; attitude, competence, and utilization. The questionnaire was validated by experts and Cronbach Alpha's formula was computed to ascertain the internal consistency. The reliability coefficients of the questionnaire were obtained as 0.84, 0.76, and 0.82 for the three variables (attitude, competence, and utilization). The collected data were analyzed using Mean and Standard deviation with a criterion mean of 2.5 as the basis for judgment. Findings revealed that lecturers have a positive attitude toward result compiler software (RCS), lecturers are competent in the use of result compiler software (RCS) to some extent and have a high level of utilization of result compiler software (RCS). Hence, it was recommended among others that college management should continue to motivate lecturers to sustain their attitude toward result compiler software and organize routine training in the area of result compilation.

Introduction

Tertiary Education as stipulated in the national policy on education (2013) is the education given after Post Basic Education in institutions such as Universities, Colleges of Education, Monotechnics, Polytechnics and other specialized institutions. The need for these institutions in Nigeria is rapidly increasing at geometrical rate; and this has therefore brought about the rise in students'/lecturers' ratio particularly in the colleges of education in Nigeria (Azi 2019; Channy & Ogunniran 2019; Uhunmwuangh, & Diakpomrere, 2019). The increase has consequently made computation and report of students results extremely difficult especially for lecturers who do not possess the required skills to use the computer or any form of technology (Schindler, Burkholder, Morad & Marsh, 2017). The growing demands had, however, pushed colleges of education management to come up with the result compiler software in order to reduce the difficulties and challenges faced by the use of manual computation. To fulfil this pressing demand and to allow timely preparation of results for consideration and approval, lecturers are therefore challenged to use result compiler software to prepare students to result as a component of their role of lecturing at the college.

In support of the aforementioned, Al-Hakeem and Abdulrahman (2017) and Francis (2012) was of the view that result compiler software is an important breakthrough in the overall advanced practices in education, trying to overcome some restrictions that are experienced in the conventional manual result computation. Current developments in computer and related software have saved lecturers time, energy and repetitive errors originating from the traditional manual computation of students' results to an electronic system in which student scores are uploaded electronically (Obayi, 2013; Flechier 2019). Al-Hakeem and Abdulrahman, (2017), Ukem and Ofoegbu (2012) further affirmed that problem of missing result in addition to unnecessary delays and deliberate manipulation of grades during computation will be minimised with the aid of computer result compiler software (RCS). Furthermore, result compiler software keeps student records, it enables administrative staff to process and retrieve students' academic transcripts within a few days of the request (Udeze, Umoren, Oheri, & Attah, 2017). Transcript, however, is an official copy of students' academic record, showing courses are taken and grades obtained and describing students complete records at the college (Hsu, Wang, & Chiu, 2016; Murangi, Perkins & Tang, 2019)).

It is in view of the above that AlDairi, (2017), Dehghantanha, Parizi, and Choo (2019), Murangi, Perkins, and Tang (2019), Muzenda, (2013), Taylor, Dargahi, Dehghantanha, Parizi, and Choo (2019) observed that result compiler software is rooted with data security which allowed the database to be protected from corruption and access by illegal persons. Accordingly, data security helps to ensure privacy and can be safeguarded through encryption, user verification, and backup solutions. Therefore, student result stored in computer software can be positioned in a way that only authorized person(s) can access it (Skopik, Settanni, & Fiedler, 2016). Colleges and other tertiary education institutions have since been using result compiler software to compute students result and store students' academic records for future use. College of education Minna, being one of the pioneer state-owned colleges established in 1976 is not exempted. The college is known to be an initial teacher training institution recognised by the National Commission for Colleges of Education (NCCE). As such it also at the forefront in the introduction and use of result compiler software among the state-owned tertiary institutions.

The college through the establishment of Management Information System (MIS) introduces result compiler software to minimise unnecessary delays and deliberate manipulation of grades during computation of result. The MIS uses compiler software, web-based software for uploading, computing and storing students' results. The software process students result accurately following the set operational guidelines by the programmers; uploading students' courses for students' access during registration, registration of courses by the students using students' interface.

All lecturers are accordingly registered with ICT unit using their control number. Correspondingly, all through result compilation, course lecturers are compulsorily required to download the list of registered students and enter the scores for their continuous assessment (CA) and examination for onward submission to web-based software (MIS, 2019).

Bearing in mind years through which lecturers computed student results in the college, the process had witnessed some noticeable challenges ranging from access to college portal, poor internet service, poor knowledge of the working environment and competency in the use of computer and attitude toward the use of computer and related software and above all, electricity failure. With the aforementioned challenges, there is every possibility that the enthusiasm

earlier developed for using the software may reduce and this had inspired the researchers to investigate the level of lecturers' attitude and competence in the utilization of result compiler software in College of Education, Minna.

Attitude is one variable used in this study, it is a complicated concept which has no proper meaning. Di Martino and Zan (2015) alleged that attitude relies on the different domain of intellectual crossroad. Notwithstanding, regardless of challenges noticed, numerous attempts have been made at specifying and describing attitude in different scope. Earlier, Allport's (1935) emphasised on the consequences of one's mental state on behaviours on specific circumstances. Reaffirming this, Awofala (2013) emphasized that quite a lot of definitions focuses on the kind of attitude as demonstrated by behaviour. Talton and Simpson (1986) and Awofala (2013) see attitude as the degree to which certain subject or learned predispositions respond either negatively or positively to certain objects, situations, concepts or persons.

According to Knezek and Christensen (2018) Attitudes is seen as a substantial structure of positive or negative evaluation, desirous emotion and evidence to social objects. It can be explained as stable conduct or rather manner of reacting, as a portrayal of feeling or opinion. It can additionally be referred to as a particular disposition to carry out or react in a positive or negative way towards certain circumstances and ideas (Issa, Bashorun, Mubashir, & Adewusi, 2010). Bowen, Bowen and Richman (2000) perceived attitude as a mixture of individual option regarding a specific element. Researchers such as Pavlovicova and Zahorska (2015) believed that a positive attitude leads to success. They claimed that attempt to improved attitude at elementary level provides the basis for higher studies, and likewise positively influenced a higher level.

In a multifaceted definition of attitude, procedures seem not to appear evidently (Daskalogianni & Simpson, 2000), consequently, attitude is observed to be a series of views and emotions related to a particular concept (Zan & Di Martino, 2007). Generally, Awofala (2013) noted that attitude put into consideration three key element when defining it thus: emotional response, beliefs regarding the subject, and behaviour related to the subject . In view of the above, Hart (1989) therefore argued that one's attitude is described in a complex way by emotions that individual is associated with. This consequently has a positive or negative impact on individual emotion about a specific concept, and by extension how an individual act.

Thus, Liu and Zhang (2017) Wu and Chen (2017) view attitude in relation to this study as the belief of lecturers about the computer which, positively or negatively influence their behaviour towards its use. They added that to successfully implement the use of result compiler software in the educational institutions, lecturers' attitude needed to be positively improved by encouraging them to be computer literate. With this, they can easily provide useful insight toward its adoption and integration into teaching and learning processes.

Competency, however, is a component of a positive attitude which provides a platform for skill development necessary for result computation (Francis 2012; Grover & Pea, 2018). Colchester, Hagras, Alghazzawi, and Aldabbagh (2017) and Muzenda, (2013) defined competence as the capability to achieve an acquired skill or use an inherent behaviour to operate a machine, an object, for a specific purpose. Competence is undistinguishable with ability while, ability to accomplish relies very much on the learnt skill of a competent individual. Gay, (2010) sees competency as the mastery of an appropriate body, scope and field of knowledge, coupled with high-level skill in applying that knowledge to affect specified learning outcomes. Muzenda, (2013) nevertheless, defined computer competence as the ability of a lecturer to accomplish

rudimentary computer operations, use generic software and integration of computer to instruction, based on lecturers' self- efficacy.

The usage of computer software by lecturers, therefore, solely depends on their level of competence in terms of the skill acquired. To achieve a level of competency by the lecturer in the use of computer and generic software therefore, knowledge and skills earlier acquired should be put to use for effective result compilation. In the same way, Hsu, Wang, and Chiu, (2016) commented that tertiary institution lecturers' regularity in the use of generic software is demonstrated by their attitude toward its usefulness.

Technology Acceptance is another aspect considered in this study. It is an aspect numerously reiterated across works of literature and academic studies in general. Davis (1993) in his research observed that an individual who has a strong sense of competence in dealing with computers is more likely to accept new technology. According to him, computer usage as being extrinsically inspired by gains in performance and associated rewards and attitude toward the use of the system. Technology Acceptance Model (TAM) according to Davis (1983) postulates that the use of information system is determined by the behavioural intention, but on the other hand, that behavioural intention is determined by the person's attitude toward the use of the system and also by his perception of its utility. He maintained that attitude of an individual is not the only factor that determines the use of a system but is also based on the impact which it may have on the individual performance.

Similar researches done employing result compiler software were studied and reviewed. Studies carried out by Leidner, and Jarvenpaa, (2013) Muzenda, (2013) Volery, and Lord, (2012) Hsu, Wang, and Chiu, (2016) respectively on lecturers' attitude competence and utilization of result complier software, revealed that lecturers exhibited substantial expertise in handling result compiler software. For this reason, it became very necessary to investigate lecturers' attitude, competence and level of utilization of result compiler software (RCS) in Niger State college of education, Minna, Nigeria. in order to reinforce previous findings.

Statement of the problem

Consistent delay and complexity experienced by lecturers in uploading students' examination scores and compilation of semester results by school examination officers have made the majority of result to incomplete and of course making it difficult for consideration and approval by the college academic board. The delay experienced were attributed to lecturer's attitude toward result compiler usage, their competence and perceived usefulness. Following the above, in an effort to find a remedy for the observed anomalies, this present research aimed at improving and considering variable that is not appropriate regarding lecturers' attitude, competence and utilization of result compiler software (RCS) in Niger State College of Education Minna, Nigeria.

Objectives of the Study
The objective of this study is to determine lecturers' attitude towards, competence and utilization of result compiler software (RCS) in Niger State College of Education Minna, Nigeria. In particular, the research objectives are as follows:

1. To determine lecturers whether lecturers attitude towards using result compiler software (RCS).
2. To assess lecturers' level of competency in the use of result compiler software (RCS).
3. To assess lecturers' level of utilization of result compiler software (RCS).

Research Questions

The following research questions were raised:

1. What is the attitude of lecturers towards using result compiler software (RCS)?
2. What is the level of lecturers' competency in using result compiler software (RCS)?
3. To what extent do lecturers use result compiler software (RCS)?

Methodology

The descriptive survey research design was adopted for the study. The design is considered suitable once the researcher is required to study the features of a given population by quantitatively collecting and analysing statistical data obtained from a sample that satisfactorily represents them (Creswell & Clark, 2017). A descriptive survey is carried out in situations where identified findings of a studied population are to describe (Patten & Newhart, 2017). The population of this study comprised of the entire lecturers in Niger State College of Education Minna, Nigeria. The sample for this study was made up of one hundred and twenty lecturers selected across the six schools (Sciences, Art and social sciences, Education, Languages, Business Education and Technical) in college using a combination of proportionate stratified and simple random sampling technique to select respondents for this study. The instrument used for data collection was Researchers-designed questionnaire that was divided into three sections; the attitude, competence and utilization. The questionnaire was validated by experts and Cronbach Alpha's formula was computed to ascertain the internal consistency. The reliability coefficients of the questionnaire were obtained as 0.84, 0.76 and 0.82 for the three variables (attitude, competence and utilization). Mean, and Standard deviation was used for data analysis. A criterion mean of 2.5 was the basis for judgment. Thus, in establishing lecturers' attitude, competence and utilization of result compiler software (RCS), a calculated mean score of 2.5 and above was interpreted as a perceived positive attitude, competence and utilisation toward using result compiler software (RCS) while mean score below 2.5 was regarded as there is no positive attitude, competence and utilisation toward using result compiler software (RCS).

Results

Research Question One: What is the attitude of lecturers towards using result compiler software (RCS)?

Table 1: Attitude of lecturers towards using result compiler software

S/NO	**Attitude**	Mean	S.D	Decision
1	I enjoy working with result compiler software	3.18	.91	Agree
2	I would work harder if I could use result compiler software more often	3.23	.93	Agree
3	I think that it takes a long time to finish when I use a result compiler software	315	.92	Agree
4	I feel comfortable working with a result compiler software	2.87	.87	Agree
5	I believe that as a lecturer it is very important for me to learn how to use a result compiler software	3.15	.78	Agree
6	Working with a result compiler software and computers makes me nervous	1.48	.50	Disagree
7	Using a result compiler software is very frustrating especially if the internet signals are weak	3.36	.88	Agree
8	I will do as little work with result compiler software as possible	2.14	.55	Disagree
9	I can do more from manual result compilation than from a result compiler software	3.10	.98	Agree
10	I cannot think of any way that I will use computers in my career	2.06	.59	Disagree
11	I believe using result compiler software in Schools will make the educational process easier and more enjoyable	3.24	.95	Agree
12	I think that using result compiler software will help arrive at accurate result computation	3.56	.68	Agree
13	I use a computer to manage and manipulate digital text	2.93	.91	Agree
14	I use the web to download applications, audio, graphics, pictures and video files from the Internet	2.01	.95	Disagree
15	I use the web to look up reference information for study purpose	3.24	.97	Agree
16	I use the web to send or receive email	3.11	.97	Agree
	Average Mean	**2.91**		

Decision Mean 2.5

Table 1 shows the mean score of lecturers' attitude towards using result compiler software in Niger State College of Education, Minna. Analysis of the result from the table reveals that respondent agreed with item 1, 2, 3, 4, 5, 7, 9,11, 12, 13, 15 and 16 but disagreed with item 6, 8, 10 and 14. The overall average mean from the table was observed to be of 2.91. This, therefore, indicates that lecturers have a positive attitude toward using result compiler software (RCS) in Niger state college of Education, Minna.

Research Question two: What is the level of lecturers' competency in using result compiler software (RCS)?

Table 2: Lecturers' competency level in using result compiler software

S/N	**Competence**	Mean	SD	Decision
1	I feel I am no capable to use result compiler software	2.74	.46	Agree
2	I need the training to understand how to use result compiler software	2.68	.47	Agree
3	I believe that frequent use of result compiler software will increase my ability to record, upload, compile and store and retrieve students result	1.82	.47	Disagree
4	I think it is not easy to access the wireless network to connect to the college portal	2.44	.79	Disagree
4	I believe that using compiler software is a complicated process	2.96	.84	Agree
6	I think it would be easy for me to become skilful at using result compiler software	2.01	.85	Agree
7	I think I can collaborate with other lecturers in my school to learn how to access and use the portal	2.97	.96	Agree
8	Knowing how to use computer and result compiler software is a worthwhile skill any lecturer should learn	2.53	.71	Agree
9	I think without result compiler software, lecturers and examination officers would not find it easy to make the result available to students in good time	2.98	.96	Agree
10	I think lecturers and examination officers need prompt and effective technical support to be competent in using result compiler software	2.56	.87	Agree
	Average Mean	**2.57**		

Decision Mean 2.5

Table 2 shows the mean score of lecturers' levels of competency on the utilization of result compiler software in Niger State College of Education, Minna. Analysis of the result reveals that the respondent agreed with item 1, 2, 4, 5, 6, 7 8, 9 and 10 but disagreed with item 3 and 4. The overall average mean from the table was observed to be of 2.57. This, therefore, indicates that lecturers are competent in utilizing result compiler software (RCS) to some extent in the College.

Research Question 3: To what extent do lecturers use result compiler software (RCS)?

Table 3: Lecturers extent of use result compiler software

S/N	**Utilization**	Mean	SD	Decision
1	The result compiler software is user-friendly	2.85	.38	Agree
2	I like to use result compiler software for uploading continuous assessment and examination scores	2.75	.42	Agree
3	I wish I would not have to use a result compiler software as part of my lecturing job	1.72	.51	Disagree
4	I think it might take me a while to get comfortable with using result compiler software	2.28	.89	Disagree
5	I would like to use the result compiler software as an alternative to manual result compilation	3.14	.81	Agree
6	I would like to use manual result compilation instead of the result compiler software	2.13	.91	Disagree
7	I would like to use email to ask a question regarding how and where to enter scores	3.09	.88	Agree
8	I would like to use the result compiler software for distance result upload and the compilation from home	2.72	.79	Agree
	Average mean	**2.58**		

Decision Mean 2.5

Table 3 shows the mean score of lecturers' levels of utilization of result compiler software in Niger State College of Education, Minna. Analysis of the result reveals that the respondent agreed with item 1, 2, 5, 7 and 8 but disagreed with item 3, 4 and 6 with an average mean of 2.58 to the eight items. This indicates that lecturers are utilizing result compiler software (RCS) to some extent in the College.

Discussion of findings

Table 1 shows the mean score of lecturers' attitudes towards using result compiler software in Niger State College of Education, Minna. This indicated that lecturers have a positive attitude toward using result compiler software (RCS) in Niger State College of Education, Minna. On the basis of the above results, it was concluded that positive attitude toward using result compiler software (RCS) among the lecturers in the college may be credited to the uniqueness of the software which according to the majority of the respondent, the result compiler software has considerable potential to make work less cumbersome. The finding of this research taking into account the above accordingly is in conformity with the research findings of Leidner, and Jarvenpaa, (2013) Muzenda, (2013) Volery, and Lord, (2012) Hsu, Wang, and Chiu, (2016) in their separate research's reports.

In table 2, Lecturers' levels of competency on the utilization of result compiler software was determined using descriptive statistics. The result indicated that lecturers are competent in utilizing result compiler software (RCS) to some extent in the College. This is in line with the view of Francis (2012) and Grover & Pea (2018) who sees competency as a component of positive attitude which provides a platform for skill development necessary for result computation. This study is also in line with the view of Davis (1993) who observed that

individual who has a strong sense of competence in dealing with computers is more likely to accept new technology.

In addition, the view of Colchester, Hagras, Alghazzawi, and Aldabbagh (2017) Gay, (2010) and Muzenda, (2013) is in line with the finding of this study.
In table 3 the mean score of lecturers' levels of utilization of result compiler software in Niger State College of Education, Minna was also determined using descriptive statistics. The finding indicates that lecturers are utilizing result compiler software (RCS) to some extent in the College. This finding is inconsonant with work of Bello, Ibrahim, Shahid, & Alleh, (2019) on Survey of lecturers' attitude, competence and utilization of result compiler software. According to them, the usage of computer software by lecturers solely depend on their level of competence in terms of the skill acquired and to achieve the level of competency by the lecturer in the use of computer and generic software, therefore, knowledge and skills earlier acquired should be put to use for effective result compilation. In the same way, Hsu, Wang, and Chiu, (2016) commented that tertiary institution lecturers' regularity in the use of generic software is demonstrated by their attitude toward its usefulness.

Conclusion

In line with the finding of the study, it was concluded that:

1. Lecturers in Niger State College of Education, Minna have a positive attitude toward result compiler software (RCS).
2. Lecturers are competent in the use of result compiler software (RCS) in Niger State College of Education, Minna.
3. Lecturers utilize result compiler software (RCS) to some extent in Niger State College of Education, Minna.

Recommendations

Based on these findings, it was recommended that:

1. Lecturers should be motivated by the college of education management to develop a positive attitude toward result compiler software, they should help to constantly update their knowledge about global issues especially in the area of information and communication technology, specifically in result compiler software (RCS).
2. Competency in using result compiler software (RCS) is an issue that requires constant practice and access to necessary tools, therefore, the college management should mandate school Deans to constantly organise seminars and workshop for their lecturers especially in the area of information and communication technology. This is necessary to update their knowledge of computer usage for various task.
3. The college of education management should initiate a process for equipping lecturers with laptop computers, tablets and related hardware (even on a soft loan basis) to increase access and ownership which is a precursor to technology and software utilization and expertise.

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