THE INFLUENCE OF PARENTAL BACKGROUND, GENDER, AND SCHOOL TYPE ON THE PUPILS' PERFORMANCE IN BASIC SCIENCE IN NIGERIAN PRIMARY SCHOOLS DURING THE COVID-19 PANDEMIC

Toyin Eunice Owoyemi
Department of Science Education,
Faculty of Education, University of Lagos
Email: towoyemi@unilag.edu.ng

Abstract

The Covid-19 pandemic had an overwhelming impact on the functioning and outcomes of education systems in some ways in so many countries in the world, especially the Nigeria education system which was already stressed in many respects. Reports from previous studies have it that the impact of the Covid-19 pandemic is felt mostly by school-age children in different ways and levels based on different factors. Therefore, this study investigated the influence of parental background, gender, and school type on the pupils' academic performance in Basic Science at upper primary schools in Lagos state during the Covid-19 pandemic lockdown. The study adopted an ex-post facto research design and 261 pupils from upper primary basic 6 from selected primary schools in Education District II, Lagos State, Nigeria were used as the sample. The research instrument used for data collection was the Basic Science Performance Test. The collected data were analysed using descriptive statistics of frequency counts and simple percentages, inferential statistics of T-test, and Analysis of Variance (ANOVA). It was found that a greater percentage of the participants possessed a high level of knowledge of Basic Science regardless of their parental background and gender but not without a significant influence of pupils' school type. In light of the findings of this study, it was recommended that the government should seriously take up the responsibility of empowering primary school teachers as a way of improving the quality of education in public schools by introducing continuous capacity building of the teachers for them to be adequately equipped for any unexpected or emergency issues like the pandemic.

Introduction

The closure of schools due to the Covid-19 pandemic interrupted teaching and learning in secondary schools, colleges, and universities around the world and academic activities at the primary school level. Covid-19 has brought a new normal to every facet of life including education,

of course, the teaching and learning process changed from the traditional pattern of face-to-face. Between the 19th and 22nd of March, 2020, governors from Nigerian states ordered schools to be closed and this resulted in changing the mode of learning from traditional face-to-face learning to an online mode of learning which was entirely different from what stakeholders in education were used to. Eventually, a total lockdown was ordered by the Federal Government of Nigeria and compelled to look for another alternative way of engaging pupils in order to ensure continuous learning and knowledge retention during the lockdown.

One of the best policy decisions ever made for the development of the right attitudes, skills, and potentials of every child is schooling. Schooling is fun in addition to many more opportunities for individuals to become relevant to themselves and society at large. Even spending a relatively short time in school could have a long-lasting impact on a child's life so also, missing out on school for a short time might have a serious implication on the child's skill growth in the nearest future. No wonder, it looks so impossible to quantify with high accuracy and precision how much the Covid-19 pandemic lockdown has affected students' learning, especially the inbuilt abilities which might not be obviously observed now. Indeed, the pandemic created a new world that is alien to so many education communities compare to what was in the operation before the lockdown. In developing countries like Nigeria, the change in the mode of teaching and learning process due to the Covid-19 pandemic was too sudden since there was no adequate preparation for online learning before the lockdown. In fact, so many grounds were required to be covered after the schools reopened in order for the Nigerian educational system not to be left behind in the world educational system that has become a global village.

According to UNESCO (2020), about 25.6 million primary school learners were out-of-school during the pandemic lockdown and about 87 percent (23.5 million) were pupils enrolled in public schools. Unfortunately for Nigerian children, learning within the homes was affected by so many factors including parental backgrounds such as educational level, occupation, economic status, and other parental responsibilities and commitments. According to Samuel (2020), some children were not academically engaged in any form not until the schools reopened.

Primary education is a foundation or bedrock upon which further educational opportunities are built, the education of any child will be in serious danger if this foundation is faulty. Previous studies conducted before homeschooling due to the COVID-19 pandemic lockdown have reported that pupils' academic performance could be significantly influenced by diverse factors or variables such as parental background, school type, gender, etc., (Allerhand, 2018; Owens, Allan, Kassab & Mikami, 2020). Thus, it is necessary to examine how some of these factors influenced primary school pupils' academic performance in Basic Science during the Covid-19 pandemic lockdown.

In the quest for national development, science subjects are taught at all levels of education because no nation can experience scientific and technological advancement without deliberate action for effective teaching and learning of science subjects. It is in schools that the curriculum is implemented with the aim of achieving the set educational goals and objectives of the nation. These goals and objectives are to be achieved through teaching and learning school subjects in which basic science happens to be one such subject. Basic Science introduces pupils to the basic rudiments of science. One of the major reasons why this subject is taught at this level is to broaden pupils' scientific knowledge and also to enable them to appreciate the unity among science subjects as the subject is always presented as integrated science (Nwafor, 20135. According to Danjuma (2019), this will enable the pupils to appreciate the unity among the science subjects and probably influence their choice of a science-oriented career which could in due course promote national development.

Parental Occupation and Pupils' Academic Performance

Research reports before the pandemic established the influence of parental backgrounds on students' academic achievement. For example, according to Owens *et al.,* (2020), parents from low socio-economic backgrounds are less likely to have the financial resources, intellectual capacity, or time availability to provide children with academic support. As schools were closed due to the pandemic, remote learning was seen as an appropriate alternative and students were expected to continue learning while staying at home for them not to be disconnected completely from academic activities during the pandemic lockdown. Therefore, parents or guardians

automatically resumed a critical position of a teacher in different homes and provided support for their children learning despite the pandemic.

Typically, some parents see this responsibility as a complement to the input from the school as the usual practice before the outbreak of Covid-19. The new role goes beyond merely supplementing maths learning with practicing counting at home but a different bug game. While many parents across the world might successfully school their children at home or support their children learning during the pandemic lockdown, this seems unlikely to be the general trend across the world.
Apart from the fact that it seems very unlikely that learning at home could adequately replace the learning lost from school due to the pandemic, there is a likelihood of substantial disparities in the kind of support received by students from their parents due to different backgrounds in terms of their level of education occupation, economic class, etc., during the lockdown. According to Brooks and Knight (2020), some of the key differences include the amount of time available to devote to teaching, the non-cognitive skills of the parents, resources to access relevant online materials, and also the amount of knowledge possessed by the parents on the subject matter since it is difficult to give what one does not have. In line with this submission, Murphy and Wyness (2020) in a study involving the influence of parental background on student achievement also reported that the predicted grades for those from disadvantaged backgrounds are lower than those from more advantaged backgrounds.

Gender and Pupils' Academic Performance

Previous studies on the influence of gender on students' achievement or performance present inconsistent reports, while some submitted that gender has a significant effect on performance [Mwihia, 2020; Filgona & Sababa, 2017; Ghazvini & Khajehpour (2011)] others reported that students' performance has nothing to do with gender. In addition, gender has become a contested factor with many points of view (Eze, Ezenwafor & Obi (2015) which focused on students' performance in different science subjects. Gender is a controversial factor that has attracted a lot of attention not only in the education sector but recently, gender equality is a focus in all sectors of life, no wonder it became one of the 17 points agenda of the Sustainable Development Goals (SDGs). It is therefore very important to ascertain its influence on pupils' academic performance during the pandemic lockdown when students were expected to learn at home. More importantly

in the traditional African home where girls are expected to conform to the stereotype conditions created from generation to generation, and boys are expected to take up activities that encourage a domineering attitude.

School Type and Pupils' Academic Performance

Although some studies identified gender as one of the factors influencing students' academic performance in science subjects, this might likely have some connection with the type of school the students are attending. On the issue of school type, Danjuma, (2019) opined that even though both private and public school teachers implement the same basic science curriculum in their classrooms the product of private schools use to be preferable to society in most cases.

Apart from the establishment of Government schools (public schools) either by the Federal or State Government, non-governmental organizations also established schools with the hope of contributing their quarter to the educational development of the nation. Recent, personal observation showed that most people prefer taking their wards to private schools over government-owned schools even when both private and public schools use the same government-approved curriculum. The preference for private schools over public schools might be due to the belief that learners achieve the goals of education better in private schools than in public schools these days.

Public schools are more accessible than private schools in Nigeria since they are found in cities, as well as villages even in some hamlets. According to Adeyinka (2010), public schools are those schools established, managed, financed, as well as supervised by the government. These schools were established and funded with the revenue generated through tax to give an opportunity to all citizens to obtain quality education irrespective of their background in terms of economic, social, or political status in society. On the other hand, private schools can be referred to as the type of educational organization that is controlled by individuals, interest groups, or non-governmental organizations (NGOs). Even though these two types of schools share a similar vision of preparing the learner to become self-reliant and useful to the development of the nation, they differ in several ways. Swinson (2018) submitted that public schools differ from private schools in terms of what the students learn, tuition, regulation of the school, the caliber of teachers, class size, and admission

policy. Hence, the need to ascertain the influence type of school had on pupils' performance during the pandemic lockdown.

Purpose of the Study

The purpose of this study is to investigate the influence of parental background, gender, and school type on the academic performance of pupils in Basic Science in Nigerian upper primary schools during the Covid-19 pandemic lockdown with reference to the selected public and private primary schools from Education District II, Lagos State, Nigeria. The specific objectives of the study are to;

1. Investigate the academic performance of pupils in Basic science during the Covid-19 pandemic lockdown.
2. Ascertain the influence of parental background on the academic performance of pupils in Basic Sciences during the Covid-19 pandemic lockdown.
3. Examine the influence of gender on the academic performance of pupils in Basic Sciences during the Covid-19 pandemic lockdown.
4. Ascertain the influence of school type (private or public) on the academic performance of pupils in Basic Sciences during the Covid-19 pandemic lockdown.

Research Questions

What is the academic performance of pupils in Basic science during the Covid-19 pandemic lockdown?

Research Hypotheses

Ho_1: There is no significant difference in the pupils' academic performance in basic Science during the Covid-19 pandemic lockdown based on the parental background.

Ho_2: There is no significant difference in pupils' academic performance in basic Science during the Covid-19 pandemic lockdown due to pupils' gender.

Ho_3: There is no significant difference in pupils' academic performance in basic Science during the Covid-19 pandemic lockdown based on the school type.

Research Method

The research design adopted for the study was an expos-facto design because the study focuses on the actions or behavior that have already occurred therefore, there was no need for manipulation of any variable. The population for this study consists of all upper basic 6 pupils in both public and private primary schools in Education District II in Lagos State. The study adopted a convenience sampling method to select two hundred and sixty-one (261) Upper Basic 6 pupils from some selected primary schools in the District which constituted the sample size for the study. Care was taken to give an adequate representation of both the gender (male & female) and the school type (public & private).

Necessary information was gathered from the participants using a validated and reliable research instrument titled: Basic Science Performance Test (BSPT) after they have given their consent to participate in the study. Section A of the BSPT addressed the bio-data information of the respondents such as school name, school type, gender, and parental occupation. While section B was a 20-item question on the Basic Science topics covered by the schools during the pandemic lockdown. The data collected through BSPT were analysed using descriptive statistics of frequency counts and simple percentages to answer the research question raised in the study and inferential statistics of T-test and Analysis of Variance (ANOVA) were used to test the formulated hypotheses.

Results and Discussion

Demographic Tables

The data presented in Table 1 provides a summary of the major characteristics of the pupils that participated in the study. The demographic information of the pupils based on gender, school type and socio-economic status is presented in Tables 1a, b, c, and d.

Table 1a: Distribution of Students by Gender

Gender	Frequency	Percentage
Male	**102**	**39.1%**
Female	**159**	**60.9%**
Total	**261**	**100%**

Table 1a shows the distribution of the students by gender. It revealed that 102(39.1%) involved in the study were males while 159(56.1%) were females. This revealed that more females were involved in the study than males.

Table 1b: Distribution of Students by School Type

School Type	Frequency	Percentage
Private	157	60.2%
Public	104	39.8%
Total	261	100%

Table 1b shows the distribution of the students by school type. It revealed that 157(60.2%) involved in the study were from private schools, while 104(39.8%) were public school students.

Table 1c: Distribution of Pupils by Parent (Mother) Occupation

Occupation	Frequency	Percentage
Artisan	**80**	**30.7%**
Trader	**57**	**21.8%**
Civil Servant	**124**	**47.5%**
Total	**399**	**100%**

Table lc shows the distribution of the students by socio-economic status of parents (mothers). It revealed that 80(30.7%) artisans, 57(21.8%) traders, and 124 (47.5%) are civil servants. These are the socio-economic status of the mothers of the students who are involved in the study.

Table 1d: Distribution of Students by Parent (Father) Occupation

Occupation	Frequency	Percentage
Artisan	**109**	**41.8%**
Trader	**21**	**8.0%**
Civil Servant	**131**	**50.1%**
Total	**399**	**100%**

Table 1d shows the distribution of the students by occupation of the Fathers. It revealed that 109(41.8%) artisans, 21(8.0%) traders, and 131 (51.1%) are civil servants. These are the occupations of the fathers of the participants in the study.

Answering the Research Question

This part presents the results of the analysis of the research questions on the influence of school type, gender, and parental background on the academic performance of pupils in Basic Science during the Covid-19 pandemic lockdown. Descriptive statistics of frequency counts and simple percentages were used to answer research question 1 while others were answered in line with the hypotheses.

Research Question: *What is the academic performance of pupils in Basic science during the Covid-19 pandemic lockdown?*

To answer this research question, the pupils' scores in the Basic Science Performance Test (BSPT) were subjected to descriptive statistical analysis of frequency counts and simple percentages as presented in Table 2. Scores between 0-40 are regarded as low, 41-60 as average, and 61-100 are regarded as high.

Table 2: Pupil's Basic Science Performance during the Covid-19 Pandemic Lockdown

Basic Science Achievement	Frequency	Percentage (%)
0 – 40 (low)	31	11.8%
41 – 60 (average)	73	28.0%
61 – 100 (high)	157	60.2%
Total	261	100%

Table 2 indicates that out of the 261 students that participated in this study, 31 (11.8%) recorded low performance in Basic Science, 73 (28%) had an average performance, and 157 (60.2%) had a score for high-level performance in Basic Science. This implies that a greater percentage of the participants in the study can be described as having a high level of knowledge of Basic Science despite the Covid-19 pandemic lockdown.

Testing the Hypotheses

Ho1: *There is no significant difference in the pupils' academic performance in basic Science during the Covid-19 pandemic lockdown based on the parental background.*

Table 3a: Influence of Parental Occupation (Mother) on the Pupils' Performance

Analysis of Variance						
Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig**	**Remark**
Between Groups	962.71	2	481.35	1.754	.176	Accepted
Within Groups	42749.99	174	274.42			
Total	43712.71	176				

Significant at 0.05 alpha level

Table 3a shows the influence of the mother's occupation on the pupils' performance in Basic Science. Since the calculated F-value (0.176) is greater than the critical F-value 0.05, the initially stated null hypothesis is therefore accepted. This implies that there was no significant influence of parental background on the pupils' performance in Basic Science the during Covid-19 lockdown.

Table 3b: Influence of Parental Occupation (Father) on the Pupils' Performance

Analysis of Variance						
Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig**	**Remark**
Between Groups	962.51	2	481.25	1.754	0.12	Accepted
Within Groups	47749.99		243.42			
Total	48712.50	176				

Significant at 0.05 alpha level

Table 3b shows the influence of the father's occupation on the pupils' performance in Basic Science. Since the calculated F-value (0.12) is greater than the critical F-value (0.05) level of significance, the initially stated null hypothesis is therefore accepted. This implies that there was no significant influence of parental background on the pupils' performance in Basic Science the during Covid-19 lockdown.

Ho2: *There is no significant difference in pupils' academic performance in basic Science during the Covid-19 pandemic lockdown due to pupils' gender.*

Table 4: Influence of Gender on the Pupils' Performance in Basic Science

Variables	N	Mean	SD	Df	T	Sig	Remark
Male	102	33.11	6.74				
				14	20.93	.10	Accepted
Female	159	33.06	6.30				

Significant at 0.05 alpha level

Table 4 shows no significant difference in the pupils' performance based on gender. Therefore the null hypothesis initially formulated was accepted since the calculated sig value (0.10) is greater than the critical T-value (0.05). This implies that there was no significant influence of gender on the pupils' performance in Basic science during the Covid-19 pandemic lockdown.

Ho3: *There is no significant difference in pupils' academic performance in basic Science during the Covid-19 pandemic lockdown based on the school type.*

Table 5: Influence of School Type on the Pupils' Performance in Basic Science

Variables	**N**	**Mean**	**SD**	**Df**	**T**	**Sig**	**Remark**
Private	157	43.21	6.74				
				14	55.871	.00	Rejected
	104	39.01	6.30				

Significant at 0.05 alpha level

Table 5 shows that the calculated t-value (0.00) is lesser than the theoretical critical T-value (0.05), the hypothesis is therefore rejected. This implies that there was a significant influence of school type on the pupils' performance in Basic Science during the Covid-19 pandemic lockdown.

Discussion of Findings

It was found that a great number of the participants in the study possess a high level (60.2%) of knowledge of Basic Science even during the Covid-19 pandemic lockdown. This might be due to the fact that most topics in Basic Science at this level have to do with personal health, the environment, and energy that is things that are familiar to them or commonly use or applicable in real life. This finding does not support the findings of Tunmibi, Aregbesola, Adejobi & Ibrahim, (2015); Onolemhenmhen, (2014) who reported poor students' achievement in science at primary and secondary schools in Nigeria.

However, the parent occupation considered as a parental background in this study has no significant influence on the pupils' performance in Basic sciences. This finding negates previous studies [Akseer, Kandru, Keats, & Bhutta, (2020); Simba et al., (2020)] submissions that alternative forms of learning, such as online classrooms, web-based courses, and homeschooling, are inaccessible to most children in rural areas and those from poor economic backgrounds.

Also, gender plays no significant role in academic pupils' academic performance in basic science during the pandemic lockdown. This might be due to the fact that these pupils are still below the age where they are seriously involved in household shores, especially the African girl child. Whereas, in previous studies that involved the participation of secondary school students, male students were reported to perform academically better than their female counterparts during lockdown. This finding is in line with the findings of Nistor (2013) that there are no disparities between male and female students in online learning but it negates the findings of Mwihia (2020) who found a significant gender difference in the academic performance of students in Kinangop Sub County amid the Covid-19 pandemic.

School type played a significant role in students' academic performance during the Covid-19 pandemic in this study and this might be due to the fact that some private schools were able to quickly leverage online classes and other means of engaging their pupils in learning activities during the pandemic while the government was still busy holding online meetings to plan for interventions. This finding corroborates the findings of Haug et al. (2021) who reported that many educators and researchers raised concerns about the effects of COVID-19-related school closures and school type on student academic achievement which could lead to learning inequalities. But

the finding negates that of Danjuma (2019) who carried out a comparative study on students' academic performance in public and private schools in Basic Science in Taraba state, Nigeria. His study revealed no significant difference between the academic performance of private and public school students in Basic Science.

Conclusion and Recommendations

This study explores the influence of Parental background (occupation), school type, and gender on pupils' academic achievement in Basic science during the Covid-19 pandemic lockdown. The major finding of the study shows that of all the three factors considered, only school type had a significant influence on pupils' academic performance during the lockdown due to the pandemic. Indeed, the Covid-19 pandemic lockdown introduced a new scenario in which the element of inequality created by school type as a factor as reported by previous studies is reproduced, and whatever gap might be created by this factor before the pandemic has further been widened. In line with this finding, Swinson (2018) submitted that public school differs from private schools in terms of what the learner learn, tuition, regulation of the school, the caliber of teachers, class size, and admission policy. The author opined that in private education, the school board and teachers have the final say regarding the addition to the minimum standard set in the school curriculum.

Surprisingly, while some studies have provided evidence of the critical role of parental backgrounds (Bonal and Gonzalez, 2020, Acheampong, (2023)) in the pandemic, this study reveals no significant influence of parental background in terms of their occupations. Also, this study revealed no significant influence of gender on pupils' performance in Basic Science during the lockdown. The findings of this study shed more light on the influence school type continues to have on pupils' academic performance in Nigerian schools even during the pandemic.

Based on the findings of the study and the conclusion drawn, the following are recommended:

i. The government must seriously take the responsibility of improving the scenario of the quality of educational performance in public schools by introducing continuous capacity building of service teachers for them to be adequately equipped in case of unexpected or emergency issues like the pandemic.

ii. The government should provide teachers, especially in public schools s with digital skills training and should be assisted in developing interactive online learning and materials for primary school pupils' education. Developing and maintaining robust communication techniques with the education board, school management, staff, and even parents are very important to keep all stakeholders informed and updated on the necessary steps for adequate preparation and continuous capacity building and training support to keep the public schools on their toes in case of any emergence issue like the pandemic.

iii. The study findings are limited to a district in Lagos State and cannot be generalized to all the educational districts in the state. Therefore, future research can be conducted to involve all five education districts in the state using both quantitative and qualitative methods.

References

Acheampong J.O. (2023). The impact of COVID-19 on students' academic performance: The case of the University of Ghana business school. *Curriculum & Teaching Studies, 10(1).*

Adeyinka, C. O., (2010). A Comparative study of male and female students in Agricultural Science and Biology in Kwara State College of Education, Ilorin. *Proceeding of the 2nd National Engineering Conference Federal Polytechnic, Offa, held between 13th15th July*, PP 111-113

Allerhand, L. A. (2018). *A preliminary investigation into the construct validity of the Stanford Social Motivation Scale (SSMS)*. AnnArbor, Mi: ProQuest.

Bjorklund, A. & Salvanes, K. (2011). Education and Family Background: Mechanisms and Policies", in E Hanushek, S Machin and L Woessmann (eds), *Handbook of the Economics of Education,* 3(2), 17-24.

Bonal, X., & González, S. (2020). The impact of lockdown on the learning gap: Family and school divisions in times of crisis. International Review of Education, 66(5–6), 635–655. 10.1007/s11159-020-09860-z - DOI - PMC - PubMed

Brooks & Knights (2020). State and regulatory responses to Covid-19 in Nigeria. *Law Business Research*, 1(1), Retrieved on September 11, 2020 from https://www.lexology.com/library/detail.aspx?g=afefb8de-48be-4808-b6e4-37e3bf8c7639

Danjuma, B. (2019). A comparative study of upper basic science students' academic performance in public and private school in Taraba State., Nigeria. *Journal of Research in Humanities and Social Science*, 7(3), 26-31.

Danjuma, B. (2020). Gender differences in the academic performance of upper basic science students. *Journal of Research in Humanities and Social Science*, 9(5), 11-18.

Eze, T. I., Ezenwafor, J. I., & Obi, M. N. (2015). Effects of age and gender on academic achievement of vocational and technical education (VTE) students of a Nigerian university. *Journal of Emerging Trends in Educational Research and Policy Studies*, 6(1), 96-101.

Filgona, &, Sababa, L. K. (2017). Effect of gender on senior secondary school students' academic achievement in geography in Ganye educational zone, Nigeria. European *Journal of Education Studies,* 3(4), 394-410

Ghazvini, S. D. & Khajehpour, M. (2011). Gender differences in factors affecting academic performance of high school students. *Procedia - Social and Behavioral Sciences*, 15: 1040-1045.

Haug, N., Geyrhofer,L., Londei, A. Dervic, E., Desvars-Larrive, A., Loreto,V., Pinior, B., Thurner, S. & Klimek, P. (2021). Ranking the effectiveness of worldwide COVID-19 government interventions. *Nature Behaviour,* 4. 1303-1312.

Murphy, R & G Wyness (2020). Minority Report: the impact of predicted grades on university admissions of disadvantaged groups. *CEPEO Working Paper Series No 20-07 Centre for Education Policy and Equalising Opportunitites*, UCL Institute of Education.

Mwihia, C. (2020). Gender differences in the academic performance of students in Kinangop Sub County, Nyandarua County. *European Journal of Social Sciences Studies*, 5(4), 19-35.

Nistor, N. (2013). Stability of attitudes and participation in online university courses: Gender and location effects. Computers & Education, 68, 284–292.

Nwafor, C. E. (2015). Comparative study of students Science in Public and Private Secondary School in Ebonyi State Nigeria. *Academic Discourse: An International journal of Psychological Studies*, 3(1), 18-29.

Owens, J. S., Allan, D. M., Kassab, H. & Mikami, A. Y. (2020). Evaluating a short form of the academic competence evaluation scales: expanded examination of psychometric properties. *Journal of School of Mental Health*, 12 (1), 38–52.

Samuel, A. I. (2020) Coronavirus (Covid-19) and Nigerian education system: Impacts, management, responses, and way forward. *Education Journal*, 3(4), 88-102

Swinson T. (2018). Public vs. Private Schools: What's the difference? *https:// www.ajc.com/lifestyles/ parenting/private-publicways-private-and- public- school-differ/fEQwmfD7fl6kaZsPQjumpI/*

Tunmibi, S., Aregbesola, A., Adejobi, P., & Ibrahim, O. (2015). Impact of E-Learning and Digitalization in Primary and Secondary Schools. *Journal of Education and Practice*, 6 (17), 53-58.