AFRICAN JOURNAL OF

EDUCATIONAL MANAGEMENT

**A JOURNAL OF THE DEPARTMENT OF
EDUCATIONAL MANAGEMENT,
UNIVERSITY OF IBADAN**

ADULT EDUCATION AS A PREDICTOR OF DIGITAL SOCIETY GOAL ACHIEVEMENT IN OYO METROPOLIS

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Abstract

This study examined the adult education as a predictor of digital society goal achievement in Oyo metropolis. Descriptive survey research design was adopted for the study. The population comprised of the two colleges of education in Oyo metropolis - Emmanuel Alayande College of Education and Federal College of Education (Special), Oyo. A total of 2,071 of 300 level students in the two colleges of education served as the total respondents. The study used purposive sampling technique to select 120 students each from the two colleges making a total of 240 sampled respondents. Data for the study were collected using the researchers' self-designed questionnaire titled 'Adult Education and Digital Society Questionnaire'. Analysis was done using simple percentages, Pearson's Moment Correlation Coefficient and regression. All the hypotheses were tested at a 0.05 level of significance. The results from the analysis revealed that literacy (p - value of 0.003 and r value of -0.194) and further education (p - value of 0.025 and r value of -0.145) had weak negative significant influence on the goal achievement of digital society but no significant correlation was established between professional education (p - value of 0.124 and r value of -0.099) and achievement of goal of digital society. Also, there was no joint influence of literacy, further and professional education and goal achievement of digital society (F $_{(4,235)}$ =3.183, p < 0.05). The result revealed that literacy education was relatively significant while further education and professional education were not relatively significant to the achievement of goals of digital society. It is therefore concluded that only two aspects of adult education (literacy and further education) play crucial role in the growth, development, promotion and goal attainment of digital society. Based on the findings and conclusion, it was

recommended that government and other stakeholder should encourage citizens of the Oyo metropolis to acquire functional literacy skills needed for the achievement of goal of digital society.

Keywords: Adult education, Literacy education, Further education, Professional education, Digital society.

Introduction

Presently, man is seriously being challenged by constant change in technology, rapid increase in new knowledge, economic challenges in the dynamic world of work and unhealthy fears and misunderstanding of tomorrow. Many adults, irrespective of their previous levels of education and age, engage in different forms of adult education in order to improve their income, live as useful members of the society and also contribute meaningfully to politics, social, economic and cultural life activities. This means that the dynamism of the society is as a result of the tremendous changes witnessed by the society and Nigeria as a nation is not exempted. The different forms of society such as hunting society (Society 1.0), agricultural society (Society 2.0), industrial society (Society 3.0), and the information society (Society 4.0) are an indication that our societies had undergone series of transformations.

According to Meiping (2019), humanity started as a hunting society (society 1.0), then the agricultural society (society 2.0), after that is the industrial society (society 3.0) and the information society (society 4.0). The fifth form of society in the human history in chronological order of hunting, farming, industry, and information is digital society which was first raised in 2016 in Japan as a technology-based and human-centered society. Digital society is explained by the government of Japan as the super smart society that creates a society where people can resolve various social challenges through the incorporation of innovations such as artificial intelligence, robots, internet of things and big data into society (Japan Business Federation, 2016). The goal of digital society is to achieve a society where people enjoy life to the fullest through economic and technological advancement.

Nigeria like other countries of the world is undergoing rapid social, economic and political reforms. The country sets to have a large,

strong, diversified, sustainable and competitive economy that effectively harnesses the talents and energies of her people to guarantee a high standard of living. The means of empowering people for the attainment of the national development plan and target is education. Education, according to the Federal Republic of Nigeria (2014) in the National Policy on Education (NPE) is regarded as an instrument per excellence for social and economic reconstruction of the nation. It is the key to the realization of Nigeria's collective aspiration of being among the top 20 developed nations. It is an agent of change. To buttress the role of education as agent of sustainable economic transformation, Babalola (2015) stated that education is one of the many elements that influence economic growth and it does so in four main ways. First, education inculcates skills such as typing, accounting teaching, medicine, law, engineering and electronics, which are useful in the productive process. Secondly, education imparts knowledge of Economics, Politics, Science, History, Arts, Geography, Philosophy, Mathematics and logical reasoning that can contribute to the most important aspects of economic growth such as innovation, adaptation and entrepreneurship. Thirdly, education provides job ethics and attitude conducive to production of goods and services. Finally, education serves as a screening device for selecting or identifying talents in the most efficient manner.

Adult education is an all-encompassing education that takes care of every category of people in the country. It is the practice of educating adults based on their felt needs. Anyanwu in Quadri and Olalekan (2016) defined adult education as the education that includes all the activities with an educational purpose that are carried on by people that normally engaged in the ordinary business of life. That is it adult education is education for adults who are biologically mature and not attending a full-time educational institutions of the kind normally catering for juveniles. The main focus of adult education is to provide adult learners with opportunities to develop new skills and acquire new knowledge needed for improvement in professional competencies and adequate handling of challenges of life.

Oyo metropolis as one of the regions in Oyo State, Nigeria is in an era of drastic change. As the economy of the state grows, life becomes progressive and need for energy and foodstuffs are growing. Also, the globalization of the economy is progressing, national

competition is becoming increasingly severe and social problems are becoming increasingly complex. There is need for awareness and thorough understanding of new technologies such as internet of things, robotics, artificial intelligence, and big data to achieve the goal of digital society needed for sustainability of economic development and solving of social problems in the digital society.

Statement of the Problem

Inability to achieve the goal of digital society hinders people to achieve economic development and solve social problems. The difficulty of Oyo metropolis in achieving the goal of forward-looking society that breaks down the existing sense of stagnation could be as a result of lack of people of the region's awareness and understanding of new technologies such as artificial intelligence, internet of things, robotics and big data which are components of the digital society needed for economic transformation and solving of social problem. Education is regarded as an agent of change, key that unlocks door to modernization and effort of a state to achieve her social, economic and political standard of life. Adult education provides practical based curriculum relevant to the felt needs of the society. This study therefore sought to investigate the adult education (literacy, further and professional education) as a predictor of digital society goal achievement in Oyo metropolis.

The objectives of the study are to:
i. examine the level of awareness of digital society among the selected respondents in Oyo metropolis.
ii. investigate the components of digital society that the selected respondents are familiar with in Oyo metropolis.
iii. determine the relationship between literacy education and the achievement of goal of digital society in Oyo metropolis.
iv. determine the relationship between further education and the achievement of goal of digital society in Oyo metropolis
v. determine the relationship between professional education and the achievement of goal of digital society in Oyo metropolis.
vi. examine the joint influence of literacy education, further education, professional education and on the achievement of goal of digital society in Oyo metropolis**.**

vii. examine the relative influence of literacy education, further education and professional education on the achievement of goal of digital society in Oyo metropolis**.**

Research Questions
The following research questions were raised for the study
1   What is the level of awareness of digital society among the selected respondents in Oyo metropolis?
2   Which of the components of digital society are the selected respondents familiar with in Oyo metropolis?

Research Hypotheses
The following research hypotheses were formulated to guide the study
Ho1: There is no significant correlation between literacy education and the achievement of goal of digital society in Oyo metropolis.
Ho2: There is no significant correlation between further education and the achievement of goal of digital society in Oyo metropolis.
Ho3: Professional education has no significant correlation with the achievement of goal of digital society in Oyo metropolis.
Ho4: There is no significant joint influence of literacy education, further education and professional education on the achievement of goal of digital society in Oyo metropolis**.**
Ho5: There is no significant relative influence of literacy education, further education and professional education on the achievement of goal of digital society in Oyo metropolis**.**

Methodology
The research design employed in this study was descriptive survey research design. The population comprised the two colleges of education in Oyo metropolis - Emmanuel Alayande College of Education and Federal College of Education (Special), Oyo. A total of 2,071 of 300 level students in the two colleges of education served as the total respondents. 300 level students were selected as respondents because they had been taught EDU 325 (Introduction to Adult and Non-formal Education in Nigeria). The study used purposive sampling technique to select 120 students each from the two colleges making a total of 240 sampled respondents.

Table 1: Population and Sample of Respondents

S/N	Name of the College	Population of the Respondents	Sampled Respondents
1	Emmanuel Alayande College of Education, Oyo.	948	120
2	Federal College of Education (Special), Oyo.	1,123	120
	Total	**2071**	**240**

Source: *Academic Planning Unit of the Colleges,* **2022**

Data for the study were collected using the researchers' self-designed questionnaire titled 'Adult Education and Digital Society Questionnaire'. The instrument was validated by the experts in the field of adult education and test and measurement. Test-retest of 50 respondents outside the target sample but within the population was carried out to ascertain the reliability of the instrument. The instruments were administered to the respondents within the interval of two weeks. The responses from the two administrations were analyzed and compared using Pearson product moment correlation coefficient statistics to determine the reliability coefficient of the instruments. The computation result yielded 0.72. This result indicated that the instrument was reliable enough to measure consistently what it purported to measure. The research instruments were administered to the sampled respondents with the aid of five research assistants and they were assured that their responses would be kept confidential. The data collected were analyzed using Pearson product moment correlation coefficient statistics. Hypotheses were tested at 0.05 level of significance.

Results and Discussion of Findings

Research Question One: What is the level of awareness of digital society among the selected respondents in Oyo metropolis?

Table 2: Level of Awareness of Digital Society

Awareness of Digital Society	Yes	No	Total
	234 (97.5%)	6 (2.5%)	240 (100%)

Source: *Field work 2022*

The analysis in table two showed that 234(97.5%) out of 240 respondents were aware of digital society or society 5.0, while only 6 (2.5%) were not aware. This result revealed that the level of awareness about digital society among the respondents in Oyo State was very high.

Research Question Two: Which of the components of digital society are the selected respondents familiar with in Oyo metropolis?

Table 3: Components of Digital Society

Components of Society 5.0	Yes	No	Total
Artificial intelligence	223 (92.9%)	17 (7.1%)	240 (100%)
Robot	232 (96.7%)	8 (3.3%)	240 (100%)
Internet of things	240 (100%)	-	240 (100%)
Block chain technology	164 (68.3%)	76 (31.7%)	240 (100%)
Cashless payment	238 (99.2%)	2 (0.8%)	240 (100%)
Autonomous driving taxi and buses	195 (81.3%)	45 (18.7%)	240 (100%)
Delivery drone	178 (74.2%)	62 (25.8%)	240 (100%)

Source: *Field work 2022*

The analysis in table three showed that most of the respondents were aware of the components of digital society such as artificial intelligence, robot, internet of things, block chain technology, cashless payment, autonomous driving taxis and buses and delivery drone while only few of them indicated they were not aware.

Ho1: There is no significant correlation between literacy education and the achievement of goal of digital society in Oyo metropolis.

Table 4: Correlation between Literacy Education and Achievement of Goal of Digital Society in Oyo Metropolis

		Goal Achievement of Digital Society	Literacy Education
Goal Achievement of Digital Society	Pearson Correlation	1	-.194
	Sig. (2-tailed)		.003
	N	240	240
Literacy Education	Pearson Correlation		1
	Sig. (2-tailed)	.003	
	N	240	240

Correlation is significant at the 0.05 level (2-tailed).
Source: *Field work 2022*

The p - value of 0.003 is significant at 0.05 level of significance with r value of -0.194. This showed a weak negative correlation between literacy education and goal achievement of digital society. The null hypothesis was therefore rejected while the alternative hypothesis was accepted. The conclusion was that there was significant correlation between literacy education and goal achievement of digital society in Oyo metropolis.

Ho2: There is no significant correlation between further education and the achievement of goal of digital society in Oyo metropolis.

Table 5: Correlation between Further Education and Achievement of Goal of Digital Society in Oyo Metropolis

		Goal Achievement of Digital Society	Further Education
Goal Achievement of Digital Society	Pearson Correlation	1	-.145[*]
	Sig. (2-tailed)		.025
	N	240	240
Further Education	Pearson Correlation	-.145[*]	1
	Sig. (2-tailed)	.025	
	N	240	240

*. Correlation is significant at the 0.05 level (2-tailed).
Source: *Field work 2022*

The p - value is 0.025 while the r value is -0.145. This showed a weak negative correlation between further education and goal achievement of digital society at 0.05 level of significance. The null hypothesis was therefore rejected and the alternative hypothesis was accepted. The conclusion was that there was significant correlation between further education and goal achievement of digital society in Oyo metropolis.
Ho3: Professional education has no significant correlation with the achievement of goal of digital society in Oyo metropolis.

Table 6: Correlation between Professional Education and Goal Achievement of Digital Society

		Goal Achievement of Digital Society	Professional Education
Goal Achievement of Digital Society	Pearson Correlation	1	-.099
	Sig. (2-tailed)		.124
	N	240	240
Professional Education	Pearson Correlation	-.099	1
	Sig. (2-tailed)	.124	
	N	240	240

Source: *Field work 2022*

The p - value is 0.124 and the r value is -0.099. This established no significant correlation between two variables (professional education and achievement of goal of digital society) at 0.05 level of significance. The null hypothesis was therefore accepted and the alternative hypothesis was rejected. The conclusion was that professional education had no significant correlation with the achievement of goal of digital society in Oyo metropolis.

Ho4: There is no significant joint influence of literacy education, further education and professional education on the achievement of goal of digital society in Oyo metropolis**.**

Table 7: Multiple Regression Analysis Showing the Joint Influence of Literacy Education, Further Education, Professional Education on The Achievement of Goal of Digital Society in Oyo Metropolis

Model	Sum of Squares	Degree of Freedom	Mean Square	F	Sig.
1 Regression	.586	4	.146	3.183	.014
Residual	10.814	235	.046		
Total	11.400	240			

Model Summary	
Model	I
R	.227
R Square	.051
Adjusted R Square	.035
Std. Error of the Estimate	21452

Predictors: (Constant), literacy education, further education, professional education

Source: *Field work 2022*

Table 7 showed the influence of literacy education, further education, professional education on the achievement of goal of digital society. The table showed how the independent variables statistically and significantly predicted the achievement of goal of digital society in Oyo metropolis $F_{(4,235)} = 3.183$, $p < 0.05$) the regression model is a good fit of the data, thus, the null hypothesis was rejected. In other words, the table showed there was a significant joint influence of literacy education, further education and professional education on the achievement of the goals of digital society in Oyo metropolis. The result presented the value of R, R2 (Model summary) and ANOVA table. The result from the table revealed multiple correlation R of 0.22 between independent and dependent variables. This implied that independent variables could influence the achievement of goal of digital society in to some extent and R2+ .051 which was an indication that independent variable accounted for 1% of the total variance observed in the

dependent variables leaving the remaining 99% to other factors that was not considered in the study.

Ho5: There is no significant relative influence of literacy education, further education and professional education on the achievement of goal of digital society in Oyo metropolis

Table 8: Regression Analysis Showing Relative Influence of Literacy Education, Further Education and Professional Education on the Achievement of Goals of Digital Society in Oyo Metropolis Coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.379	.136		10.158	.000
Literacy education	-.019	.008	-.215	-2.380	.018
Further education	-.014	.012	-.121	-1.168	.244
Professional education	.002	.009	.017	.169	.866

Dependent Variable: Goal Achievement of Digital Society.
Source: *Field work 2022*

Discussion of Findings

The result from the hypothesis one with p - value of 0.003 and r value of -0.194 showed a weak negative correlation between literacy education and goal achievement of digital society in Oyo metropolis. This revealed that there was a significant correlation between literacy education and achievement of goal of digital society in Oyo metropolis. Most of the respondents agreed that literacy education assisted them in operating cashless payment, operation of new technological devices,

connecting and sharing information on health care, be more creative and innovative in the digital society. The awareness and understanding of new technology devices through literacy education would go a long way to achieving a forward-looking society that breaks down the existing sense of stagnation in Oyo metropolis. The testing of hypothesis two with p - value is 0.025 and r value is -0.145 at 0.05 level of significance showed a weak negative correlation between further education and goal achievement of digital society. This result established that there was a significant correlation between further education and achievement of goal of digital society in Oyo metropolis. Most of the participants agreed that further education could improve their skills of creativity and innovation, enhance their understanding of how robots and artificial intelligence work and assist them in adopting and operating cashless payment in the digital society that enables people to enjoy life to the full. The results obtained from the hypotheses one and two supported the view of Digital Management and Leadership (2018) who reported that education promotes collective intelligence, innovation, creativity and develops skills of new technology. The result from hypothesis three with p - value is 0.124 and the r value is -0.099 at 0.05 level of significance showed no significant correlation between professional education and achievement of goal of digital society in Oyo metropolis. This result indicated that functional professional education had no significant correlation with goal achievement of digital society in Oyo metropolis. Most of the respondents agreed that their professional education and training had no significant influence in adopting and operating cashless payment in the digital society which is one of the components necessary for the realization of the goal of digital society. The result from hypothesis four with P value of 0.244 and R = 0.866 for further and professional education respectively at 0.05 level of significance revealed no significant joint correlation among literacy, further and professional education and achievement of goal of digital society. The result presented the value of R, R^2 (Model summary) and ANOVA table. The result from the table revealed multiple correlation of 0.22 between independent and dependent variables. This implied that independent variables could influence the achievement of goal of digital society to some extent and R^2 = .051 which is an indication that independent variable accounted for 1% of the total variance observed in the

dependent variable leaving the remaining 99% to other factors that was not considered in the study.

This result obtained from hypotheses three and four contradicted the report of Babalola (2015) who stated that education provides the skills and knowledge of innovation and adaptation which are important aspects of achieving the goal of digital society and economic transformation.

The result of hypothesis 5 revealed that from all the indicators of the independent variable, professional education made the highest contribution to the achievement of the goals of digital society. The result revealed that literacy education was relatively significant, while further education and professional education were not relatively significant in the achievement of goals of digital society. A unit change in literacy education led to a corresponding change in the achievement of goals of digital society. The three indicators of adult education had their t-values lesser than 2. This showed that the three were not strong predictors of the achievement of the goals of digital society, but one was relatively significant. Therefore, the hypothesis was rejected for literacy education and accepted for further education and professional education.

Conclusion

The study established that only two models of non-formal education (literacy and further education) had significant influence on goal attainment of digital society in Oyo metropolis. Most of the respondents agreed that literacy and further education assisted them in operating cashless payment, operating new technological devices, connecting and sharing information on health care and be more creative and innovative in the digital society.

Recommendations

Based on the results and conclusion, the following recommendations were made

1. Education stakeholders should encourage citizens of the Oyo metropolis to acquire functional literacy skills needed for the achievement of goal of digital society to solve social problems.
2. Government should create enabling environment that will encourage people to further their education and thereby

acquire necessary skills needed for survival in the digital society.

3. Government should improve funding of primary school in order to increase citizen's literacy level in Oyo metropolis.
4. Government should create more awareness about digital society especially block chain technology, delivery drone and remote medical care.

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