

## **Information and Communication Technology (ICT) Skills as Correlate of Business Education Lecturers' Instructional Effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria**

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**ABSTRACT:** *This study examined ICT Skills as correlate of business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria. Six specific purposes, research questions and null hypotheses guided the study. The design chosen for the study was correlational research design. The population of the study comprised one hundred and seventy-three (173) business educators in seven (7) colleges of education in the study area. ICT Skills Test (IST) and the Instructional Effectiveness Questionnaire (IEQ) were used to collect data for the study. The instruments were validated by three experts and tested for reliability using K-R 20 for ICT skills Test (IST) and Cronbach Alpha coefficient for Instructional Effectiveness Questionnaire (IEQ). The result for ICT Skill Test using K-R 20 was 0.97 and that of Instructional Effectiveness Questionnaire, using Cronbach Alpha coefficient was 0.91. Data collected from the respondents were analysed using the Pearson Product Moment Correlation Coefficient ( $r$ ) to answer the research questions, while the null hypotheses were tested using  $t$ -test associated with simple regression. Findings of the research questions revealed that word processing and database management skills have high positive correlation with business education lecturers' instructional effectiveness. Findings of the research hypotheses indicated the following: There is a significant relationship between word processing skills and business education lecturers' instructional effectiveness and there is a significant relationship between database management skills and business education lecturers' instructional effectiveness. The educational implication of the study is that skills are needed to efficiently use at least the elementary functions of ICT in instructional effectiveness. Therefore, it is crucial for institutions operating business education programmes to recognize the importance of ICT skills and provide ample support and resources to their lecturers in order to ensure their instructional effectiveness in the digital era. It was recommended among others that institutions of learning through its ICT unit should offer workshops and seminars to help lecturers stay updated with the latest advancements in ICT skills such as word processing and database management skills.*

**KEYWORDS:** information and communication technology, skills, business education, lecturer, instructional effectiveness

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## INTRODUCTION

Information and Communication Technology (ICT) is a set of tools enabling, supporting, and reinforcing the sharing of information. UNESCO in Ratheeswari (2018) defined ICT as a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters. They include the internet, wireless networks, cell phones and other communication mediums. ICT can be broadly defined as the means of creation, storage, management and dissemination of information by electronic means. ICT comprise of: Capturing technologies (camrecorders); Storage technologies (CD-ROMs, DVDs, Pen drives, etc); Processing technologies (application software); Communication technologies (local area networks); and Display technologies (computer monitors, LCDs).

Yusuf in Oyediran and Dick (2017) believed that ICT have qualitatively and quantitatively impacted on teaching, learning and research through teacher education. Similarly, Buladaco (2012) postulated that, ICT can empower teachers and learners, promote change and foster the development of the 21st-century skills. Furthermore, Fu (2013) opined that, ICT is considered a powerful tool for educational change and reform and has increasingly been used successfully in instruction, learning, and assessment. More so, ICT provide opportunities for student-teachers, academic and non-academic staff to communicate with one another effectively during formal and informal teaching and learning. In the opinion of Oyediran and Dick (2017), effective teaching could be facilitated through advances in computer and telecommunication technology. In addition, the ever-evolving worldwide web has become a major force to reckon with in searching for and dissemination of information (Bhatt, 2017).

The integration of ICT in instructional delivery is commendable. It makes it easier for lecturers to get the students to participate in the teaching-learning process. As Israel in Idris, Raymond, Aminu, Ajibuwa and Abutu (2017) noted, ICT play a crucial role in the development of a lifelong learning culture and has the capacity to empower learners by providing them with multiple pathways that offer choices and channels to meet their education and needs. Additionally, Blaise, Onwuagboke, Kaur, Singh and Fook (2015), emphasized the need to fully integrate ICT in instruction at the College of Education level due to the demand on graduates of the college of education system to be ICT literate in an emerging world that is ICT driven. The integration of ICT is also necessary as it will ensure effective instructional delivery. However, Onu and Ezhim (2019) expressed displeasure that the use of ICT instructional delivery is hampered by teachers' lack of skills. To be proficient in the use of ICT certain ICT Skills are needed. In the words of Yalman, Basaran and Gonen (2016), Knowledge of Information and Communication Technologies and related skills play an important role in today's educational activities.

Skills are commonly referred to as abilities to do something (Attewell, 2018). Following that line of view, Knapp in Zhang (2019) defined skill as the learned ability to bring about pre-determined results with maximum certainty; often with the minimum outlay of time or energy or both. It consist of both mental and physical proficiency to undertake and perform a job successfully with ease. Skill could be considered from three perspectives: functional, self-management and special knowledge. In terms of functionality, skills could be defined as the abilities that are inherited or developed through experience and learning. In Self-management, skills are the behaviours one developed in learning to cope and interact with his or her environment and the people and conditions by it. With regards to special knowledge, skills involve mastering a specific body of information related to a particular type of work, profession, occupation, educational, or leisure activity. Similarly, Green (2015) viewed skill as a personal quality with three key features, namely: Productive (it has productive value); Expandable (skills could be enhanced by training and development) and Social (skills are socially determined).

ICT skills, in the opinion of the European Centre for the Development of Vocational Training in UNESCO (2015) are skills needed to use efficiently, at least the elementary functions of Information and Communication Technologies, essentially word, image or data processing, Internet and e-mail. In the assertion of Praino (2022), ICT skill is the term used to describe the abilities required to effectively use the ICT components. ICT components include the hardware (physical technology devices such as computers, printers, camera and others); Software (which are operating systems and applications or programs installed in hardware devices for specific function such as spreadsheets, databases, presentations and text-based documents); communication systems and devices that facilitate connections with other ICT users and the internet (such as smartphones, telephone lines and wireless signals); and online data sharing platforms using social media. In addition, ICT skills can be seen as the ability to use ICT facilities for information creation (example word processing, camera and videos); storage (example cloud, flash drive, CD and hard drive); retrieval (example search engines); and sharing and usage (example social media).

There are multiple resources and knowledge abundant on the Internet, video clips, audio sounds, and visual presentation and so on, but will require ICT skills to access. Eremie and Agi (2020) are of the opinion that, ICT skills are of great demand and significance in effective and efficient management of educational resources in the school system. ICT skills are much needed in education by teachers and students to facilitate teaching and learning. Teachers, particularly, need ICT skills for effective teaching –learning process (Bhattacharjee and Deb, 2016). In addition, Onyebinama (2021) noted that, students acquire basic ICT skills in computer, Internet, information, and media literacies mostly from business centres or cybercafés

Furthermore, the Western Australia Department of Education and Training in Patankar and Jadhav (2014) identified the following as ICT skills: word processing, file navigation, internet, email, presentation packages, database and SIS Curriculum Manager. More so, Praino (2022:2) presented examples of ICT skills to include the ability to: switch on a computer, log in and connect to the appropriate platforms and programs; use ICT hardware to scan, print and copy documents; use a digital camera to capture photographs or video footage, edit images using computer software (like Adobe Photoshop); use popular software packages such as Microsoft Office to create, edit and save documents; use a search engine (such as Google or Bing) to find information; Browsing and posting on social media accounts (such as Facebook, Twitter or LinkedIn); use computers and the internet safely, for example, keeping personal information private, and avoiding viruses, identity theft and other online threats; working knowledge of the languages used in coding and programming, such as HTML, CSS and JavaScript and sending and receiving information using data-sharing applications and cloud storage systems, for example, Google Drive or Dropbox.

For the purpose of the study, attention was given to the following ICT skills: word processing, database management, PowerPoint presentation, internet searching, cloud storage and electronic communication. These skills cover the broad aspects of ICT which include creation of information (word processing skills); storage of Information (cloud storage skills); management of information (data based management skills), information presentation (PowerPoint presentation skills) and information sharing(Internet and electronic communication skills).

Word processing is a software application like Microsoft Word and Google Documents used to create, edit, format, and share documents. In the assertion of Techno Hella (2021), it is a program used to produce professional-looking publications and it permits format text, stylize images, arrange objects, alter page layout, create tables, spell check, and more. The basic Word processing skills, according to Techno Hella (2011:2), are add text; enter text; format text: font, style, size, and colour; adjust line spacing; insert and format WordArt; insert and format clip art or picture file; modify the text wrap of an object; draw and format shapes; scale, move, and rotate objects; insert a simple page border; spell check a document; print preview; print a document; cut, copy, and paste a selection and copy formatting from a selection. Mulwa (2015) found that with necessary skills in word processing software it is easy to use features such as Word-wrap, autocorrect and auto complete; use superior editing tools such as spelling checker, the Thesaurus etc., hence making editing easier. More so, word processing skills make it easier to store documents for future retrieval; use superior formatting features that make a document more appealing to the reader; produce multiple copies more easily and it enables copy, move (cut) and paste operations that make it easier to manipulate a document. Techno Hella (2021) found that word processing as a programme is used to produce professional-looking publications and it permits format text, stylize images, arrange objects, alter page layout, create

tables, spell check, and more. Ogbonna et al (2019) noted that word processing skills are necessary to create letters, electronic mails (emails), reports and other documents and can help an educator to create and organise attractive and readable documents. Azeta and van der Merwe (2016) found that there is a positive and significant correlation between word processing skills and students' achievements. The finding also relates to Aladwan (2021) who found that word processing skills were significant in effective teaching of the ninth grade students in writing skills. Aladwan also found that there are significant positive differences in the achievement of students (experimental group) in spelling and grammar because of the use of word processor in their teaching.

Data based management is a software system that allows access to data contained in a database. Bhojaraju and Koganurmath (2014) noted that, it is a system that provides a convenient and effective method of defining, storing and retrieving the information contained in the database. Database management skills are the abilities one can use to effectively manage and use information. Data management skills involve looking for patterns, understanding database design concepts and being able to participate in short and long-term planning about database projects. CaLRIM in Ajike (2015) noted that the database management system gives fast access to information, centralization of information, flexibility of information retrieval, and reduction of miss-filing. More so, the ability to incorporate relevant data contributes to a more practical learning experience. Also, the effective utilization of database management skills positively influences student engagement and participation. Lecturers can design interactive and dynamic learning activities based on real-time data, promoting student involvement, thereby increasing students' motivation and interest. Mariuta (2013) noted that proficiency in database management helps to protect data against unauthorized use, alteration or destroy of data. Keeping records safe increase confidence in the person keeping such records. Gurat (2018) study revealed a positive relationship between educators' data organization and student academic achievement. This finding suggest that educators should have basic skills that will help them in their information organization in order to prepare and make students better organized as well.

One area in education where ICT skills can facilitate effective instructional delivery is business education. It is a programme that is concerned with developing of vocational knowledge, skills, experiences and attitudes needed in the field of business and the teaching profession. Njoku in Ajisafe, Bolarinwa and Edeh (2015) defined business education as a programme that equips an individual with functional and suitable skills, knowledge, attitudes and values that would enable him or her operate in the environment he or she finds himself or herself. In the view of Ola (2017), business education is a course that prepares students for entry into and advancement in jobs within business. It is important because it prepares students to handle their own business affairs and to function intelligently as consumers and citizens in a business

economy. Business education emphasizes the acquisition of skills of which ICT is an integral part.

Those saddled with the responsibility of inculcating knowledge, skills, experiences and attitudes needed in the field of business and teaching career are called business educators, business teachers or business education lecturers. They are required to have qualification in the field ranging from the minimum of National Certificate in Education (NCE) to Ph.D., and must have competencies in their specialized areas. For the purpose of this work, business education lecturers is used. They are generally males and females, teaching in public and private colleges of education and universities, located either in urban or rural areas and they have a mixture of experience. In other words, they can be classified according to gender, location, institutional ownership and experience, among other variables.

Gender is a social classification of human into masculine (males) and feminine (females). In the assertion of United Nations Office for the Coordination of Humanitarian Affairs (2012), gender applies to the social attributes and opportunities associated with being male and female, the relationships between women and men and girls and boys, and the relations among women and among men. This study simply considers gender as males and females

### **Statement of the Problem**

Experience gained from long period of teaching service indicates that many teachers are yet to fully appreciate the need for the utilization of ICT to enhance effective instructional delivery, probably because of their lack of ICT skills. From personal experience of the researcher, most of them are having difficulty in adjusting to ICT use in education, particularly in teaching and learning demand of the 21<sup>st</sup> century. Many of them are yet to see the need to adopt ICT to compliment the traditional teaching approach. It is also unfortunate that this setback to ICT skills has not been given proper attention particularly among business education lecturers in colleges of education in South-South Geo-Political Zone of Nigeria. The colleges are supposed to prepare future teachers in all ramifications including inculcating in them ICT skills to help them function well in the digital age teaching. Unfortunately, students are not taught by ICT competent teachers and on graduation, they in turn cannot impart ICT skills in their students and the cycle continues. Thus, it became necessary to examine ICT skills as correlates of business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.

### **Purpose of the Study**

The main purpose of the study was to examine Information and Communication Technology Skills as correlate of business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria. Specifically, the study ascertained the relationship between:

1. Word processing skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.
2. Database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.

### **Research Questions**

The following research questions were formulated to guide the study:

1. What is the relationship between word processing skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria?
2. What is the relationship between database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria?

### **Hypotheses**

The following null hypotheses were tested at 0.05 alpha level of significance:

1. There is no significant relationship between word processing skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.
2. There is no significant relationship between database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.

### **METHODOLOGY**

The study adopted for the study was correlational research design. The population of the study comprised one hundred and seventy three (173) business educators in seven (7) colleges of education in the study area. ICT Skills Test (IST) and the Instructional Effectiveness Questionnaire (IEQ) were used to collect data for the study. The instruments were validated by three experts and tested for reliability using K-R 20 for ICT skills Test (IST) and Cronbach Alpha coefficient for Instructional Effectiveness Questionnaire (IEQ). The result for ICT Skill Test using K-R 20 was 0.97 and that of Instructional Effectiveness Questionnaire, using Cronbach Alpha coefficient was 0.91. Data collected from the respondents were analysed using the Pearson Product Moment Correlation Coefficient (r) to answer the research questions, while the null hypotheses were tested using t-test associated with simple regression

## RESULTS

The results of data analysis are presented in Tables according to the research questions and hypotheses that guided the study.

**Research Question 1:** What is the relationship between word processing skills and business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria?

Data collected with the word processing skills items of the ICT Skills Test (IST) and the Instructional Effectiveness Questionnaire (IEQ) were used to answer this research question. Summary of result is presented on Table1

**Table1: *The Index of Relationship between Word Processing Skills and Business Education Lecturers' Instructional Effectiveness in Colleges of Education***

Computed r	r. Square	Adjusted r Square	Standard Error of estimate
0.538	0.289	0.285	13.12871

Table 1 show that the calculated regression coefficient r was 0.538. This indicates a high positive relationship between word processing skills and business education lecturers' instructional effectiveness. Furthermore, the regression coefficient squared ( $r^2$ ) value is computed to be 0.289. This indicates that approximately 29% of teachers' instructional effectiveness is attributable to their word processing skills. In other words, word processing skills can influence teachers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria by 29%.

**Research Question Two:** What is the relationship between database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria?

The database management skills items of the ICT Skills Test (IST) and the Instructional Effectiveness Questionnaire (IEQ) were used to answer this research question. Summary of result is presented on Table 2

**Table2: *The Index of Relationship between Database Management Skills and Business Education Lecturers' Instructional Effectiveness in Colleges of Education***

Computed r	r. Square	Adjusted r Square	Standard Error of estimate
0.604	0.365	0.362	12.40740

Table 2 shows that the calculated regression coefficient r is 0.604. This indicates a high positive relationship between database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of



Nigeria. Furthermore, the regression coefficient squared ( $r^2$ ) value was computed to be 0.365. This indicates that approximately 37% of business education lecturers' instructional effectiveness can be attributed to their database management skills. In other words, database management skills have the ability to influence business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria by 37%.

### **Hypothesis One**

There is no significant relationship between word processing skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.

The index of relationship obtained between word processing skills and Business Education Lecturers instructional effectiveness was subjected to test of significance at 0.05 alpha levels using simple linear regression. Summary of result is presented on Table 3

**Table 3: Test of Significance of Relationship between Word Processing Skills and Business Education Lecturers' Instructional Effectiveness in Colleges of Education**

Computed r	r. Square	Adjusted r Square	Standard Error	Beta	t	Sig of t
0.538	0.289	0.285	0.064	0.538	8.342	0.000

Summary of result on Table 3 indicates that the alpha level (0.05) is greater than the significance of t (0.000). Furthermore, the calculated-t value of 8.34 is greater than the critical-t value 0.97. The researcher rejects the null hypothesis and concludes that there is relationship between word processing skills and Business education lecturers' instructional effectiveness is statistically significant. Therefore, there is a significant relationship between word processing skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria.

### **Hypothesis Two**

There is no significant relationship between database management skills and business education lecturers' instructional effectiveness in Colleges of Education in South-South Geo-Political Zone of Nigeria. The index of relationship obtained between database management skills and Business Education Lecturers instructional effectiveness was also subjected to test of significance at 0.05 alpha levels using simple linear regression. Summary of result is presented on Table4

**Table 4: Test of Significance of Relationship between Database Management Skills and Business Education Lecturers' Instructional Effectiveness in Colleges of Education**

Computed r	r. Square	Adjusted r Square	Standard Error	Beta	T	Sig of t
0.604	0.365	0.362	0.071	0.604	9.919	0.000

As shown on Table 4 the alpha level (0.05) is greater than the significance of t (0.000). Also, the calculated-t value of 9.91 is greater than the critical-t value 0.97. Based on the decision rule the researcher rejects the null hypothesis and concludes that there is a significant relationship between database management skills and business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria.

## DISCUSSION

Data analysed indicated a high positive relationship between word processing skills and business education lecturers' instructional effectiveness. The computed regression coefficient squared ( $r^2$ ) value 0.28 revealed that word processing skills has the potential to influence business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria by 28%. This finding proves the efficacy of word processing, which is concerned with the arrangement of letters or symbols so that they can communicate meaning to a reader. The skills in word processing enable the Business Educators to use automated features to create, format and edit quality documents that communicate meaningful information. In this regard, the finding agree with Mulwa (2015) that with necessary skills in word processing software it is easy to use features such as Word-wrap, autocorrect and auto complete; use superior editing tools such as spelling checker, the Thesaurus etc., hence making editing easier. More so, word processing skills make it easier to store documents for future retrieval; use superior formatting features that make a document more appealing to the reader; produce multiple copies more easily and it enables copy, move (cut) and paste operations that make it easier to manipulate a document.

Word processing skills allows a person to create professional-looking documents with consistent font styles, paragraph formatting, headers, footers, and page numbering. These features are especially crucial for creating resumes, business reports, and academic papers. It enhances manipulating text, characters, words, and sentences in such a manners as to make the final document free of errors and attractive to look at. This align with Techno Hella (2021) that word processing as a programme is used to produce professional-looking publications and it permits format text, stylize images, arrange objects, alter page layout, create tables, spell check, and more.

Skills in word processing enables one to conveniently type, revise, and proofread documents, eliminating the need for manual editing and rewriting. Features like spell check, grammar check, and auto-correct further streamline the writing process, saving valuable time and effort thereby enhance users' efficiency and productivity. The finding align with Ogbonna et al (2019) that word processing skills are necessary to create letters, electronic mails (emails), reports and other documents and can help an educator to create and organise attractive and readable documents.

Data analysed further revealed that there is a significant relationship between word processing skills and business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria. The more an educator develop his or her skills in word processing the better the quality of document that is produced to enhance instructional delivery. Thus, word processing skills showcase the professionalism of the educator in producing attractive and error free documents for students. This will communicate clear meaning to learnings and enhance their academic achievements. The finding is similar to Azeta and van der Merwe (2016) who found that there is a positive and significant correlation between word processing skills and students' achievements. The finding also relates to Aladwan (2021) who found that word processing skills were significant in effective teaching of the ninth grade students in writing skills. Aladwan also found that there are significant positive differences in the achievement of students (experimental group) in spelling and grammar because of the use of word processor in their teaching.

The calculated regression coefficient  $r$  was 0.60. This indicates a high positive relationship between database management skills and business education lecturers' instructional effectiveness in colleges of education in South-South Geo-Political Zone of Nigeria. Furthermore, the regression coefficient squared ( $r^2$ ) value was computed to be 0.37. This indicates that database management skills have the ability to influence business education lecturers' instructional effectiveness in colleges of Education in South-South Geo-Political Zone of Nigeria by 37%. The findings indicated that database skills are essential. Database management skills are essential for business education lecturers in organizing and analyzing vast amounts of information. The efficient organization of data allows lecturers to create structured and comprehensive learning materials. The ability to timely access data enables lecturers to respond effectively to students' inquiries, thereby enhancing their learning experience. Additionally, database management skills empower lecturers to incorporate real-world examples and case studies in their teaching approach.

Database management skills facilitate lecturers' ability to conduct research and stay updated on industry trends. The skills provide them access to extensive databases and allow them to remain knowledgeable and incorporate cutting-edge information into their lectures. Easy access to data can provide lecturers with up-to-date information on relevant and valuable

insights to students' learning, thus, enhancing the overall instructional quality. The finding in this regard align with CaLRIM in Ajike (2015) that the database management system gives fast access to information, centralization of information, flexibility of information retrieval, and reduction of miss-filing. More so, the ability to incorporate relevant data contributes to a more practical learning experience. Also, the effective utilization of database management skills positively influences student engagement and participation. Lecturers can design interactive and dynamic learning activities based on real-time data, promoting student involvement, thereby increasing students' motivation and interest.

Ability in database management helps to secure data from unauthorized access, modification, or destruction. Students' data can be secure by performing strong identity verification to ensure devices are not compromised; limiting the use of third-party software and browsing to unsafe websites, encrypting data on the device to protect against device compromise and theft and perform regular audits of endpoints to discover threats and security issues. The finding agrees with Mariuta (2013) that proficiency in database management helps to protect data against unauthorized use, alteration or destroy of data. Keeping records safe increase confidence in the person keeping such records.

Data analysed further revealed that the P-value 0.00 was significant. In addition, the calculated-t value of 9.91 was greater than the critical-t value 0.97. Null hypothesis two was rejected. Therefore, there is a significant relationship between database management skills and business education lecturers' instructional effectiveness in colleges of education in South-South Geopolitical Zone of Nigeria. The finding denotes that database management skills play a crucial role in the success of various industries and organizations. In the field of business education, lecturers' instructional effectiveness is determined by their ability to utilize database management skills effectively. The finding concurs with Gurat (2018) whose study revealed a positive relationship between educators' data organization and student academic achievement. This finding suggest that educators should have basic skills that will help them in their information organization in order to prepare and make students better organized as well.

The effective use of database management skills enables lecturers to personalize and tailor their teaching methods. With the ability to analyse students' performance data, lecturers can identify individual needs and design custom learning experiences. They can as well track students' progress, provide timely feedback, and intervene when necessary, fostering a supportive learning environment. Database management skills enable lecturers to address individual learning needs and improving students' outcomes. By identifying knowledge gaps through data analysis, lecturers can design targeted interventions, helping struggling students to improve. Therefore, the relationship between database management skills and the instructional effectiveness of business education lecturers is evident. By harnessing these skills, lecturers can effectively organize information, incorporate real-world examples, personalize teaching

methods, stay informed, and enhance the student learning experience. Thus, it is crucial for business education lecturers to continuously develop and refine their database management skills to maximize instructional effectiveness and foster student success.

## CONCLUSION

Information and Communication Technology (ICT) has become an integral part of almost every aspect of our lives. It has transformed the way we communicate, gather information, conduct business and deliver instructions in schools. As a result, it is imperative for business educators to possess high level of ICT skills in order to effectively deliver instruction to their students. The correlation between ICT skills and instructional effectiveness among business education lecturers is undeniable. ICT skills such as word processing, database management, PowerPoint presentation, internet searching, cloud storage and electronic communication skills have high positive correlation with instructional effectiveness. Thus, possessing these ICT skills empowers business educators to create dynamic and engaging learning environments, leading to improved students' outcomes. It is crucial for institutions operating business education programmes to recognize the importance of ICT skills and provide ample support and resources to their lecturers in order to ensure their instructional effectiveness in the digital age.

## Recommendations

The following recommendations were made based on the findings of the study:

1. Institutions of learning through its ICT unit should offer workshops and seminars to help lecturers stay updated with the latest advancements in ICT skills such as word processing, database management, PowerPoint presentation, Internet searching, cloud storage and electronic communication skills.
2. Business education lecturers should create platforms for themselves to share best practices, templates, and techniques to foster a collaborative environment where ICT skills such as word processing, database management, PowerPoint presentation, internet searching, cloud storage and electronic communication skills can be collectively improved.

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