

## **MINDFUL TEACHING AND ADOPTING RESILIENT COURSE DESIGN IN DISTANCE EDUCATION**

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### **ABSTRACT**

Due to COVID-19, educational institutions are shut across the world. There has been a sudden shift from traditional to online teaching. Many educational institutions offer Distance Education courses and programs to meet the diverse educational needs of the students. As a result, education has changed dramatically. Whatever is the form of education (school-aged, higher learning, or institutional), all have greatly optimized this window of opportunity. Since its inception, there has been a tremendous rise of e-learning and teaching has been undertaken remotely on digital platforms. Teachers have been facing challenges due to lack of resources, lack of technical know-how, uncertainties resulting in loss of classes that teachers hoped to teach; loss of connection with students, colleagues, and friends; loss of good health, or additional health complications; loss of income; loss of loved ones; and perhaps a loss of hope. There have been financial, technical, and pedagogical issues as major problems. Remote Teaching and learning are slipping towards mediocrity. A stressful work environment has led to moral and emotional distress, burnout, compassion fatigue, and now zoom fatigue too. Considering that current socio-economic and technological trends will have a significant impact on the future of teaching and learning, one must take control of situations and have a proactive attitude. Distress needs to be transformed into resilience as it gives emotional strength. This study aims to emphasize mindful teaching by adopting resilient pedagogy and building resilience in course design through hybrid learning models. Such learning models enable flexible movement between remote and in-person experiences and make classes, assignments, and assessments as resistant to disruption as possible. It will also help institutions to ensure continuity of course delivery through future crises.

**Keywords:** Distance Education, Teachers, Moral Distress, Resilient Pedagogy, Resilient Course Design

### **INTRODUCTION**

In an increasingly complex and interconnected world, the education sector has been disrupted by the COVID-19 pandemic globally that led to the closures of educational institutes. With the worldwide shutdown, distance education became a necessity at lightning speed. More than 1.5 billion students, or 91.3 per cent of global enrolments, were directly affected by school closures at the height of the COVID-19 outbreak in early April ("Global Education Coalition", 2021). With so many students suddenly out of classrooms, school administrators, teachers, and parents scrambled to meet student's educational needs with online learning. Online education/distance learning (OE/DL) was opted by governments also across the world. Online learning is relatively the newest form of distance education, although it has been practised for decades (Stern, 2015).

E-learning has seen a whopping 900% growth since 2000, that is before the pandemic (Tamm, 2021). It is expected to grow at a compound annual growth rate (CAGR) of 9.1% from 2018 to 2026 ("62 eLearning Stats and Facts That You Need to Know Now", 2021). The MOOC market is projected to grow at an annual rate of 32.09% until 2025. (Sharma, 2021). Asia-Pacific is expected to be the fastest-growing market for MOOCs from 2020 to 2025 (Mordor Intelligence, 2020). Mobile learning (m-learning)

is also one of the fastest-growing markets in e-learning, with an annual growth of 23 percent (Tamm, 2021). While North America and Europe are leaders in online learning, but other regions such as Europe, Latin America, and Asia are also starting to become increasingly prevalent players in the industry (Tamm, 2021). Statistics prove that more and more educational institutions recognize the value and benefits of online learning to students. 33% of post-secondary school administrators will continue to offer remote and online courses after their campuses have reopened completely (Venable, 2021).

The most recent statistics show that most K-12, undergraduate and graduate students are in favour of using e-learning. Educational institutions see digital learning to rejuvenate the stagnant numbers of student enrolment, and students see e-learning as a favourable alternative to traditional classrooms. Annual growth of 12% is projected for the global market size of K-12 online tutoring from 2020 to 2025. 48% of K-12 students have online classes available to them. The percentage of graduate students taking entirely online degree programs has risen from 6.1% in 2008 to 27.3% in 2016 (Tamm,2021).

Education largely has moved online. The world economic forum reports a surge in the use of language apps, virtual tutoring, video conferencing tools and online learning software in the past few months. India too is witnessing an e-learning boom. Classes on zoom, WhatsApp, Google Meet are becoming a norm for students, parents, and teachers. Yet, this abrupt transition to online hardly compensates for the absence of classroom experience.

### **IMPACT ON PEDAGOGY**

Distance education courses are of the nature of the self-paced study with time and space flexibility and are very economical. A forced movement to virtual learning was a challenge to the educators as the suddenness with which they were plunged into this new mode of teaching implied that they had to adopt it with little preparation. Merely moving classrooms online would not mean effective remote learning. One-to-one interactions among peers and teachers are very important for learning. On a digital platform, how students learn and communicate with others is largely dependent on the readiness of both teachers and students to accept digital learning. In the case of distance education, the onus of learning is more on students, which requires discipline. There are challenges for teachers too.

The online survey conducted by Today and Studies (2021) showed that while children face issues in accessing education digitally, teachers also face issues in delivering education through digital mediums. It also reported that a staggering 84% of teachers were facing challenges in delivering education digitally and close to half the teachers faced issues related to the internet both signal issues and data expenses. Many teachers are digitally inept, and many teachers have never used an online environment to teach. Teaching a course online ideally requires preparation, such as designing a lesson plan and preparing teaching materials such as audio and video content. This has posed new challenges for many teachers.

This is justified by the research conducted by Gurung (2021). The results of his research depicted that due to the COVID-19 pandemic, 81.3% of the teachers learned new online teaching methodologies to successfully shift themselves from classroom teaching to online teaching. While 75.4% of the teachers found it difficult to teach students in remote areas due to poor infrastructures, no electricity, no internet connectivity and inadequate knowledge of information technology. Understanding problems and personal behaviour of the students were a cause of concern 61.5% of teachers, as they found it difficult to motivate students because of minimum opportunity to interact face to face and 61.8% of the teachers found it challenging to keep tracking of the student progress. According to 63.94% of the teacher's their lack of technical and software knowledge became one of the biggest challenges. 62.7% agreed that online teaching required more time in preparing course content as they must prepare their course content in the electronic form. Not surprisingly 71.88% of the teachers found it difficult to teach the numerical as they feel, "blackboard was an easy method to explain students". Monitoring and discipline students are few other challenges faced by 57.03%. Only 43.8% of the teachers are satisfied with online teaching methodology. They enjoyed the flexibility of the time; they can now teach anywhere and can use or share wide internet resources.

Schools supported teachers by upgrading their systems and permitting them to use their facilities. Somehow teachers pulled together as schools organized online courses to aid their staff in handling the situation. Though 60% of teachers received professional development in ICT while most teachers participate in professional development, the programmes they enrol in are not always the ones they find most valuable. Even before the crisis, teachers reported a strong need for training in the use of ICT for teaching, with 18% on average across OECD countries identifying this as a high training need (Schleicher, 2021).

Now again a shift from online to blended or face to face teaching will pose new challenges. One cannot be so sure that such disruptions will not recur. In future, there may be possible disruptions in pedagogy. Hence, the entire teaching faculty needs to play an active role in building a resilient community to face any possible disruptions.

## **THE NON-COMPLIANT STUDENTS**

It is not technology and training alone that posed a roadblock. With the prolonged closure of educational institutions, many teachers discovered that students don't actively engage as much as they do in a real classroom. Students blocked the teachers or turn off mics. Teachers felt uncomfortable and got the feeling of being powerless when no one answers a question or responds. The students' holistic development comprising of their academic activities, as well as their mental well-being, has been adversely affected. In the past few years, various surveys have been conducted to find out the impact on the learners.

Studies suggest that restricted social interaction, insufficient mental refreshment, uncertainties over academic and professional career together with prolonged home confinement have amplified the mental problems and intensified the screen time. It is a foreshadow of the student's further life to adjust to the online mode of education. (Cao et al., 2020; Gao et al., 2020; Hossain et al., 2020; Islam et al., 2020; Lu et al., 2020; Shovo et al., 2021)

Distance learning is slowly becoming a popular way to complete college or job training. But many people still have reservations about it as it gives a sense of isolation and struggle to stay motivated. There also exist lack of face-to-face interaction, difficulty in getting immediate feedback and need for constant and reliable access to technology.

## **DIGITAL DIVIDE**

Teachers and school administrators have been advised to continue communication with students through virtual lectures or portals like Massive Open Online Courses. However, in the absence of physical classrooms and proper digital infrastructure, one of the major challenges of remote learning is a disparity in access – from electricity and internet connections to devices like computers or smartphones.

According to the Kumar (2018), only 24% of Indian households have an internet facility. While 66% of India's population lives in villages, only a little over 15% of rural households have access to internet services. For urban households, the proportion is 42%. Only 8% of all households with members aged between five and 24 have both a computer and an internet connection. The digital divide is evident across class, gender, region, or place of residence. Among the poorest 20% of households, only 2.7% have access to a computer and 8.9% to internet facilities. In the case of the top 20% of households, the proportions are 27.6% and 50.5%. Kundu (2021) reports on the usage of the internet in India reveals that both the state and the private players have not yet accomplished assured connectivity to all subscribers. The survey shows that among respondents who use home broadband, over 3% face cable cuts, 53% face poor connectivity and 32% face signal issues. In the case of mobile data, 40.2% face poor connectivity and 56.6% face signal issues (Kundu, 2021). So, there has been a feeling of discomfort among the teachers, due to lack of appropriate materials and resources, technical problems, and lack of internet facilities and constant power cuts.

## VALUE CONFLICT

When teachers can teach, they faced professional dilemmas, value conflict between (quality) effective teaching and efficient teaching or conflict between quality and equity, that is, the varying quality of students, and the tension between students' responsibility and the need for teachers to provide guidance. Such dilemmas may conflict with one's conscience, e.g., when one knows the right thing to do but constraints make it difficult to act in a way that is consistent with one's morals.

Dilemma and discomfort among teachers result in a stressful work environment. It leads to not only physical symptoms like headaches, high blood pressure, sleep problems but also moral and emotional distress, burnout, compassion fatigue and nowadays it is zoom fatigue which is then unconsciously passed on to the children. Issues relating to mental health and the digital divide were important before the pandemic, are important today and are likely to remain important in near future.

Positively coping with stress is known as resilience. It's associated with longevity, lower rates of depression, and greater satisfaction with life. "There's a sense of control, and it helps people feel more positive in general," says Laura Malloy (2017), the Successful Aging program director at the Harvard-affiliated Benson-Henry Institute for Mind-Body Medicine.

Some studies have shown that resilience is negatively correlated with depression and anxiety. It has also been found that resilience characteristics are associated with lower depression symptom levels and anxiety. Resilience also shows noteworthy correlation with positive mental health indicators. A modest, positive correlation between resilience and subject well-being has been found. It has been demonstrated and verified that resilience contributed to the positive outcome of life satisfaction in young adults. Such children have a history of childhood trauma, and positive emotions might have a mutual impact on each other (Wu, Sang, Zhang & Margraf, 2020).

## RESILIENCE

As learners have also been affected and get overwhelmed by big emotions, it is the teacher's job to share their calm and not join their chaos. Teachers have the responsibility to act as a model for their learners they work with on how they want the learners to respond to the challenging tasks, people and situations. For that, the first step is to acknowledge one's failure to provide a frame to see where one can continue to improve, then take control of situations and have a proactive attitude.

Moral distress needs to be transformed into moral resilience. Teachers should be mindful about their teaching, build and enhance individual capacities, look for gaps in the expectations, anticipate more and be solution-oriented and not problem-focused. Resilience is usually linked with adaptations to unexpected changes as it leads to transformation and improves performance. Also, this is a good time to plan for long term survival. There is a need to have a rethink of providing learning experiences for current as well as a future catastrophe.

The solution lies in adopting a resilient pedagogy. It is a release from rigid, standardized, pre-pandemic approaches that didn't meet the needs of all learners before and will help us emerge with more equitable, sustainable, and relevant ways of teaching and learning. As Watson (2021) highlighted, "essentially, resilient pedagogy is a combination of course design principles and teaching strategies that are as resistant to disruption and to change in the learning environment as possible". This novel teaching and learning approach are a continuous progress approach to accommodate different types of crises. It enables teachers and students to adapt to changes effectively so that the impact of crises on teaching and learning can be minimized (Kruk et al., 2015).

## The Resilient Course Design

Resilient pedagogy is all about balancing online and face to face instruction, planning and flexibility to maintain a sense of community with colleagues and students. One needs to make such instructional choices that create a supportive learning environment, transparency of expectations, flexible or adaptable course policies, regular communication, peer connections and collaborative opportunities and

quality vs quantity of assignments. It is of utmost importance as student development is recognised as a process and not a product.

The core of resilient course design lies in engagement; communication and connection and feedback, where engagement must be between student-student, student - content, students - teacher whereas communication and feedback need to be from both students to faculty and faculty to students. One may think about how resilience can be applied by educators across different subjects and how it can be combined with other innovative learning pedagogies, e.g., online learning, roleplaying, storytelling, and gamification to enhance teaching and learning. This kind of work requires an additional skill set of technological and pedagogical knowledge along with the knowledge of the subject matter, which is often not the forte of most academic staff (Naidu, 2006).

Creativity, connectivity and making use of diverse resources and methods play an important role here as it enables us to come up with new ideas in adversity. One needs to possess the mental strength to continue and not to give up in adversity (Aburn,2016; Lee & Lee, 2015; Quinlan e al.,2016; Unagr, 2018). One of the biggest issues with remote teaching has been the lack of student engagement. Hence, one needs to focus efforts on identifying the activities and interactions that support meaningful learning and finding ways to make these work regardless of where the learning takes place.

Resilience learning can be achieved by combining multiple learning pedagogies at the same time. It comprises of such teaching and learning practices that integrate both offline and online (hybrid) approach (Dziuban et al., 2018). The learning needs of the students can be supported through pre-recorded lectures, developing micro-module videos for topics, audio podcasts, virtual labs, and video conferencing to promote discussions with students remotely. This combination approach enables opportunities for the students to actively practice personalized independent learning from diverse and online resources in a more flexible way.

One can plan, organize the course in larger chunks and structure it as week-by-week, and make sure that each larger chunk includes a mix of synchronous and asynchronous opportunities for students to engage with content, with each other and with the instructor. One must provide the students with a road map for how to navigate and be successful in the course.

### **The Hybrid Approaches**

Driscoll (2015) defines hybrid learning to combine or mix modes of web-based technology and various pedagogical approaches with the face-to-face, instructor-led approach to create a harmonious effect of teaching and learning. On the other hand, Dziuban, Hartman, and Moskal (2018) define hybrid learning as a "pedagogical approach that combines the effectiveness and socialization opportunities of the classroom with the technologically enhanced active learning possibilities of the online environment" (p. 3).

For a well-designed blended course, one needs to begin with focusing on learning outcomes. Instructors should first ask "what do I want students to learn at the end of the course?". Hence, the first principle for developing a hybrid course is to "work backward from the final course goal... and to avoid a counterproductive focus on technology" (Sands, 2002). Next, there must be structured interaction as the students interact with course materials, with the course instructor, and among each other. To make the interaction successful, the instructor needs to intentionally create activities that require such interaction among the students in such a manner that led to the overall attainment of the intended course outcome. The best approach is that one must start it with minimum technology that integrates well with the course. For that, choose technology that one is familiar with and in future, it will be possible to modify your course design by adding new and appropriate technology tools that contribute to the overall attainment of course outcomes.

It is important to recognise that whether it is face-to-face, hybrid, or online, no combination is ever going to be perfect. So, one must continuously collect feedback from the students to make changes to make the course better for future students.

## **Collaborative Tools**

For a hybrid approach, one can make use of Group google docs, sheets on which small groups of students are assigned each to make notes on one of the three readings for the day, and then collaborate through google slides to distil key points for the rest of the class. Padlet - an online notice board tool that lets teachers and students create a collaboration space. Google Jam board offers a digital whiteboard on which students can collaborate. Microsoft Teams offers a platform that facilitates team communication and collaboration. These discussion boards can be used where students rotate the responsibility of posting a thought-provoking question in place of presentations and discussion-leading in class.

## **Flipped Learning**

"Flipped" classes, where students watch a 5–7-minute video explanation of something and before they do the reading, so that class/zoom discussions can be more focused. Brief videos are preferred as they not only capture students' attention but are quite effective for learning. It is a good practice to add interactions to videos every two minutes or so. These interactions can involve answering a question or lending a comment (Forbes, 2021).

Instead of a recorded lecture, one can prompt students to research a certain idea to bring back to the synchronous class time. It has been found that making students responsible for finding content that guides the discussion makes them highly invested. They come back eager to share what they've learned instead of providing them with the information (Forbes, 2021).

## **Developing Online Tool Kits**

It is best to do small little things and begin with developing online tool kits, or short and flexible online modules. Online tool kits are collections of links, resources, and tips that point students explicitly to resources that will help them develop core academic skills for engaging in an online or hybrid class environment. For example, if you are using a particular tool on which the success of your student rests, dedicate time to helping them learn how to use that technology. Think of reading or note-taking or researching. For reading, tell them about Adobe reader, PDF Escape for annotations; for notetaking, tell them about Evernote, one-note and for researching talk about using different search terms like putting the phrase in a quotation, putting the word and so on. One shouldn't assume that just because they are Gen Z that they will understand things automatically. We must help students adapt as the purpose is to make them learn the relevance of adaptability (Thurston, Lundstrom & González, 2021).

## **Flexibility in Assessment**

Another approach is to be flexible with assessments while challenging students. Allow students to choose their deadlines from a set of options you provide or a set of criteria you decide. Allow students to choose a particular week's content they would like to focus on. Flexibility in assessment can further motivate students and engage them in the learning process by giving them some control over their learning. Create an online test that can be written over a certain period or offer multiple times to write a test or give them more time to write a test than generally needed. One can offer several quizzes or drop the lowest marks in the final grade or allow the students to write two small assignments and one large assignment. Offer them to write short answers instead of multiple-choice questions (Bie & Brown, 2021).

## **Flexibility in Feedback**

One can be flexible in providing feedback in the course. Offer multiple opportunities for students to receive feedback. Highlight common issues identified in the tests and assignments. Identify individual strengths and opportunities for improvement. One can share feedback privately after the class. Encourage students to review their evaluated tests. One must ensure that feedback arrives in time and in a format that students can use to achieve their expectations and learning goals in subsequent work.

## **Weekly Grid**

One can make use of a weekly grid. It communicates expectations to students about what's going on in class in a particular week, in what mode, and how long each item should take them to complete. It is of immense help for planning out each week. It shows whether activities are balanced or not, that is, too many or too few asynchronous team activities planned. One can also make a 5–10-minute video that presents a review of what was done in the previous class or week and what's coming up this week. The review and preview focus on how the course activities, concepts, skills, etc. fit into the learning goals. Similarly, to the grid, it provides orientation and context within the course — why are these activities being done now? How will this get closer to achieving the learning goals in the course (Dalal, 2021)?

## **Class Schedule**

Thinking in these terms might mean that a normal 90-minute class becomes: 10-min of pre-recorded lecture to watch alongside the reading, twenty minutes of discussion board posts and responses ahead of the class meeting, fifteen minutes of small-group work in which sets of 3-4 students prepare talking points on key issues for the day, And then only 45 minutes of in-person discussion. This way, any person who cannot be in the synchronous class only misses half of that day's interactions, not all of them (Tang, 2021).

## **Instructional Videos/Walkthroughs**

One can opt to record smaller-sized lectures and post those along with targeted readings. Walking through videos can be prepared for worked examples of problems; for revision purposes; for explaining the steps of a lab activity or to providing feedback to individual students and/or teams on an assignment (Dalal, 2021).

## **Team Based Learning**

Team-based learning (TBL) brings rigour to online learning and promotes student resilience. There are four essential principles of TBL in any environment. They focus on appropriately formed teams that ensure learner resources are equally distributed among the teams, the learner's accountability for the work, learning and team development promoting team assignments, and finally giving frequent and immediate feedback for learners. TBL needs to be introduced into the online environment. This will ensure active, collaborative, small group learning experiences in the context of large groups working virtually (Winter, Clark & Burns, 2021). But for TBL to work, the team must be properly formed, and learners should be accountable for an individual as well as teamwork (Thurston, Lundstrom & González, 2021).

## **Inclusive Content**

Last and most important is to create more inclusive and flexible content and experiences for students with disabilities that is a blind student using text-to-speech technology; hard of hearing (HOH) learners watching an instructional video using closed captions and so on. Adopting such practices demonstrate that when we include margins in our pedagogies, teaching becomes more resilient to the challenges.

Such pedagogical practices increase transparency. They expose how students' approach and apply the course concepts. They give students a glimpse into how to think about the various aspects of the course and expectations for their learning and engagement. They make the construction of the learning process visible. Blended learning was examined by Kurt and Yildirim (2018) to determine student satisfaction and what they considered to be important features of the blended format. The results indicated that the Turkish students who participated, almost unanimously felt that BL was beneficial and that their role and the instructors' role was central to their satisfaction.

## CONCLUSION

So many students faced difficulties and were struggling even before the pandemic. Today, the idea of “resilient pedagogy” feels new as perhaps, the pandemic has proved to be the greatest evidence of how ill-prepared teachers and educational institutions were for the disruptions that may occur at any time. It is also evidence of how much harm has been done to marginalized students for all the years preceding the pandemic. We must learn from past experiences and bounce back and be resilient to prevent future moments of crises.

To conclude, one needs to adopt a proactive approach while designing courses. One must keep reminding oneself that one must teach the students one has and not the students one wishes to have. For that let’s follow the core principles for adaptable courses comprising of detailed planning, communicating strategically, scheduling regular interactions, and embracing alternative assessments.

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Poonam Vohra, a post-graduate in Economics and Education, has taught Economics for the last 28 years to high school students in India. She has taught through power point presentation way back in 2004; taught online using Wiziq for doubt clarification sessions since 2014; adopted 'Flipped Learning' in 2015; introduced making Collaborative power point presentation using G - Slides to and with the students in 2016. Poonam is certified Microsoft Innovator Educator Expert for the years 2017-18 and 2018-19. She has developed three online courses for high school students and has written a copyrighted 600-page manuscript covering the topics of Microeconomics, Macroeconomics, and Indian Economic Development.

She has been presenting on Moodle MOOC Virtual Conference and Conference Online since 2017 on topics such as Social Emotional Learning, Computational Thinking, Understanding Artificial Intelligence, Understanding Learners While Teaching Online, Inclusiveness and Equity in Education, Improving Student Retention through Predictive Analytics, Being Happy by Practising Mindfulness, and Be Resilient and Adopt Resilient Pedagogy. Poonam has always believed in adopting a flexible approach to handle changes and incorporate new ideas.

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