
An Assessment of On-Line Platform as a Strategy of Mitigating Against Covid-19 Effect on the Roles of Secondary School Management Board in Imo State

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ABSTRACT

The study sought to assess on-line platform as a strategy of mitigating against covid-19 effect on the roles of secondary school management board in Imo State. An Expost-facto research design was used for this study. The research area for this study was Imo state. The population of this study comprised policy makers in ministry of education and public school administrators. A stratified random sampling technique was used to select 38 respondents as the sample size. The main instrument used in this study was an interview schedule titled “ON-LINE PLATFORM, COVID-19 AND SECONDARY SCHOOL MANAGEMENT BOARD QUESTIONNAIRE (OPCSSMBQ). Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.81 and this was high enough to justify the use of the instrument. The researcher subjected the data obtained to appropriate statistical techniques such as descriptive statistics and simple regression. The test for significance was done at 0.05 alpha levels with 36 degree of freedom. Based on the findings of the study, it was concluded that on-line platform significantly mitigates against COVID-19 effect on the planning, organization and supervision of educational activities in Imo State. One of the recommendations was that the Imo State government should send out the staff of the ministry of education, school administrators and teachers for online training in order to aid them mitigate against COVID-19 effect on the planning, organization and supervision of educational activities in the state.

KEY WORD: On-Line Platform, Strategy, planning, organization, supervision, Covid-19 Effect, Secondary School Management, Imo State

Introduction

COVID-19 is caused by a contagious newly identified virus. There are no therapeutics and vaccines available and there is presumably no pre-existing immunity in the population. Symptoms of COVID-19 range from no symptoms (asymptomatic) to severe pneumonia and can lead to death. It is therefore of paramount importance that measures that are appropriate and proportionate to each phase of the epidemic are immediately put in place to interrupt human to-human transmission chains, prevent further spread, reduce the intensity of the epidemic and slow down the increase in cases. One of such measures include the closure of schools.

Some studies state that prolonged school closures and home confinement might have the negative effects on children’s physical and mental health (Brazen-dale et al., 2017). The “psychological impact of quarantine is wide-ranging, substantial and can be long-lasting”, although there are some examples of having a plan of using the distance/online learning during

the pandemic, they are mostly concentrated on small cases and not a global crisis as it is happening in COVID-19 pandemic. The global lockdown of education institutions is going to cause major (and likely unequal) interruption in students' learning; disruptions in internal assessments; and the cancellation of public assessments for qualifications or their replacement by an inferior alternative.

Statement of the Problem

Across the globe, the spread of COVID-19 has led to profound changes in social interaction and organization, and the education sector has not been immune. The pandemic has quickly led to the closure of schools around the world, in hopes that public health officials' advice of social distancing could help reduce total fatalities from the disease. This study therefore sought to assess on-line platform as a strategy of mitigating against COVID-19 effect on the roles of secondary school management board in Imo State.

Objectives of the Study

The study broadly sought to assess on-line platform as a strategy of mitigating against COVID-19 effect on the roles of secondary school management board in Imo State. Specifically, it sought:

1. To determine the extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities.
2. To examine the extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities.
3. To find out the extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities.

Research Questions

1. What is the extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities?
2. What is the extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities?
3. What is the extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities?

Hypotheses

1. On-line platform does not significantly mitigate against COVID-19 effect on the planning of educational activities.
2. On-line platform does not significantly mitigate against COVID-19 effect on the organization of educational activities.
3. On-line platform does not significantly mitigate against COVID-19 effect on the supervision of educational activities.

Concept of Education

According to Dagar & Dhull (1994), education is an excellent invention of human race. It is more important than all his inventions like tools, machines, space craft, medicines, weapons and even of language, because language too was the product of his education. Man without education is just like an animal. It is education, which transforms man from a mere ‘two-legged animal’ into perfect human being. Education to the man does not begin at school, it begins at birth. It ends, not when he graduates from any educational institutions, but at his death. Hence, education is a lifelong process. As Thakur & Thakur (1997) says “any modification brought about in the behavior of an individual as a result of his interaction with the environment constitutes learning.”

Sundar & Jawahar (2009) in their study on principles of economics of education, asserts that “the whole of education– intellectual, moral and physical consisted in leading out the innate knowledge, virtue and the powers of the child making the potential actual.” Thus, education means both the acquisition of knowledge and experience as well as the development of skills, habits and attitudes which help to a person to lead a full and worthwhile life in this world. It is a process of training an individual through various experiences of life, which draws out the best within him.

Components of Educational Management

Education of a human being is, perhaps, the most cherished goal of any human civilization that ever existed or is yet to come in this world. According to Pandya (2011), the eight components of educational management are:

Educational Planning: Being the first aspect in the scope of educational management, planning implies a basic function- that is how the aims and objectives are to be realized. A plan is conceptualized as a predetermined strategy, detailed skills or program of action related to the achievement of an objective. It is a basic management task and a means of achieving higher levels of effectiveness.

Educational Administration: plays a vital role in making management of every educational program grand success. It is a specialized set of organizational functions whose primary purpose is to ensure the efficient and effective delivery of relevant educational services as well as implementation of legislative policies through planning, decision making and leadership behavior. Educational administration constitutes the following aspects in its jurisdiction as its scope: Production, Assuring Public, Finance and Accounting, Personnel, and Co-ordination.

Educational Organization: Educational organization means two things; one is the organization of resources and the other is educational institution. All types of resources meant for the educational program are organized or made available in an organization or institution for realizing the educational objectives or goals. Because poor organization leads to wastage and bad outcomes. Interpersonal relations must be improved to make organization effective and adequate.

Educational Direction: It is essential that there must be an authority, an order or a policy for providing direction to the management of every educational program and for taking decisions in solving the problems. Democratization of management seeks to encourage the pride, enjoyment and growth among the individuals working in the organization. Each individual must work according to his needs, interests and capabilities.

Educational Co-Ordination: For making smooth management of every educational program for resulting in adequate realization of its goals or objectives, there is need of ensuring co-ordination and co-operation among the multifarious resources. Through this coordination, all facilities will be unified and all services harmonized. So through this aspect of educational management, different kinds of resources especially human resources have to be interrelated or coordinated for utilizing the resources properly in an effective manner.

Educational Supervision: Educational administration and supervision are now regarded as the total process of making any educational program a grand success. For this, there is the need of ensuring and maintaining good inter-personal relationships Educational supervision is the means to coordinate, stimulate and direct the growth of the teachers, of every student through the exercise of his talents towards the achievement of richest goals.

Educational Control: Controlling is not similar to evaluation but it is meant to fulfill the purposes of evaluation. In order to fulfill the purposes of evaluation, the techniques of control are the policies, the budget, auditing, time table, curriculum, personal records etc. Educational controlling involves the human elements in relation to the management of an educational program. Both men and women involved in the educational program should discharge their duties efficiently and effectively by being controlled.

Educational Evaluation: Being the last but not the least aspect of educational management, educational evaluation is an integral part of it as it determines the degree of realization of educational objectives or goals as well as the effectiveness of it. It is also desirable that both internal and external agencies need be involved in evaluating the achievement and performance of the individuals concerned with management.

At last, in the light of above discussion on the scope of educational management, it can be strongly said that the management of any educational program will be meaningful and successful if there is proper co-ordination and integration among its different aspects. The reason is that all these aspects are interrelated and interdependent.

Concept of Coronaviruses (COVID-19) Pandemic

Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y. (2020), studied the stability of SARS-CoV-2 in different environmental conditions, using viral culture as a measure of infectivity (rather than PCR), indicating detection of replication-capable virus. They found that the virus was very susceptible to high heat (70°C). At room temperature and moderate (65%) humidity, no infectious virus could be recovered from printing and tissue papers after a 3-hour incubation period or from wood and cloth by day two. On treated smooth surfaces, infectious virus became undetectable from glass by day 4 and from stainless steel and plastic by day 7. “Strikingly, a detectable level of infectious virus could still be present on the outer layer of a surgical mask on day 7 (~0.1% of the original inoculum).”

According to Anand, Ziebuhr, Wadhvani, Mesters, & Hilgenfeld (2003), prevention is so far the best practice in order to reduce the impact of COVID-19 considering the lack of effective treatment. In order to achieve this goal, the main measures are the following: (1) to use face masks; (2) to cover coughs and sneezes with tissues; (3) to wash hands regularly with soap or disinfection with hand sanitizer containing at least 60% alcohol; (4) to avoid contact with

infected people; (5) to maintain an appropriate distance from people; and (6) to refrain from touching eyes, nose, and mouth with unwashed hands.

Effects of COVID-19 Pandemic on Educational Management

Many countries have (rightly) decided to close schools, colleges and universities. The crisis crystallizes the dilemma policymakers are facing between closing schools (reducing contact and saving lives) and keeping them open (allowing workers to work and maintaining the economy) Murphy & Wyness (2020).

Impacts on education: Schools

Going to school is the best public policy tool available to raise skills. While school time can be fun and can raise social skills and social awareness, from an economic point of view the primary point of being in school is that it increases a child's ability. Two pieces of evidence are useful. Carlsson, M, Dahl G B, Öckert B and Rooth D (2015), in his study concluded that even just ten days of extra schooling significantly raises scores on tests of the use of knowledge ('crystallized intelligence') by 1% of a standard deviation. As an extremely rough measure of the impact of the current school closures, if we were to simply extrapolate those numbers, twelve weeks less schooling (i.e. 60 school days) implies a loss of 6% of a standard deviation, which is non-trivial.

Impacts on education: Families

Perhaps to the disappointment of some, children have not generally been sent home to play. The idea is that they continue their education at home, in the hope of not missing out too much. Families are central to education and are widely agreed to provide major inputs into a child's learning, as described by Bjorklund and Salvanes (2011). But the bigger point is this: there will likely be substantial disparities between families in the extent to which they can help their children learn. Key differences include (Oreopoulos, P, Page, & Stevens, A. 2006): the amount of time available to devote to teaching, the non-cognitive skills of the parents, resources (for example, not everyone will have the kit to access the best online material), and also the amount of knowledge – it's hard to help your child learn something that you may not understand yourself.

Impacts on education: Assessments

The closure of schools, colleges and universities not only interrupts the teaching for students around the world; the closure also coincides with a key assessment period and many exams have been postponed or cancelled.

Impacts on education: Graduates

The careers of this year's university graduates may be severely affected by the COVID-19 pandemic. They have experienced major teaching interruptions in the final part of their studies, they are experiencing major interruptions in their assessments, and finally they are likely to graduate at the beginning of a major global recession. Evidence suggests that poor market conditions at labor market entry cause workers to accept lower paid jobs, and that this has permanent effects for the careers of some.

Concept of On-line platform

According to Garrison (2011), in the 21st century, technology is playing a crucial role in our daily lives and it calls professionals, educators, and learners, to reflect again over their basic beliefs in order to use technology for the re-design or re-engineering of education and training system. In addition, these technological devices play a significant role to help learners and teachers to get more advantages from it. Gibbs (2009) reported in his study on the effectiveness of online learning that 95% of the online learners included in his research sample felt that On-line learning is as effective as traditional learning, if not more. This finding tends to suggest that On-line platform has become more acceptable as a learning tool in the minds and perceptions of learners. After all, it has allowed learners to save money and acquire their knowledge and skills online at their own pace and in their own time, which helped working or busy students to get their degrees more conveniently.

Mitigation of COVID-19 Pandemic Effect on Educational Management through On-line Platform

The COVID-19 pandemic quickly led to the closure of universities and colleges around the world, in hopes that public health officials' advice of social distancing could help to flatten the infection curve and reduce total fatalities from the disease. One strategy adopted by the government to fill the space is the introduction of on-line platform into the educational system.

In a study conducted by Basilaia and Kvavadze (2020) on Transition to Online Education in Schools during COVID-19 Pandemic in Georgia, they discovered that online education, help in the planning, development and acquisition of knowledge from the different remote locations. Different countries worldwide have introduced various solutions during the pandemic to continue the education process. According to UNESCO (2020) on National Learning Platforms and tools, online libraries, TV broadcasts, guidelines, resources, video lectures, online channels are organized and introduced in at least 96 countries. To increase the coverage of the school lessons to the population, the live transmission of lessons is broadcasted through the TV channel in different subjects nationwide.

In this hard period, the educational system has gotten support from large companies such as Microsoft, Google, Zoom, and Slack, who are offering many of the features of their products for free: Microsoft is offering anyone its premium version of Teams for free for six months and lifted existing user limits. Google has announced that it is offering its enterprise video conferencing features such as larger meetings up to 250 people and recording functionality for free to G Suite and G Suite for Education customers through July 1, 2020. Zoom has lifted the time limit of video calls in china, japan, Italy and the US by request. (Rani Molla, VOX. 2020). Also, the study of Muirhead, (2000) on online education in schools, admits that online education, although new in the school system, can be considered for enhancing traditional schools and home-schooling if properly supervised.

Methodology

The research design used for this study was an Expost-Facto. The research area for this study was Imo State. The population of this study comprised policy makers in ministry of education, and public school proprietors in Imo state. A stratified random sampling technique was used in

the study. 20 principals, and 5 directors, 5 assistant directors and 5 deputy directors (under the ministry of education), were randomly selected to give a total of 35 respondents as the sample size. The main instrument used in this study was an interview schedule titled “ON-LINE PLATFORM, COVID-19 AND SECONDARY SCHOOL MANAGEMENT BOARD QUESTIONNAIRE (OPCSSMBQ).” Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.81 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques such as descriptive statistical analysis and simple regression analysis. The test for significance was done at 0.05 alpha levels

Results and Discussions

Research Question 1

The research question sought to find out the extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities. In order to answer the research question, descriptive statistical analysis was performed on the data collected as shown in Table 1.

Table 1: Descriptive statistics analysis of the extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities

Variable	N	Arithmetic mean	Expected mean	r	Remarks
Planning		16.71	12.5		
	38			0.87*	*Strong to perfect Relationship
On-line Platform		15.02	12.5		

Source: Field Survey

Table 1 Presents the result of the descriptive analysis of the extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities. The two variables were observed to have strong to perfect relationship at 87%. The arithmetic mean for planning (16.71) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards on-line platform (15.02) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable extent to which on-line platform mitigates against COVID-19 effect on the planning of educational activities.

Research Question 2

The research question sought to find out the extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities. In order to answer the research question, descriptive analysis was performed on the data collected as shown in Table 2.

Table 2: Descriptive statistics of the extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities

Variable	N	Arithmetic mean	Expected mean	R	Remarks
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Organization	14.55	12.5		
	38		0.76*	*Strong to Perfect Relationship
On-line Platform	15.02	12.5		

Source: Field Survey

Table 2 Presents the result of the descriptive analysis of the extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities. The two variables were observed to have strong to perfect relationship at 76%. The arithmetic mean for organization of educational activities (14.55) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards on-line platform (15.02) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable extent to which on-line platform mitigates against COVID-19 effect on the organization of educational activities.

Research Question 3

The research question sought to find out the extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities. In order to answer the research question, descriptive analysis was performed on the data collected as shown in Table 3.

Table 3: Descriptive statistics of the extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Supervision		15.50	12.5		
	38			0.64*	*Moderately Strong Relationship
On-line Platform		15.02	12.5		

Source: Field Survey

Table 3 Presents the result of the descriptive analysis of the extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities. The two variables were observed to have moderately strong relationship at 64%. The arithmetic mean for supervision (14.55) was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards on-line platform (15.02) was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable extent to which on-line platform mitigates against COVID-19 effect on the supervision of educational activities.

Hypotheses 1

The null hypothesis states that On-line platform does not significantly mitigate against COVID-19 effect on the planning of educational activities. In order to test the hypothesis regression analysis was performed on the data, (see table 4).

TABLE 4: Simple Regression Analysis of the extent of on-line platform mitigation against COVID-19 effect on the planning of educational activities

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.87a	0.76	0.75	1.03	0.76

***Significant at 0.05 level; df= 36; N= 38; critical R-value = 0.334**

The above table 4 shows that the calculated R-value 0.87 was greater than the critical R-value of 0.334 at 0.5 alpha level with 36 degree of freedom. The R-Square value of 0.76 predicts 76% mitigation. This rate of percentage is highly positive and therefore means that there is significant extent of on-line platform mitigation against COVID-19 effect on the planning of educational activities, meaning that on-line platform has contributed immensely to the planning of educational activities even in the phase of covid-19. It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 5).

TABLE 5: Analysis of variance of the extent of on-line platform mitigation against COVID-19 effect on the planning of educational activities

Model	Sum of Squares	df	Mean Square	F	P
Regression	121.42	1	121.42	113.84	.000b
Residual	38.40	36	1.07		
Total	159.82	37			

a. Dependent Variable: Planning

b. Predictors: (Constant), On-line platform

The above table presents the calculated F-value as (113.84) and the P-value as (000). Being that the P-value (000) is below the probability level of 0.05, the result therefore means that On-line platform significantly mitigates against COVID-19 effect on the planning of educational activities. The result therefore is in agreement with the research findings of Basilaia and Kvavadze (2020) that proved that transition to Online Education in Schools during COVID-19 Pandemic in Georgia is a way forward to learners as they discovered that online education, help in the planning, development and acquisition of knowledge from the different remote locations. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Hypotheses 2

The null hypothesis states that on-line platform does not significantly mitigate against COVID-19 effect on the organization of educational activities. In order to test the hypothesis regression analysis was performed on the data, (see table 6).

TABLE 6: Simple Regression Analysis of the extent of on-line platform mitigation against COVID-19 effect on the organization of educational activities

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.79 ^a	0.62	0.61	1.29	0.62

***Significant at 0.05 level; df= 36; N= 38; critical R-value = 0.334**

The above table 6 shows that the calculated R-value 0.79 was greater than the critical R-value of 0.334 at 0.5 alpha level with 36 degree of freedom. The R-Square value of 0.62 predicts 62% mitigation. This rate of percentage is highly positive and therefore means on-line platform significantly mitigate COVID-19 effect on the organization of educational activities.

It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 7).

TABLE 7: Analysis of variance of the extent of on-line platform mitigation against COVID-19 effect on the organization of educational activities.

Model	Sum of Squares	df	Mean Square	F	P.
Regression	95.74	1	95.74	57.78	.000b
Residual	59.65	36	1.66		
Total	155.40	37			

a. Dependent Variable: Organization

b. Predictors: (Constant), On-line platform

The above table 7 presents the calculated F-value as (57.78) and the P-value as (000). Being that the P-value (000) is below the probability level of 0.05, the result therefore means that On-line platform significantly mitigate against COVID-19 effect on the organization of educational activities. The result therefore is in agreement with the research findings of UNESCO (2020) which asserted that National Learning Platforms and tools, online libraries, TV broadcasts, guidelines, resources, video lectures, online channels are organized and introduced in at least 96 countries and that to increase the coverage of the school lessons to the population, the live transmission of lessons is broadcasted through the TV channel in different subjects nationwide. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Hypotheses 3

The null hypothesis states that on-line platform does not significantly mitigate against COVID-19 effect on the supervision of educational activities. In order to test the hypothesis regression analysis was performed on the data, (see table 8).

TABLE 8: Simple Regression Analysis of extent of on-line platform mitigation against COVID-19 effect on the supervision of educational activities

Model	R	R-Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.64a	0.40	0.39	1.68	0.40

***Significant at 0.05 level; df= 36; N= 38; critical R-value = 0.334**

The above table 8 shows that the calculated R-value 0.64 was greater than the critical R-value of 0.334 at 0.5 alpha level with 36 degree of freedom. The R-Square value of 0.40 predicts 40% mitigation. This rate of percentage is highly positive and therefore means on-line platform significantly mitigate against COVID-19 effect on the supervision of educational activities. It was also deemed necessary to find out the extent of the variance of each class of independent variable as responded by each respondent (see table 9).

TABLE 9: Analysis of variance of the extent of on-line platform mitigation against COVID-19 effect on the supervision of educational activities

Model	Sum of Squares	df	Mean Square	F	P.
Regression	68.34	1	68.34	24.32	.000b
Residual	101.17	36	2.81		
Total	169.50	37			

- a. Dependent Variable: Supervision
- b. Predictors: (Constant), On-line platform

The above table 9 presents the calculated F-value as (24.32) and the P-value as (000). Being that the P-value (000) is below the probability level of 0.05, the result therefore means that on-line platform significantly mitigates against COVID-19 effect on the supervision of educational activities. The result therefore is in agreement with the research findings of Muirhead, (2000) which affirmed that online education, although new in the school system, can be considered for enhancing traditional schools and home-schooling if properly supervised. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusion

One of the strategies adopted by the government to fill the space created by COVID-19 pandemic is the introduction of On-line learning platform into the educational system. Based on the findings of the study, it was concluded that On-line platform significantly mitigates COVID-19 effect on the planning, organization and supervision of educational activities.

Recommendations

1. The Imo State government should send out the staff of ministry of education, school administrators and teachers for online training in order to aid them mitigate against COVID-19 effect on the planning, organization and supervision of educational activities in the state.

2. Extraordinary times call for extraordinary measures. Hence, the government must adopt the “emergency eLearning” protocols, marking the rapid transition of face-to-face classes to online learning systems.
3. The government should make provisions for an effective On-line learning, such as the provision of whiteboards, projectors or audio-visual display, equipment and digital boards.
4. The government should provide financial support to students with low living standard, by providing them with gadgets for effective online learning.
5. School students should endeavor to take active part in online learning, since the teachers cannot see them face to face. Their level of seriousness rests solely on their shoulders.

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