EMERGENCY REMOTE TEACHING (ERT) FOR THE CONTINUATION OF EDUCATION DURING CAMPUS CLOSURE

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ABSTRACT

The emergence of Coronavirus in 2019 and the subsequent declaration of the pandemic in 2020 brought life to a standstill. The schools, colleges, and universities being social and public places where our young generation attend for their education also had an impact. There is an attempt from all researchers to look into the emergency. This pandemic has affected all walks of life, including the field of education at all levels. However, the field functionaries like teaching, non-teaching staff, etc., worked hard and attempted to continue educational processes following all the protocols, procedures including social distancing as prescribed by various governments from time to time. Here, an attempt is made to understand the concept of Emergency Remote Teaching (ERT), which was an attempt to the continuation of Education during campus closure. In this connection, this article discusses ERT, and its differences with online education. The features, principles, and essential elements of ERT are also looked into along with challenges, action steps, and concerns for effective implementation of education at the field level.

Keywords: Emergency Remote Teaching (ERT), campus closure, educational institutes, social distancing, online education

INTRODUCTION

Educational Institutes (schools, colleges, and universities) are places of learning, where students, teachers come together in a preconceived and pre-designed environment for the teaching-learning process within the classroom, in the library, in the laboratory, on the playground, in formal and informal settings during the specified time and beyond. All these processes require the interaction of individuals, be in a close net or together in a social setting. Imagine a situation when all this comes to a standstill because of some emergency, and the entire educational process stops. This was not an imagination but a reality when COVID-19 was declared as a global pandemic by World Health Organisation (WHO) on 12th March 2020 and social distancing was adopted as a norm of living in various parts of life. Thus, this situation significantly affected teaching-learning processes and institutions. Therefore, the institutions were forced to suddenly cancel face-to-face classes, including laboratories and other learning experiences on their campuses, to maintain social distance. This scenario affected institutions of all sizes and types across the globe, specifically the institutions run by State and Central Government or even Private bodies. This sudden closure of all academic activities on the campus in the educational institutions to maintain social distancing is called Campus Closure. The emergent situation made all the institutions sprint their teaching-learning process away from face-to-face to online mode. The educational institutes continued teaching and learning while keeping their faculty and students at their own places, i.e., away from public places, reducing or trying to cope up with public health emergencies. This mode of continuing education was also encouraged by UNESCO and online learning was made mandatory by suggesting various measures, but practically the institutions could not adopt online education immediately.

LIMITATIONS TO GO ONLINE INSTANTLY

Patel, M. A. (2021) is of the opinion that the educational institutes were not in a position to face this emergency. He enlists following reasons to put forth his argument:

- Online courses existed before COVID-19, but these were for a few courses and not common for the entire education system, i.e., for all programmes of learning and all disciplines at all levels
- Even the contents and syllabus required to meet this situation was not available.
- The educational institutions were not having gadgets and equipment required for meeting emergencies for online education, what to speak about students, teachers, and other stakeholders.
- The modalities of pedagogy, teaching-learning process, evaluation, and technology-mix were not worked out by educational institutions for mass applicability, which could be used in emergency situations at a wider scale.
- All the stakeholders working at all levels of education, like teachers and support staff, were not exposed to teaching in this format.

Thus, the emergency forced educational institutes to adopt instant solutions to meet requirements and continue education with gradual adjustments.

ABRUPT CHANGES/ATTENTION FOR MEETING EMERGENCY SITUATION

The examination of the then prevailing educational conditions during COVID-19 showed that this was not a planned event, but an emergency, and educators, institutions had to combat this by using innovative ideas, although educational institutions were not prepared to fight or face this. This abrupt change brought in few difficulties in the teaching-learning process and the Patel, M. A. (2021) elaborates them in following paragraphs,

- *Abrupt changes in modality of teaching* – from in-person, on-campus face-to-face mode to online/virtual mode, which was new to both the learner and teacher.
- *Uncertainties* about how to use and navigate between technologies – as they were constantly changing and improving and so its application in education too.
- *Duration* - How long was this situation going to be present? The answer to such a question was neither known to the teacher nor the learner, and even the managers of education did not know the answer. Thus, permanent arrangements for teaching-learning could not be thought of in the shortest time span, after the WHO declaration of the pandemic on 12th March 2020.
- *Ample stress* on teachers, learners, and academic fraternity because of the sudden appearance of such a situation and unpreparedness to face this by the entire system was another challenge.
- *Scope to turn these challenges into opportunities* by Online Teaching, however, became possible and educators saw a ray of hope to fight this situation across all levels.

ONLINE LEARNING AND STIGMA

Thus, abrupt disruption required the addition of an online mode to continue education. However, Hodges (2020), opines from the perspectives of learners that online learning carries a stigma of being lower quality than face-to-face learning, despite research showing otherwise. The teachers were supposed to overcome this prejudice and produce the best possible results, as there was no other way.

This clearly indicates that the stigma on online education is not correct. Online education can be effective if planned and implemented properly. The teachers and taught can stay at their places to learn from the comfort of their work and home. Stress of physical movement can be avoided. Additional skills required for work can be learnt properly.

ASSUMPTIONS ON LOCATIONS OF TEACHERS AND STUDENTS

Looking at the locations of learners when Social Distancing was imposed on students and teachers, Patel, M. A. (2021) describes various situations which emerged in Emergency Remote Teaching.

- The students and teachers were in the *same locality* or community, or probably nearby adjacent geographical locations, but not in the same institution, at the specified time of learning because of social distancing.
- Both the stakeholders were in *different houses* or distant houses, like some of them, stayed in farmhouses to maintain social distance.
- Both teacher and student were sometimes present in *adjacent districts* or in different districts for States.
- In some situations, it was found that the stakeholders were separated geographically by remote locations in the *same country or outside the country*.

All such remote and social distancing situations were found during the pandemic on various occasions because the families were stranded or struck because of lockdown situations at various places for students and their teachers. The above factors need to be kept in mind by teachers to design their teaching for the continuation of education during pandemics.

GOING FOR ONLINE EDUCATION

Most of the time, the academicians started debating that we have moved to online education, whereas the present situation was not a permanent settlement on a newly established digital platform for teaching and learning. Hence, it is pertinent to look into the definition of online education to find out the subtle difference between the two terms.

 "Online education is electronically supported learning that relies on the Internet for teacher/student interaction and the distribution of class materials." Mamounas et. Al. (2008) Mayer (2019), describes that online education can be defined as instruction delivered on a digital device that should support lifelong learning. Further, this online education has got few advantages that are useful in prevalent scenarios. According to Ferri & Guzzo (2020), in this format of education, learners can study from anywhere, at anytime; the possibility of saving significant amounts of money; no commuting on crowded buses or local trains; the flexibility to choose; and saving time were possible. These characteristics of online education were also useful in an emergency like a pandemic. Hence, quite useful during the present pandemic, but ironically, this has increased the digital divide among the haves and have nots, which needed to be addressed in the best possible way.

EMERGENCY REMOTE TEACHING (ERT)

The question which comes to mind is whether ERT and online education are the same? The best plausible answer for this is a "No". Both are not the same; one is based on 'emergent need' and another is a 'planned and long-time activity'. Emergency Remote Teaching (ERT), is also not an education in itself. By education, we mean it as a lifelong process that starts from the cradle and continues until the grave. The ERT is not expected to go up till such a long time for any individual. Here, more emphasis is on continuing the teaching and teaching as written by the Open University of Malaysia (OUM, 2019) can be defined as engagement with learners to enable their understanding and application of knowledge, concepts, and processes. It includes the design of strategy, content selection, delivery, assessment, and reflection. The teacher attempts to meet these requirements through ERT and continues teaching-learning.

Now, let us look into the concept of "Emergency Remote Teaching". Hodges (2020), affirms that the ERT is teaching as, "the act, practice, or profession of a teacher" and "the concerted sharing of knowledge and experience,"—along with the fact that the first tasks undertaken during emergency changes in delivery mode are those of a teacher/instructor/professor.

Many educators and field functionaries tried to define the present education scenario in teaching as teaching, learning, education or online education, etc., but finally, the academicians settled with the concept of ERT, where teaching is considered a more important aspect from the perspective of engagement of teacher to meet the new situation to continue the education.

Further, the following definitions give more insight into the concept of ERT. "ERT is defined as a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" (Grammes, 2020). Emergency Remote Teaching (ERT), "involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated" (Charles Hodges, 2020).

Thus, this is an alternative mode of teaching, during the pandemic situation and it is a temporary shift, using technology in place of face-to-face mode to continue education and we are going to return to the original format after overcoming the pandemic situation.

IMPORTANT FEATURES OF ERT

The teachers and students in this system have to note the following features of the ERT,
- *Media and material* are carefully selected for increased engagement. The process involves a way of thinking about delivery modes, methods, and media during the engagement.
- This provides a *context for study* which creates student activities, provides feedback and support for the learner,
- This is not meant to create a 'robust educational system' but to *attend 'emergency'*.
- This is an attempt to *"just get it online"* – and it is not a long-term solution for the education system. Thus, here we 'divorce' from online education.
- This is a *demand-based innovative solution,* e.g. Children's Education through Radio in war-affected conflict zones, wherein emergency exists and children are not allowed/permitted to go to regular schools (educational institutes) due to conflict.
- It is not the only work of a teacher to meet this emergency, whereas a key role is played by the *'Faculty Support Team'*. The entire team attempts for the training of teachers, experimenting tools, multimedia creation, professional development opportunity, support for faculty with varying digital fluency.
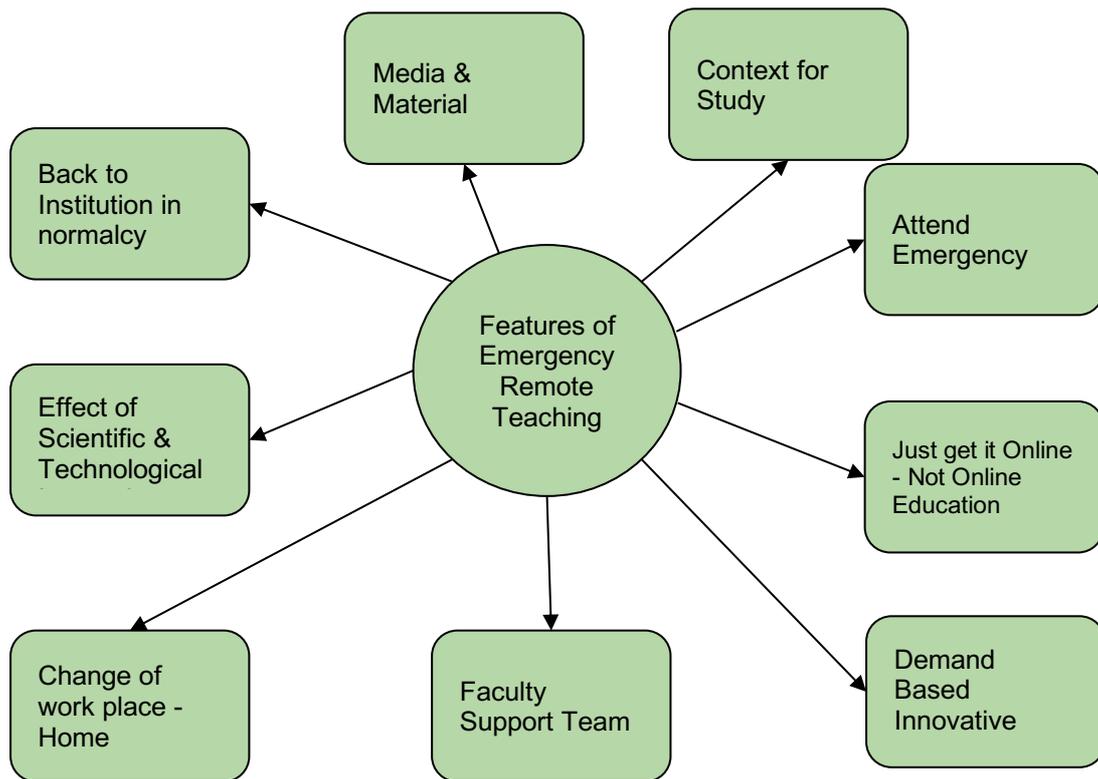
Figure 1. showing Features of Emergency Remote Teaching

Thus, all the educational functionaries need to come forward to meet this emergency. There is a greater responsibility of *management* for their role in adapting to new situations and providing a conducive environment for teaching-learning. The *scientific and technological innovations* affect the teaching-learning process and hence, continued teachers' training is required. In present circumstances, the *workplace* has shifted from institutions to homes. The features of teaching are quite specific for the needs of the present scenario and once normalcy is restored; stakeholders will *return* to former normal situations.

PRINCIPLES BEHIND ERT

Ryoo (2020), lays down four principles as guiding force for implementation of ERT, viz., Be Engaged, Technology consideration for engagement, Communication, Assessment, accountability. Let us examine these,
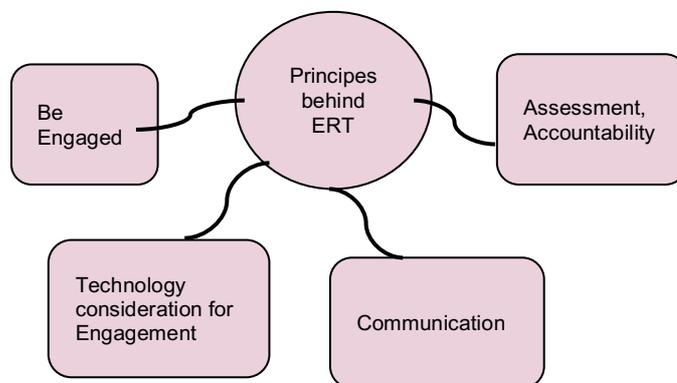
Figure 2. Principles

Be Engaged

The teacher is involved as a *facilitator and organiser* in the process. He/she looks into Community organisation and facilitation, makes frequent timely and meaningful feedback to the stakeholders. These Periodic announcements/feedbacks are as text and short video clips (3-5 minutes) along with continued online discussion, which keeps everyone engaged in teaching-learning.

Technology Consideration for Engagement

Using technology for continued engagement is the core of this process. For this purpose, teachers use platforms like Zoom and make use of its features like Polling features, chat, screen sharing, whiteboard, breakout rooms for small group discussion. The teacher also uses Microsoft teams to collaborate, Project-based learning, mural or jam board, brainstorming to create, http://www.mural.co/. WhatsApp Chats, Telegram Posts, Google Forms, etc., also show a few examples of the huge potential of technology in the present scenario.

Communication

The teaching will be effective if, the teacher checks the pulse and provides support to foster "student success". For this purpose, steady and frequent streaming of email, texts, surveys, and social media posting is taken up by the teacher. The technological consideration for communication (outside class) depends on the type of gadget available to the learner, i.e., mobile Vs desktop. This use of multiple modes of communication helps in reducing redundancies. The video and emojis used in communication help in bringing emotional support through the use of empathy. The teachers need to ensure that there is student-student, student-teacher communication possible besides teacher-student communication.

Assessment, Accountability

The teaching-learning is incomplete if it is not assessed, but here teachers need to educate their students on plagiarism. Teachers are not present during examinations, assessments with students, and they have to discuss a code of conduct to be followed during examinations. The teachers have to design various assessment tools, including small lower stake assignments, which are continued formative evaluation processes.

ACTIONABLE STEPS FOR ERT

The success of any good teaching is the Commitment of educators/ teachers. This is possible through proper planning, training of teachers, and the use of the best online pedagogies for teaching. Maridi (2020), suggests following actionable steps for better implementation of ERT.
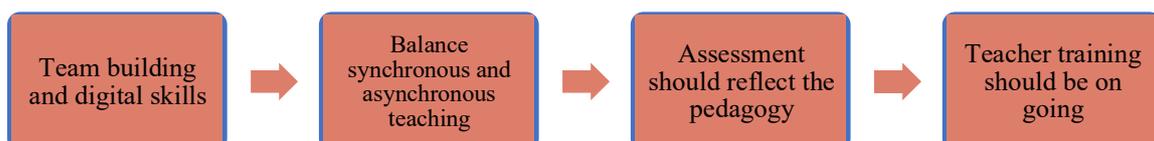
Figure 3. Actionable Steps for Emergency Remote Teaching

Team-Building and Digital Skills - Students and Teachers

The students and teachers are new to this type of education and hence, to implement ERT effectively, all the members, including teaching, non-teaching support staff, and students are to make a team by learning digital skills.

Balance of Synchronous and Asynchronous Teaching – Proper Instructional Design

Only conducting online classes is not complete as ERT deals with emergency situations. An emergency may always not have a 24/7 internet facility for all stakeholders. Proper guidelines will not be available during such a situation. Hence, teachers have to design their strategy by including modalities of teaching in synchronous and asynchronous modes and evaluation. A judicious and harmonious balance of these modes to be worked by teachers themselves without waiting for specific government policy.

Assessment Should Reflect the Pedagogy

The Government of India has announced a reduction of 30% of the syllabus for the 2020-21 academic year during the present pandemic situation. Students cannot interact with their peers and teachers for getting additional information. They also did not have access to books in the library, equipment for experiments from the laboratory. In such a scenario, it is always important to restrict the assessment of the content taught to the learners.

Teacher Training Should Be Ongoing

Technology, ways of engagement, evaluation procedures were continuously changing during the time of crisis. Vaccines were developed in a brief span of time and so also continued innovations and recent developments were seen in teaching and learning. Teachers are products of old training processes and hence, teacher training should be an ongoing process to meet such emergencies, so that teachers adapt to emerging educational and training/teaching requirements.

CONDUCT SYNCHRONOUS SESSIONS

The conduct of synchronous sessions is suggested only when all stakeholders have the required facilities. In such cases following general rules are to be kept in mind while conducting synchronous sessions during ERT programs. The students must be informed to
- Switch off the microphone.
- Switch off the video camera to prevent bandwidth.
- Inform the participants to leave their questions in the chat box.
- Teachers must share other contacts like mobile numbers, email id for students.

The teachers must also understand limitations of equipment/gadgets, bandwidth, accessibility issues, dearth of a print facility at the learner's end and accordingly design their teaching and accommodate students of all sections of the society. For this, radio, television, and YouTube places can be planned, which may not depend on synchronous use of internet facilities.

ESSENTIAL ELEMENTS OF ERT
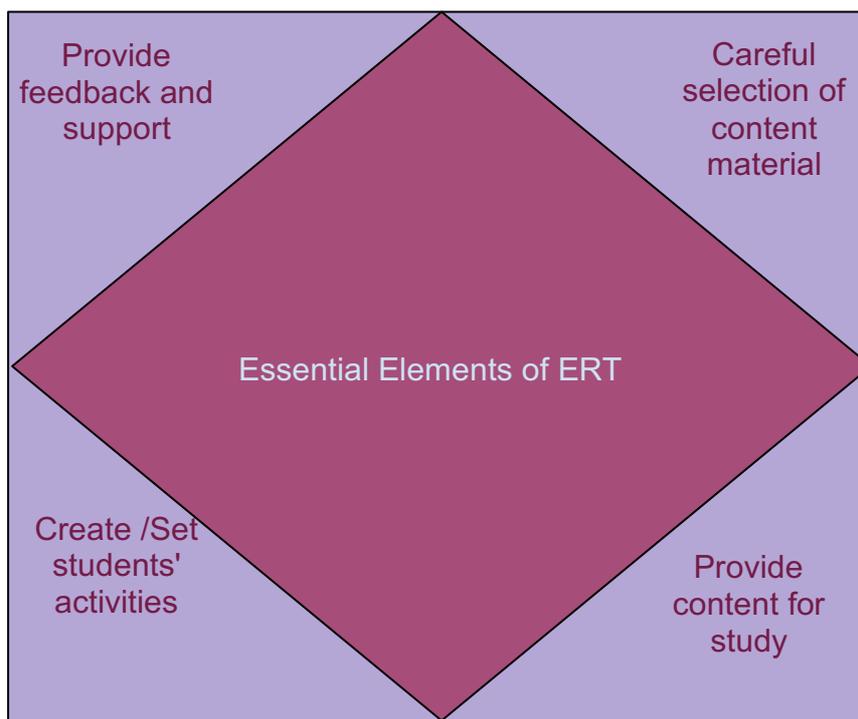
Figure 4. Essential Elements of ERT

The teachers have to consider the following aspects while designing their ERT.

Careful Selection Of Content Material

There is an abundance of learning material available on the websites and teachers need to distribute only essential content to the learners, i.e., knowledge to be screened out from the ocean of abundant information on the internet. The material given to the learners has to be concise and/or 'chunked' to meet essential course requirements. The material needs to be from resources that are in multiple formats like print, text, graphics, audio, video, or multimedia so that variety and diversity can be taken care of. The learner should have access to the resources and hence, Open Educational Resources (OER) resources need to be shared to avoid any difficulty for the learners. Patel (2020) observes that the OER is best way to reach as a remote teaching-learning tool in the times of COVID-19 crises.

Provide Content for Study

Provision of content has to be scientific and systematic. For this purpose, the teachers have to set questions to focus study, use real-world problems to frame theory. The content shared or taught should enable the student to transfer theory to new content areas. Thus, the learning will be more effective.

Create/Set Students' Activities

The teaching process through ERT should not be a one-way process from the teacher alone. Hence, to create or inbuilt interactivity, online debates or discussions have to be created. The students have to be given short focused assignments to increase their activities. The project work covering multiple lessons

shall also increase peer interaction and activity. The conduct of short quizzes or tests will also be useful for the learners in ERT.

Provide Feedback and Support

The ERT continues education during the closure of campuses. But, to continue education, weekly office hours video, where the teacher, head of the institute interacts with learners to discuss their general learning difficulties is to be arranged. During pandemic situations, social distancing has become a norm and therefore, teachers should encourage the use of peer networks through social media platforms. Platforms like WhatsApp have helped during such times to increase interactive support. However, it is always suggested to provide a list of Frequently Asked Questions (FAQ), on the school/college/university website homepage, so that repeated discussions on similar questions can be avoided. Further, the subject teachers can summarise readings of the entire week, which enforces and ensures learning.

CHALLENGES OF ONLINE LEARNING

It is a crucial situation for the continuation of the educational process and that too by using innovative methodologies like online education by face-to-face teachers having orthodox training. The difficulties faced in online education also apply to ERT situations. Fernando Ferri (2020), shows some important challenges faced during online learning, which are technological, pedagogical, and social challenges.

Table 1. The challenges of online learning (also applicable to ERT)

TECHNOLOGICAL CHALLENGES	Access to infrastructures such as technological devices and an Internet connection.
PEDAGOGICAL CHALLENGES	Teachers' lack of skills in using technology. Need for training and guidelines for teachers and students.
	Need for teaching materials in the form of interactive multimedia (images, animations, educational games) to engage and maintain students' motivation.
	Lack of student feedback and evaluation system.
SOCIAL CHALLENGES	Lack of a suitable home learning environment to study and parents' support.

The teachers and institutions have to reduce, minimise these challenges, and plan their teaching to be effective.

CONCERNS FOR EMERGENCY REMOTE TEACHING

The study of Ozge Misrilly (2021), shows a few themes and sub-themes that are referred to in their study, which need to be kept in mind while designing Emergency Remote Teaching. The list is given below,

Table 2. Issues and problems for implementing Online ERT

Themes	Sub-Themes
Infrastructure issues	Access problems to EBA (educational electronic content network of a social nature)
	Having inadequate Internet infrastructure
Communication/interaction problems	Lack of communication between teachers and students
	Lack of communication between student and student
	Teachers' inability to communicate with parents
	Non-interactive distance learning sessions
Course durations	Long/short course durations
	Increased screen time
Branch diversity	Priority to core courses
	Lack of consultation
Motivation issues	Lack of course materials
	Unmotivated distance learning sessions
	Lack of live sessions
Issues of the age/skills	Remote teaching is unsuitable for young children
	Remote teaching is unsuitable for students with special needs
Evaluation issues	Poor quality homework
	Poor quality exams

The ERT has to be planned so that such difficulties are overcome and issues are attended to.

CONCLUSION

The pandemic situation has brought a radical change in students, staff, and their lives, outside their association with the educational institute. They are available for teaching and learning beyond office hours. The assumption is that students might not attend courses immediately, because of the digital divide. Asynchronous activities might be more reasonable than synchronous ones and teachers can plan for the same. Because of new media and difficulties encountered, flexibility with deadlines for assignments within courses, course policies, and institutional policies should be considered. Post COVID-19, we have to return to our teaching and learning practices forgetting about ERT. The ERT is a must skill for faculty in the wake of natural disasters such as wildfires, hurricanes, etc., and hence, requires an integrated part of the professional development programming of teachers. This has brought unique challenges for institutions of higher education. Hence, extraordinary efforts are sought regarding course delivery and learning. The ERT cannot be equated with online learning. This will not cause a rollback to teacher-centred classroom culture, as a long-term effect. Social distancing is only a temporary norm to protect and safeguard one another and is based on the adage, "If I protect myself – I can protect you." Thus, the ERT was an immediate reaction to keep the education moving on when the campuses were closed.

REFERENCES

Africa, O. (2020). *Emergency Remote Teaching - AAU / OER Africa webinar series.*

Charles Hodges, S. M. (2020, March 27). The Difference Between Emergency Remote Teaching and Online Learning. *Why IT matters to Higher Education - Educause Review*. Retrieved from er.educause.edu: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

Fernando Ferri, P. G. (2020, October). Online Learning and Emergency Remote Teaching: Opportunities and Challenges in Emergency Situations. *Societies*, 1-18. doi:10.3390/soc10040086

Grammes, T. (2020). COVID-19 pandemic, emergency remote teaching and social science education. *Journal of Social Science Education, 19*, 1-7. doi:DOI 10.4119/jsse-3544

Mamounas, E. P., Jeong, J. H., Wickerham, D. L., Smith, R. E., Ganz, P. A., Land, S. R., ... & Wolmark, N. (2008). Benefit from exemestane as extended adjuvant therapy after 5 years of adjuvant tamoxifen: intention-to-treat analysis of the National Surgical Adjuvant Breast and Bowel Project B-33 trial. *Journal of Clinical Oncology*, 26(12), 1965-1971.

Mavridi, S. (2020, July 24). From Emergency Remote Teaching to sustainable online education. England/Australia. Retrieved from https://youtu.be/ivPeLEzk98Y

Mayer, R. E. (2019). Thirty years of research on online learning. *Applied Cognitive Psychology*, 33(2), 152-159.

OUM (Open University Malaysia) (2019), Master of Education, January 2019 Semester, HMEF5123, Models and Strategies of Teaching Sungai Petani Learning Centre retrieved from https://www.scribd.com/document/436780644/MODELS-OF-TEACHING-ASSIGNMENT-OUM, on 18th Aug, 2021

Ozge Misirli, F. E. (2021, March 29). Emergency remote teaching during the COVID-19 pandemic: Parents experiences and perspectives. *Education and Information Technologies*, 1-25. doi:https://doi.org/10.1007/s10639-021-021-10520-4

Patel, M. A. (2020). The OER - A Teaching-learning tool in the times of COVID-19 in India. *GLOKALde*, 6(2). retrieved from http://www.glokalde.com/pdf/issues/18/Article8.pdf

Patel, M. A. (2021, May 19). Emergency Remote Teaching. One Day Webinar, K.C.T. Engineering College, Kalaburagi.

Ryoo, J. (2020, Nov 1). Compassionate and Mindful Emergency Remote Teaching (ERT).

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