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# Converting a pandemic into educational opportunities: Lessons yielded from college students' experiences during the first months of the COVID-19 lockdown

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## Abstract

The second week of March 2020 marked the beginning of an unforgettable experience for students and lecturers in a pre-university college in Malta. For the next four months, the college adopted an emergency remote learning programme, which allowed immediate access to education. The authors of this paper, intrigued by the new challenges, sought to understand the novel issues faced by the students, listen to their voices, and comprehend their lived experiences through the use of a questionnaire which afforded the collection of both quantitative and rich qualitative data. The students' responses provided a lens on the infrastructural, technological and learning-related issues which affected learning. A variation in student experiences involving self-management, management of the environment, technological and learner-related issues and need for support was observed. The COVID-19 pandemic disrupted the normal education programme, but this research indicates that this chaos has presented the college community with valuable opportunities for evolving and transforming with a lens focussing on the development of new communication, teaching and learning skills and on innovative infrastructural and learning strategies.

## Keywords

Challenges, management, remote learning, emergency, ERL, e-learning, disposition

## Introduction

The second weekend of March 2020 was the start of an unforgettable experience for Malta's educational sector. On March 12, all educational institutions were closed for a week. However, within a few days, all educational institutions were physically closed until the end of the scholastic year, which

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for the college in this research was 19th June. For four months, lecturers at this college embarked on an emergency remote learning (ERL) programme which brought about a unique experience to all stakeholders, namely administrators, lecturers, students and parents. The switch to online learning was an emergency measure that was unprecedented. Very few, if any, were prepared for this huge change from face-to-face learning, with perhaps some technology-enhanced learning, to emergency remote learning (ERL). ERL was not meant to create stability but to provide immediate access to education – pandemic pedagogy (Millman, 2020).

This study focuses on the challenges faced by pre-university college students during ERL. The students relied on modes of learning chosen by their respective lecturers. They had to comply and adapt. It may have been assumed that these 21<sup>st</sup> century Prensky's (2002) digital natives would welcome the opportunity to use technology, in this case for academic purposes. However, whether students were online-ready or online-eager was a different matter. A general state of shock and bewilderment took over. As several other researchers, such as Helsper & Eynon (2010), concluded, the readiness to use technology does not depend on age.

The first two weeks, which were the last two weeks before the Easter break, were a trial and error period, where stakeholders had to adjust rapidly to an emergency situation (Juliani, 2020). The Easter respite provided time for preliminary reflections and adjustments to the situation. Throughout this transition, IT support services and a team of voluntary college lecturers were available to support staff. The college administration issued and frequently updated strategy guidelines. First-year students were mostly concerned with how they will proceed to their second and last year at the college, while second years were concerned about their final external examinations, a gateway to their future.

Prior to ERL, students had attended face-to-face lectures, tutorials and laboratory sessions. A virtual learning environment (VLE) had been available for twelve years, yet most lecturers used it for convenience to upload notes. ERL prompted the college IT services to embed video conferencing (Zoom) and lecture capture/recording (Panopto) tools in the VLE. Two-hour courses in using Zoom, Panopto and the VLE were provided. The immediate urgency was met; however that was only the start of a lengthy and demanding process.

The authors of this paper were intrigued by the students' diverse behaviours, their challenges and different responses. The purpose of the study was to investigate these by listening to the students' voices, and to identify means to support them.

## Methodology

The authors selected a quick but efficient and effective research tool which could capture the students' lived experiences of the three months of ERL. As educational practitioners, the authors sensed that students were becoming tired and overwhelmed with the developing situation. The research was conducted as soon as it became possible to have a true picture of reality. Considering all factors, an online questionnaire sent to all first-year students ( $n = 966$ ), was selected as the best research tool.

In the second week of June, all first-year students were invited via email to participate in an online anonymous questionnaire, designed in Google Forms, which only took 15 minutes to complete. The students were informed that their participation was voluntary and that their response would help the college identify their needs in the changing circumstances.

The questionnaire consisted of 41 questions arranged in seven sections, including general personal details, technological and learning issues, the home learning environment and particular needs and concerns. It included several multiple choice questions (78%), Likert scale-type questions (5%) and open-ended questions (17%) which were ideal to capture the students' thoughts and opinions in the form of narrations.

The data generated in the multiple choice and Likert scale questions was analysed in Google Forms and presented as data visualisation charts and graphs. The data generated in the open-ended questions was analysed with Nvivo 12. Both *á*-priori and *á*-posteriori coding (Wellington, 2000) were used. The data was reduced several times and re-categorised (Miles & Huberman, 1994) into five main themes.

## Findings and discussion

Unless stated otherwise the (n%) in this Section – Findings and Discussion – denotes the affected percentage of students.

245 student responses (25% response rate) were collected in the last three weeks of the academic year. The ratio between female and male respondents stood at 3:1. This does not exactly reflect the ratio of female to male students at the college, which is approximately 3:2. The ages varied between 16 years (41%), 17 years (51%), and 18 years old or over (8%).

Students from all five areas of study at college, viz., natural sciences (55%), business and technology (47%), languages (40%), social sciences (26%) and arts (19%), answered the questionnaire. The percentages were representative of the number of students registered to study the particular subjects at the college.

As often encountered in research involving perceptions of students (Mason & Weller, 2000; Sweeney et al., 2004), the college students in this study showed extreme variations in their perceptions of the remote learning experience. The student responses immediately confirmed the authors' concerns regarding the effect of the pandemic. Ninety-five per cent of students claimed that remote learning posed several challenges. The prevalent issues were those related to self-management, management of the environment, technology, learning and student support.

### Supporting students

Most of the students (83%) stated that they did not require any technological, medical or financial support services. However, 11% sought college IT support, 4.5% sought mental health services and 1.6% sought the college counselling services.

The students needed two major types of immediate college support: technological (accessing and using the virtual learning environment (VLE) and video-conferencing (VC), and medical assistance. It was evident that a number of students felt lonely and at a loss. A number of students had become preoccupied with their academic progression and were in constant fear of 'missing a year' in their studies. The psychological well-being of students was therefore threatened by this new concern, arising from the sudden transition to online learning (Najmul & Yukan, 2020). Some students developed anxiety and other mental health problems. A couple of students claimed that the pandemic, adjustment to ERL and the amount of work further aggravated their condition.

Comments included:

'The pandemic and the overwhelming amount of work we were given had taken a great toll on my mental health and I felt it was best to look for professional advice.'

'I needed to see my psychologist more often during quarantine as I found it difficult to cope well'

As an emergency response, the college IT and well-being/counselling services moved online. At first this was random and the onus was put on the students; however, students at this age are in constant need of communication and support (Goldman et al., 2017). Eventually the counselling services advertised and delivered structured online sessions and offered after-hours emergency support.

Management of the environment: focusing and paying attention

While some students (20.6%) felt that the home learning environment never or rarely hindered their learning, others (36.4%) admitted that it frequently did; and 34.4 % of students said that it was occasionally not conducive to learning. This means that over 70% of the students thought that the home environment was not ideal as a learning environment. It seems that students encountered three main type of distractions: (1) outside the house (70%), (2) in the house (67%), and (3) social media (64%). Construction works and noise from neighbouring houses were a main external distraction, together with heavy vehicles, car engines and horns, street vendors and loud music. Parents on videoconferences, loud conversations, and noisy siblings were the main reasons for house distractions. Other distractions included doing errands for parents, parents cleaning the students' study area, younger siblings requesting help with their learning, attending to doorbells, pets, and taking care of elderly relatives or sick siblings. It seems that some parents did not comprehend that students were at home attending classes and were not on holiday:

'I had chores and errands that I had to do and because everyone was home we had to do laundry and cook home meals more often.'

Students needed quiet spaces to focus on the live lectures or asynchronous recordings. For many, these quiet places were scarce due to living in small

homes. Several students (64%) admitted that they were often distracted by the use of social media; Facebook, sending messages, checking chats, and emails were popular distractors during live online lectures. Students found it easier to access their mobile devices at home than when at school.

Nevertheless, students who had no or little distractions saw the home environment as a positive experience, conducive to learning. The reasons included (1) easiness to find a quiet place to focus on their work, (2) availability of all books and notes for their lectures (3) no class disturbances in the form of talking and misbehaviour, (4) more available study time due to less socialising, and (5) greater flexibility to work at their own pace. Moreover, students who suffer from class anxiety conditions felt more relaxed and happier at home.

This difference in opinions and reaction to the home environment depended mostly on the nature of the home environment, on the ability of the student to adapt, and on the student's personality; for some students, staying at home and not having to socialise was a blessing, for others a disaster. Nevertheless, even if this is beyond the control of educators, parents can be made more aware of their children's needs when learning from home and also empowered to help them (OECD, 2020).

### Self-management

Self-management issues were very much related to the adaptability in managing the home environment. The data related to self-management was gathered in open-ended questions regarding advantages and disadvantages of online learning; the main challenge was to learn how to deal with managing their time and studies. While 40% of the students took advantage of learning from home and managed to organise their time and studies, others lost the opportunity and found it difficult to cope. Time management was an issue for many students. Most complained of having to spend very long hours in front of the computer, both for synchronous and asynchronous sessions. In addition, students felt that lecturers were giving more work than usual and they were not finding the time to complete their work and pursue other activities.

'During this online period, most lessons were after each other and I was given more tasks to do at home.'

Some students claimed that they missed the encouragement from their friends, for example:

‘When at school, we managed our time better and got together for study sessions, while interacting.’

Some students felt that they lacked time-management skills. They were inclined to miss live lectures and then watch several recordings at a later time. In their defence, some lecturers were giving extra live and recorded lectures, which disrupted the students’ plans. Students were also overwhelmed with emails and subscribed VLE messages, which became the main mode of communication.

On the other hand, some students were in control, managed to organise themselves and created a workable timetable better than when they were at the College. They felt empowered to do a personal schedule and were no longer concerned about being late for lectures. These students said that they felt less tired as they saved on travelling time.

‘I am less tired than when I wake up early to catch the bus and finish lectures at 5 and catch the bus once again.’

The waste of time related to travelling by bus was a main argument in favour of having better time management when at home. Students used this respite time not only to study and complete assignments, but also for resting and spending more time with their family:

‘I can sleep more, do not have to worry about getting to school by public transport late, that I can have breakfast for the first time after a year.’

Self-management depended on how each student adapted to the change. There were three cohorts: (1) those who lacked self-management skills at the College and continued having the same problems at home, (2) those who became better organised at home, using recorded lectures to plan better their own timetable, and (3) those who started having problems when it became their responsibility to organise themselves at home. This implies that students who developed self-management skills were able to take full advantage of the situation, while others were lost and considered remote learning as unmanageable and time-consuming.

Apart from time management, students were also grappling with isolation issues. Comments included 'feeling less known amongst classmates and invisible', while missing 'friends', 'laughter in class', 'seeing real faces', 'socialising', 'venting out', 'between lectures chats', 'chill time' and 'finding their crowd'. Considering all these issues, the majority of students felt deprived of college life. The effects of home confinement on students were varied and a novel challenge for all educators worldwide (Wang et al., 2020).

The study has clearly shown that at college level students are not mature and skilled enough to adapt to a new timetable and way of life without any problems. This puts the onus on the college to equip students with basic self-management skills, which would empower them to adapt to changing circumstances. The pandemic situation has uncovered cracks in the system – the attrition of students throughout the years due to lack of self-managing skills.

### Technological issues

A list of technological issues was suggested to the students. Common technology-related problems included internet connectivity issues (44%), sensing the lecturers' discomfort at using the required technology (36%), using different types of technology to learn different subjects (35%), and unclear expectations around which technologies and applications the students were expected to use (17%). Other issues were access to printers (22%) and the students' own discomfort to using technology (13%). Twenty per cent of students felt that they did not encounter any of the suggested technological challenges.

The survey indicated that the three main modes of remote teaching were:

- online live meetings (video-conferencing – Zoom, Skype or Google Meet) (75% of lectures);
- recordings using Panopto and other recording devices (24% of lectures);
- files and folders uploaded in the VLE (1% of lectures).

Most students (66%) preferred video-conferencing (VC) to recordings, while 21% of the students preferred the latter, and 3% of the students were contented



to learn through notes uploaded in the VLE. Most students (62%) preferred to have a topic discussed as a live online session and then followed by a given task. Only 13% of the students were not at ease to learn remotely.

All students, except one who had studied abroad, indicated that online learning was an innovative experience. This student commented that the remote learning offered by the college was more effective than the online learning which was experienced abroad.

Although it may seem that remote learning offered students flexibility in their learning, students had no choice over the mode of lesson delivery. In ERL, lecturers were free to design their own mode or blend of content delivery. Students had to adapt according to their lecturers' preferences - VC and/or asynchronous recordings. Several students preferred VC as it proved more familiar to the face-to-face setting. Wheeler (2020) described VC as face-to-face at a distance.

Some students were overwhelmed when lecturers expected them to quickly familiarise themselves with different methods of delivery for different subjects. Lecturers were using different platforms such as Skype, Zoom, Teams, Hangouts, Panopto and other recording facilities. The students also felt confused due to lack of appropriate instructions on how and where to present their work, which, as previously discussed, turned out to be excessive. Furthermore, some students were concerned about their learning due to the technological uncertainties of some of their lecturers.

Negative aspects of remote learning included: (1) no access to computers (9%), (2) limited access due to other family members requiring the computer (11.5%), (3) many consecutive VC sessions (6% - 6 hours and over), and (4) recorded sessions exceeding 1 hour (23%). These technological issues were beyond the control of the learners. When it came to having computer availability problems, 32% of the students used their mobile phone, while 21% missed the live sessions.

Many live sessions were recorded and sent to the students. Six per cent of the students used the recorded sessions for revision, while others (8%) relied on the availability of the recordings because they could not attend the live sessions. Some students (16%) purposely missed the real-time sessions with

the intention of watching the session at their convenience; yet most of these admitted that they did not find the time or have the motivation to watch the recorded VC sessions.

Recorded lessons at the beginning were manageable but as time went by they increased in number. It was difficult to watch more than one every day since each was at least one hour long.

It seems that recorded live sessions could solve some problems, as students would be able to listen and/or watch lectures at a later time. However, attending several successive live VC lectures and listening to long recordings proved to be tiring and demotivating. This involved sitting in front of a computer for long hours. The long recordings were also time-consuming. Even though students were able to listen to long recorded sessions in small stretches or using, where possible, double the recording speed, they would have preferred shorter recordings. It was generally taken for granted that students would find time to watch or listen to several recorded lectures in a day.

Unfortunately, the students who relied on recordings or missed lived sessions felt distant and isolated from the class. There was no immediacy to solve content-related problems and such students could not be involved in live class collaborative activities.

As previously discussed, several students struggled with time management. In fact, 64% claimed that they were expected to do much more work out of class than in pre-COVID times. This work included frequent assignments, extra VC and recorded lectures. Quite often, a one-hour timetabled lecture was supplemented by learning material such as further recording or assigned work to cover new areas of the syllabus.

The work given during this situation doubled, if not tripled in quantity. This made it even more difficult to focus, which greatly decreased the motivation to learn, even for me, a student who loves learning and shows great enthusiasm towards learning.

Lecturers were assigning a lot of work to ensure that they were providing enough academic content. They either gave large volumes of assigned work or asked students to cover sections of curricula on their own. This phenomenon of lecturers assigning more work in emergency remote learning than in normal circumstances seems to be common in academia (Rahiem, 2020).

Another technological issue concerned the use of the webcam. Six per cent of the students did not have a webcam, whereas 74.2% of those who had a camera preferred to keep it switched off during the VC sessions. The reasons given were shyness to appear online, other students not using their cameras, home privacy issues and distractions when seeing others online. A fifth of students showed no preference, while 5.7% of the students preferred to use the camera as this made them (1) feel part of the class, (2) less distracted, (3) more ready to interact, and (4) feel more visible to the lecturer, who would immediately respond to their difficulties.

The students with a feeling of belonging to a class community were eager to participate in class VC with the camera switched on. Most students preferred to keep the lecturer on Speaker View than use Gallery View to see the whole class. They visualised the lecturer as speaking individually to each one of them and could engage more with subject content. That way the students were more comfortable to discuss and ask questions, and felt that the tutor will be able to monitor their understanding of concepts.

Nevertheless, even students who did not use their camera felt close to the lecturer; most kept the lecturer in Speaker View to feel the one-to-one contact. However, most of these students admitted that when not using cameras, they could easily be distracted by the use of social media, sending text messages to classmates and other friends, or checking emails.

Students with the camera switched off had a greater tendency to become distracted and hence feel distant from the class. This implies that if the camera is switched on, there is a greater probability of minimising home/social media distractions and increasing active learning. It must be mentioned that in the first stages of ERL, lecturers were advised to respect the students' privacy and allow the non-use of the camera. In reality, lecturers are the ones mostly affected by students not using their cameras; the lecturers see themselves facilitating the learning of black boxes!

#### Learner- and learning-related issues

Eighty per cent of the students felt that they learnt better in the traditional face-to-face class and 31% of the students declared that they were uncomfortable learning remotely. On the other hand, 19% experienced telepresence and were

so comfortable with learning online, that they felt as though they were in a normal usual class.

Twenty-nine per cent of the students declared that they are passive learners in both the traditional and remote type of class; 55% of the students claimed that they are usually active participants in the traditional face-to-face class; 35 % said that they are active participants in the online live class if the meeting is not recorded, and only 24% described themselves as active participants in live sessions which are recorded. Recorded VC live sessions made some students reluctant to discuss in class. These students had issues with the permanency of recordings. They would participate actively in class if the lecture was not recorded. This issue may be solved in some cases if the recording is paused each time that a discussion starts in class. Some students said that they are always shy to ask or answer questions in class; the chat feature in VC provided a solution to this problem as students sent private messages in real time to the lecturer.

Issues of active or passive student participation prevail also in traditional face-to-face classrooms. Students need to believe in their entitlement to ask questions, to feel safe to discuss and to feel confident to ask questions. Claxton & Carr (2002) described the disposition of reciprocity as students' willingness to express their uncertainties, to question, to discuss, and to intervene to help others. Learning environments, whether physical or remote, should be safe places, purposely created to promote discussion and collaboration.

In general, students preferred traditional learning as in pre-COVID times. Not all students were flexible to adjust quickly to remote learning and some saw this as a barrier to their learning. This lack of flexibility may have resulted in a lack of motivation to learn remotely. Some students hoped to return to the familiar college classrooms within a short period of time and were not prepared to be resilient. Some became unmotivated, distracted and stopped their learning. Some even became anxious and concerned about their learning and well-being.

Claxton & Carr (2002) also described the disposition of resilience as an inclination to take on challenges when outcomes are uncertain, to persist despite temporary confusion or distractions, to recover from setbacks, and to rededicate oneself. The resilient and flexible students in this study were able

to overcome setbacks and redirect themselves to learning. Such students welcomed the new opportunities and engaged in peripheral learning such as scanning and file conversion and new modes of learning.

In contrast, some students used remote learning as an opportunity to get out of reach of the lecturer. This was observed to be a common occurrence in institutions (Bao, 2020). They felt that remote learning was an occasion to miss lectures, avoid doing the assigned work and engage in social media during class, especially if they opted to keep cameras switched off.

Therefore, in addition to opportunities to foster dispositions of reciprocity, flexibility, and resilience, ERL presented opportunities to students to become responsible for their own learning and the learning of their peers. Students with this disposition focused on their learning, did the assigned work, did not miss lectures, were flexible to learn in different ways, were not distracted by social media and the home environment, and refrained from distracting others. Some reported that the online live sessions had a good uninterrupted flow when compared to some traditional lectures; thus, class disruption in the online medium due to student misbehaviour seemed to be minimal. Palloff & Pratt (2003) point out that the individual learning process of the virtual student is dependent on the participation and commitment of the other students in the group.

The disposition to take responsibility for one's learning includes the development of self-regulatory strategies in the learning process such as being flexible, and assessing and evaluating learning (Miltiadou & Savenye, 2003). It also entails the development of resource management strategies which include managing time, managing study environments, monitoring effort, effective focusing, determination to learn, and learning from resources (Pintrich & DeGroot, 1990). In contrast, some students did not shoulder enough responsibility for their learning and the learning of others. These students displaced the responsibility to learn and claimed that lectures were boring. Some also said that they felt isolated, too distant from lecturers and classmates and were inclined to become distracted.

A responsibility for one's learning and the learning of others involves a willingness to form a learning community with a sense of belonging, of

connectedness and of community spirit (Abedin et al., 2010). Many students wanted to stay connected with the rest of the class. These are the ones who eagerly followed the live sessions; especially the students who used the cameras to feel more engaged and part of the class.

### The way forward

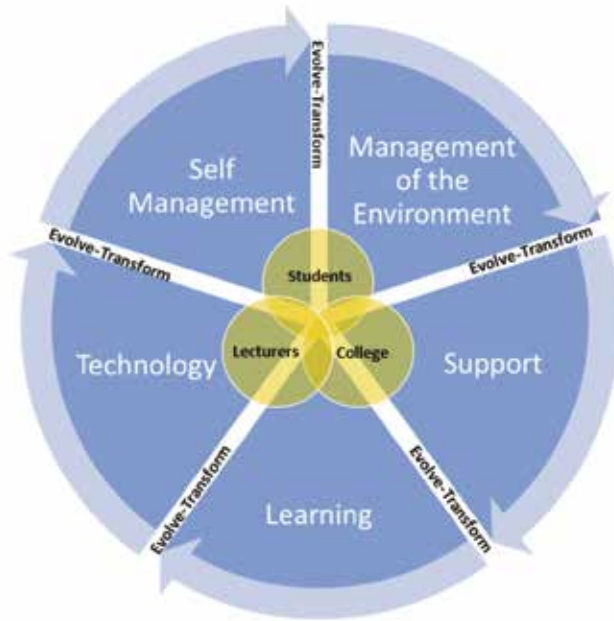
Prior to the pandemic, learning at the college relied heavily on face-to-face lecturing, and in consequence, lecturers and students were not online-ready. The pandemic has clearly shown that educational communities were taken unawares and were unprepared to deal with the sudden physical closure of educational institutions and seamlessly switch to digital online systems. Backups for such an unexpected event were not available. Normality was disrupted and chaos attempted to take over; uncertainties and confusion prevailed in the first weeks. As institutions watched and monitored the evolving scenario, ERL evolved as an experimental endeavour.

The students' responses in the questionnaire pointed to what has been lost in terms of normal college life, including learning and socialising. However, analysis of this study has revealed what can be potentially gained. The factors which contributed to the student challenges fell under the main themes of support, self-management, environment management, technology and learning-related issues. These, as discussed in this paper, constitute notable concerns which call for effective future planning and guidelines for learning, both during the prolongation of the pandemic period and also beyond.

Grajec (2021), discusses the possibility of three main scenarios. Strategic planning may focus on either (1) restoration, i.e., working towards reverting to the old normal, or (2) evolution, i.e., adapting to a new normal, or (3) transformation, i.e., focusing on creating an innovative future.

Restoration may not be the best option, as the pandemic revealed the weaknesses of the old normal during its prevailing existence; several lessons have been learnt through experiences, such as the use of ICT, which should not be abandoned and forgotten. Educational institutions must be pushed beyond restoring traditional practices. Evaluation of the pandemic experiences should drive institutions not only to identify and strengthen good old practices but

Figure 1: COVID-19 Opportunities for College Education



where possible to evolve and/or transform. Figure 1 shows the five main areas which presented challenges to the students; these areas provide a platform for evolve and transform policies and strategies.

## Conclusion

The pandemic impacted both the micro scenario involving the students' learning and also the macro scenario which involved the institution's strategies. At the micro-level, ERL offered several novel opportunities to the students. These include peripheral technological learning (1) in virtual communication such as using VC, the VLE and their tools, (2) in procedures, e.g., using keyboard for assignments, scanning and uploading/downloading files, and (3) in the use of software such as readers, editing tools, and file converters. Other opportunities were the development of new skills in self-management and time-management and the development of learning dispositions such as becoming resilient,

flexible, reciprocating and responsible learners. Students were required to own their learning and adapt to any rising circumstances.

This study showed that at the macro-level, institutions must focus on both the academic success of students and on the development of an infrastructure which ensures the provision of technological and well-being services to all students. This would provide equity access to education.

In addition to academic content, educational curricula need to emphasise on (1) empowering students to become self-directed learners with self-regulatory and resource management skills, (2) the development of key learning dispositions of reciprocity, flexibility, resilience and responsibility in students, (3) the integration of ICT across all subjects, and (4) personal and social student development. This is possible with the inclusion of appropriate policies and strategies based on a transformation process, which would also include the professional development of academic staff in novel pedagogies and student-related policies.

Evolution and possible transformations with respect to equity access for education have already been initiated at the college involved in this study. The immediate and long-term responses include the advancement of counselling services to cover outside college hours and reach needy students, raising parents' awareness on home learning needs, and providing increased support with respect to technology needs and training, thus enabling technology availability and use for all students,

The focus on evolution and transformation needs to be on holistic student growth, institutional culture and technological advancement. Evolution includes a progress from remote learning to online and blended learning and would necessitate both technology availability and training for all students and educators. In addition, transformation would involve the identification and application of sustainable digital strategies and innovations. The new strategies should also be applied to advance the existing well-being and support services, in terms of the emotional and personal needs of students, guiding them to attain academic and career goals. Such an institutional culture of transformation would provide a vision with rigid foundations for the future, keeping pace with strategic change.



## Notes on contributors

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