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Utilization of E-Learning Technological Tools in Teaching and Learning during Emergency Situations

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ABSTRACT

Teaching has been proven to be an attempt to help someone acquire or change skills, attitudes, knowledge, or ideas while learning as a change in human disposition or capability that can be retained but which is not simply ascribed to the process of growing. The paper defined what learning is, noting that it is a relatively permanent or enduring change in behaviour as a result of practise or experience. Changes in perception, insight, reaction, or reasoning may occur, but not as a result of biological changes. For learning to be said to have taken place, the individual learner must demonstrate a positive change in behaviour as a result of learning and experience. It also gave an explanation of what teaching is, teaching and learning in the physical classroom and emergency situations. It was on this basis that the paper concluded that e-learning technological tools are the total of electronic devices and various online tools to support teaching and learning during emergency situations or for remote learning experiences. Teaching and learning are the bones of education. In the recent past, teaching and learning have been done in physical classrooms where a positive classroom climate enhances the emotional and mental well-being of the learner. In physical class, the teacher interacts with the learners on the learning wheel. She uses eye contact to observe the paralinguistic gestures of the learners while teaching, and she changes teaching styles to accommodate all learners. One of the recommendations was that the government should fund education and one of the ways of doing this is to provide adequate e-learning platforms to increase access to the internet and an interactive learning approach. The whole nation should be on the same page on internet use.

KEYWORDS: E-Learning Technological Tools, Teaching and Learning

Introduction

It is better to start discussing this topic by first explaining the important keywords. Countless articles have been written on the concepts of teaching and learning. Once the words "teaching and learning" are mentioned, the first mental picture one gets is of the teachers and students. Teaching and learning is one of the global needs of the nations for cognitive, industrial, wealth, and human development. In this paper, discourse will be made on e-learning, teacher and learning elements in the

physical classroom, the tools used in teaching and learning during emergencies, and the challenges encountered when using them.

The world habours uncertainties, which tend to disrupt the flow of teaching and learning. The global outbreak of Covid-19, which originated in December 2019, led to global shut down of schools and other sectors. For many decades, there have been records of adverse effects of disasters since the dawn of human existence. Not up to 30 years before the outbreak of Covid-19 pandemic, there were various epidemics and pandemics all over the world, and some of the events that struck resulted in a sizable reduction of the world population. In 1999, there were floods, famine, and tsunamis in different parts of the world that claimed many lives. Also in 2014, there was a recorded outbreak of polio and Ebola in some countries in West Africa.

According to Yoshikawa et al. (2020), in 2015–2016 the Zika virus epidemic struck and millions of people died as a result of the epidemic, and between 2018–2020 there was the spread of Kivu, Ebola, and Covid-19, which shocked the whole world. A pandemic is any disease or condition that affects people in many countries at the same time. Covid-19 was "serious," "sudden," "unusual" and was unexpected. Because of the international spread, WHO, in collaboration with IHR International Health Relations, had to declare a lockdown to enhance the reduction of harm to life. The outbreak of the pandemic led to the observance of physical and social distancing. As a result, physical teaching and learning were brought to a halt. Then, one of the global challenges confronting progressive thinkers and educators was how to keep students connected to their learning materials.

What is Teaching?

The concept has attracted different definitions from various disciplines. Clark and Starr (1967) defined teaching as an attempt to help someone acquire or change skills, attitudes, knowledge, or ideas. Teaching is a planned process which requires the methodological application of techniques based on the results of experimental analysis of behaviour. Van Dalen and Brittel in Obiefuna, et al. (2010) saw teaching as the guidance of pupils through planned activities such that the learner may acquire the richest learning possibilities from their experiences. Umunna (2019) defined teaching as the activities undertaken by a more knowledgeable or more experienced person in order to enable a learner to learn. Obiefuna et al. (2010) also defined teaching as the interaction of a young, old, bright or below average intelligence, poor or rich, male or female, or disabled student with a teacher over a subject. According to Mkpa (2005), psychologists define teaching as an interaction between a guide and the learner over a topic or contents in a learning wheel. Teaching includes using one or more strategies to assist the learner in learning a given content.

For this paper, teaching is all the activities of teachers, online or offline, to make students learn. The definitions so far show that teaching is the ability to plan activities that can bring about the transferring of knowledge, skills, habits, and activities in a learner with maximum guidance for a positive change in behaviour, skills, and attitudes. To achieve this aim, teaching must be adequately planned, adequately delivered and properly assessed to meet the needs of the learners. Teaching is not only about presenting the subject matter to the students. The interests, needs, and aspirations of the learner, as well as the environment, should be considered.

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What is Learning?

Learning has been defined by different authors from different points of view. Elizabeth Hurlock defines learning as development that comes from exercise and effort. Psychologists in general define learning as a relatively permanent modification of behaviour resulting from experience. Gagne in Iroegbu et al. (2003) defined learning as a change in human disposition or capability that can be retained but which is not simply ascribed to the process of growth. Ebenebe & Unachukwu (1995) defined learning as a process of gaining new insights or changing old ones.

Behaviourist theorists Ebenebe and Unachukwu (1995) define learning as a relatively permanent change in an individual's potential behaviour as a result of experience. To sum up all these definitions, one conclusive definition is upheld, and it is: Learning is a relatively permanent or enduring change in behaviour as a result of practise or experience. Changes in perception, insight, reaction, or reasoning may occur, but not as a result of biological changes. For learning to be said to have taken place, the individual learner must demonstrate a positive change in behaviour as a result of learning and experience. There must be observable behaviour in the life of the learner after the learning experience. The learner must move from the level of not knowing how to do a particular thing to knowing how to do what he was not able to do before the learning experience took place. If there is no change in behaviour, it means that learning did not take place. Efficient learning, whether done in physical classrooms or online classrooms, must change the individual in some ways. It must move the individual from the level of not knowing how to do a particular thing to the level of knowing and doing what he was not able to do before the learning experience took place. Again, the change in an individual must come as a result of experience, and there must be a change in potential performance. It is not enough to discuss learning without mentioning the three important elements of learning. What the learner learns, how he learns the subject matter, the learner's environment, and the learner's interests and aspirations are important and indispensable factors in the learning cycle.

Furthermore, learning should not be viewed as a process of information transfer but as a social and cognitive process. Incidentally, learning does not occur in isolation since learning is a continuous process. Learning takes place anywhere and can take various forms. Learning is not a simple mental process; it involves a lot of intricacies and complex behavior. Learning is a man's interaction with his environment on a daily basis whereby skills and knowledge are acquired. Teaching and learning are like fraternal twins; both are intermingly related. It might be a little difficult to discuss one and leave the other. The difference is that the teacher is in the teaching while the learner is in the learning.

Teaching/Learning in the Physical Classroom

A good physical environment promotes teaching and learning. The sitting arrangement is one of the best panaceas to achieve effective classroom control. The physical classroom environment gives the students an opportunity to come into contact with their mates; it creates a caring, child-centred environment. The teacher has eye-to-eye contact with the students while teaching. A well-organized class motivates children, improves learning, and reduces behavioural issues. The teacher of the class, Umunna (2019), If the classroom atmosphere is positive, students will learn and learn happily, but if the classroom is not well arranged and not warm, the teacher may lose full

control of the class. Some pupils sitting at the back of the class may be doing different things altogether while the lesson is going on.

Learning in the physical classroom enhances effective class interactions with students. Each child has his or her unique potential, which each child has to benefit from. Students build an interest in one another; they share learning materials, edibles, laugh, quarrel, and settle their differences among themselves as part of growing up. Through staying together in a class, they develop a likeness and care for one another. This develops their emotional intelligence, which is one of the important spices and fragrances needed in today's society. Students enjoy teaching and learning more when they stay with their peers and learn in a joking manner, talking and laughing together as they open their minds to one another (Umunna, 2019).

Teaching and learning in a physical classroom offers the teacher the opportunity to use different teaching methods to cover the differences in the learning styles of students. This kind of opportunity may be deficient in some online teaching and learning because, in the physical classroom environment, the teacher while teaching listens to the body movements of the learners. Through the close observation of the expressions on their faces and some paralinguistic movements, she quickly adjusts teaching styles. Not only that, she gives more attention to the slow learners and ensures that they benefit from learning experiences, and she figures out what more remedial attention they need.

As a physical classroom is a home away from home, it is a place of full comfort, home and protection for all members, so it becomes the responsibility of every member of the classroom to make each other happy. One way of achieving this is by following the stated rules and regulations of the class. The teacher is not happy when students flaunt the class rules. The teacher may decide to use any form of punishment schedule to ensure that negative behaviours are not repeated by the individual. Through this means, vicarious learning takes place. Students, having seen the consequences of the actions of their fellow students, may be scared to repeat such behaviour.

The student may not be bold enough to tell the teacher if she makes mistakes in the class. However, the students can tell their parents about their experiences with their teacher at home. If it is a school that rates the activities of the teachers through their pupils or students, the students may anonymously vote for or against the teacher. So, with this type of behaviour control network for the teacher and students, a good teacher would be cautious in what she says and does with the students.

Physical classroom learning, as opposed to online learning, fosters peaceful coexistence between teachers and learners' parents, as well as between students and their fellow students' parents. Parents meet together with teachers on open days at the school. During Parent-Teacher Association (PTA) days, parents and teachers meet, and some lasting relationships start from such meetings. The usefulness of a good physical and positive classroom climate cannot be over emphasized, yes, but in an emergency situation such as COVID-19, a switch to online learning becomes necessary. There are many electronic learning tools that can be used in emergency situations.

Emergency Situation

An emergency situation is any situation that poses an immediate threat to a person's health, security, property, or environment. It means any significant disruption to normal operations caused by a riot, strike, flood, fire outbreak, natural disaster, outbreak of

war, abduction of pupils and teachers, or other serious incident. Any situation that amounts to a threat and harm to a human being, emotionally and physically, is considered an emergency situation. Other emergency situations that may necessitate school closures include blizzards, chemical spills, dam failures, earthquakes, droughts, extreme heat, and thunder storms. In this part of the world, there have never been records of such a global disaster as was experienced recently that led to the shutting down of schools, offices, and public places and physical distancing.

The Inter-agency for education in Emergency INEE decries Emergency International Education as a quality learning opportunities for all ages in situation of crisis. Millions of children and young people affected by global pandemic and they face disruption to their schooling. As Children have right to education even during natural disaster, so, the education of the children goes on even in the critical situations. In this case, education in emergencies is a critical one as it is done to protect the lives of children and those that teach them. The children regardless of where learning takes place, whether for short or long term basis, teaching and learning must on in order to track down the minds of the learners on their academic pursuit. So, emergency situation as a condition in which the specific provisions of regulations cannot be met for a temporal period and which necessitates immediate actions because of the potential danger to public health. Lock down becomes necessary and e-learning becomes the indispensable option to physical learning.

There are many e-learning technological tools that can be used during emergency situations. E-Learning: E-Learning is a new project for education is a new project for education based on the adoption of new computerized, multimedia and telematic technologies. The definition of the term is still a work in progress due to the fact that technologies are evolving everyday and it is difficult to improve teaching technologies or adapt traditional method to a new or already existing educational model. Ewelum and Chigbogu (2017) defined e-learning as an innovative approach for delivering electrically, well designed, interactive learning environment to anyone, any place and any time.

The advancement in digital technology has given room for widespread knowledge and sharing experiences of various kinds via electronic media. E-Learning incorporates all educational activities that are carried out by individuals or groups working online or offline and synchronously via network or stand –alone computer and other electronic devices. It also involves a combination of computers, internet and digital media with established classroom forms. Electronic learning involves all forms of electronic media which includes the following but are not limited to: Interactive television, podcasting, computers and video conferencing. E-learning makes the interaction between the students and the teachers possible as the students learn online. It is a learning realized with the use of some technology via internet. It is a continuity learning through electronic media which is good for short or long term purposes. E-learning uses online tools for learning prescribed courses. Every form of learning which has to do with learning with electronic media via internet is considered an e-learning. It is a kind of umbrella embracing all forms of learning outside physical classroom teaching and learning.

What is online learning? Online learning is the use of internet and a learning experience realized with the use of some technology. It is associated with content readily accessible on a computer. The content may be on the computer hard disk. It is using online tools with internet direction for learning. Online learning is a combination of

blended learning and e-learning as it generally uses online tools for learning the course. It is comprehensive term that includes a number of instructional environment and approaches online learning is an instruction delivered on a digital device that is intended to support learning. It is studying from anywhere at any time without coming in contact with people.

Online learning enables many students who can access internet connection to continue learning without interruption during emergency situations. It accords the learner the opportunity to remain in touch with classmates and teaches and lessons. Incidentally, online learning is new experience to many students in the third world country. The outbreak of Covid-19 gave room to online education to all countries to continue learning while at home.

Difference between e-learning and online learning: e-learning is a kind of learning situation whereby the teaching and learning take place online. The students are taught through a medium. In e-learning, no actual classroom as the teachers and students communicate online. The students must be connected with their teacher through an internet connection to learn. If not connected through internet teaching and learning may not be possible. It is a learner and teacher online for a purpose.

On the other hand, online learning is learning online with the use of internet and it is described as the learning experience that is realized with the use of some technology. It encompasses all other forms of learning as the main idea is using online tools for learning. E-learning is learning utilizing electronic technologies in order to have access to the educational curriculum outside traditional classroom. It is a kind of home-based learning with the aid of an online portal that students have access to students have to log into their respective accounts to learn and do assignments. E-learning contains materials which are either softcopy materials (e.g., worksheet/lecture notes/power point slides) and index explanation of the lecture/class, it contains quizzes, tests, homework and assignments. The students connect to access all materials posted by the teacher. They can post their questions to the teacher and receive answers too.

Online Live Learning Class

In the online live learning class, learning happens just like normal learning but entirely online. The students learn by the tutorship or well experienced teacher. The students and the teacher see themselves as the lesson is ongoing. Both students and teachers communicate with each other via audio, video or/an interactive whiteboard. Live online learning platforms are built with features to aid educational learning like graph papers for students to us. Live online learning can be conducted on individual or group level. The whole idea is to help the learners learn even when at home.

E- Learning Tools

E-learning tools are collection as of all online learning tools, any program, app or technology that can be accessed via an internet connection and enhance teacher's ability to present information and a student's ability to access that information. However, it may be difficult to provide a single definition of online tools because of the variety of tools. In any case, the e-learning tools that can help the students learn during emergency situations are discussed on this paper.

Technological Tools

Technological tools refer to all forms of technologies that are used to transit, store, create, display, share or exchange information by electronic means. When we talk of technological tools, it is not a new word but a comprehensive concept that embrace e-learning, online learning and all media used for online, offline teaching and learning. TT includes such technologies as radio, television, video, DVD, telephone, softwares, hardwares, equipment and services associated with technologies such as video conferencing, email and blogs. Included are all tools to the satellite that link nations to the machines that students work on in the classroom. Technological tools are used in managing different aspects of e-learning, including productivity, content creation, research, networking and communication.

According to Diecker (2019) technological tools are used to facilitate learning and help the learners to remain in touch with their teacher. Google classroom was launched in 2014. More attention was not paid to it by teachers and students in some developing countries. The outbreak of corona virus which brought physical classes to a sudden halt lead many to learn the use of goggle classroom in teaching the students online. Goggle classroom is only available for individuals with Goggle accounts computers or smart phones are needed to access lessons.

Google Classroom

Google classroom is an aspect of online learning developed by Google for schools that aims to simplify, creating, distributing and grading assignments. As a free web services, the sole aim is to streamline the process of sharing files between teachers and students outside a physical class. In Google class, students join class through private code. Teacher creates, distributes and marks assignments within the Goggle ecosystem. Each class creates a separate folder in the respective users drive. The students submit work to be graded by a teacher. The teacher on the other hand, monitors the progress for each student by reviewing revision history of a document and after being graded teachers can return work along with comments.

A student can join Goggle classroom by:

- Go to www.classroo.goggle.com
- Sign in with your C.V. USD (Student)
- Click the x sign on the top right
- Select "join class" and enter class.
- Available wi-fi or data is needed to access goggle class.

During the Covid-19 lock down, a training program was organized by our institutions to abreast the lecturers on how to use Goggle classroom. Students who joined classes benefited. New topics from their scheme of work was taught and assignments given to the students.

However, Goggle classroom has few limitations. Bad hits are on the developing countries. Bad network disrupts teaching and learning. As data is needed, most parents could not provide money for their children from different levels of education in various institutions to buy the data to connect online for lectures. There was hunger during Covid-19. Business was at stand still, some workers were not paid to join goggle classes. Not only that, goggle classroom requires more time as it requires good time

management skills. It creates sense of isolation as neither the teacher nor the students see each other. There is no flow of emotion during teaching and learning. As the teacher do not see the students, the learners may be combining other activities while learning in the goggle classroom.

The mood of the students is not felt white teaching. Finding answers to questions can be difficult as the teacher drops answers to students' questions. As the student's question may not require a "yes or No" answer. She may not get a clear answer she needs from the teacher because they do not see each other. Goggle classroom does not offer the medical students opportunity for practicals in laboratories. If network is poor, accessing information is hampered. In any case, Goggle classroom is an important e-learning tool to get the teachers connected to their students during emergency situations.

Television

Television is a one-way electronic visual communication tool. In many countries, television has been given considerable importance as a source and a tool for teaching. During the Covid-19 period, many countries televised learning contents and also through this medium, educate the populace on how to avoid the spread of the pandemic. Television provides direct class teaching. Selected teacher was made to teach particular topics on their area of specializations. The children tuned in from their various homes and learnt.

Teaching and learning on television broadcasting in no doubt is a very important tool. There is need to consider what happens to students in some third world countries where some villages and towns do not have steady power supply. Some of the television stations have poor network services and cannot be accessed by many families in remote areas. Not only that, what is taught on television most time was not in the scheme of work of all the levels of classes in school. The learners see and hear a teacher teaching on television but sees a huge gulf have the learner cannot ask the teacher questions. Children from low socioeconomic status may not benefit from television lesson because of inability of finance to buy generator and fuel for the children to learn. According to Bruner (1977) individuals learn by listening watching, touching, and reading. And people learn better when the subject matter is relevant to the personal interest of the students.

Radio

Radio is a one-way communication tool which is very important not only for entertainment but for education of the populace and as a viable tool of teaching and learning. The Covid-19 lock down gave a boost in using radio to teach teeming population of children at home. Incidentally, adolescents and teens do not pay greater attention to radio rather they prefer smart phones for various reasons. Children in primary schools and secondary schools were taught certain subjects on fixed days. Although the experience was a short span one. It did not last for a long period of time. As for now, there has not been any verified research work on the outcome of the use of radio in teaching student during the Covid-19 whether it improved their learning or not the only essence was to keep the children back to class. Thus, keeping their minds tracked to their academic pursuit.

On the other hand, it is good to know that some radio stations do not have wider coverage. Students who live close to the network area benefit more than those outside network service areas. Assessment of the learners were not possible as there were no communication between the teachers and the learners. No feedback of any kind. Did the learner pick anything from the lesson taught? The teacher cannot say. However, radio is a better alternative where online learning was not possible and a viable teaching and learning tool in emergency situations.

Class Dojo

Class Dojo is another important online educational tool. This connects the teacher and the students with the parents at home. The parents by request link up their child's teacher to continue teaching the child while at home due to some emergency cases. The teacher monitors the child's learning at home. She can share photos, video to the learner to help him learn better. The skills and values are built up and the family and school become a community in teaching and learning. With class Dojo, the teachers record videos of reading from the pupils recommended text books and send to families for children to watch from home; create digital meet ups and assign tasks to the pupils which they do at home. She makes the students keep a diary of their work at home. On class Dojo, the teacher shares class code and students log in. She share activities and follow up the students online.

Lark

Lark is a software very useful for online teaching. Video conference calls were easy to use and it can contain a lot of people about one hundred in one call. With this, the teacher can teach the students online, being mindful of time and data usage. Lark adjusts the time zones automatically which makes it easier to reach people in any part of the globe. Lark automatically combines group chats, calendar assistant and private messages, with that, saving the teacher from having bunch of different tabs. Lark allows exchange of videos between teachers and students. It is just one App that contains everything needed to collaborate as a group. Incidentally, many have not put lark into use. May be due to data consumption level or they are not aware about the tool.

Zoom

Zoom is a virtual classroom that can contain more than 20 persons in video conferencing. It brings the teacher and students together for teaching and learning. It can be inform of audio or video. It allows screen sharing, so, each participant see things together. Teachings during zoom meetings can be recorded and play off line. The number of people needed in each meeting and the duration is given to the teacher so as to direct learning appropriately. As an online teaching, in most cases, network turbulent disrupts the teaching and learning. The students data get exhausted before meeting ends. Challenges in implementation of e-learning technological tools.

Teaching and learning through e-learning technological tools are useful during emergency situation to keep students back to online classes but there are setbacks experienced in various countries during Covid-19 saga. Each country has it's characteristic and the Covid-19 has diversified effects in nations of the world. Many students lacked the necessary electronic devices needed to access the uploaded materials. The bad hits are students from developing countries. Some students that

could afford smart phoned could not login for on learning teaching due to lack of money to buy data. Again, there was lack of structured contents plus the abundance of online resources and learners were confused on what to read or not. Note only that, there is lack of human interaction between teachers and students as well as students, students interactions which amounts for the emotional wellbeing of the learner is lacking in the use of some online learning tools. As the lock-down was a sudden one, teachers were not prepared to teach online but it became necessary to do that, so, many lack the digital skills needed for effective online teaching. Some students lack the skills too.

Online teaching and learning has some conditions which users are required to meet up so, inability to comply, denys the person an opportunity to access online classes. Insufficient bandwidth, delay or connection failures during lessons and video conferencing and insufficient broadband connections are challenges of learning online. There is also the challenge of the know-how and expertise in monitoring and evaluating of learning. In all, there is no teaching tool that is void of merit or demerit but modalities should be put in place, to fill up the missing gaps.

Conclusion

E-learning technological tools are the total of electronic devices and various online tools to support teaching and learning during emergency situations or for remote learning experiences. Teaching and learning are bones of education. In the recent past, teaching and learning had been done in physical classrooms where positive classroom climate enhances emotional and mental well-being of the learner. In physical class, the teacher interacts with the learners in the learning wheel. She uses eye contacts to observe paralinguistic gestures of the learners while teaching and she changes teaching styles to accommodate all learners. Covid-19 brought a sudden switch to online learning which is a panacea for continuing education in emergency situation. Students were taught while at home but statistical evidence are yet to show if those tools positively helped to influence the academic achievement of students in developing counties such as Nigeria.

Recommendations

The following recommendations were made:

1. Government should fund education and one of the ways of doing this is to provide adequate e-learning platforms to increase access to the internet and interactive learning approach. The whole nation should be on the same page on internet use.

2. Government should organize workshops and trainings for teachers and students to improve their technological and pedagogical competencies in online learning.

3. E-learning technological tools providers should improve in their packages set for teaching and learning and make them in such a way that teaching and learning online cost little or nothing for the teachers and students.

4. Teachers should use some of the learning technological tools in their physical teaching.

5. Student should have interest in their studies whether online learning or in physical classroom.

REFERENCES

Clark, H. and Starr, I. (1967). *Secondary school teaching methods*. New York, MacMillan Company. 501p.

Diecker, S. (2019). Evaluating video models of evidence-based instructional practices to enhance teacher learning. *Teacher Education and Special Education*, 32(2) 180-190.

Ebenebe, R. C. and Unachukwu G. C. (1995). *Psychology of Learning*. Theories into classroom practices. Ogidi: Onimax Publishers.

Ewelum, J. N. and Chigbogu, C.C; (2017). E-learning resources in National Open University of Nigeria: Role, constraints and strategies for Improvement. *Unizik Journal of Education Graduates*, 4(1), 64-74

Iroegbu, T. C., Chukwudire, H. U. C., Nkwocha, P. C. and Onyemerekeya, N. P. (2003). *Psychology of Human Learning*. Owerri: Versatile Publishers.

Mkpa, M. A. (2015). Challenges of implementing the School Curriculum. *Nigeria Journal of Curriculum Studies*, 12(1), 9 – 17.

Obiefuna, C. A., Okoro, I. F. and Iwuanadi, F. N. (2010) *Basic Principles and Methods of Teaching and Learning*. Owerri: Career Publishers.

Umunna, C. G. (2019). *Effects on Problem solving strategy on Academic Achievement and Retention in Reading Comprehension of Secondary School Students in Imo State*. A Ph.D dissertation submitted to Faculty of Education Nnamdi Azikiwe University Awka, Anambra State.

Yoshikawa, H., Wuermli, A. J., Britto, P. R., Dreyer, B., Leckman, F. J., Lye, S. J., Ponguta, L. A., Richter, L. M. and Stein, A. (2020) Effects of the Global Coronavirus Disease Pandemic on Early Childhood Development: short and Long Term Risks and mitigating program and Policy Actions. *Journal of Pediatrics*, 223: 188-193.