
**PERCEIVED INFLUENCE OF EMERGING TECHNOLOGIES FOR MANAGING
UNIVERSITY EDUCATION AMONG LECTURERS DURING POST COVID-19 ERA IN
THE CROSS-RIVER STATE OF NIGERIA**

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ABSTRACT

This study examined the perceived influence for managing University education with for lecturers' professional empowerment during Post COVID-19 era in the Cross River State of Nigeria. Stratified and proportionate sampling techniques were used to select 150 respondents (5%) from a population of 4,770 lecturers in the two public universities in Cross River State. The instrument was validated and tested for reliability through Cronbach Alpha analysis. Data collected were analyzed using STATA/regression Analysis and descriptive statistics of mean and standard deviation. The results show that there was a significant influence of emerging technologies on lecturers' professional empowerment during the post-Covid-19 era. Finding also indicated that some of the lecturers used emerging technologies for lecture content development and delivery, knowledge creation, communication, assessment, research, academic advising and professional development, all of which empowered them to a low extent. Factors such as poor network and electricity issues were found to impede the effective utilization of emerging technologies by lecturers. The study concluded that although emerging technologies are technologies whose development, practical applications, or both are still largely unrealized, they are still essential tools to improve lecturers' efficiency and productivity. Therefore, it was recommended that there is a need for all lecturers to regularly update their digital skills in tandem with the emerging trends in educational technology especially in the post-Covid 19 era for maximum academic productivity.

Keywords: Influence, Managing, Emerging technologies, Lecturers, Empowerment, Post Covid-19

INTRODUCTION

Globally, University education is perceived as the most impressive component of tertiary education. This is because it is established by binding legal maxims to train people to acquire various educational recognitions. But critical observations of the post-COVID-19 across Universities in Nigeria revealed that most of the institutions are grappling with technological impositions. It is surprising to observe that most of the schools are yet to fully employ emerging technologies for academic purposes (Ukpong & Uzoigwe, 2020). This gap in welcoming emerging technologies is already orchestrating poor productivity among lecturers in public Universities in Cross River State. This is seen in terms of low research output, poor lecture content development, lack of knowledge creation, poor communication, ineffective teaching method, and lack of data storage skills, to mention but a few (Uzoigwe & Opuwari, 2020). The purpose of this study, therefore, is to explore the perceived influence of managing university education with emerging technologies for lecturers' professional empowerment during Post COVID-19 era in the Cross River State of Nigeria.

Earlier in 2019, it was discovered by a team of researchers that COVID-19 is an acronym for a disease caused by a new strain of coronavirus: 'CO' stands for corona, 'VI' for the virus, and 'D' for disease. Formerly, this kind of disease was referred to as the '2019 novel coronavirus,' or '2019-nCoV' because it is a new virus linked to the same family of viruses as severe acute respiratory syndrome (SARS) and some types of the common cold (Ukpong & Uzoigwe, 2020). Still, symptoms can include fever, cough and shortness of breath. In more severe cases, the infection can cause pneumonia or breathing difficulties. More rarely, the disease can be fatal. During and after the pandemic experience, schools globally are incorporating emerging technologies, such as Artificial Intelligence (AI), Virtual Reality (VR) and Augmented Reality (AR), among others into the classroom for lecturers' professional empowerment and maximum academic productivity. Unfortunate, the researchers have observed that most lecturers in Cross River State are yet to utilize emerging technologies in result computation, conceptual understanding, online education, meeting, knowledge sharing, research, supervision, academic advising, professional development, creativity and digital learning (Ukpong & Uzoigwe, 2020). Even though emerging technologies are technologies whose development, practical applications, or both are still largely unrealized, such that they are figuratively emerging into prominence from a background of nonexistence or obscurity (Uzoigwe, Owashi & Opuwari, 2020), they are still perceived as being capable of changing the educational status quo which is why they are integrated into school management during the post-pandemic era. More so, many teachers think that using emerging technologies better prepares students for future careers (Ukpong & Uzoigwe, 2020). The aim is also to enable more innovative and engaging teaching methods and learning experiences. Spector in Edeh, Sharma, Nwafor, Fyneyface, Sen and Edeh (2020) states that teaching and learning with emerging technologies are characterized by stable and persistent changes in what a person or a group of people know and can do. The main issue/biggest change therefore in the present era is the application of emerging technologies in the classroom. Emerging technologies provide opportunities for lecturers to improve their skills and service delivery (Onyema, 2019). It introduces flexibility to the teaching and learning process, and takes teaching and learning

beyond the physical classrooms as a medium of professional empowerment for lecturers and students alike.

For ages, the evolution of managing university education with emerging technologies (ETs) is changing all facets of educational processes ranging from; the nature of classrooms, quality of content, methodologies, mode of students' engagement and evaluation (Akbulut, 2010). This is because emerging technologies played important roles in education by fostering educational activities as seen during the past Coronavirus lockdowns. Emerging technologies facilitate online education, research, and the use of flexible methodologies by lecturers. Emerging technologies are those technologies which are "likely to have a large impact on teaching, learning, or creative inquiry on learners, or those technologies which are on the rise" (Bozalek, 2011). Emerging technologies bring about paradigm changes, and these changes are taking place at a very rapid pace in the digital world. Buttressing this fact, Chux and Ikechukwu (2018) state that learning is characterized by stable and persistent changes in what a person or a group of people know and can do. The biggest change in the present era is the application of emerging technologies. Emerging technologies provide opportunities for educators to improve their skills and job performances. It introduces flexibility to the teaching and learning process, and takes teaching and learning beyond the physical classrooms.

According to Onyema (2019) and Cliff (1988), emerging technologies have brought tremendous transformational changes to education across the globe, and many educators are now moving towards technology-based teaching and learning. The evolution of tablet computing, mobile applications, cloud computing, virtual technology, Artificial Intelligence, and many more are making teaching and learning more interesting and productive. Nurharani, Nur and Nur (2013) posited that the education system tries to inculcate technologies to enable teachers and students to gain access to knowledge. Similarly, Hoque, Razak, and Zohora (2012) stated that the current workplace practices require individuals to have the ability to use Information and Communication Technology (ICT) with efficiency and confidence. Different technology platforms and applications have since emerged and are being deployed by education authorities to help lecturers to improve the quality of education. Technological tools such as CCTV cameras, biometric and recognition technology have proven very useful in the conduct of examinations and mitigation of examination malpractices (Onyema, 2019). Lecturers now use different mobile platforms to communicate and interact with their students, and also to receive feedbacks from them on assignments and other learning tasks (Patric 2018). Video Conferencing tools such as Google Meet, ZOOM, GoToMeeting and Bluejeans were largely used by educators to facilitate remote teaching during the recent Coronavirus pandemic lockdown. Also, emerging educational technologies inspire countless conferences, workshops, white papers and think pieces every year, and it is changing the way students and educators work and interact (Onyema, Udeze & Chinecherem (2019). The precincts to learning have been lifted by emerging technologies which are now providing huge access to a wide range of educational materials. However, despite the perceived impact of ETs, there are questions about the readiness and capabilities of educators to adapt to the change and embrace the trends in education technology. Though, there is a growing literature on emerging technologies, few studies have focused precisely on their effects

on the job performance of educators in tertiary institutions in Nigeria. Thus, the present study is relevant in this direction.

Empowerment is the degree of autonomy and self-determination in people and communities. This enables them to represent their interests in a responsible and self-determined way, acting on their authority. According to Ukpong and Uzoigwe (2020), professional empowerment is about choices and the value an individual places on himself, the skills one has acquired and what contribution he brings to the table at work. Hence, it is not fallacious to say that empowered people have a firm idea about what they want, and goals in place and work towards achieving them. Similarly, lecturers' professional empowerment is one of the ways to increase the work productivity of lecturers at the University. This enhances productivity, performance, and job satisfaction (Patric 2018). Onyema (2019) found that academic staff empowered with emerging technologies were able to carry out course content development, knowledge creation, communication, and employ good teaching methods, among others. Patric (2018) opined that emerging technologies will boost the productivity of workers. He identified AI, IoT, Blockchain, Autonomous devices, Robotics and Convergence as some of the technologies that have potential significant positive effects on productivity. Hoque, Razak, and Zohora (2012) state that technological advancement improves employees' performance, as well as, less the employee working effort and task completion time.

Findings from Onyema (2019) have shown that lecturers' service delivery is deteriorating in Cross River State. It was also found that lecturers' job performance is usually affected by poor school facilities, classroom size, leadership style, motivational strategy, teacher morale and poor technology. The results of a study conducted by Nurharani, Nur and Nur (2013) on the integration of emerging technologies in teaching and learning process, show that emerging technologies brought about inspiration and modernization to education, enhanced inclusiveness, and promote the achievement of teaching and learning objectives. Similarly, Chux and Ikechukwu (2018) examined the importance of mobile phone technology on job performances of Human Resource Managers. The findings showed that majority of the respondents agreed that the use of mobile phone technology aid their job activities, and performances at work. Indeed, technology has become a key component in education to the level that it cannot be ignored by academic staff who crave maximum productivity. Hence, the adoption of educational technologies would go a long way to assist educational institutions to equip their students with the problem-solving skills needed to enhance their employability in the 21st century.

Statement of the problem

Generally, universities are established by law to render quality and sustainable services to students/staff and the public by way of teaching, research and community service. But a cursory observation by the researchers revealed the issue of poor professional empowerment of academic staff in terms of teaching, student assessment and project supervision. Poor management of the University Education with emerging technologies in the study area seems to have created poor mastery of assigned courses by lecturers, irregular assessment of students and poor supervisory skills of some academic staff. The researchers have observed with dismay that some lecturers are not committed to providing quality service delivery. They

hardly attend classes with well-prepared materials to engage their students in interactive lectures. This has resulted in students' low interest in learning. This leads to corrupt-related practices, cultism, and delayed graduation and attracts concerns from stakeholders. To salvage lecturers' poor service delivery, the government provided digital support services and other emerging technologies for teaching and learning in Cross River State public universities but the extent to which these gadgets were used to empower lecturers is not yet known, hence this study.

Purpose of the study

The main purpose of this study was to examine the perceived influence of emerging technologies in managing university education by lecturers' during post COVID-19 era in the Cross River State of Nigeria. Specifically, the study sought to find out:

1. The extent to which lecturers in UNICAL and CRSU professionally employed/used emerging technologies during the post-COVID-19 era in Cross River State.
2. The various barriers that impede the use of emerging technologies by lecturers in public universities in Cross River State during the post-COVID-19 era in Cross River State

Research questions

1. To what extent were lecturers in UNICAL and CRSU professionally use emerging technologies during the post-COVID-19 era?
2. What are the various barriers that impede the use of emerging technologies by lecturers in public Universities in Cross River State during the post-COVID-19 era?

Hypothesis

1. What is the composite prediction of lecturers' professional use of emerging technologies for managing university education during Post COVID-19 Era in the Cross River State of Nigeria.?

Methodology

The study adopted a survey research design. This design is a method of research that is used for collecting primary data based on verbal or written communication with a representative sample of the target population. Stratified and proportionate sampling techniques were used to select 150 respondents (5%) from a population of 4,770 lecturers in the two public Universities in Cross River State. A questionnaire titled: Perceived Influence of Managing University Education with Emerging Technologies for Lecturers' Professional Empowerment Survey (PIMUEETLPES) was used for data collection. The questionnaire had sections 'A' which dealt with the instruction for respondents. Section 'B' contained questionnaire items of lecturers' empowerment indices based on a four Likert type scale of Strongly Agree (SA)=4, Agree (A)=3 Disagree (D)=2 and Strongly Disagree (SD)=1. Data collected were analyzed using STATA/regression Analysis and descriptive statistics of mean and standard deviation.

Results

Regression analysis interpretation

Dependent Var.: Lecturers' empowerment indices

Table 1: Summary of the R-value and R Square value with the Std. Error

Model	R	R. Square	Adjusted R. Square	Std. Error of the Estimate
1	.599 ^a	.312	.213	.751

Table 1 provides the R and R² values. The R-value represents the simple correlation which is 0.559 (the "R" Column), which indicates a high degree of correlation. The R² value (the "R Square" column) indicates how much of the total variation in the dependent variable, lecturers' empowerment indices, can be explained by the independent variables, that is, content development, knowledge creation, communication, teaching method, data storage, result computation, concept understanding, online education, meeting, knowledge sharing, research, supervision, academic advising, professional development, accuracy, creativity, digital learning and efficiency among others. In this case, 31.2% of the dependent variable can be explained by the independent's variables.

Table 2: ANOVA result

Model		Sum of squares	df	Mean Square	F	Sig
1	Regression	33.796	19	1.779	3.155	.000 ^a
	Residual	74.408	131	.564		
	Total	108.204	150			

Table 2 shows that the significance value is 0.000 ($p = .000$), which is below 0.05. And, therefore, there is a statistical significance of using emerging technologies by the lecturers on for professional empowerment. As seen in Table 2, the first column shows the predictor variables (content development, knowledge sharing, communication, research, assessment, and academic advising among others). The first variable (constant) represents the constant, also referred to the lecturers' empowerment indices as the Y intercept, the height of the regression line when it crosses the Y axis. In other words, this is the predicted value of emerging technologies on lecturers when all other variables are on zero values. This coefficient table contains the values for the regression equation for predicting the dependent variable from the independent variable. These are also the values for 95% confidence intervals for the coefficients.

Table 3 A summary of regression weights of lecturers' empowerment indices using emerging technologies and Coefficient with P value at 95% confidence interval

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
Constant	1.243	.563		2.208		.130	2.356
Content development	.189	.123	.142	1.535	.029	-.055	.433
Knowledge creation	.108	.102	.104	1.060	.127	-.094	.311
Communication	-.084	.090	-.083	-.940	.291	-.262	.093
Teaching method	.136	.114	-.128	1.188	.349	-.090	.362
Result computation	-.108	.100	-.096	-1.077	.237	-.307	.090
Data storage	-.077	.101	-.068	-.762	.284	-.276	.122
Assessment	-.064	.116	-.059	-.546	.448	-.294	.167
Online Education	.271	.138	.224	1.964	.0586	-.002	.544
Meeting	-.026	.142	-.020	-.181	.052	-.307	.255
Knowledge sharing	-.182	.118	-.174	-1.545	.0857	-.415	.051
Research	.153	.125	.142	1.230	.125	-.093	.399
Supervision	.033	.092	.036	.354	.221	-.149	.214
Academic advising	-.159	.125	-.142	-1.272	.0724	-.406	.088
Efficiency	-.026	.133	-.021	-.196	.206	-.290	.238

Professional development	.060	.081	.074	.748	.845	-.099	.220
Accuracy	.136	.127	.122	1.065	.456	-.116	.387
Creativity	.157	.137	.128	1.142	.289	-.115	.429
Digital learning	-.082	.141	-.068	-.585	.256	-.361	.196
Decision making	.264	.134	.233	1.977	.560	.000	.529

Dependent variable: Lecturers' empowerment indices.

Table 4: Hypotheses testing comparing with the P value

Hypothesis number	Variable name	P-value	Statistically significant	Acceptance of null hypothesis
H1	Content development	.127	Not statistically significant	Accept
H2	Knowledge creation	.291	Not statistically significant	Accept
H3	Communication	.349	Not statistically significant	Accept
H4	Teaching method	.237	Not statistically significant	Accept
H5	Result computation	.284	Not statistically significant	Accept
H6	Data storage	.448	Not statistically significant	Accept
H7	Assessment	.586	Not statistically significant	Accept
H8	Online Education	.052	Not statistically significant	Accept
H9	Meeting	.857	Not statistically significant	Accept
H10	Knowledge sharing	.125	Not statistically significant	Accept
H11	Research	.221	Not statistically significant	Accept
H12	Supervision	.724	Not statistically significant	Accept
H13	Academic advising	.206	Not statistically significant	Accept
H14	Efficiency	.845	Not statistically significant	Accept

Hypothesis number	Variable name	P-value	Statistically significant	Acceptance of null hypothesis
H15	Professional development	.456	Not statistically significant	Accept
H16	Accuracy	.289	Not statistically significant	Accept
H17	Creativity	.256	Not statistically significant	Accept
H18	Digital learning	.560	Not statistically significant	Accept
H19	Decision making	.050	Statistically significant	Reject

Source: Authors' computation of field work, 2019.

From Table 4, the null H19 is rejected. This indicates that emerging technologies did not promote decision-making among the lecturers, hence the variable is not accepted and therefore did not have a major effect. The other variables were accepted. This indicates that emerging technology improved lecturers' content development, knowledge creation, communication, teaching method, data storage, result computation, assessment, online education, meeting, knowledge sharing, research, supervision, academic advising, professional development, accuracy, creativity, digital learning and efficiency have significant effects on lecturers' professional empowerment.

Factor Analysis

From the factor analysis result, the eigenvalue of each factor was found.

Factor analysis/correlation Number of obs = 152
 Method: principal-component factors Retained factors = 2
 Rotation: (unrotated) Number of params = 19

Table 5: Factor analysis result of lecturers' professional empowerment indices with Eigenvalue

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	4.87648	3.79033	0.4876	0.4876
Factor 2	1.08615	0.20614	0.1086	0.5963
Factor 3	0.88001	0.19493	0.0880	0.6843
Factor 4	0.68509	0.13533	0.0685	0.7528
Factor 5	0.54975	0.02135	0.0550	0.8077
Factor 6	0.52840	0.11926	0.0528	0.8606

Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 7	0.40914	0.05046	0.0409	0.9015
Factor 8	0.35868	0.02330	0.0335	0.9374
Factor 9	0.33539	0.04449	0.0291	0.9709
Factor 10	0.14235			1.0000

From Table 5 above, there were 10 factors found with their eigenvalue value. The initial 2 factors (Factor-1, and Factor-2) were recognized utilizing Eigen value more than one (Cliff, 1988). These two factors clarified 0.5963 or about 60% of the total variance. From the factor result with the Eigenvalue table, factor loading has been found.

Factor loadings (pattern matrix) and unique variances

Table 6: Factor loading value on the barriers to

Variable	Factor 1	Factor 2	Uniqueness
Poor digitals	0.6249	0.2379	0.5529
School Policies	0.5994	0.5488	0.3396
Digital divide	0.6667	0.4975	0.3080
Poor electricity	0.7509	-0.2572	0.3700
Unavailability	0.7887	-0.1436	0.3574
Network issues	0.7503	-0.2117	0.3923
Inadequate personnel	0.7526	-0.3945	0.2779
Inadequate devices	0.6358	-0.1292	0.5790
Lack of funding	0.7002	-0.2682	0.4377
Resistance to change	0.6873	0.3242	0.4225

As seen in Table 6 above, factors were strongly associated with some particular factors. Innately, it shows the degree to which the factors loaded on the factors. The communality measurement is shown in Table 7.

Table 7: Measuring Commuality from Uniqueness Value

Variables	U = Uniqueness	C = Commuality $\sum (\text{loading})^2$ or (1-uniqueness) %
Poor digitals skills	0.5529	0.4471=45%
School Policies	0.3396	0.6604=66%
Digital divide	0.3080	0.692=69%
Poor electricity	0.3700	0.63=63%
Unavailability/accessibility issues	0.3574	0.6426=64%
Network issues	0.3923	0.6077=61%
Inadequate facilities	0.2779	0.7221=72%
Inadequate training	0.5790	0.421=42%
Lack of funding	0.4377	0.5623=56%
Resistance to change	0.4225	0.5775=58%

The main reasons for choosing these factors are those factor loadings 0.5 and above are extremely noted. An analysis of the factor loading identifies the factors significantly the most barriers to educators' use of technology. From the analysis, the study has confirmed that the eight factors are statistically significant (eight communalities' values are < 0.05), and explain the barriers to educators' technology usage. From this analysis, it can be inferred that poor digital skills and inadequate training do not have any significant relationship to the barriers to technology usage by educators. However, the other eight factors as shown in table 9 significantly hinder the use of technology by educators in tertiary institutions. This means that provision of enabling facilities such as constant electricity, good internet connection; funding and regular training would go a long way to facilitate the use of emerging technologies by educators, which will also result in lecturers' empowerment.

Table 8 Independent t-test analysis on the extent to which lecturers were empowered via emerging technologies by Cross River State Public Universities

S/N	Schools	No of cases	X	SD	Df	t-cal.	t-crit.	Remarks	Significance
1	UNICAL	100	2.22	1.19	148	0.25	1.96	Accept HO	Not Significant
	CRSU	50	2.18	1.09					
2	UNICAL	100	1.74	0.91	148	8.49	1.96	Reject HO	Significant
	CRSU	50	2.60	0.85					
3	UNICAL	100	1.71	0.84	148	1.30	1.96	Accept HO	Not significant
	CRSU	50	1.84	0.93					
4	UNICAL	100	1.82	0.89	148	1.24	1.96	Accept HO	Not significant
	CRSU	50	1.70	0.78					
5	UNICAL	100	1.89	0.97	148	0.44	1.96	Accept HO	Not significant
	CRSU	50	1.84	0.85					
6	UNICAL	100	1.66	0.97	148	0.18	1.96	Accept HO	Not Significant
	CRSU	50	1.64	0.96					
7	UNICAL	100	1.65	0.79	148	2.67	1.96	Accept HO	Not Significant
	CRSU	50	1.92	0.97					
8	UNICAL	100	2.16	1.03	148	1.36	1.96	Accept HO	Not Significant
	CRSU	50	2.01	0.91					

S/N	Schools	No of cases	X	SD	Df	t-cal.	t-crit.	Remarks	Significance
9	UNICAL	100	1.86	0.92	148	2.76	1.96	Accept HO	Not Significant
	CRSU	50	1.58	0.77					
10	UNICAL	100	1.45	0.72	148	0.00	1.96	Accept HO	Not Significant
	CRSU	50	1.45	0.71					
11	UNICAL	100	1.84	1.19	148	8.49	1.96	Accept HO	Significant
	CRSU	50	1.66	1.09					
12	UNICAL	100	1.64	0.91	148	1.30	1.96	Accept HO	Not Significant
	CRSU	50	1.65	0.85					
13	UNICAL	100	1.92	0.84	148	1.24	1.96	Accept HO	Not Significant
	CRSU	50	1.84	0.93					
14	UNICAL	100	1.66	0.89	148	0.44	1.96	Accept HO	Not Significant
	CRSU	50	1.64	0.78					
15	UNICAL	100	1.65	1.19	148	0.18	1.96	Accept HO	Not Significant
	CRSU	50	1.92	1.09					
16	UNICAL	100	2.22	0.91	148	2.67	1.96	Accept HO	Not Significant
	CRSU	50	2.18	0.85					
17	UNICAL	100	1.74	0.84	148	1.36	1.96	Accept HO	Not Significant
	CRSU	50	2.60	0.93					

S/N	Schools	No of cases	X	SD	Df	t-cal.	t-crit.	Remarks	Significance
18	UNICAL	100	1.71	0.89	148	2.76	1.96	Accept HO	Not Significant
	CRSU	50	1.11	0.78					
19	UNICAL	100	2.00	0.11	148	0.00	1.96	Accept HO	Not Significant
	CRSU	50	1.21	0.34					
	t-test value					1.87	1.960	Accept HO	Not Significant

Source: Authors' computation of field work, 2021

From the results in Table 8, the independent t-test value of 1.87 was less than the t-critical value of 1.960; therefore, HO1 is not rejected. This means that there is no significant difference in the mean responses of lecturers in UNICAL and CRSU on the extent to which they were professionally empowered with emerging technologies during the post-COVID-19 era in Cross River State.

DISCUSSION OF FINDINGS

The result of the study shows that there was a significant improvement in the job performances of educators due to their usage of various emerging technologies. The majority of the participants agreed that the use of various technological tools, devices and platforms aid their efficiencies and productivity at work. The findings indicate that most of the participants lecturers were using emerging technologies for various purposes, including; content development and delivery, Knowledge Creation, communication, data management result computation, assessment, online education, meeting, knowledge sharing, research, supervision, academic advising, teaching mode and professional development. The result is consistent with the finding of a study by Bozalek (2011) which shows that there is an increasing quest for use of technology to facilitate effectiveness in education. It is also consistent with the assertion by Hoque, Razak, and Zohora (2012) that technology significantly impacts employees' performance, and reduces their workload and error rate. Some of the emerging technologies that were found to be commonly used by the participants include, videoconferencing tools, internet technology, Cloud, biometrics, 3-D printing, virtual reality, mobile and recognition technologies, expert systems, digital computers and printers' projectors, plagiarism software, simulation, mobile applications, and other software and hardware. The results also show that the use of emerging technologies by educators is hindered by poor infrastructures such as; poor electricity, network issues, unavailability and accessibility issues, poor funding and resistance. This is in line with an earlier assertion by Akbulut (2010) that the integration of emerging technologies in the teaching-learning process is often constrained by several challenges including,

epileptic power supply, insufficient skills, and poor internet connectivity. From the study, it can be inferred that emerging technologies improve the professional empowerment of lecturers and enhance their experiences, skills and competencies, all of which are relevant to improving their output or performances. Therefore, there is a need for education authorities to address the various issues that hinder the integration of emerging technologies in education to enable lecturers and students to maximize the benefits offered by educational technologies.

CONCLUSION

The study establishes that managing University education with emerging technologies did have a positive significant effect on the professional empowerment of lecturers. This means that if more lecturers have access to relevant technologies, the quality of their output would increase. This would also have corresponding effects on their students' performances. Consequently, there is a need for educational institutions to provide the enabling environments and supportive infrastructures that aid the smooth adoption of emerging technologies. Lecturers have to also update their digital skills in line with the emerging realities in education which requires technological knowledge and skills to meet the needs of the digital era.

RECOMMENDATIONS

Based on the outcome of the study, the researcher recommends the following:

1. Educational institutions should formulate flexible policies that would encourage the integration of emerging technologies in the teaching and learning process.
2. There should be periodic training and retraining of academic staff to update their knowledge of learning technologies. Similarly, educational institutions should establish a department of Learning Technologies to enhance innovations and research on education technology
3. Educational institutions should ensure the provision of relevant infrastructures to facilitate the adoption and integration of emerging educational technologies.

REFERENCES

- Akbulut, Y. (2010). A structural model proposal for Turkish faculties of education regarding ICT integration indicators. *Contemporary Educational Technology, 1*(4), 322-334.
- Bozalek, V. (2011). An investigation into the use of emerging technologies to transform teaching and learning across differently positioned higher education institutions in South Africa. In G. Williams, P. Statham, N. Brown, & B. Cleland (Ed.), *Changing Demands, Changing Directions Proceedings ascilite 2011*, pp. 156- 161).
- Chux, G. I. & Ikechukwu, C. O. (2018). Achieving quality education by understanding teacher job satisfaction determinants. *Journal of Social Science, 7* (25), 1-13.
- Cliff, N. (1988). The eigenvalues greater-than-one rule and the reliability of components. *Psychological Bulletin, 103*(2), 276–279 <https://doi.org/10.1037/0033-2909.103.2.276>
- Hoque, K. E., Razak, A. Z. & Zohora, M. F. (2012). ICT Utilization among school teachers and principals in Malaysia. *International Journal of Academic Research in Progressive Education and*

Development, 1(4), 17-34.

- Nurharani, S., Nur, N. S. & Nur, S. M. K. (2013). The impact of organizational climate on teachers' job performance. *Educational Research Journal*, 2(1), 71-82.
- Onyema, E. M. (2019). Integration of emerging technologies in teaching and learning process in Nigeria : the challenges. *Central Asian Journal of Mathematical Theory and Computer Sciences*, 1(1), 35-39.
- Onyema, E. M. (2019). Opportunities and challenges of the use of mobile phone technology in teaching and learning in Nigeria – A review. *International Journal of Research in Engineering and Innovation*, 3 (6), 352-358. <http://doi.org/10.36037/IJREI.2019.36.01>
- Onyema, E. M., Ani, U. E., Nnaji, A. D., Abdullahi, I., Alsayed, A. O. & Noorulhasan, N. Q (2019). the role of technology in mitigation of examination malpractices in West Africa. *International Journal of Innovative Research in Computer and Communication Engineering*, 7(10), 3990-4002.
- Onyema, E. M., Udeze, O. A. & Chinecherem, D. E. (2019). Potentials of mobile technologies in enhancing the effectiveness of inquiry-based learning. *International Journal of Education (IJE)*, 2(1), 1–25. <https://doi.org/10.5121/IJE.2019.1421>.
- Patrick, G. Y. (2018). *Emerging technologies in higher education: A case study for putting learning first*. Retrieved from Online via www.education.cu-portland.edu. Accessed October, 2021.
- ProTrainedu.org, (2019) *Emerging technologies for teachers*. Retrieved from Online via www.ProTrainedu.org, Accessed 20 October, 2021.
- Spector, J. M. (2012). *Foundations of educational technology: integrative approaches and interdisciplinary perspectives*. Routledge, New York.
- Teachthought (2016). *10 Specific examples of emerging educational technologies*. Retrieved from Online via www.teachthought.com Accessed 10 October 2021.
- Ukpong, N. N. & Uzoigwe, M. C. (2020). Threat of COVID-19 and improved mechanisms for long-term institutional capacity. In A. D. Usoro, A. E. Udofia & G. A. Akpan. (2020). *COVID-19 pandemic: The pendulum for reconstruction of instructional system in Nigeria*. Uyo. Benchmark Educational Services.
- Uzoigwe, M. C., Owashi, A. & Opuwari, O. S. (2020). Educational application platforms and higher education students' learning during periods of school closure. In E. E. Usoro, A. D. Usoro & C. E. Ezekiel (2020). *COVID-19: The changing landscape of higher education in Nigeria*. Uyo. Benchmark Educational Services.