

Analysis of students' communicative patterns in a covid-19-moderated learning environment in edo state university Uzairue, Nigeria

Peter Eshioke Egielewa¹, Obinna Johnkennedy Chukwu²

Abstract

The study aims at analysis of students' communicative patterns in a Covid-19-Moderated learning environment in Edo State University Uzairue, Nigeria. The study was predicated on the Experimental Learning Theory (ELT). The objectives, amongst others, were to determine the communicative patterns of the students of Edo State University Uzairue in a Covid-19-Moderated Environment, assess whether the Covid-19-moderated learning environment affected the communicative patterns of students of Edo State University Uzairue, as well as, investigate whether the Covid-19-moderated learning environment affected Edo State University Uzairue students' extra-curricular activities. Survey was adopted as the study design, while questionnaire was used to elicit information from 210 undergraduate students. Findings that the students of Edo State University Uzairue communicative pattern in a Covid-19-moderated learning environment was through virtual (Online), and that despite the inherent challenges enthroned by the Covid-19-moderated learning environment, the students communicated more with friends through the new media platforms. Findings also show that Covid-19-moderated learning environment affected communication among students negatively, and that the implication of the results x-rayed, is that communication amongst students, and between the students and the lecturers, were badly affected by the Covid-19 moderated learning environment, amongst others. Based on the forgoing, the study, amongst others, recommends improvement and introduction of measures that would improve communication amongst the students and the lecturers.

Keywords: Analysis, Students' Communicative Patterns, Covid-19-Moderated Learning Environment.

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1. Introduction

The novel coronavirus (Covid-19) has, no doubt, had a negative impact on the global community. Many sectors of human society are still reeling from the impact. Many national economies have suffered recession leading to high joblessness and increasing poverty in poorer nations, health infrastructure in many countries have had to be tested to the limits with many collapsing under the burden of Covid-19 demands. The educational sector has been one of the hardest hit with many schools shutting down and many schools having no alternatives. The Covid-19 pandemic caused the largest disruption of education in history. As of 23 March 2020, globally, over 1.3 billion students didn't attend school. Indeed, as of April 2020, an estimated 94% of youths and children (approximately 1.6 billion people) from pre-primary to higher education in 200 countries were affected by the

pandemic. Nonetheless, several students were able to attend lectures virtually by e-learning technologies such as Zoom, Google classroom, CANVAS Learning Management Systems (LMS) and even Whatsapp. Studies have revealed that e-learning increases retention of information for students and take less time signaling that the changes in education format may eventually become a hybrid, combining both in-person and virtual. In other words, e-education, e-learning or online education will eventually become an integral component of school education. ^[1]

However, since the beginning of 2021, many school gates have been reopened and academic activities have resumed and millions of students are coming into a seemingly "strange" or "different" learning environment with new Covid-19 protocols put in place to prevent the spread of the virus.

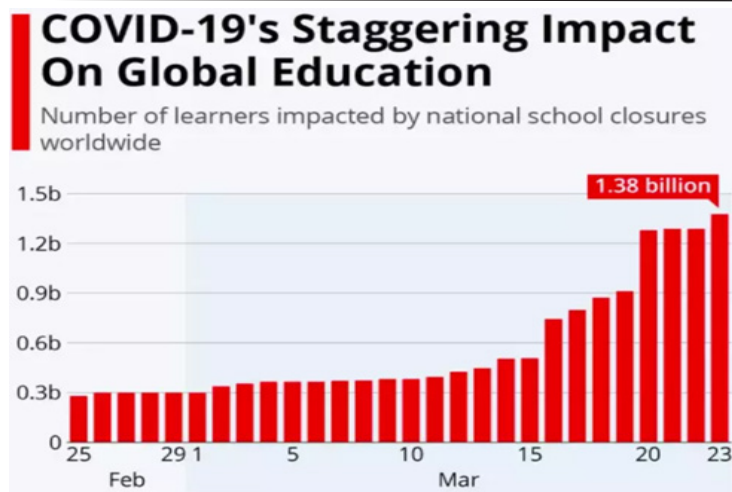


Figure 1: Number of students affected by school closure due to COVID-19 as of March 23 2020.
Source: Li & Lalani (2020)/UNESCO, 2020.

This has, therefore, made the learning environment in which students find themselves somewhat “strange” because students now have to observed social distance and crowded gatherings in normally undistanced learning spaces, students have to wear facemasks thus limited or inhibiting, as it were, free speaking and students must use hand sanitisers and wash their hands with soap and water more frequently than they would ordinarily do. All these have changed the learning environment for students, particularly students of higher institutions where students normally enjoy a higher degree of freedom in what can best be described as a Covid-19-moderated-learning-environment (CMLE).^[2]

In such Covid-19-moderated-learning-environment (CMLE), students’ communicative patterns have changed. The types and degrees of interaction between students themselves and between students and staff have changed and this affects the overall academic performance of students. This is particularly important as many students face anxiety as they come back to school not sure how their studies will progress with the several restrictions put in place and fearing an overload of academic work.^[3]

In a study, Di-Pietro argue that classroom physical contact of students due to the “peer effects” has positive effects on students’ academic activities such as teaching each other, greater interests in reading or even healthy competition. Such physical interactions also “help the students to acquire social skills that have important implications for their future personal and professional growth” (p. 11).^[4]

UNESCO posits that although physical education remains important, COVID-19 has altered the communication patterns of students in terms of the mode, form and places of such education. Such alterations affect both academic and extra-curricular relationships between students and faculty on the one hand and amongst students on the other hand in

what is now labeled COVID-19-moderated-learning-environment (CMLE).^[5]

This study seeks to interrogate the extent to which students’ communication patterns have been moderated by COVID-19 in Edo State University Uzairue, Nigeria as outlined in the research objectives and questions.^[6]

2. Research Objectives

The objectives of the study are to find out:

1. Determine the communicative patterns of the students of Edo State University Uzairue in a Covid-19-Moderated learning environment.
2. Assess whether the Covid-19-moderated learning environment affected the communicative patterns of students of Edo State University Uzairue.
3. Investigate whether the Covid-19-moderated learning environment affected Edo State University Uzairue students’ extra-curricular activities.
4. Examine if Covid-19-moderated learning environment affected Edo State University Uzairue students’ interaction with their lecturers.
5. Find out whether Covid-19-moderated learning environment affected Edo State University Uzairue students’ interpersonal interaction.^[7]

3. Research Questions

In view of the above, the formulated research questions for the study are as follows:

1. What are the communicative patterns of the students of Edo State University Uzairue?
2. To what extent did the Covid-19-moderated learning environment affect communicative patterns of students of Edo State University Uzairue?
3. To what extent did the Covid-19-moderated learning environment affect the extra-curricular activities of students of Edo State University Uzairue?

4. To what extent has the Covid-19-moderated learning environment affected students' interaction with their lecturers?
5. To what extent has the Covid-19-moderated learning environment affected Edo State University Uzairue students' interpersonal interaction?

4. Literature review

Students of higher institutions across the globe, returning to schools after the Covid-19 lockdowns met a new or altered learning environment. This new environment has led to the increasing digitalisation of learning such as the frequent use of online learning platforms. Even in physical interactions, there were new restrictions put in place in terms of the form, and mode of such physical contact between students and students on the one hand, and between students and teachers on the other hand. Payne has highlighted some communication patterns that were altered after the Covid-19 including the need for either increasing the sizes of classrooms or reducing the number of students in a classroom due to the need for social distancing. In some countries, students needed to stay 1 or 2 meters distance apart depending on the gravity of the infections in such countries. Some countries like France and the UK require downsizing of students in a classroom to only 15 students per class. However, since most countries could hardly downsize within a short period, many schools resorted to using previously unused spaces and converting them to lecture rooms.^[8]

In terms of the moderated learning environment occasioned by Covid-19, Schleicher found out that students benefitted less from the virtual learning platforms that were deployed by most schools during the Covid-19 shutdown of schools underscoring the global push for schools to reopen. This established and confirmed previous studies which showed that students preferred physical learning to online learning due to the possibility of encountering their teachers and peers and access to full access to a wide variety of educational, social and health-related services which schools offer.^[9]

Thus, students found themselves increasingly directed to take e-classes to reduce physical contact. This means that students will have to sit alone in their rooms and attend lectures without the usual side distractions and friends' chatter before or after classes or quick coffee breaks in-between classes. Thus, students' social life suddenly ceased. In many cases, students were locked away in their rooms to prevent distractions by parents and siblings, driving the students to unusual loneliness that they were not used to previously. Even at home, family members isolated students because of the need for a "silent and conducive learning environment". Expectedly, this affected practical or experimental aspects of their learning which e-learning hardly offers effectively, even with strenuous efforts to close the gaps by lecturers.^[10]

Many schools resorted to a reduction in indoor activities and instead opted for more outdoor activities. Although this was specifically meant to reduce the possibility of spreading the Covid-19 infection, it ended up providing the students with fewer teaching materials that were readily and easily available indoors and which were simply impossible to move outdoors. For example, it was almost impossible to move smart boards or chemistry laboratories outdoors. Students, therefore, suffered a reduction of some practical dimensions of their learning.^[11]

In a sense, patterns of communication have been altered. As UNESCO posits "education and learning are about human interactions, dialogue and exchange." For instance, parents have become active participants in the education of their children due to their increasing accessibility to the online platforms deployed in teaching their children. An example of such platforms is the CANVAS Learning Management System (LMS) propelled by easier and cheap provision of internet services. Teachers have become extra health-conscious by trying to safeguard both their health and those of their students thus becoming essential participants in defining the future of education globally. COVID-19 quarantines and social distancing restrictions have occasioned the "new normal" causing separation and widening of trust. In the post-Covid-19 era, the schooling environments need to rebuild the trust once again that existed pre-Covid-19.^[12]

Today, the hybrid education format in which teaching and learning take place both on and offline has become a new normal too. Increasingly, students must resort to many hours of engaging with colleagues in a virtual world even when in the same building. In other words, the changing patterns of education are reflected in education taking place in "flexible forms, flexible times, shared educational commitments, and an understanding of the ways that learning is broadly diffused across contemporary societies."^[13]

5. Theoretical framework Experiential Learning Theory

The Experimental Learning Theory (ELT) was developed by David Kolb in his thesis published in 1984. Kolb posits that learning is an impetus for the development of new knowledge that is conditioned by new experiences.^[14]

The ELT has been defined by Kolb as "the process whereby knowledge is created through the transformation of experience, that is knowledge results from the combination of grasping and transforming experience" where grasping experience refers to the process of taking in information and transforming experience by individual and how those individuals interpret and act on the information received (Guang, n.d). It is an approach that is semi-structured and requires students to cooperate and learn from one

another through direct experiences tied to real-world problems. The ELT positions learning as a continuous process in which students bring their knowledge, ideas, beliefs and practices—at different levels—to their understanding and interpretation of new information.

Kolb's experiential learning theory is typically represented by a four-stage cycle of learning and four separate learning styles. In essence, effective learning is seen when a person passes through a cycle of four stages:

1. Concrete Experience (CE) - a new experience or situation is encountered, or a reinterpretation of existing experience.
2. Reflective Observation of the New Experience (RO) – Assessment of any inconsistencies between experience and understanding.
3. Abstract Conceptualization (AC) reflection gives rise to a new idea or a modification of an existing idea that an individual has learnt from an experience.
4. Active Experimentation (AE) – Application of the learner's new idea(s) to the world around them to see what happens.

Corresponding to the four-stage cycle of learning are Kolb's four distinct learning styles: (1) diverging (view concrete situations from several different viewpoints) (2) assimilating (involves a concise, logical approach to information) (3) converging (use of learning to find solutions to practical issues) (4) accommodating (relies on intuition rather than logic and use other people's analysis rather than their own), and that an individual usually prefers one learning style over the other. Many factors usually influence a person's preferred style. These moderating factors include social environment, educational experiences, or just the basic cognitive structure of the individual. [15]

For Kolb, the factors that influence a person's choice of style are again dependent on two pairs of variables which he called "continuums". The first is the east-west axis that is called the Processing Continuum (how we approach a task), and the north-south axis that is called the Perception Continuum (our emotional response, or how we think or feel about it).

This theory suits this study because it supports learning in higher education in which the experiences of the COVID-19 of students and educators have brought about some new information that has changed the way learning takes place in the education environment. In other words, the learning environment has been moderated. [16]

6. Methodology

The study adopted survey research design, while questionnaire was used as the instrument of data collection. A sample size of 210 was drawn from the population of the undergraduate students of Edo State University Uzairue, Edo State, Nigeria, which, according to the University's Registrar's office, stood at 2900. Convenience and snowball sampling techniques were used to track the respondents, where the copies of questionnaire were administered and collected. Data collected was presented on tables, as well as, analysed using simple percentage and Weighted Mean Score (WMS). On WMS, scores above 3.0 are considered as Positive or High, scores on 3.0 reflect Undecided, whilst below 3.0 are seen as Negative or Low.

7. Data presentation and Analysis

Research Question One: What are the communicative patterns of the students of Edo State University Uzairue in a Covid-19-Moderated Learning

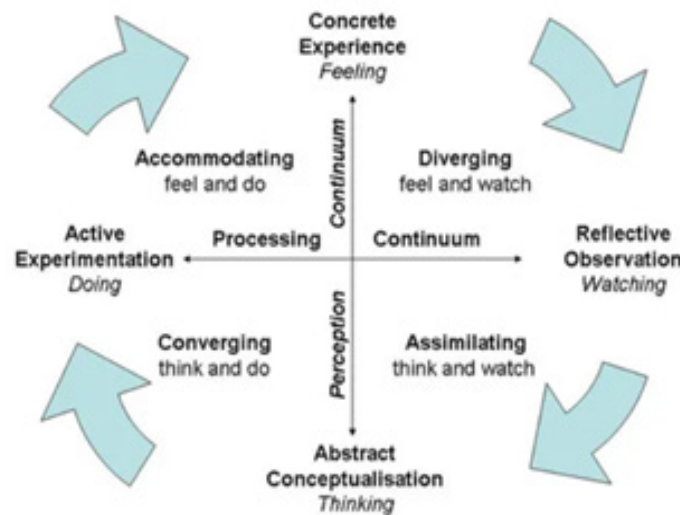


Figure 2: Interplay between Kolb's four learning stages and four learning styles.

Source: (McLeod, 2017).

Table 1: Which communication pattern did you utilise in a Covid-19-Moderated Learning Environment at EDSU?

Options	Number of respondents	Percentage (%)
Virtual (Online)	210	100
In-person	-	-
Text Message	-	-
Non-verbal	-	-
Others	-	-
Total	210	100

The table indicates that students of Edo State University Uzairue's communicative pattern in a Covid-19-moderated environment was through virtual (Online).

Table 2: I communicated more with friends through the new media platforms – Facebook, Twitter, WhatsApp, etc.

OPTIONS	RESPONDENTS	WEIGHTED	MS	RESPONSE RESULT	PERCENTAGE
Strongly Agree	180	900			85.8
Agree	12	60			5.9
Undecided	18	54			8.3
Disagree	-	-			-
Strongly disagree	-	-			-
	210	1014	4.8	POSITIVE	100

The table shows a Positive response result, and that the students of EDSU under the Covid-19-moderated environment, communicated more with friends through the new media platforms.

Research Question Two: To what extent did the Covid-19-Moderated Learning Environment affect communicative patterns of students of Edo State University Uzairue?

Table 3: Extent effect of Covid-19-Moderated Learning Environment on communicative pattern of students of Edo State University Uzairue (EDSU)

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Very High Extent	130	650			62
High Extent	23		92		11.1
Undecided	30	90			14
Low Extent	22	44			10.5
Very Low Extent	5	10			2.4
Total	210	886	4.2	HIGH	100

The table indicates that the extent of the effect of Covid-19-moderated environment on communicative patterns of the Students of Edo State University Uzairue is High.

Research Question Three: To what extent did the Covid-19-Moderated Learning Environment affect the extra-curricular activities of students of Edo State University Uzairue?

Table 4: Extent of effect of Covid-19-Moderated Learning Environment on extra-curricular activities at EDSU

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Very High Extent	131	655			62.4
High Extent	19		76		9
Undecided	-	-			-
Very Low Extent	16	32			7.6
Low Extent	44	44			21
Total	210	807	3.8	HIGH	100

The above table indicates that the extent of the effect of Covid-19-moderated learning environment (Social distancing) on extra-curricular activities of students of EDSU is High.

Table 5: Which extra-curricular activities did Covid-19-Moderated Learning Environment affected the most at EDSU?

Options	Number of respondents	Percentage (%)
Shopping, Eateries, etc.	140	66.7
Sporting activities	-	-
Religious activities (Church/Mosque)	13	6.2
Others	57	27.1
Total	210	100

The table indicates that majority of the students of Edo State University Uzairue agree that Covid-19-moderated learning environment affected going for Shopping and Eateries.

Table 6: Covid-19-Moderated Learning Environment affected curricular activities that require physical presence

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Strongly Agree	170	850			81.3
Agree	5		20		2.5
Undecided	5	15			2.5
Disagree	30	60			13.7
Strongly disagree	-	-			-
	210	945	4.5	POSITIVE	100

The table indicates a positive response result and indicates that Covid-19-moderated learning environment affected curricular activities at EDSU, but, only the ones that require physical presence.

Table 7: Which curricular activities did Covid-19-Moderated Learning Environment affected the most at EDSU?

Options	Number of respondents	Percentage (%)
Sitting together in class	156	74.4
Reading with other students	12	5.6
Visit to Library	21	10
Attendance to lectures/class	-	-
Others	21	10
Total	210	100

The table indicates that majority of the students of Edo State University Uzairue agree that Covid-19-moderated learning environment affected sitting together in class. The implication of the above result is that the social distancing measure introduced by EDSU worked perfectly.

Table 8: Covid-19 protocol introduced by EDSU did not affect my studies generally

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Strongly Agree	75	375			35.1
Agree	49	196			23.4
Undecided	13	39			6.7
Disagree	30	60			14.3
Strongly disagree	43	43			20.5
	210	713	3.3	POSITIVE	100

The Table shows a weighted mean score of 3.3, and a positive response result that indicates that Covid-19 protocol introduced by EDSU did not affected the students' studies generally.

Research Question Four: To what extent has the Covid-19-Moderated Learning Environment affected students' interaction with their lecturers?

Table 9: Extent of the effect of Covid-19-Moderated Learning Environment on communication with my lecturers at EDSU

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Very High Extent	86	430			41.2
High Extent	25	100			11.8
Undecided	74	222			35.3
Very Low Extent	25	50			11.8
Low Extent	-	-			-
	210	802	3.8	HIGH	100

The table shows that the extent of the effect of the Covid-19-moderated environment on communication by the students of Edo State University Uzairue (EDSU) with their lecturers is Low.

Research Question Five: To what extent has the Covid-19-Moderated Learning Environment affected Edo State University Uzairue students' interpersonal interaction?

Table 10: Covid-19-Moderated Learning Environment at EDSU affected my interactions with other students

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Very High Extent	198	990			94.1
High Extent	8	40			4
Undecided	-	-			-
Very Low Extent	4	8			1.9
Low Extent	--	-			-
	210	1038	4.9	HIGH	100

The Table shows a weighted mean score of 4.9, and a positive response result that indicates that Covid-19-moderated learning environment affected interactions amongst students at Edo State University Uzairue (EDSU).

Table 11: Covid-19-Moderated Learning Environment affected communication amongst students at EDSU negatively

OPTIONS	RESPONDENTS	WEIGHTED	WMS	RESPONSE RESULT	PERCENTAGE
Strongly Agree	123	615			58.8
Agree	12		60		5.9
Undecided	62	186			29.4
Disagree	-	-			-
Strongly disagree	12	24			5.9
Total	210	885	4.2	POSITIVE	100

The table indicates that the students of EDSU agree that Covid-19-moderated learning environment affected communication among students negatively.

8. Discussion of Findings

Findings show that students of Edo State University Uzairue's communicative pattern in a Covid-19-moderated learning environment was through virtual (Online), as well as, a Positive response result, and that despite the inherent challenges enthroned by the Covid-19-moderated learning environment, the students of Edo State University Uzairue communicated more with friends through the new media platforms. The implication of the above is that the respondents agreed that the moderated learning environment did not affect the frequency of communication amongst students; and that the result detracts from the negative findings of Schleicher, which amongst others, found that students benefitted less from the virtual learning platforms; and agrees with the assertion of UNESCO, that Covid-19 pandemic effect would affect our mode of communication.

The findings further indicate that the extent of the effect of Covid-19-moderated learning environment on communicative patterns of the Students of Edo State University Uzairue is High, as well as, the extent of the effect of Covid-19-moderated learning environment (Social distancing) on extra-curricular activities of students of Edo State University Uzairue, which, also indicates a High response result. Besides that above, the findings of the study show that majority of the students of Edo State University Uzairue agree that Covid-19-moderated learning environment affected going for Shopping and Eateries (Restaurants and Fast-food joints); affected curricular activities that require physical presence, as well as, In-person learning. The implication of the above result is that the Covid-19 protocol, inclusive of the social distancing measure, introduced by Edo State University Uzairue worked perfectly, did not affected the students' studies generally, particularly, the virtual or online learning.

Further, the findings indicated that the extent of the effect of the Covid-19-moderated learning environment on communication by the students of Edo State University Uzairue with their lecturers is Low, as well as, affected interactions amongst students. The findings also show that Covid-19-moderated learning

environment affected communication among students negatively. The implication of the above results is that communication amongst students and between the students and the lecturers were badly affected by the Covid-19 moderated learning environment.

9. Conclusion and Recommendations

Based on the findings, the study concludes that students of Edo State University Uzairue communicative pattern in a Covid-19-moderated learning environment was through virtual (Online), and that despite the inherent challenges enthroned by the Covid-19-moderated learning environment, the students communicated more with friends through the new media platforms. Findings also show that Covid-19-moderated learning environment affected communication among students negatively, and that the implication of the results x-rayed, is that communication amongst students, and between the students and the lecturers, were badly affected by the Covid-19 moderated learning environment. Therefore, the study recommends improvement or introduction of measures that would improve communication amongst the students and the lecturers.

Also, in view of the low extent result generated regarding the above, efforts should be intensified towards restoring the conviviality and cordiality existing amongst the students, as well as, the areas affected the Covid-19 moderated learning environment, such as – going to Shopping and Eateries (Restaurants and Fast-food joints); curricular activities that require physical presence, as well as, In-person learning, amongst others.

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References

1. L.R. Amir, I. Tanti, D.A. Maharani, Y.S. Wimardhani, V. Julia, B. Sulijaya, R. Puspitawati, Student

- perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia, *BMC Medical Education*, 20 (2020) 1-8.
2. M. Barron, C. Cobo, A. Munoz Najar, I.S. Ciarrusta, The changing role of teachers and technologies amidst the COVID 19 pandemic: Key findings from a cross-country study, *World Bank*, (2021).
 3. E. Bartle, *Experiential learning: An overview*, Institute for Teaching and Learning Innovation, (2015).
 4. G. Di Pietro, F. Biagi, P. Costa, Z. Karpiński, J. Mazza, The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets, (2020).
 5. P. Egielewa, P.O. Idogho, F.O. Iyalomhe, G.T. Cirella, COVID-19 and digitized education: Analysis of online learning in Nigerian higher education. *E-Learning and Digital Media*, (2021) 1-17.
 6. L.H. Guang, *Overview: Experiential Learning*, (2015).
 7. A.D. Kolb, R.E. Boyatzis, C. Mainemelis, *Experiential Learning Theory: Previous Research and New Directions*, In R. J. Sternberg and L. F. Zhang (Eds.), *Perspectives on cognitive, learning, and thinking styles*, (2000) 1-40.
 8. C. Li, F. Lalani, The COVID-19 pandemic has changed education forever, This is how, *World Economic Forum*, (2020).
 9. S. McLeod, *Kolb's Learning Styles and Experiential Learning Cycle*, (2017).
 10. National Center on Safe Supportive Learning Environments. NCSSE, *Addressing COVID-19 pandemic in higher education*, (2021).
 11. W. Payne, *The future of learning environments after COVID-19*, (2021).
 12. A. Schleicher, *The impact of COVID-19 on education: Insights from education at a glance*, (2020).
 13. C. Smith, M. Hoderi, W. Mcdermott, A preliminary study of students' perception and learning from different delivery methods, *Academy of Educational Leadership Journal*, 23(2) (2019) 1-10.
 14. United Nations, *Policy Brief: Education during COVID-19 and beyond*, (2020).
 15. United Nations Educational, Scientific and Cultural Organization, UNESCO, *Learning in the COVID-19 era*. (2020),
 16. United Nations Educational, Scientific and Cultural Organization, UNESCO, *Education in a post-COVID world: Nine ideas for public action*, (2020).