

# EMPIRICAL INVESTIGATION OF THE CHALLENGES FACING EFFECTIVE EDUCATIONAL PLANNING AND EDUCATIONAL TECHNOLOGY APPLICATION IN MODEL SECONDARY SCHOOLS IN EDO STATE

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#### Abstract

This study examined the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. A descriptive survey research design was used in achieving the central purpose of the study. The research participants comprised of 109 teachers (45 Permanent Staff, 31 EdoSTAR, and 33 Community Teachers, respectively) in all the Model Secondary Schools in Edo State. The entire participants were used in the study without applying any sampling technique because the entire population were not too large to cover. The instrument for data collection was a structured questionnaire and were constructed by the authors, titled: "Questionnaire on Challenges of Effective Educational Planning and Educational Technology Application in Model Secondary Schools (OCEEPETAMSS)". The instrument was subjected to face and content validity by three experts, two in Education Management and one in Measurement and Evaluation from Faculty of Arts and Education, Benson Idahosa University, Benin City, Edo State. The reliability of the instrument was established by administering 25 copies on teachers from Model Secondary Schools in Delta State and who were not part of the sample that was used for the study. Thereafter, Cronbach's alpha was employed to ascertain the internal consistencies of the items in the instrument, obtaining coefficients alpha of 0.74 for challenges of effective educational planning, 0.74 for challenges of educational technology application, 0.74 for possibilities of overcoming challenges of effective educational planning, and 0.82 for possibilities of overcoming challenges of educational technology application. The statistics used for data analysis are Mean and Standard Deviation. The result showed some of the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. The result further showed some of the possibilities of overcoming challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. Logical conclusions were drawn based on these findings. The authors recommended that government and all relevant stakeholders should endeavour to invest large amount of financial and material resources that would help to surmount the challenges of effective educational planning and educational technology application in Model Secondary Schools in Nigeria.

Keywords: Challenges, Edo State, Effective Educational Planning, Educational Technology Application, Model Secondary Schools, Possibilities.



#### Introduction

Model Secondary School is established to be a model of academic excellence and leadership, fostering generations of morally and ethically sound individuals who will build a better nation and positively impact their families and world. Model Secondary School emphasizes on a two-pronged approach, namely: academic rigor and character development. Through a challenging curriculum model, dedicated and competent teachers, effective planning and managerial approach and effective and efficient instructional deliveries, Model Secondary School strive to encourage students to focus on their academic work. At the same time, Model Secondary School inculcate moral values and civic responsibilities through character development programmes, leadership opportunities, and community service projects. Maintaining academic integrity is also a hallmark of Model Secondary School, which could be achieved through clear policies, open communication, and emphasis on honesty. Ultimately, the Model Secondary School aspires to nurture exceptional individuals who contribute positively to their communities and the world over, which are guided by morals and ethical principles. To achieve these missions and objectives, managers and teachers need to effectively plan educational resources and apply educational technology. This implied that Model Secondary School can only achieve its set goals and objectives in an effective and efficient manner when managers and teachers effectively plan educational resources and apply educational technology.

Planning involves a primary task of management. It has to do with the establishment of set goals and objectives, and the formulation, evaluation, and selection of the policies, strategies, tactics and actions required to achieve these goals and objectives. Planning is a continuous process which is concerned with where and how to achieve set goals and objectives and by what route to get there (Osagie, 2017). Planning is required in all sectors of the national economy particularly the education sub-sector that is the foundation upon which national development is to be hinged. Accordingly, educational planning involves the application of rational, systematic analytic development with the aim of making education more effective and efficient in responding to the needs and goals of the society. It emphasizes the determination of policies, priorities and cost of an educational system having due regard to economic, political and social realities. The essence of this is not only to make the educational system synergic but meet the needs of the society on a continuous basis. This is why the needs of the society are assessed on a regular basis and the feedback useful to the educational system to emphasize that school leavers learn only relevant, useful and requisite skills and knowledge to engage in further education and gainful employment.

Effective planning of educational resources has important roles to play in achieving the set goals and objectives of the Model Secondary Schools in an effective and efficient manner. Model Secondary Schools in Nigeria appear to be faced with the challenges of underfunding, shortage of manpower and inadequate supply of infrastructural facilities, which may in turn lead to ineffective planning of educational resources. Although, the effective educational planning has a salient role to play in fostering effective application of educational technology in Model Secondary Schools in Nigeria. The processes of effective educational planning delivery could be hindered because of the challenges the managers (including principals) may be facing in providing the technical know-how, resources and competences. Today, principals in Model Secondary Schools appear to be struggling with how to effectively plan for manpower and other resources. The implication is that Model Secondary School may be facing significant challenges of managing manpower and other resources for effective planning of educational resources. The challenges on how to effectively plan educational (manpower and other) resources that will equip students to acquire requisite and useful skills and knowledge to be employable and further their education appears to be common concerns.

The issue of ineffective planning of educational resources may directly hinder the effective application and utilization of educational technology. The term "technology" involves the application of scientific principles and technical know-how, which aimed at solving divers' problems. This means that technology may perhaps represent the strongest factor or element that could shape the educational landscape as at today in Model Secondary Schools in Edo State. Accordingly, educational technology is the utilization of electronic media to aid teaching and learning. It can also be characterized as the use of





technical tools to investigate data, improve learning through construction, and improve teaching and learning efficacy (Januszewski, 2021). People, procedures, ideas, equipment, and facilities all play a salient role in understanding issues, planning, executing, and assessing teaching and learning. It has many facets, including a cyclical process using a collection learning tools (both physical and conceptual), as well as a multiple-node relationship between learners and instructional facilitators, as well as between learners themselves.

Although, the application and utilization of educational technology has facilitated the process of teaching and learning, rendering it more streamlined, tangible, and outcome-driven (Ibrahim & Ogunmola, 2022). The processes of effective educational technology application could be hindered also because of the challenges teachers in Model Secondary School may experience in providing the technical know-how, resources and competences. Today, teachers in Model Secondary Schools appear to be struggling with the application of educational technology, which may directly affect learning processes and outcomes. The implication is that Model Secondary Schools would face a significant challenge or issue of producing students who are equipped with the requisite skills and competence to engage in entrepreneurial careers and lifelong learning task.

There are several challenges that have hindered the effective application of the application of educational technology in Model Secondary Schools in Edo State. Unfortunately, scholars have earlier pointed out that many States, especially in Nigeria, are still ineffective in the application and use of educational technology (Aduwa-Ogiegbean & Iyamu, 2005). However, the ineffective application of educational technology in Model Secondary Schools in Edo State can be attributed to various social and physical challenges. These challenges include insufficient availability of instructional technology facilities in schools, inadequate information infrastructures, frequent electricity interruptions or lack of electricity facilities, ineffective implementation strategies for ICT policies and projects, insufficient technical expertise among teachers in internet technology, inadequate management of resources by school administrators, managers and government, as well as limited or poor networking accessibility, among other challenges (Omoregbe & Ibrahim, 2024). Other similar challenges include inadequate and often mismanaged government funds; inequality with regard to provision and access to educational opportunities; gender disparity; underqualified teaching staff; insufficient and inaccurate education planning; poor school or educational management and planning; dilapidated school infrastructures and facilities; lack of ICT and an underdeveloped and overloaded curriculum; the lack of a uniform educational system, and limited instructional aids and resources that lead to a disconnect between the subjects taught within the curriculum and the needs of the labour market in the 21st century (Dele-Ajavi & Taddese, 2020).

The Model Secondary Schools in Edo State has continued to experience the challenges of ineffective planning of educational resources, and stakeholders are deeply worried that if not abated may snowball into ineffective teaching and learning processes, leading to the acquisition of premature knowledge and skills, which further hinder students' determination and confidence for entrepreneurial careers and lifelong learning task. The continuous experiences of the challenges of facing effective educational planning and educational technology application have necessitated the need for all major stakeholders within and outside the country to consultatively and collaboratively invest sufficient amount of resources to ensure that the goals and objectives of Model Secondary Schools in Edo State are achieved in an effective and efficient manner.

#### Statement of the Problem

Model Secondary Schools especially in Edo State seem to be experiencing some challenges of effective educational planning and educational technology application. This precarious situation may snowball into ineffective instructional delivery processes, thereby leading to the acquisition of premature knowledge and skills, and in turn hinder students' intentions to pursue entrepreneurial careers and lifelong learning task. To surmount this precarious situation, the Federal Government of Nigeria in its education policy document has emphasized the need for proper planning framework (Federal Republic of Nigeria, 2013). Similarly, the National Council on Education and the Federal Executive Council has



approved the Information and Communication Technologies (ICTs) in Education policy document for the development and deployment of ICT in education in 2010 (Federal Ministry of Education, 2019b). Despite the intentions of the Federal Government of Nigeria in its education and ICT policy documents in recognizing the prominent roles and impacts of effective education planning and educational technology application for instructional delivery in the educational sector, there are still some obvious challenges hindering the effective planning of educational programme and application of educational technology in Model Secondary Schools, especially in Edo State. It is based on this premise that the researcher intends to provide an empirical data on some of the challenges hindering effective educational planning and educational technology application in Model Secondary Schools in Edo State.

# **Purpose of the Study**

The purpose of this study is to investigate some of the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. Specifically, the study seeks to investigate:

- 1. some of the challenges of effective educational planning in Model Secondary Schools in Edo State?
- 2. some of the challenges of educational technology application in Model Secondary Schools in Edo State?
- 3. some of the possibilities of overcoming the challenges of effective educational planning in Model Secondary Schools in Edo State?
- 4. some of the possibilities of overcoming the challenges educational technology application in Model Secondary Schools in Edo State?

### **Research Questions**

The following research questions were raised to guide the study:

Research Question 1: What are the challenges of effective educational planning in Model Secondary Schools in Edo State?

Research Question 2: What are the challenges educational technology application in Model Secondary Schools in Edo State?

Research Question 3: What are the possibilities of overcoming the challenges of effective educational planning in Model Secondary Schools in Edo State?

Research Question 4: What are the possibilities of overcoming the challenges educational technology application in Model Secondary Schools in Edo State?

#### Method

### Research Design

A descriptive survey research design was employed to achieve the general purpose of the study. It is a non-experimental research design that produces an accurate representation of persons, events or situations (Robson, 2002). This type of research designs involves a structured collection of data using questionnaire from a sizable population (Saunders, Lewis & Thornhill, 2007). The research design was adopted because it would help to establish the challenges of effective educational planning, challenges of educational technology application, possibilities of overcoming challenges of effective educational planning, and possibilities of overcoming challenges of effective educational planning, challenges of effective educational planning, challenges of effective educational planning, possibilities of overcoming challenges of effective educational planning, and possibilities of overcoming challenges of educational technology application, possibilities of overcoming challenges of educational technology application was established through Mean scores and Standard Deviation values.



### Participants and Sampling Procedure

The research participants comprised of 109 teachers (45 Permanent Staff, 31 EdoSTAR, and 33 Community Teachers, respectively) in all the Model Secondary Schools in Edo State. There are currently six Model Secondary Schools in Edo State. The entire research participants were used in the study without applying any sampling technique because the entire population were not too large to cover. The distribution of research participants (e.g. Teachers) in Model Secondary Schools in Edo State is shown in Table 1. The population data were obtained from the Edo State Ministry of Education (2024).

Table 1. Population Distribution of Teachers in Model Secondary Schools.

| S/N | Model Secondary Schools                          | Teachers |
|-----|--|----------|
| 1.  | St. David Boys Model, Evboneka, Ovia North East. | 14       |
| 2.  | Edo College Model, Oredo, Benin City.            | 47       |
| 3.  | Girls Model, Orhionmwon, Abudu.                  | 12       |
| 4.  | Esan Boys Model, Esan North East, Uromi.         | 07       |
| 5.  | St. John Boys Model, Etsako Central, Fugar.      | 12       |
| 6.  | ACC Model, Esan Central, Irrua.                  | 17       |
|     | Grand Total                                      | 109      |

Source: Edo State Ministry of Education (2024).

#### Data Collection Instrument

The instrument for data collection was a structured questionnaire and were constructed by the authors. The instrument is titled: "Questionnaire on Challenges of Effective Educational Planning and Educational Technology Application in Model Secondary Schools (QCEEPETAMSS)". The instrument comprised of 25 items in four clusters, which are in line with the variables covered in the study. Items 1 to 5 measured the challenges of effective educational planning. Items 6 to 14 measured the challenges of educational technology application. Items 15 to 19 measured the possibilities of overcoming the challenges of effective educational planning. Items 20 to 25 measured the possibilities of overcoming the challenges of educational technology application. Teachers in Model Secondary Schools rated their experiences of challenges of effective educational planning and educational technology application as well as possibilities of overcoming the challenges of effective educational planning and educational technology application on a 4-point rating scale, ranging from 4 = Strongly Agree to 1 = Strongly Disagree.

### Validation and Reliability of Instrument

The instrument was subjected to face and content validity by three experts, two in Education Management and one in Measurement and Evaluation from Faculty of Arts and Education, Benson Idahosa University, Benin City, Edo State. The face and content validity of the instrument was made with respect to relevance, sentence structure and adequacy. The suggestions that were made by these experts were effected in the final copies of the instrument. The instrument was reproduced for answering the research questions raised by the authors. To establish the reliability of the instrument, copies of the instrument were administered on 25 teachers from Model Secondary Schools in Delta State and who were not part of the sample that was used for the study. Thereafter, Cronbach's alpha was employed to ascertain the internal consistencies of the items in the instrument. The coefficients alpha obtained provide the reliabilities for each clusters, namely: challenges of effective educational planning ( $\alpha = 0.74$ ), challenges of educational technology application ( $\alpha = 0.74$ ), possibilities of overcoming challenges of effective educational planning ( $\alpha = 0.74$ ), and possibilities of overcoming challenges of educational technology application ( $\alpha = 0.82$ ). Thus, the coefficient alpha obtained was greater than .70, indicating adequate reliability measures, further implied that the instrument is reliable and can be used in any context to measure the same items at any given point.



#### Data Collection Procedure

The instrument will be distributed personally to the respondents, with the help of some research assistants who will be briefed on the procedures required for data collections. The respondents will be contacted via letters before the instrument were administered on them using a direct contact procedure. The respondents were allowed to complete the instruments and were given the chance to return them in two weeks' time. Copies of the questionnaire, covering the four clusters (challenges of effective educational planning and educational technology application, possibilities of overcoming challenges of effective educational planning and educational technology application) were administered on teachers since the instrument for measuring these four clusters were considered as a self-report measurement scales.

### Data Analysis

The Statistical Package for Social Sciences version 23.0 were used as statistical package for data analysis. The statistics that were used for data analysis are descriptive statistics (e.g. Mean and Standard Deviation). The Mean were used to answer the research questions. The standard deviation was used to determine the extent to which the Mean scores are deviated from the Mean. The decision rule was based on any calculated mean scores equal to, or greater than 2.50 were regarded as agree, while any calculated mean scores less than 2.50 were regarded as disagree. A standard deviation value between .00 and .96 is an indication that the responses of teachers are very close.

### Result

Research Question 1: What are the challenges of effective educational planning in Model Secondary Schools in Edo State?

Table 2: Mean and Standard Deviation on the Challenges of Effective Educational Planning in Model Secondary Schools in Edo State.

| S/N | Items  | M    | SD   |
|-----|--|------|------|
| 1.  | Low supply of qualified and competent educational planners.                | 3.35 | 0.75 |
| 2.  | Inadequate supply of financial resources.                                  | 3.40 | 0.78 |
| 3.  | Unfavourable government policies.  | 3.26 | 0.62 |
| 4.  | Lack of non-state actors involvement in planning of educational resources. | 3.36 | 0.67 |
| 5.  | Poor attitude of administrators toward educational planning,               | 3.33 | 0.63 |

Note. M = Mean, SD = Standard Deviation.

Table 2 shows the mean scores of teachers in Model Secondary Schools on the challenges of effective educational planning. The result revealed that the mean scores on the challenges of effective educational planning range from 3.26 to 3.40. The result indicated that there are some of the challenges of effective educational planning in Model Secondary Schools. The result also revealed that the standard deviation values on some of the challenges of effective educational planning range from 0.62 to 0.68. The result indicated that the standard deviation values imply that respondents' opinions on the challenges of effective educational planning are very close.

Research Question 2: What are the challenges educational technology application in Model Secondary Schools in Edo State?



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Table 3: Mean and Standard Deviation on the Challenges of Educational Technology Application in Model Secondary Schools in Edo State.

| S/N | Items   | M    | SD   |
|-----|---|------|------|
| 1.  | Improper educational planning.  | 3.35 | 0.75 |
| 2.  | Low level of School budgetary allocation.   | 3.40 | 0.78 |
| 3.  | Inadequate supply of educational technology-oriented teachers.                    | 3.26 | 0.62 |
| 4.  | High cost of educational technology facilities.                                   | 3.36 | 0.67 |
| 5.  | Inadequate supply of educational technology facilities.                           | 3.33 | 0.63 |
| 6.  | Poor perception of teachers towards the use of educational technology facilities. | 3,44 | 0.69 |
| 7.  | Poor perception of students towards the use of educational technology facilities  | 3,44 | 0.62 |
| 8.  | Epileptic electricity power supply.   | 3.50 | 0.58 |
| 9.  | Poor management on the parts of school administrators and government              | 3.31 | 0.61 |

Note. M = Mean, SD = Standard Deviation.

Table 3 shows the mean scores of teachers in Model Secondary Schools on the challenges of educational technology application. The result shows that the mean scores on the challenges of educational technology application range from 3.26 to 3.50. The result indicated that there are some of challenges hindering of educational technology application in Model Secondary Schools. The result also revealed that the standard deviation values on some of the challenges of educational technology application range from 0.58 to 0.78. The result indicated that the standard deviation values imply that respondents' opinions on the challenges of educational technology application are very close.

Research Question 3: What are the possibilities of overcoming the challenges of effective educational planning in Model Secondary Schools in Edo State?

Table 4: Mean and Standard Deviation on the Possibilities of Overcoming the Challenges of Effective Educational Planning in Model Secondary Schools in Edo State.

| S/N | Items   | M    | SD   |
|-----|---|------|------|
| 1.  | Adequate provision of qualified and competent educational planners would help     | 3.44 | 0.64 |
|     | to promote proper educational planning.   |      |      |
| 2.  | Adequate provision of financial resources would help to promote proper            | 3.42 | 0.50 |
|     | educational planning.   |      |      |
| 3.  | Favourable government policies would help to ensure proper educational            | 3.41 | 0.37 |
|     | planning  |      |      |
| 4.  | Involving private sector actors in managing education would help to foster proper | 3.41 | 0.61 |
|     | educational planning.   |      |      |
| 5.  | Changing the mindset of educational administrators would help to foster proper    | 3.37 | 0.63 |
|     | educational planning,   |      |      |

Note. M = Mean, SD = Standard Deviation.

Table 4 shows the mean scores of teachers in Model Secondary Schools on the possibilities of overcoming the challenges of effective educational planning. The result shows that the mean scores on the possibilities of overcoming the challenges of effective educational planning range from 3.37 to 3.44. The result indicated that there are possibilities of overcoming the challenges of effective educational planning in Model Secondary Schools. The result also revealed that the standard deviation values on the possibilities of overcoming the challenges of effective educational planning range from 0.37 to 0.64. The result indicated that the standard deviation values imply that respondents' opinions on the possibilities of overcoming the challenges of effective educational planning are very close.

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Research Question 4: What are the possibilities of overcoming the challenges educational technology application in Model Secondary Schools in Edo State?

Table 5: Mean and Standard Deviation on the Possibilities of Overcoming the Challenges of Educational Technology Application in Model Secondary Schools in Edo State.

| S/N | Items  | M    | SD   |
|-----|--|------|------|
| 1.  | Proper allocation of financial resources would help to foster the application of | 3.41 | 0.69 |
|     | educational technology.  |      |      |
| 2.  | Recruiting the right calibre of ICT-oriented teachers would help to foster the   | 3.39 | 0.43 |
|     | application of educational technology.   |      |      |
| 3.  | Adequate supply of ICT-oriented resources/facilities would help to promote the   | 3.39 | 0.61 |
|     | application of educational technology.   |      |      |
|     | Changing the mindset of teachers toward the use of ICT-oriented resources would  | 3.44 | 0.60 |
|     | help to foster the application of educational technology.                        |      |      |
| 4.  | Changing the mindset of teachers toward the use of ICT-oriented resources would  | 3.40 | 0.63 |
|     | help to foster the application of educational technology.                        |      |      |
| 5.  | Constant electricity power supply would help to enhance application of           | 3.35 | 0.61 |
|     | educational technology.  |      |      |

Note. M = Mean, SD = Standard Deviation.

Table 5 shows the mean scores of teachers in Model Secondary Schools on the possibilities of overcoming the challenges of educational technology application. The result shows that the mean scores on the possibilities of overcoming the challenges of educational technology application range from 3.37 to 3.44. The result indicated that there are possibilities of overcoming the challenges of educational technology application in Model Secondary Schools. The result also revealed that the standard deviation values on the possibilities of overcoming the challenges of educational technology application range from 0.37 to 0.64. The result indicated that the standard deviation values imply that respondents' opinions on the possibilities of overcoming the challenges of educational technology application are very close.

#### Discussion

This study at the first instance investigated the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. This study further investigated the possibilities of overcoming the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. One of the major findings in this study is that there are some obvious challenges hindering effective educational planning and educational technology application in Model Secondary Schools in Edo State. Major findings further showed that there are possibilities of overcoming the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. Existing studies have supported the main findings of this study. For instance, Ola (2014) acknowledged that some of the problems of effective educational planning in Nigeria include ill-equipped learning environment, inadequate funding, and shortage of qualified educational planners. Akpan (2019) further enumerated some of the constraints that inhibit effective educational planning in Nigeria to include financial constraint, faulty planning, inadequate planning tools and facilities, and lack of adequate planning personnel.

Existing studies supported the main findings of this study. For instance, the USAID (2018) found that computers and other educational technology gadgets utilized by teachers and students for teaching and learning delivery is very low, both in public and private secondary schools in urban (13.4%) and rural areas (2.5%). Lawal (2017) also found that approximately 65% of secondary schools lack access to electricity. The assertion of Dele-Ajayi and Taddese (2020) supported the findings of this study who





argued that there is limited government funding for educational technology; arguing further that nearly all educational technology initiatives are led by NGOs, startups and international organizations. They also carefully pointed out some of the specific challenges of educational technology, which include inadequate and frequent mismanagement of government funds; underqualified teaching staff; improper and inaccurate planning of educational programme; poor school management; dilapidated school structures; lack of ICT, underdeveloped curriculum; and limited teaching aids and resources. Januszewski and Molenda (2008) opined that educational technology is still not being applied sufficiently, mostly for the following reasons: lack of school equipment, the necessary resources and insufficient qualification of teachers for the implementation of these technologies. Other challenges identified by various researchers include apathy on the part of some teachers in Nigerian tertiary institutions who are unwilling to accept the new technological advancement. Secondly, the cost of integrating educational technologies in teaching and learning can be expensive, due to the high cost of the ICT equipment and facilities. Thus, some schools in Nigeria cannot afford to procure the necessary ICT facilities due to cost. Conversely, in cases where some schools in Nigeria can afford them, they do not see investing huge amount of resources in educational technology as a way to improve teaching and learning. Thus, Ross (2010) opined that inadequate funding becomes the bane of our educational development in this regard. In like manner, many teachers do not have access to ICT facilities in Nigerian tertiary institutions. Elechi (2020) reported that lack of access to ICT's resources like computers and internet can seriously impede what teachers can do in the classroom as regards implementation of its programme. Trailing behind the lack of technological resources is also the lack of adequate computer literacy by both students and teachers. As stated earlier, some teachers are not willing to accept technology or ICT resources in teaching; they prefer to use the old traditional method of teaching. They lack adequate skills to access computer and internet, and this amount to a very big challenge in integrating educational technologies in their teaching. The instability of power supply equally constitutes a challenge to the deployment of technology in the management of education in Nigeria. This is because, not all tertiary institutions can afford power generating sets, talk more of buying the diesel to power on the generators.

Existing studies have also supported the main findings of this study. For instance, Ola (2014) outlined some key strategies for surmounting the challenges of educational technology application in Nigerian schools, which include improved funding of the educational programme, provision of modem ICT facilities, immediate training and re-training of analogue professionals, integration of educational planning into the school curriculum to foster environmental literacy and planning consciousness. Elechi (2020) also argued that if Nigerian schools must ensure extensive application of technology or ICT in Nigerian schools, there is need to develop strategic planning in that their vision along with teaching and learning requirements can be identified and integrated in such strategy. Nigerian government must also recognize the significance of technology or ICT in enhancing learning and ensure adequate funding of Nigerian schools with budget specifically for putting educational technologies in place. There is also the need to recognize that technologies are major drivers of worldwide, knowledge-based societies, hence, the functional application of technologies for instructional delivery in Nigerian schools has the high potentials of ideally positively impacting on instructional (teaching and learning) processes. Furthermore, urgent areas of technological or ICT application in the educational sector, especially in Nigeria include: the proper management of schools and tertiary institutions; implementation and actualization of the general and specific functions of teaching, learning and research as well as records management.

### Conclusion

The study investigated the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. The study also investigated the possibilities of overcoming the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. The study found that there are some specific challenges facing effective educational planning and educational technology application in Model Secondary Schools in Edo State. The study further found that there are some possibilities of overcoming



the challenges of effective educational planning and educational technology application in Model Secondary Schools in Edo State. It is, therefore, concluded based on these findings that inadequate funding, inadequate instructional resources or aids, inadequate teaching and planning personnel, coupled with improper management practices accounted for the main reasons why educational technology application for proper instructional delivery is very low.

#### Recommendation

Based on the findings of this study, the following recommendation were made.

Government and all relevant stakeholders should endeavour to invest large amount of financial and material resources that would help to surmount the challenges of effective educational planning and educational technology application in Model Secondary Schools in Nigeria.

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