Virtual/Blended Delivery and the Future of Learning: A Reflection From Practice

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Abstract

This paper analyses teaching and learning practices in two diverse national contexts using reflection from experience. As an educator, I have experienced diverse teaching and learning contexts at different stages of my teaching journey. This diverse context experience, which ranges from my learning as a student in the traditional classroom environment in Nepal in the late 70s and early 80s with changing context of education delivery in early 2000 as an educator, and finally to the modern classroom environment with the virtual mode of delivery in the New Zealand tertiary sector, has encouraged me to reflect on my professional practice. I am using Mitra’s conceptual framework of the school in the cloud in my reflexivity. Sugata Mitra, through his school in the cloud concept, encourages disrupting the traditional system of education that acknowledges teachers as the core of knowledge. Instead, Mitra suggested that computer and the internet could act as a medium of knowledge without the active involvement of teachers. In this paper, I analyse and discuss how Mitra’s concept of self-organised learning could be applied to the future of learning in the 21st century.

Keywords: Future of learning, Nepal, New Zealand, Sugata Mitra

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Introduction

Educated in the late 70s and early 80s in a traditional classroom environment in a school with an authoritarian approach to teaching, I could never have imagined that I would be a staff member in the current teaching and learning environment, where I need to use the virtual classroom environment with a blended mode of delivery. This diverse context of experience, from the traditional classroom environment in the Nepali education context of the late 70s and early 80s to the modern classroom context and its virtual environment in the New Zealand tertiary sector, has encouraged me to reflect on my professional experience. I wanted to critically reflect on how my experience in the diverse context of teaching and learning could be used in the changing mode of online and blended delivery which is gradually becoming the future of learning. To do this, I have used Mitra’s conceptual framework of the school in the cloud, commonly called the Self-Organised Learning Environment (SOLE) (Mitra, 2003; Mitra, 2020; Mitra & Rana, 2001). My engagement in this reflection has driven my interest toward the research question, ‘How can Mitra’s conceptual idea of self-organised learning be implemented in future learning in the tertiary setting?’ This question has become more and more relevant and thought-provoking during the global pandemic of Covid-19 when almost all teaching and learning has been experienced in completely virtual or blended modes.

No one would have expected that we would experience a global pandemic in 2020 and that the year 2020 would seem to have, in some respects, ended the era of globalisation (Yip, 2021). The Covid-19 global pandemic has tested everyone from former American President Donald Trump to the former Prime minister of New Zealand, Jacinda Ardern. The pandemic has elevated Jacinda Ardern as a global leader through her leading by example. In contrast, the pandemic could be said to have brought about the failure of Donald Trump as a leader. This is a living example of situational leadership, where the situation can make or break a leader (Thompson & Vecchio, 2009). The leadership that has emerged in response to the global pandemic is often called pandemic leadership (Wilson, 2020). Wilson, in her study of the New Zealand government's response to the public health aspects of Covid-19 under the leadership of Prime Minister, Jacinda Ardern, proposes a pandemic leadership framework. Due to the impact of the Covid-19 pandemic, most educational institutions either adopted the virtual mode of teaching or a blended teaching and learning
environment (Ali, 2020). Such macro changes in the political environment appear to impact the day-to-day operation of educational institutions, which is discussed next.

**Macro Changes Impacting Educational Operation**

I had an awful learning experience as a student at the authoritarian police school I attended, where the military culture dominated most day-to-day school activities. This was coupled with my experience at home, where my father was both strict and bought police work at home to discipline me and my siblings. As highlighted by Foucault (1995) in *Discipline and Punishment: The Birth of Prison*, and many others, power can be used as a technique to discipline us in both school and home environments. The system of operating a hierarchy of power in the micro institutional of home and educational settings was common in Nepal. This existing hierarchical social structure might be due to the cultural context of monarchy in the political scenario for about 240 years. Nepal operated a monarchical power system for 240 years, where the macro institution of absolute monarchical power is disseminated in the lowest level of society (Foucault, 1995). The theoretical enframing of the micro-politics of school (Ball, 1987) appears to be a relevant means of understanding the Nepali education context.

This experience of applying macro power in the micro institutions of schools and universities continued through my university education. While in the university, I experienced teacher-centred teaching and a learning environment where the teacher/lecturer would lecture to the class while we students memorised and reproduced the content in a three-hour examination scheduled at the end of the year. Although many, including Mitra (2020), argue that this system of the reproduction of knowledge is outdated, there are still many, such as Toh (1994), who argues that teacher-centred learning is still alive, and continue to operate a teacher-centred pedagogical approach, suggesting that the teacher-centred approach continues to have relevancy in the 21st century. The teacher-centred approach is still popular in Nepal, where I grew up and was educated before coming to New Zealand, where I initiated my career in education in a student-centred learning environment (Brough, 2008). It took me a while to get to grips with the reality of this later teaching and learning environment, a transition involving my movement from a teacher-led lecturing method to a student-centred learning environment. This transition involves moving from a teaching approach that assumes knowledge is being transmitted from teachers to learners to an approach where
teachers take the role of facilitator. This means moving from the role of the teacher as a ‘sage on the stage’ to that of the ‘guide on the side’ (King, 1993).

My PhD journey in one of the well-known universities in New Zealand helped me prepare myself for this new environment of student-led independent learning (Sharma Poudyal, 2016). However, I was not so well prepared for the teaching and learning environment in the virtual classroom. The divergence in the teaching and learning approach I have been experiencing and the emergence of future learning environment with the macro changes in the environment due to the Covid-19 pandemic are analysed in this paper using Mitra’s (2020) conceptual approach, ‘the school in the cloud and the emerging future of learning.’

**Mitra’s School in the Cloud and the Future of Learning**

Sugata Mitra is a well-known education thinker and theorist who is popular for his ‘Hole-in-the-Wall’ experiment in which he embedded computers in walls in the streets of a slum area of Delhi, India (Mitra, 2020). The Hole-in-the-Wall concept, which claims to provide unconditional access to internet-based learning driven by children’s natural curiosity, has attracted interest worldwide (Arora, 2010). The basic notion of this experiment is that children learn to work together and take ownership of their learning once they are allowed to freely interact and play with the computer. This means disrupting the traditional pedagogical approach where the teacher is the main source of knowledge. Instead, children are invited to learn without teachers, textbooks, or tests, leading to Mitra’s SOLE concept. This view reflects the ongoing tension worldwide within the educational policy environment between those seeking to reduce teachers' roles and those promoting teachers’ roles and agency (Biesta et al., 2015).

Sugata Mitra is in the former group of scholars as he suggests using technologies and the Internet to come up with different learning styles. He started with the ‘Hole-in-the-Wall’ experiment, which was mostly confined to India and other developing countries with few resources. He gradually expanded his idea to a ‘school in the cloud’ that could be applied everywhere in the world (Hattie, 2020). The school-in-the-cloud concept has been applied in schools across different parts of the world, including in India, Bhutan, and England (Mitra, 2020; Mitra & Dangwal, 2017). Such systems of education where children learn more from being independent and making proper use of the Internet and technology are becoming more and more relevant in the changing scenario of learning.
after the global pandemic of 2020, and now academics, including Mitra (2020), began to refer this as the future of learning.

The concept of self-organised learning, also referred to as minimal invasive education (MIE), is often challenged by researchers, including Arora (2010) and Ward (2010), who question such autonomous learning with computers when it is experienced without supervision and sustainable funding. These scholars argue that the sustainability of Mitra’s approach may face obstacles to the success of its implementation. Sugata’s (2020) theory that computer and the Internet act as a medium of knowledge without the necessary active involvement of teachers or teaching has been treated with scepticism in the education world as neither governments nor teachers have implemented his idea into practice (Wilby, 2016). Dellar (2014) criticises Mitra’s conceptual idea arguing that he [Mitra] is encouraging neoliberal agenda of larger corporations promoting the internet to reduce the state's role in education. Mitra (2020) himself partially agrees with this criticism, a view he expresses when he says, "While teachers in England [may] hate to teach to the test, but they still have to" (p. 42). Didau (2015) further criticised Mitra’s idea calling him [Mitra] an ‘irresponsible charlatan’ and questioned Mitra's findings based on sample size, an unreal control group, and finding lacking statistical depth and detail.

Although Mitra’s conceptual idea of SOLE is interesting and thought-provoking, it needs to be looked up with scepticism. We need to understand the dynamics of teacher agency (Biesta et al., 2015), thereby enhancing the pedagogical approach to be more learning-centered with the facilitator role of the teacher. Keeping this in mind, I attempted to apply Mitra’s conceptual idea of SOLE or MIE to reflect on my tertiary-level teaching.

### Teaching and Learning in Nepal’s Tertiary Sector

When I began my teaching career in the tertiary sector in the early 2000s, teacher-centred teaching and learning (Toh, 1994) was popular. I was a management lecturer and followed the traditional approach to teaching. I wondered how Mitra’s (2020) idea of self-organised learning be used in this situation. Most of the teaching and learning was based on the teacher/lecturer delivering content and learners taking notes and preparing themselves for the end-of-the-semester examination. This rote learning was popular in the tertiary sector in Nepal during those days when I started teaching.
(Belbase et al., 2008). When we have a cohort of 40-50 students in a class with the ultimate aim of completing their semester studies, which finishes with a three-hour examination, it was challenging to adopt a student-centred pedagogical approach. However, in saying this, I do not deny the idea that teacher needs to make an effort for their teaching and for learning to be as participative as possible. In fact, teachers have to make a shift from their conventional pedagogy to a more constructivist one (Dhakal, 2017). Most of the classes were two or three-hour sessions, and I used to attempt to make the class as participative as possible with the active involvement of my learners. This includes using the Socrates model of teaching (Chapman, 2022), with the teacher leading the session by asking thought-provoking questions to promote an environment that creates a dialogue between teachers and students and between students. Some of the courses, such as investment analysis and the fundamentals of financial management, which I used to teach in one of Nepal’s Tribhuvan University-affiliated tertiary sectors in the late 2000s, required more practice learning. Although I was teaching to the examination, I made every effort to encourage student participation through practice. My method might not have followed the self-organised learning (Mitra & Rana, 2001) with absolute fidelity, but there was a minimal amount of invasive learning (Mitra, 2003) as I was facilitating instead of just lecturing. My teaching practice in this context involves some aspects of collaboration, communication, critical thinking, and creativity (Kawkins, 2022), which are the principles of SOLE.

After working for about eight years in the tertiary sector in Nepal, I began to feel that the tertiary sector teacher/lecturer job was gradually becoming more thought-provoking and challenging. I experienced that many professors did not have their PhD degrees. PhD degree for academics was the less priority until 2016, which can be viewed in the data in the 2018 Tracer Study Report of Kathmandu University (Kathmandu University School of Education, 2018). Similarly, a research report from Asian Development Bank suggests that in 2009, only 12% of lecturers in Nepal held a doctorate suggesting Nepal's university system is weak in doctorate qualification (Asian Development Bank, 2015). The data from Nepal University Grant Commission shows that in 2020/21, there were 4,66,828 students and 10,810 teachers/lecturers in fifteen universities in Nepal, out of which only 105 faculties/students applied for PhD fellowship in the commission (University Grants Commission, 2021). A recent trend suggests that Nepali universities expect more PhD graduates in their faculty teams. For
instance, the 2075 Teachers’ Recruitment Regulation of Tribhuvan University stated that applicants with PhD degrees would get more points in the teachers’ promotion and selection exams (Tribhuvan University, 2021). Although there are many professors in Nepal without PhD, those entering the academic profession these days are now facing difficulties getting promotions without research experience and PhD qualifications. Such a scenario leads to more faculty members pursuing doctoral degrees in Nepal and abroad. There are now many universities in Nepal, including Tribhuvan University and Kathmandu University offering doctoral education in different disciplines. This might be due to the criteria set out by most universities that to be promoted to associate professor or professor, the existing lecturer needs to have at least five years of experience with research and publication with a PhD (Asian Development Bank, 2015). As more PhD graduate enter higher education in Nepal’s universities, there is changing trends of teaching and learning activities being more student centred because these graduates appear to be more interested in using their overseas experience in practice. This changing scenario and environment encouraged me to think of pursuing my doctorate in education, which I argue is aligned with self-organised learning in terms of Mitra’s conceptual framework (Mitra, 2003) in the forthcoming section.

**Applying Mitra’s Conceptual Framework in My PhD Journey in New Zealand**

As a management graduate involved in teaching, I thought of marrying management knowledge with my teaching and learning professional experience. This led to my interest in continuing my studies and doing a doctorate in management of education. When I first met my supervisors, I explained to them that my passion was to better understand conflict management in schools in the changing political scenario in Nepal. I was expecting my supervisors to tell me what I needed to do, but I was really surprised when one of my supervisors asked me to find a book by Stephen Ball, ‘The Micro-politics of the School: Towards a Theory of School Organization’ (Ball, 1987) with a purpose of further discussing this topic in our next meeting. This first incident in my doctoral journey really came as a surprise because the book my supervisor suggested I read was not relevant to what I had intended to explore in my doctorate. Secondly, I was told to read this text without being given any reasons for why I should do this. This incident contradicted the relational pedagogy philosophy in my learning journey. Biesta (2015) argues that education exists in the web of relations between the learners and the academic professional, more specifically, my supervisors in this
situation. This is the first time I had to get to grips with the self-directed nature of learning (all be it during my doctoral research project), where students required less invasion from their supervisors (Johnson, 2014). This task also pointed me toward becoming a more independent learner in my own right. This type of learning transition was stressful in the beginning. As Boodhoo (2017) indicated in his reflexive account of his PhD studies, I was no stranger to the common challenges from academic writing to researching and critiquing other research work during my doctoral education. This has encouraged me to reflect on my professional experience (Belbase et al., 2008).

Although more self-directed with minimal invasion from the supervisors, PhD studies still emphasize learning as something that individuals do in formal education settings, as Hager (2014) indicated in his critique of educational philosophy. The common approach to PhD education in New Zealand, like many countries including Australia and the UK, is that it should be about learner working alone under the supervision of just one or two seniors scholars (Boud & Lee, 2005; Johnson, 2014) and my PhD was no different. I was assigned two supervisors and a shared office equipped with all the necessary equipment, including access to the Internet. This is closely aligned with Mitra’s (Mitra, 2003; Mitra, 2020; Mitra & Dangwal, 2017) minimal invasive and self-organised future of learning. It is all about giving adult and experienced learners agency so that they can pursue learning independently with the aid of technology and the Internet. This was about learners having skills and knowing where and how to access knowledge (Mitra, 2020). Dolan et al. (2019) argue that self-organized learning environments exist where learners self-organise into groups in order to learn using a computer connected to the Internet and with minimal teacher support. During my PhD, I worked independently using the Internet and technology, occasionally taking part in conferences and research symposia where other PhD candidates in the same boat would come together and discuss topics of mutual interest. My PhD experience has taught me a lot about independent and self-organised learning. Still, I was unprepared for the virtual learning that emerged after the global pandemic of Covid 19.

**Covid 19 and Virtual/Blended Teaching and Learning Environment**

The Director General of the World Health Organisation (2020) declared the coronavirus outbreak, commonly referred to as Covid-19, a global pandemic on March
2020. With the declaration of the Covid-19 pandemic, the education sector, like other sectors, had to rapidly move to a virtual mode of teaching and learning (Ali, 2020). This virtual classroom environment, which started in a chaotic way and as a makeshift, has become necessary during the global pandemic (Ali, 2020; Butnaru et al., 2021). Since the beginning of the pandemic, many researchers have been focussing on the virtual classroom experience and ways of improving the teaching and learning experience. For example, the European Agency for Special Needs and Inclusive Education (2021) conducted a literature review on the impact of Covid-19 on inclusive education in the European context and found that there is a digital divide when it comes to the adoption of an online mode of learning, as the learners with disabilities appear to be having difficulties using digital tools for online education. This digital divide is affecting learners who are already vulnerable.

Similarly, Butnaru et al.’s (2021) study on the effectiveness of online education during Covid 19 pandemic in Romania found that students' learning depends on their proficiency in using online tools, whether they have the technical skills and whether instructors have the ability to conduct learning activities. Whether we like it or not, this virtual classroom environment has become a reality. It has provided an opportunity for wider participation and gender equity as mature students find it easy to take part in learning while being able to fulfil their family obligation (Stone & O'Shea, 2019). This type of online and virtual teaching and learning has, in effect, signalled the future of learning, meaning it is now time to think about how we can improve our online pedagogy as an educator and help the world prepare for the occurrence of further global pandemic (Butnaru et al., 2021).

Like many other institutions worldwide, the institution where I worked started using the blended mode of teaching and learning to adapt to changing scenarios during the global pandemic. Initially, I struggled to be effective in this new teaching and learning environment, where I had to speak with students via a computer, with my students listening and interacting via their devices at home. I commonly had the sensation that I was just speaking to a computer. Coupled with the associated technological hiccups, conducting classes could be a frustrating experience. Sometimes, I wondered if I was suited to the virtual classroom environment. This situation could be interpreted as being based on Salmon’s (2014) five stages of online learning. Stage one is about access to the learning medium and motivation of the learners that might involve welcoming and
encouraging learners, while stage two is about online socialisation of sending and receiving messages, and stage three consists of information exchanges in the form of facilitating tasks and supporting the use of learning materials. Similarly, stage four is about conferencing and facilitating process, while stage five is about knowledge construction. I was struggling at the beginning of my online teaching journey as it appears that the adaption process gave us no time to understand that change in pedagogy, which led me to be unable to progress through these different stages that Salmon regards as essential for effective online learning. Nevertheless, this new experience has gradually become a part of my teaching and learning journey, meaning I began climbing the five-stage online learning mountain described by Salmon (2014). This is also about making teaching less invasive and moving towards self-organised learning, which Mitra (2020) suggested would be the future of learning in that this development supposes a logical education response to technological innovation. Instead of creating a more hierarchical structure in teaching and learning, I was interested in co-creating knowledge with my learners.

No matter how perfect we think we are as educators, there is always room for improvement. The teaching and learning processes need to be considered an opportunity for continuous improvement (Park et al., 2013). Therefore, I formally and informally evaluate my teaching to improve my pedagogical approach further. I used questions such as ‘What would you like me to discontinue in my teaching?’, ‘Write down two or three things that have really stuck and were not clear to you’ in my learners’ evaluation tools. However, getting feedback from my learners on this aspect of my teaching was difficult. This is quite like the situation of Tadayyon et al. (2016), who suggest that teachers are avoiding learners’ avoidance. Some of my learners provide me with vague feedback such as ‘all good’, ‘no need to improve’, ‘I think everything was good’, and ‘everything was clear to me’. As Gina (2022) argues, this type of incomplete and confusing feedback left me wondering about how they are experiencing their learning journey. As a result of this, I tried to involve my learners in their learning activities with indirect questions such as, ‘What activity did we enjoy the most in today’s session?’ in response to which they write about the activity, enabling me to assess their interest and involvements in their learning journey. I was interested in empowering my learners and building trust with them. The main motive behind this is to ensure learners take control of their learning by creating a self-organised learning
environment (Mitra, 2020). This is also about building learning communities with digitally connected 21st-century learners rejecting the authoritarian culture of schooling in which teachers deliver knowledge for students to consume (Benade, 2015).

**Concluding Remarks**

This paper enabled me to engage in a rigorous self-reflection on my practice of using Mitra’s conceptual framework concerning the future of learning. The main aim of this paper was to analyse and discuss how Sugata Mitra’s concept of self-organised learning could be applied in the teaching and learning activities in the diverse tertiary contexts of Nepal and New Zealand. While Mitra’s conceptual framework originated from applying a new idea about self-directed learning in a rural school in India, it was gradually elaborated to incorporate the future of learning in the era of a digitally connected world in different education environments worldwide. In this paper, I attempt to apply this conceptual idea using my professional practice reflection in diverse tertiary contexts in Nepal with my experience in a developed Western country. Mitra’s future of learning is about using the Internet and technology in teaching and learning activities, mostly confined to the face-to-face classroom environment. However, in this paper, I attempted to cross the boundary of face-to-face education to the virtual and blended mode of delivery in analysing how Mitra’s self-organised learning could be implemented in the future of learning that has emerged due to the Covid-19 global pandemic.

The significance of self-organised learning for both students and teachers is noteworthy. For educators to be critical thinkers, they need to actively reflect on their practice. This will enable them to think about their learner’s experience of learning, whom they (educators) influence in many ways. The pedagogical process as such needs to be a part of social construction that results in both learners and teachers having the confidence to take control of their own learning resulting in the construction of knowledge. When it comes to Sugata Mitra’s idea that teaching and learning activities to be ‘self-organised with minimal involvement’ of the teacher, it appears to be quite challenging to implement ‘self-organised learning with minimal involvement’ in practice, as indicated in most of the research carried out to date. Complementing Mitra’s theorisation about self-organised learning, I experienced that less engagement of teachers is not about a passive role; it is about creating a space for teacher-learners to
grow together with critical thinking and the value of belongingness. I feel that it is high
time for us as educators to make an effort to ensure teaching and learning are about the
co-construction of knowledge from the active involvement of both teachers and
learners. Learners should take control of their own learning, and educators need to play
the role of facilitator of the learning process. This approach will promote the notion of
learning being a two-way process with both educators and learners learning from each
other, although educators might have more to offer in this process.

My method here is that the more deeply we inquire, the closer we get to what we
want to say. The key is that we cannot get where we want to be by just asking one
question. The investigation needs a series of questions, each peeling away a layer of
skin on the same onion - the same interest. I, therefore, want to end my paper with the
following questions that would be worth pondering:

- What benefit is Mitra’s framework to areas of learning outside where it is already
  used?
- What does this new learning look like?
- How will Mitra’s framework benefit our understanding of education in new areas?
- What are the implications of this new form of learning, i.e., what benefits will it
  have across the student’s wider learning experience (in other subjects, for example)?
- What new questions does Mitra’s framework ask of education - i.e., questions that
  have not been asked before?
- How will teachers teach and students learn differently due to engaging with Mitra’s
  framework?
- How can implementing Mitra’s framework help sustain education in a pandemic
  such as COVID-19? What are the structural barriers to implementing Mitra’s
  framework in both Nepal and New Zealand?

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