

## Emerging Trends of Emergency Remote Education in COVID-19: A Thematic Literature Review

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### ABSTRACT

The emergence of Pandemic has led to closing of schools and colleges world over leading to sudden disruption of education for millions of students and teachers across the globe. The students and teachers have suddenly been forced to adopt online teaching. In this scenario, a lot of thematic trends in online education is emerging such as blended learning, mobile education etc. This paper tries to find some the thematic trends, emerging world over education sector, and summarized the finding in the paper.

The blended learning with appropriate stakeholder management with collective responsibility with the use of new age technologies has emerged as common trend all over education community as summarized by our findings.

**Keywords:** E-learning, Blended learning, Mobile education, Covid-19, Comparative, School Leadership, Student Autonomy.

### Introduction

#### *Integration of web technology into education/learning*

Definitions of distance learning, online learning and e-learning environments vary across geographies (J. L. Moore et al., 2011). Different studies have been carried out over the years to understand the integration of web technology into education; factors affecting teaching effectiveness in online mode (Volery, 2001), learning outcome improvement due to web-based technology (P. S. D. Chen et al., 2010), improvement in enrollment and access to education due to online mode of classes (Goodman et al., 2019), evolving trends of e-learning (Choudhury & Pattnaik, 2020).

### Methodology

We have analyzed over 100 Scopus indexed papers from various databases such as Emerald, Web of Science to

find out the thematic emergence of education during the Covid-19 lock down period.

### Literature Review

#### *Student engagement in different learning environments*

Based on various research findings, it has been postulated that different learning environment will have different level of student engagements and learning outcomes; satisfaction in short-duration and long-duration online courses (Ferguson & Defelice, 2010), comparison between classroom and online mode based on learning styles and outcome (Brau et al., 2017; Callister & Love, 2016; Clayton et al., 2010; A. Driscoll et al., 2012; Emerson & MacKay, 2011; Fadol et al., 2018; Kemp, 2020; Tang, 2013; Tseng, 2016) and based on learning preference (Aragon et al., 2010; Barnes, 2017; Butler & Pinto-Zipp, 2005; Hagel & Shaw, 2010; Marquis & Ghosh, 2017; Nollenberger, 2015; Rovai & Grooms, 2004), fairness of

assessment in different course modes (Hewson, 2012), characteristics difference in low and high achieving students in classroom and online mode learning context (Fendler et al., 2016), difference in learning satisfaction between new and existing learners in online mode (Li et al., 2017), difference of learning outcomes based on Myers-Briggs Indicator of personality (Boghikian-Whitby & Mortagy, 2016) and big five model (Rios, 2019), based on asynchronous and synchronous online modality of teaching (Sharifrazi & Stone, 2019), hybrid model of teaching outperforming online and face to face modality of teaching. (Swanson & Swanson, 2019).

Researchers have looked into factors for online course abandonment (Lee & Choi, 2011). Further Rogers et al. (2018) studied the online class expectations and deterrents for the faculties taking online classes.

### ***Emergency remote (online) education mode during COVID-19***

The prevailing COVID-19 pandemic scenario has put all educational institutes to adopt remote (online) education mode on an emergency basis as uncertainty looms over on the prospect of when regular classes can get started across geographies. The practices to be adopted in the emergency remote (online) education mode need to differ from already existing practices of online education. (Bozkurt et al., 2020).

In this context, various researchers have looked into dynamics of emergency remote (online) education mode; need of revamping online pedagogy (Bhaumik & Priyadarshini, 2020), adoptive pedagogy design options (Lynch, 2020), adoption of innovative technology (Major, 2020). Also impact of suddenly switching to online mode have been studied; increase in academic stress (Moawad, 2020).

## **Results and Analysis**

Following trends have emerged during Covid-19 which are summarized below

### ***1) Blended Learning***

Blended learning as a concept has gained currency recently. In simple terms, it means a holistic approach towards teaching which includes face to face classroom

interaction, mentoring, projects and online assignments among other things (Bonk et al., 2005).

In recent times this gained additional currency since, blended learning has proved to be successful in reducing geographical and transactional distance (M. G. Moore, 1993). The transactional distance can be understood in term of distance in communication and leaning space between the teacher and the students (Giossos et al., 2009).

Thus, blended learning according to researchers have reduced the gap in learning and thus, have greater probability in ensuring the success of the students (Oliver & Trigwell, 2005).

Accordingly, the blended model (Norberg, 2017) during pandemic has four different themes

1. The Face to Face Blended learning that entails the learning within the four walls of classroom with teacher and student physically present at the same time
2. The Self-paced learning which can be facilitated by the educational platforms which have leaning material for the students to grasp and self-pace at suitable speed
3. The Tele-communication which entails modes of mass communication for educational purposes such Gyan Darshan etc.
4. Ubiquitous learning that comprises self-paced courses available at platforms like MOOCs (Massive Open Online Courses)

With respect to Blended learning during the COVID 19 time, one must also be aware of education in these two contexts (Hwang, 2014)

1. Classroom context when learning environment is teachers leading / facilitating the learning
2. Personal context when the students undertake self-paced learning. The thematic approach should be to close in the gap between the two contexts as much as possible

The blended leaning has also used different felicitation models for students such as

1. Flipped classrooms, (Suo & Shi, 2008)
2. Web based learnings, (M. Driscoll, 2010)
3. Distance learning, (Cockrum, 2017)
4. E-Learning, (Suo & Shi, 2008)

5. Pervasive process leaning, (Altamimi & Ramadan, 2016)
6. Learning management system (Moskal et al., 2013)

## 2) Access and availability to E-Resources

The emergence of single learning theory during Covid-19 is essential (K.-C. Chen, 2007). This ensures all the stakeholders in the model are on same page. There are different viewpoints on the importance of technology of delivery or the contents of the learning that is supposed to be most important (Beynon, 2007).

One school of thought places prominent emphasis on instructional delivery strategies in terms of classroom material to be shared (Clark, 1994), the projects and assignment to be submitted while other school of thought prominently places technology of education at a higher level (Kozma, 2001).

It takes into consideration the stakeholders (Mayer & Moreno, 2003)

1. Course content
2. Co learners
3. Course Instructors

## 3) Stakeholder theory in distance education

Technological platforms are being used to lay theoretical foundations of cognitive skills in the students. (Mungai, n.d.) This has become especially useful during pandemic which has forced millions across the world to adopt new and innovative technologies to overcome learning curve in a very short span of time.

The various parties in model e-learning (Johnson et al., 2008; Zhang et al., 2014) can be summarized as

1. Learners / Students
2. Instructors/ Faculties / Teachers
3. Developers (Content)
4. Various accretion bodies
5. Employees or office Administrators
6. Educational Institutes
7. Technology Providers

These are further classified to learners (students), instructors, designers and executors (implementers) (Amit & Zott, 2001; Berge, 1995; Wagner et al., 2008).

## Analysis

### *The design principles of E-Education*

In an extensive study (Hall et al., 2020) undertaken over six countries (UK, Australia, Cyprus, Ireland, The Netherlands and Belgium) based on the four years study to find out 21 designs principles under DEIMP (Designing and Evaluating Innovative Mobile Pedagogies) project have identified five major areas to give the most emphasis on:

1. Collaboration – Teamwork for grater synergy and workmanship
2. Adaptive – Evolving and changing according to needs
3. Mobility – Seamless transition on different platforms
4. Student Choice – Giving priority to student autonomy
5. Authenticity – Authentic tools and environment to felicitate the leaning

## Conclusion

What is very self-evident is the fact that there can be no student wellbeing without teacher wellbeing (Hargreaves & O'Connor, 2018). Hence the need of the hour is to balance the need of all the stakeholders. This calls for effective professional collaborative approach with multidisciplinary team serving multiversity set of students (Shirley et al., 2020).

Ensuring emotional support to teachers, faculties by leadership management is absolutely crucial as a way forward along with transparency, openness and collective shared organizational goals (Solvason & Kington, 2019). The students and the teachers will prosper in an environment of common moral ground with shared responsibility (Hargreaves et al., 2018).

## Competing Interest Statement

All authors have read and approved the manuscript and take full responsibility for its contents. No potential conflict of interest was reported by the author(s).

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