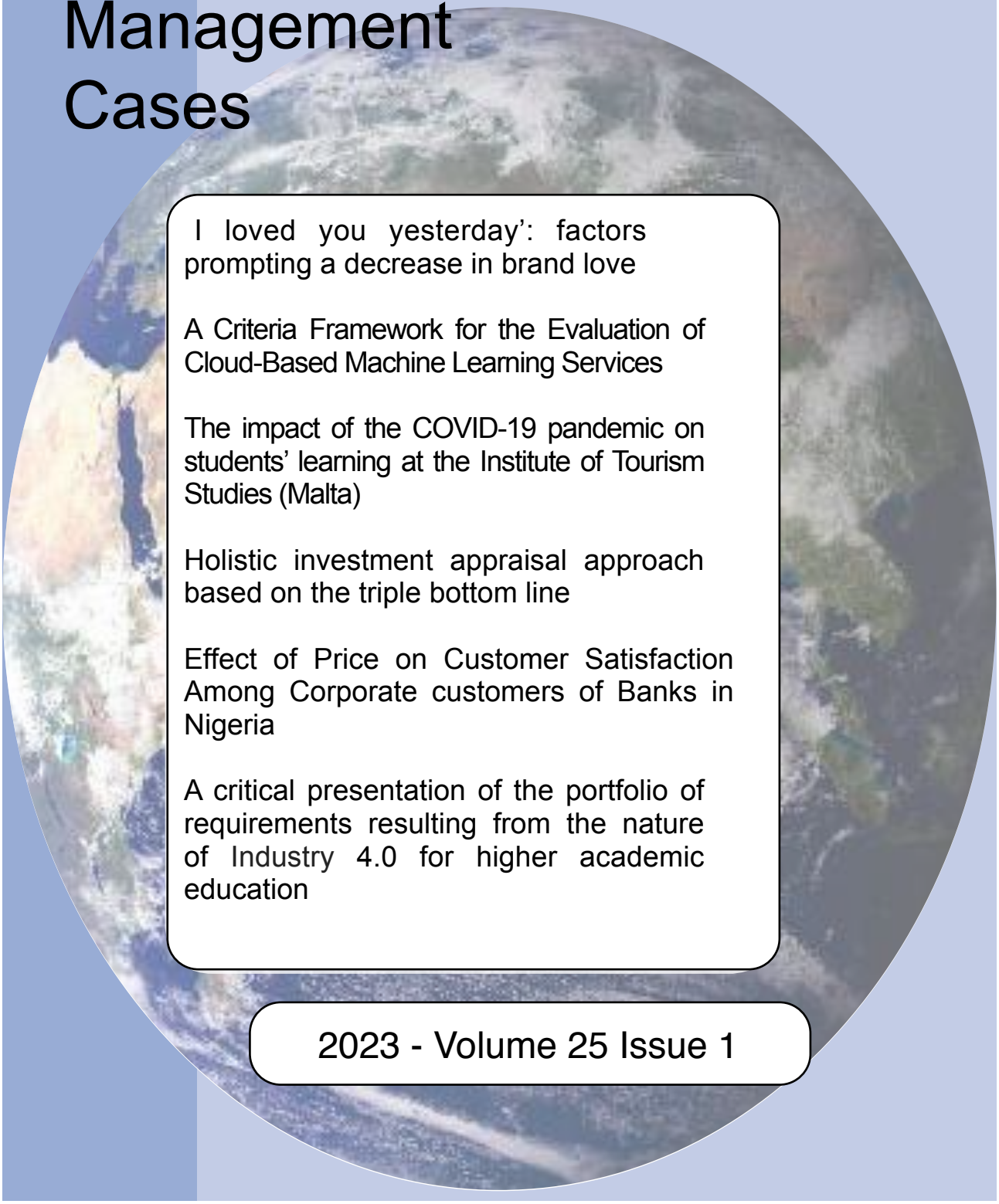
International Journal of Management Cases



2023 - Volume 25 Issue 1

The impact of the COVID-19 pandemic on students' learning at the Institute of Tourism Studies (Malta)

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Abstract

This paper discusses the impact of the COVID-19 pandemic on the learning experience of students at a VET (Vocational Educational Training) Higher Education Institution in tourism education, namely the Institute of Tourism Studies (ITS) in Malta (EU).

A sample of students who attended ITS between March 2020 and January 2022 generated the primary data. This revealed the students' experience in terms of their academic performance (both theoretical knowledge and practical skills), their personal well-being, and their perceived evaluation of the educational institution during the emergency caused by COVID-19. There is particular emphasis on e-learning / remote learning and the challenges of conducting school-related practical work, going on work placement or work in the tourism industry (both part-time and full-time) apart from their studies.

The data analysis revealed that the student experience at ITS was, in many aspects, similar to international trends. This was seen in terms of the impact of the pandemic's restrictions on face-to-face learning and the sudden shift to pure e-learning in all courses. Students confirmed that since ITS had, in previous years, invested in the e-learning infrastructure, e-learning systems in place proved extremely effective when they were needed most. However, not all subjects were considered suitable for delivering online. In fact, students stated that most practical subjects and certain theoretical subjects are better delivered face-to-face. The way forward recommended by students is a blended system where the courses have both a face-to-face component and an online component. The latter not only provides more flexibility in learning, which is especially sought by mature and part-time students, but also reduces time wasted in travel to and from campus.

Although research on the impact of the COVID-19 pandemic on education is widely available, little research focused on VET and Higher Education in Tourism, especially through the experience of learners. For this reason, this paper seeks to address this gap in knowledge. The major limitation of this research is that it was conducted in a volatile situation with ever-changing COVID-19 conditions, restrictions and challenges that had a direct impact on education.

Keywords: COVID-19, post-pandemic, higher education, e-learning, tourism education

Literature Review

The effect of the pandemic on higher and VET education

The COVID-19 pandemic shook the educational world to its core and according to the United Nations (2020, p 2) it 'has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and in all continents. Closures of schools and other learning spaces have impacted 94% of the world's student population and up to 99% in low and lower-middle income countries.

The most common reaction to the COVID-19 pandemic was the closure of educational institutions and the suspension and/or cancellation of physical classes (Auger et al, 2020, Sahu, 2020 and Viner et al, 2020). Many institutions authorised lecturers to start working from home and began disinfecting premises, particularly those that had recorded students and staff positive to the virus. While remote learning with digital technologies was quickly implemented or expanded to make up for the loss of face-to-face classes in many countries around the world (Amemado, 2020), the quality of e-learning has been questioned and school closures are common two years from the start of the pandemic (Azevedo, et al, 2021, p 5). Remote emergency learning was not quality online learning (National Council for Online Education of North America, 2022), however it could be as effective as face-to-face learning if done correctly (ibid.). Bozkurt et al, (2020, p 1) discovered that emergency remote learning is different from well-planned e-learning: 'in terms of educational processes, the interruption of education signifies the importance of openness in education and highlights issues that should be taken into consideration such as using alternative assessment and evaluation methods as well as concerns about surveillance, ethics, and data privacy resulting from nearly exclusive dependency on online solutions'.

Irish observers have described this overnight switch to e-learning as the 'great onlining of higher education' (European Distance and e-Learning Network, 2021). However, others started to ask why it had to be a crisis on such a scale to provide the catalyst for digital transformation of higher education (Brown & Keogh, 2021). The need for education reform has already been felt before the pandemic but there was resistance to change and rather prophetically, the OECD (Organisation for Economic for Co-operation and Development) had warned that 'reform is more easily undertaken in 'crisis' conditions, although the meaning of 'crisis' might be somewhat different in education. The shock involved is likely to be something that alters perceptions of the education system rather than an event that suddenly affects its ability to function' (Schleicher, 2018, p 208). This shock came two years later with the COVID-19 pandemic.

The success or otherwise of the sudden transition to e-learning depended on how fast the educational institutions adapted to the new circumstances and how amenable the authorities were to such a change. This depended on a variety of factors including academics' and students' problems of adjustment, connectivity, network, internet and bandwidth issues, lack of space and/or environment, lack of basic needs, mental health related issues, and lack of teaching and internet resources (Mseleku, 2020; Barbaro, 2021).

In the case of academics, some did not have the requisite knowledge to adapt to a sudden shift to online learning (Barbaro, 2021), while others had problems with adapting, carrying out and monitoring online lectures. Some of these problems were due to the lack of effective planning and enough professional development to bring the lecturers up to speed with the e-learning systems (Almahasees et al, 2021; Hickling et al, 2021; Korkmaz et al, 2021).

Vision, planning and investment in both human and technical resources are essential to deliver proper e-learning (Debattista, 2018, National Council for Online Education; 2022), and the sudden onset of the pandemic did not favour such a disposition. Furthermore, the sudden transition to online learning attracted the attention of the mass media and such terms as 'remote learning' and 'hybrid learning' were widely adopted. However, historically there is no consensus on the definition of terms related to e-learning (Debattista, 2018) and this was also the case with 'hybrid learning' when it was referring to the by-then established 'blended learning' but with a new name (Fullan et al, 2020; Microsoft Education, 2020).

In the case of the ITS, most of the e-learning infrastructure had already been implemented, with online and blended learning available in some of the programmes. The Institute was among the first higher eduation institutions in Malta to bridge the gap between face-to-face lectures and online education activities, namely by introducting a virtual learning environment as easly as 2005 and a full productivity suite for all faculty and student in 2015 (Times of Malta, 2005). This proved invaluable in March 2020, when the Maltese Government announced a national lockdown in education (Azzopardi, 2020; MaltaToday, 2020) mainly because all lectures were transferred online.

In the rest of Malta the transition to online learning was done with varying degrees of success, especially in compulsory education, due to the decrease in teacher contact hours that are so important to primary and secondary students (Busuttil & Farrugia, 2020).

The pandemic's effect on students

The change from class to online learning is a complex one that has had a multitude of effects on students. Contrary to the popular perception, young learners of Generation Z do not have innate digital competences and underachievement in the application of digital skills is still widespread in the EU (Pedone, 2021).

The first scholarly research on the impact of the pandemic on education suggested that students still prefer face-to-face instruction over e-learning (Kemp & Grieve, 2014; Amir et al, 2020; Chakraborty et al, 2021; Costado Dios & Piñero Charlo, 2021; Adams et al, 2021). This can be attributed to many reasons that seem to depend on numerous factors including availability of computing devices, the availability, quality and cost of Internet access, technical constraints, lecturer availability, presence of social cues and motivational signals and social connection (Unger & Meiran, 2020; Dick et al, 2020; Murdaugh et al, 2020; Felson & Adamczyk, 2021; Szabo, 2021).

Moreover, with the transition to full e-learning, student motivation fell drastically (Wang et al, 2019). In fact, certain learners reported challenging home environments

which led them to prefer the on-campus experience (Matarirano et al, 2021) whilst others felt the loss of the communal student life on campus and lost the drive to continue their learning programme (Gocheva et al, 2021). Additionally, certain students further noted the need for more face-to-face contact which would remind them to do and hand in assignments (Tichavsky et al, 2015).

Not having the right e-learning environment, educational tools and platforms was an even bigger challenge for less developed countries, but the demand or usage of more online and technological tools after and during the lockdown did not necessarily mean better education as it depended on the skills of the students using the system. The speed of the change-over in many institutions was so fast that students had little time to prepare for the change and this may have affected their self-confidence (Almaiah et al, 2020; Khan et al, 2021; Lukas & Yunus, 2021.)

The issue of self-confidence is tied to that of self-efficacy and perceived personal strengths and weaknesses at doing something (Bandura, 1977). This also covers student behaviour such as effort, determination, flexibility, toughness and task choice - all of which are essential in the realisation of academic expectations and performance (Alghamdi et al, 2020; Hamdan et al, 2021). Therefore, since e-learning is often seen less challenging than traditional learning due to certain advantages such as lecture recording, online tests and less written assignments, online learning must be planned in a way that elicits the same academic effort from the student that was displayed before the onset of the COVID-19 pandemic. This may also lead to a decrease in effort from the student that can affect the choice of task and lower academic performance (Lau & Sim, 2020; Mustakim et al, 2021; Nasution et al, 2021; Sakkir et al, 2021).

Moreover, Fullan et al (2020) note that students want personalised learning more than automation in their learning experience. Therefore, a balance with more social interaction on campus and e-learning still playing an important role seems to be the future of post-pandemic education (Barbaro 2021). In fact, higher education students have put forward the following recommendations for their post-pandemic learning (JISC 2021, p 19):

- Acknowledge that online learning is different and design accordingly
- Ensure students can access the technologies they need
- Improve group and class interactions
- Make online platforms more user-friendly
- Improve group and class interactions
- Improve access to support and online materials
- Record lectures (even of live lessons)
- Communicate and provide constructive feedback

Indeed, the future is clear: blended learning, or a mix of on campus and online classes in the courses. However, this brings us back to the issue of remote emergency learning not being well-prepared and well-though-out online learning. For blended learning to work, ‘there must be a pedagogical shift to design more intentional learning relationships as the foundation for engagement in content, problem-solving, and skills development’ Microsoft Education (2020, p 8).

The effect of the pandemic on practical subjects

It has been established that the sudden switch from face-to-face to pure online learning in an emergency situation was challenging for both learners and educators, with some managing to adapt despite the exceptional situation (Sahu, 2019; Hjelsvold et al, 2020; Almendingen, 2021). However, notwithstanding that online learning proved to be successful for theoretical subjects, other studies have suggested that practical subjects were not as successful online (Mahdy, 2020; Chadwick et al, 2021; Dorn, 2021).

Indeed, the difficulty associated with teaching practical subjects online has been regarded as a common issue amongst the limited studies that explore practical subjects delivered online during the COVID-19 pandemic. This difficulty is not only due to the ample preparation and situation-specific adaptation required (Pelikan, 2021) but mainly because such subjects have been built with the intention to be taught in physical classrooms where experimental and hands-on operations are the norm (Priyadarshani, 2021). In fact, Ghaemi and Potvin (2021) state that the change in the method of learning has left students following practical subjects with more difficulties during the COVID-19 pandemic, given that the closure of schools, and consequently the decrease in facilitation of practical activities, meant students were unable to carry out hands-on activities. On the other hand, however, Burford and Gregory (2002) have previously argued that it is possible to follow practical modules online as well.

In effect, various educational institutions have ensured the continuation of delivering practical subjects, despite evident constraints. During this time, various alternatives were sought, including: the postponement of practicals to when the students were back on campus (UNESCO, 2021); the rise of recovery curriculum required to successfully transition students back to school (Moss, 2021); the earlier reopening of educational institutions solely for students following practical subjects (Centre for Global Development, 2020; Department for Education, 2022); the encouragement of ‘take home labs’ were students use artifacts to engage with the required learning outcomes (Patterson, 2019) and the use of artificial intelligence and augmented reality (Nesenbergs, 2020) to compensate for the lack of physical practical tasks.

Evidently, this pandemic has, and in certain contexts, continues to cause unprecedented disruption to education and training provisions. However, research has shown that the access to theoretical skill development has been maintained through the rapid shift to distance learning (Trucco & Palma, 2020). In contrast, Schleicher (2020) argues that whilst distance learning has provided educational continuity to theory-based subjects, vocational education and training (VET) programmes have suffered a double disadvantage. This is mainly because practical and work-based learning is difficult or impossible to conduct due to imposed social distancing requirements and the closure of practical establishments (UNESCO, 2020).

The impact on students’ practical skills

A study carried out by the International Labour Organisation (2021) notes that since practical-based components account for more than 60% of the total learning time of these programmes, the increase in distance learning in VET programmes has limited

the acquisition of practical skills and organisation of work-based learning. Similarly, Gillis and Krull (2020) add that these latter components are essential for the success of VET programmes and so, in situations where practical sessions were simulated remotely, the learning experience was extremely limited.

Adjusting to distance learning has not been the only factor impacting the continuous development of students' practical skills. VET programmes that rely heavily on practical training such as hospitality, usually also include apprenticeship training and industry placements that further enhance students' experiences within the industry. Since employers have historically cut back on such programmes during economic recessions and global downturn, this concern added a further burden on VET programmes (OECD, 2020). In fact, Muehlemann (2021) notes how the pandemic strongly affected apprenticeship training because workplace training often became more difficult, or stopped completely, due to social distancing rules and closure of establishments for extended periods. This, in turn, has negatively influenced the practical skills development process of students following VET programmes.

VET institutions implemented distinct efforts to keep up the delivery of practical skill training during the pandemic and, to continue to do so efficiently, further support measures must be considered. These initiatives must aim not only to help institutions concerned to respond to current challenges but also to adapt to possible changes in labour market requirements. In fact, various countries are investing in VET and building skills to mitigate future skills shortages and minimise the pandemic's aftermath in this regard. In Sweden, for example, the government has put together a crisis package for jobs and transition by increasing funding and giving additional support to VET including distance learning providers in higher VET (OECD, 2020). In the United States, Youth Apprenticeship Readiness grants are supporting the enrolment of in-school or out-of-school youths into new or existing apprenticeship programmes (US Department of Education, 2020).

In Malta, the Ministry for Tourism in collaboration with the Malta Tourism Authority (MTA) offered a top-level training platform to thousands of workers in the tourism sector whereby the courses offered under this scheme were free of charge to participants being wholly financed by the MTA. These online training courses addressed a wide range of skills that are required in the tourism industry (Malta Tourism Authority, 2020).

Cedefop (2021, pp 6-7) recognised that 'In Malta, there is a general effort to continue with lessons via distance learning at all levels. It is still very early to say how effective it is, but at least the effort is there by all parties concerned and the technological/ infrastructural setup is proving to be up to the standard required.'

VET students' perception of e-learning

Studies focusing on the students' perception towards their satisfaction with online learning during this pandemic have established mixed outcomes (Demuyakor, 2020; Hodges et al, 2020). In Indonesia for example, mechanical engineering students felt that online learning did not allow them to master their competencies and that although they had ease of access to resources, they were still reluctant about using them sustainably in the future (Syauqi, 2020). Similar results were noted in Norway: when VET students were asked to rate the quality of online education during the

pandemic, most students described online teaching as being unmotivating, whilst some also noted how teaching was reduced or that they did not receive any teaching at all (Cedefop, 2021). In the United Kingdom, higher education (HE) students made both positive and negative statements. Flexible assessments and digital content were rated as the most significant positives whilst the lack of interaction and lack of support from teaching staff during lockdown were earmarked as the most significant drawbacks (Khan, 2021). In contrast, data collected from hospitality students in Korea and Malaysia showed a greater level of satisfaction with the availability of more than one mode of class delivery method being the greatest reason for their overall satisfaction (Choi, 2021).

Changes in assessment patterns

Monitoring of learning, assessment and the provision of feedback are important to understand students' learning progress because these allow educators to implement appropriate pedological actions that will help improve students' learning outcomes (OECD, 2013). Therefore, it is to no surprise that around 80% of the European HE institutions planned to continue with regular examinations, including online examinations during the pandemic (James, 2020; Marinoni et al, 2020). Other studies show how the COVID-19 pandemic has played an important role in the growth of continuous assessments because educational systems worldwide transformed existing assessment systems and/or developed new practises to maintain quality throughout (UNICEF, 2020; Verillaud, 2020).

Since the assessment of skills in VET programmes is usually based on a demonstration of competences in a real working environment, pandemic restrictions and closure of practical establishments led to the disruption of assessments and certification of examinations in such programmes. Nonetheless, it has been reported that many VET providers have continued their efforts to ensure continued assessments even during the pandemic (European Commission, 2020). Indeed, the effects and severity of the pandemic varies in each country, with no one-size-fits-all approach being implemented and so, rapid, and innovative responses are specific to local needs. Countries reporting low COVID-19 spread and decreased containment measures continue with in-person assessments by implementing precautionary measures and limiting the number of students present at the same time (International Labour Organisation, 2021). In other countries, alternative methods are implemented to assess practical knowledge and skills, often through virtual platforms. For example, in Ecuador and Finland, students are reported to be carrying out practical tasks at home and uploading them onto platforms or sending videos and photos of completed work to their teachers for evaluation (Cedefop, 2020).

Various concerns on the assessment process of practical skills in VET and HE were raised well before the COVID-19 pandemic. In fact, Harden and Cairncross (2006) note that the assessment of such skills is often neglected with unsatisfactory assessment instruments being the contributing factor. This pandemic has continued to trigger wider discussions about the validity and alignment of the examination processes and their benefits within certain areas such as VET and HE (EUA, 2020). Consequently, debates surrounding the need to make such assessments more authentic, including the consideration of 'open-book' exams or allowing more teamwork and presentations, are imminent (Times Higher Education, 2020).

The adoption of relatively new education technologies is also being considered. Pedone (2021, p 5) suggests that advanced digital technologies like augmented (AR) reality and artificial intelligence (AI) can support remote work-based learning.

Conclusion of literature review

The onset of the COVID-19 pandemic was one of the most disruptive factors on society in general in the 21st century, and had a profound effect on education. The institutions that already had a suitable information and comunication technology infrastructure and had previously invested in online learning were the ones to adapt first to the change.

The effect of this change was a complex one that depended on many factors. The most important factor was the gap between the developed and developing countries, but as has been shown, the technological and pedagogical factors are also very important. Despite the efforts by the authorities and the educational institutions themselves, the pandemic left a mark on the students' educational experience. This effect varies from one country to another and from one institution to another with VET educational institutions not being an exception.

In the case of the Institute of Tourism Studies, it had the advantage of a robust and well-developed VLE with lecturers and students that were already familiar with online learning. Indeed, this helped the Institute to continue with its planned strategy even during such unprecedented times (Institute of Tourism Studies, 2021).

Data Presentation and Analysis

Methodology

A qualitative research method was chosen to gather primary data on the effects of the COVID-19 pandemic on the stundent's learning at ITS. While the literature review has revealed how the effects of the pandemic on education has been widely studied around the world, the same attention has not been directed towards VET and Malta in particular. The targeted population for this online questionnaire were all of the 1067 students attending any course, at any level (EQF Levels 1 to 7) between March 2020 and December 2021 at the ITS. When compared to standard response rates, the number of responses received, 177 students (n=177) were high.

Sample characteristics

Out of 177 respondents 35.59% (n=63) were under 18 of age and so were either in the first or second year of their educational career at the Institute. These students probably experienced the Institute in transition from the full COVID-19 experience to the eventual loosening of COVID-19 rules and regulations. 31.07% (n=55) were between the ages of 18 and 24 and 33.06% (n=59) were 25 and over. The latter were mostly undergraduate bachelor student and master students. At 57.63% (n=102), more female students answered the survey than males, 41.24% (n=73). Two students (1.12%) prefered not to register the gender or chose the other option.

ITS is renowned for its multicultural environment with student enrollment from around the world. This is reflected in the survey. Although 85.88% (n=152) of the

respondents where Maltese, 14.12% (n=25) constituted 14 different student nationalities. 7.91% (n=14) came from EU member countries, while 6.21% (n=11) came from non-EU countries showing that there is no great difference from where the students originate. The top three in terms of numbers were Italian, Serbian, and Russian, but the group also included students from Brazil, Hungary, Greece, and South Korea.

Participants were asked to name the course they were attending during the pandemic. 11% were attending the basic foundation course in tourism; 27% were in culinary arts; 16% in events, travel and tourism; 15% in culture and heritage; 28% in tourism management; and 3% in other courses. It needs to be reported that the percentage of culinary arts students should have been higher since there were students who are at ITS during the pandemic but were having their internship abroad at the time of the data collection. However, this data also shows that ITS has moved away from the predominance of culinary arts courses and diversified to cover the whole range of fields related to travel, tourism, culture and hospitality.

Although the availability of work during the pandemic fell quite drastically, 32.05% (n=50) still managed to continue working full-time and 31.41% (n=49) worked part-time. Analysing these figures depended on what type of work these students had. In the case of those working in the tourism and hospitality sectors, many had their salaries guaranteed by the Government's wage supplement, particularly in the tourism sector which suffered a lot during the lockdown.

It is interesting to note that 25.00% (n=39) choose not to work to concentrate on their studies, while another 11.54% (n=18) expressed a wish to work because they were unemployed. It is important to add that in Malta, every student is given a stipend to study and so, all students do earn a small pay packet. A few students wrote further comments concerning their employment situation.These findings all tie to the tendency of older students in joining courses such as the HND in Tour Guiding and the Master of Arts in Heritage Interpretation who either have more time to dedicate to lifelong learning or prefer to work less and study.

The majority of students (82.86%, n=87) replied that they work in the hospitality sector, while 7.62% (n=8) work in the travel sector and 6.67% (n=7) in the culture and heritage sectors. At 2.85%, a small percentage of the students indicated other industrial sectors which probably included students that either want a change of career or want to supplement their earnings by acquiring a new qualification.

When asked why they were made redundant, 61.84% (n=47) answered that they lost their job because they were employed in the hospitality, travel, tourism, and culture sectors which were all very badly hit by the pandemic. Only 6 respondents (7.89%) stated they were made redundant from jobs which were not related to the aforementioned sectors. Moreover, 23.68% (n=18) stated that they wanted to work in the hospitality sector but were not offered good salaries or good conditions of work. Another 14.47% (n=11) said they could not find a job in this sector.

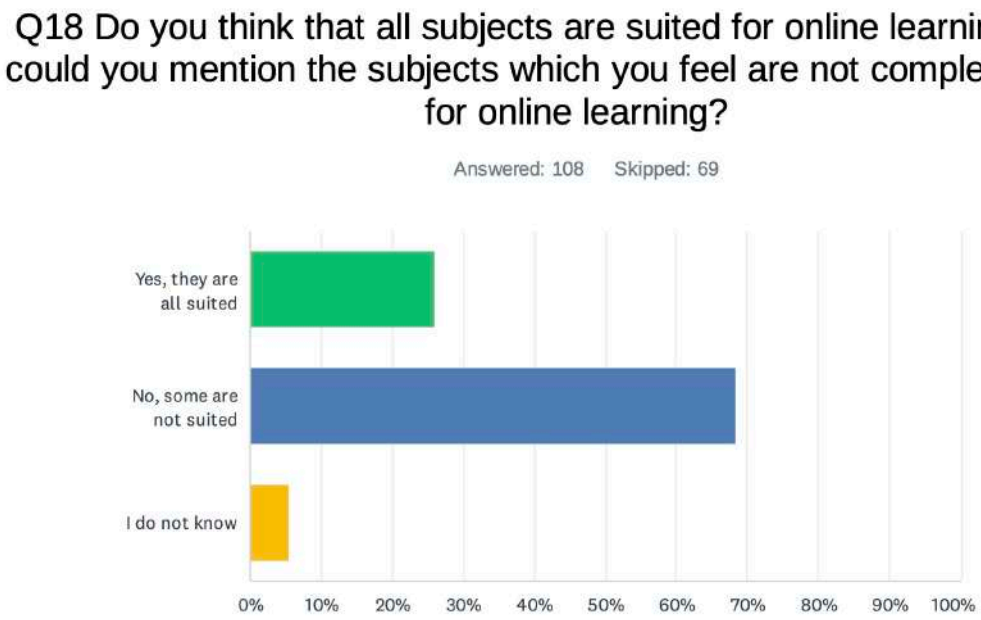
The Effect on Practical Subjects

The COVID-19 pandemic forced higher education institutions and universities to adapt to the rapidly changing situation. The mandatory social distancing

requirements were difficult to meet in a research setting particularly in the areas requiring bench work and human subjects, as well as fieldwork, were causing significant losses to research studies. (Schleicher, 2020; Ghaemi & Potvin, 2021).

The collected primary data from ITS students is aligned with such studies: At 68%, the absolute majority of respondents who follow practical courses at ITS, note that not all subjects are suited for online learning. In contrast, the views of students following purely theoretical subjects were not as distinct. In fact, 59% of these students agreed that some subjects are appropriate for online learning whilst 41% stated that all subjects were suitable (see Figure 1).

Figure 1. The subjects at ITS considered suited for online learning by the Institute's students



ANSWER CHOICES	RESPONSES	
Yes, they are all suited	25.93%	28
No, some are not suited	68.52%	74
I do not know	5.56%	6

When prompted to identify which subjects were not suitable for online learning, both theoretical and practical students identified similar ones. The absolute majority mentioned traditional practical subjects such as food and beverage service, food preparation, housekeeping, and barista techniques. However, in both groups, students also listed other subjects generally regarded as theoretical subjects such as bookkeeping, languages, research methods and statistics. This marks an evident contrast between literature that states how the access to theoretical knowledge has been maintained through the rapid shift to online learning (Trucco & Palma, 2020).

Although the majority of both practical and theoretical students agreed that practical subjects are not suitable for online learning, the discrepancy between these two

cohorts in stating how the pandemic made it harder for them to learn, is minimal. Nonetheless, it is interesting to note that the percentage appears higher amongst students following theoretical subjects. Indeed, in comparison to the 40% of practical students who confirmed the pandemic made it harder for them to learn at 47%, more theoretical students appear to have had a harder time at learning during this pandemic.

Current literature shows that practical-based components account for more than 60% of the total learning time of VET programmes, therefore, the increase in online learning implemented in such instances appears to have reduced the overall acquisition of student's practical skills (International Labour Organisation, 2021). This phenomenon was also observed by students following practical courses at ITS. Below shows how 24% of these students could not practice their practical skills during special events due to COVID-19 restrictions, 23% had their number of practical hours reduced and another 20% noted that social distancing and other health-related limitations did not allow them to practice their skills as per usual routines.

Further research also shows how VET institutions implemented distinct efforts to keep up the delivery of practical skill training during the pandemic (OECD, 2020). Incidentally, this was also brought to light by the respondents that certain measures, including block recovery practical sessions ensured that the effect of the pandemic on their practical skills was kept to a minimum. Such initiatives were essential not only to help institutions respond to challenges posed by the pandemic but also to adapt to possible changes in labour market requirements.

In fact, literature shows how adjusting to online learning was not the only factor impacting the continuous development of students' practical skills. During this pandemic, certain mitigating measures made workplace training more difficult, thus creating further burden on VET programmes relying heavily on practical training and industry placements (OECD, 2020; Muehlemann, 2021). However, the majority of the respondents did not convey this concern: more than 60% of the ITS students following practical courses stated that they completed their work placements without any issues. Further analysis shows how 52% of these students stated they actually learnt much more than they expected.

Further studies also noted how practical skills are vital for the success of VET programmes and that negatively influencing students' practical skills can have an impact on the students' overall development process (Gillis & Krull, 2020). Unfortunately, such research slightly collaborates with gathered respondents' data in that most ITS students following practical courses feel that, due to the pandemic, they are missing some key practical skills they need for their next studies.

Changes in Assessment Patterns

During this pandemic, not only have VET providers continued their efforts to ensure continued assessments (European Commission, 2020) but many have also provided altered assessment systems and/or developed new practises to maintain quality throughout (UNICEF, 2020; Verillaud, 2020). Research indicates how during this pandemic, around 80% of the European HE institutions continued with regular

examinations, including online exams (James, 2020; Marinoni et al, 2020). Such developments were also witnessed in feedback given by ITS students when 43% noted how more assessments were carried out online, 29% stated they witnessed fewer exams and more formative assessments spread throughout the academic year and 28% reported no major changes in assessment patterns.

Indeed, the monitoring of learning, assessment and the provision of feedback are vital in allowing educators to implement appropriate pedological actions that will help improve students' learning outcomes (OECD, 2013). Nonetheless, reviewed literature notes how various concerns on the assessment process of practical skills were raised well before this pandemic with certain studies showing how the assessment of practical skills are often neglected due to unsatisfactory assessment instruments (Harden & Cairncross, 2006). This pandemic has continued to trigger wider discussions about the validity and alignment of the examination processes and their benefits within certain areas such as VET and HE (EUA, 2020), however, it is also important to note that there is no one-size-fits-all approach and so, innovative responses should be specific to student needs.

In fact, when asked to rank their preference with regards to their ideal assessment methods for online learning, the majority of the respondents noted typed online assignments, short online tests during the semester, online presentations, online exams at the end of the semester and online oral tests. It is no surprise that students are suggesting alternative forms of assessment that were not considered before these unprecedented circumstances given their call for more authentic assessment (Times Higher Education, 2020).

The transition from face-to-face courses to pure online tuition as a result of the COVID-19 lockdowns need to be examined within the context of the students' digital skills and attitudes towards the digital lifestyle and its impact on their learning.
Participants answering the questions about their use and consumption of computing devices(n=108) were mobile learners with 94% saying they used a laptop and 42.60% mentioning their smartphone for their online learning. Desktop computers were only mentioned by 11.10% and tablets by 7.40%.

When asked about how much time they had spent, on average, each day learning online, (both synchronous lessons and independent study), responses varied across a wide range: 1.85% said less than one hour; 29.63% said 1-3 hours; 31.48% said 3-5 hours; 24.07% said 5-7 hours; 10.19% said 7-10 hours; and 2.78% said they spent more than 10 hours each day. Despite this wide range, 65.74% of respondents felt they had spent just about the right time on learning, with only 21.30% saying they had spent too much time on online learning and more learning on campus is better. On the other hand 12.96% said they had experienced very little time on online learning and would have liked more.

The respondents' comments reflected their preference for online learning despite the long hours involved: "*Too much time on online learning however, I prefer online learning, too hectic to come over to ITS from where I live with all this traffic, it is very time consuming*", "*I believe through online learning there is more concentration*", "*lectures online are too long (3hr) "*.

In terms of satisfaction with the online learning opportunities provides through the ITS virtual learning environment (Moodle) and productivity suite (Micrsoft Office 365) both provided to faculty and students alike, the respondents were overwhelmingly positive, with 49.07% saying they were very satisfied and 37.04% saying they were satisfied. However, the respondents noted discrepancies between the lecturers in their use of these online tools, without consistency among faculty in terms of how much they use and how they exploit them. This confirms that institutions who had adopted e-learning before the pandemic were in a much better position to provide meaningful e-learning and not ad hoc emergency remote teaching, which was not deemed as successful by the students due to the lack of planning, technical issues and other factors (Bozkurt et al, 2020; Almahasees et al, 2021; Barbaro, 2021; Hickling et al, 2021; Korkmaz et al, 2021).

Asked about the preferred means of communication online, the ITS email (part of the MS Office productivity suite) was first with 84.11% of preferences, followed by messages on Microsoft Teams with 70.09% and audio/video calls on Teams (43.93%). These three official institutional channels were followed by WhatsApp (36.4%) and Facebook Messenger (29.89%).

The participants were positive in terms of the support they received from ITS as an institution and from the ITS academics in terms of their online learning. At 53.27%, the absolute majority said ITS was very helpful, 22.43% moderately helptflul and 17.76% extremely helpful in offering resources to learn from home. In terms of support from academics, 52.78% said they were very helpful and 27.78% said they were extremely helpful. This comment from a respondent reflects the trend: *"Online learning was a totally new experience and different lecturers have different ways of explaining the lessons. However, the lecturers were all approachable and offered their personal advice and help through messages and emails*." Nevertheless, there were some negative comments also: "*A lecturer didn't even do the lesson and blamed us*", and "*Not many lecturers care if one of the students understood something or not, they just wanted to do what they had planned, which in my opinion was very selfish*".

In terms of the advantages of e-learning, when asked to rank a set of variables, 43.50% pointed out the fact that lessons can be followed from anywhere outside campus as the first preference and 30.60% as their second preference. In terms of learning from homes meaning less time saved from travelling to/from campus, 32.40% ranked it first and 21.3% second. The lowest ranking were given to the options related to communication between academics and students:

In terms of disadvantages, the fact that students must have self-discipline was ranked first by 26.85% and second by 10.19%. The need for better time management skills was given first prefence by 7.41% and second by 24.07%. This result mirrors literature that highlighted the issue of self-motivation and discipline in e-learning (Tichavsky et al, 2015; Wang et al, 2019; Alghamdi et al, 2020; Hamdan et al, 2021) when they can meet their tutors on campus. Only 11.11% ranked first a preference for a physical class to have physical interaction. The reduction of face-to-face contact received the second lowest ranking, while the need of electric power was the lowest.

All these positive responses to e-learning at ITS during the pandemic may give the impression that it was a remarkable experience throughout for the students. However, the relative majority of students, 37.14%, felt that that the pandemic had made it harder to learn. For 32.38% it made it easier, while it made no difference for 30.48%. These figure are for the total number of respondents. When filtered between Maltese and non-Maltese students, the percentage of non-Maltese students who felt that the pandemic made it harder to learn was higher at 58.82% while only 23.53 said it made it easier to learn. This is agrees with the international experience (Schleicher, 2020; UNESCO, 2020).

The students felt that their well-being suffered during the pandemic, the biggest factor being the fact they were worried about the future of the tourism industry (71.15%), and increased stress levels (57.14%). On the other hand, a relative majority felt that their motivation to succeed actually increased (39.05%) and for 38.10% it remained the same while it decreased for only 22.86%.

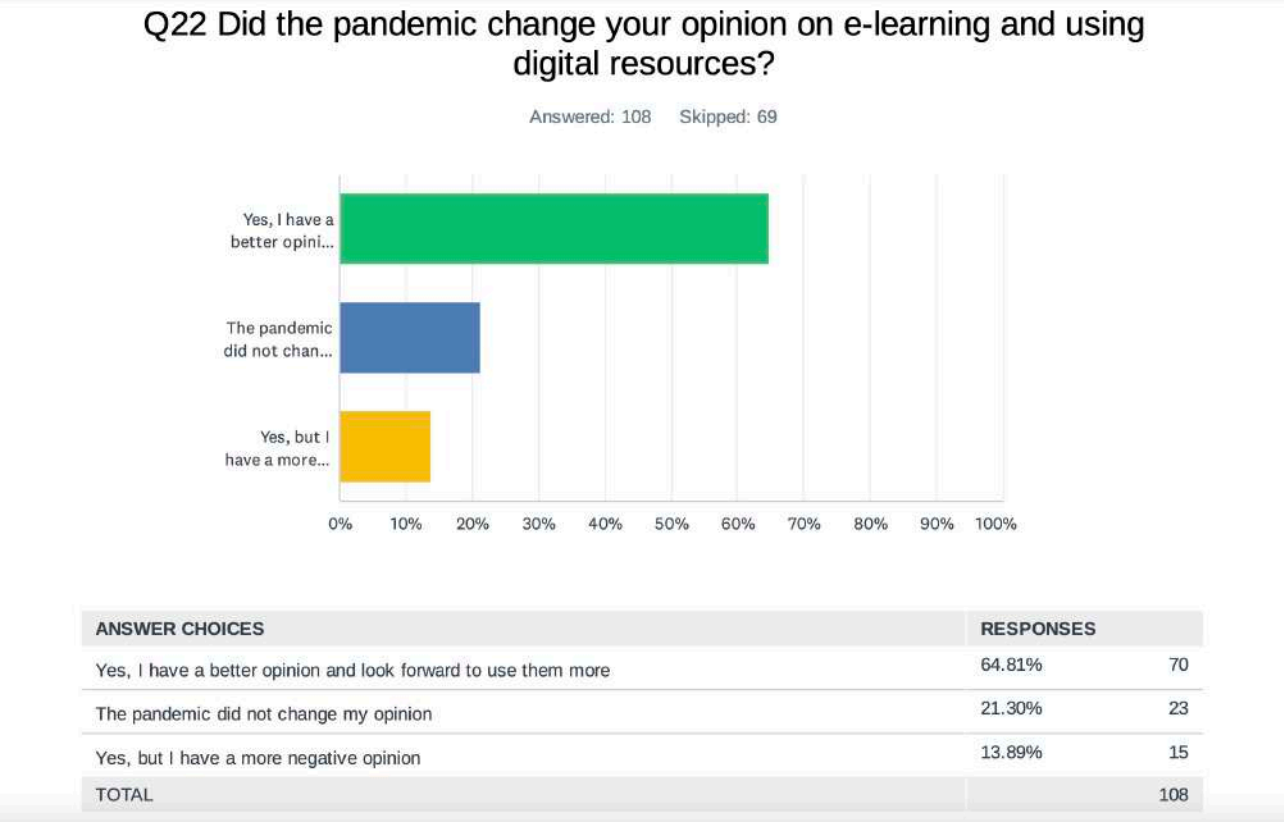
The respondents' comments are quite revealing and worth analysing:

> *"With some students being online and some in class... it takes long to start the lecture, issues with connecting. When being all online you have to rely on the internet connection and there is very little interaction between student and lecturer."*
>
> *My motivation to learn was slowly disappearing because there was no social interaction.*
>
> *"The pandemic affected me mentally not in my academic learning. Lessons kept on going as if nothing was happening so the pandemic has not affected my learning."*
>
> *"In a way, going online helped me save time on travelling to the campus. However, due to several lockdowns my 3-year-old was at home and that was very hard for me to study and take care of my child at the same time."*
>
> *"Personally I would never have found the time to travel to and from ITS and waste time between lectures . I have many work and family responsibilities. Online learning gave me the possibility to follow this course."*
>
> *"Some students didn't ask questions as they were too shy or self-conscious about their voice through the mic or wasn't available to them. Some students sleep during the lecture and the teacher would ask for then and we have to wait 3 minutes for the person to answer. For me specifically I found it difficult to stay concentrated as the lessons were boring where the teacher just talks and sometimes ask the students to participate. I prefer in class as its easier for me to participate."*

Despite all the challenges, 64.81% said they have a better opinion of e-learning, 21.30% felt no change, while only 13.89 reported a more negative opinion (see Figure 2). When all the responses were filtered by full-time and part-time programmes, the percentage of part-time students with a better opinion of e-learning

increases to 81%, a reflection of the fact these are mature students who feel they have less affinity with digital technologies that the younger students.

Figure 2. The pandemic has changed the opinion of students on e-learning at ITS in a positive way



ANSWER CHOICES	RESPONSES	
Yes, I have a better opinion and look forward to use them more	64.81%	70
The pandemic did not change my opinion	21.30%	23
Yes, but I have a more negative opinion	13.89%	15
TOTAL		108

The open-ended comments that were given as part of the response to this question are also worth noting:

> *"I have difficulty learning online because the environment at home is not the same like at school. In class physically, at school, I get more motivation and get better insights from teachers. I also capture notes quicker when I'm in class physically with students around and teachers"*
>
> *"Pandemic or not ITS should consider giving online courses, making it easier for those who want to further their studies. From my experience ITS is already equipped well for this opportunity."*
>
> *"Probably one of the better well managed institutes yet as opposed to closing its doors, it engaged students, asked what they wanted and acted accordingly with what the lecturers felt was necessary."*
>
> *Being a part-time student and the circumstances we are living in I feel certain things have to be online like for example the access to the ITS library, the ITS journal or magazine*.

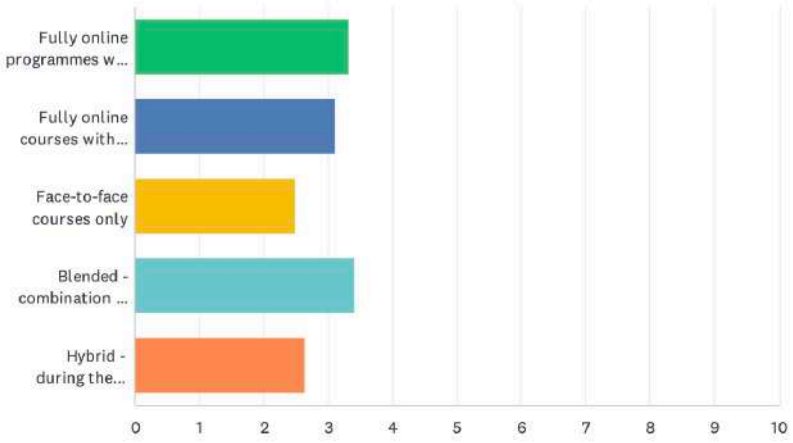
Looking forward to the post-pandemic scenario, the respondents (n=108) have a clear view of what they expected. Asked to rank the range of options from fully online

to fully face-to-face, blended learning received the highest number of first options with 32.41%, followed by pure online programmes with synchronous lesson with 25.93% and pure online programmes with asynchronous lessons with 15.74%. Only 15.74% said they would prefece only face-to-face courses and 10.19% (the lowest ranking) was given to the hybrid model (where the same class is split for the same lesson with some students in class and the rest following online at the same time). When the first and second rankings are added together, fully online synchronous (50.93%) and blended learning (50.00%) got the majority of preferences. This is in-line with the expectations of international students who also favour the blended option, exploiting both on campus and virtual learning (Fullan et al, 2020; Barbaro 2021; JISC, 2021).

Figure 3. Fully online and blended courses are the students' clear preference for post-pandemic learning

Q19 What is your personal preference for post-pandemic learning experiences? Rank these options with by moving your most important preference at the top and the least important at the bottom.

Answered: 108 Skipped: 69



	1	2	3	4	5	TOTAL	SCORE
Fully online programmes with live lessons (synchronous)	25.93% 28	25.00% 27	16.67% 18	20.37% 22	12.04% 13	108	3.32
Fully online courses with both live and recorded lessons (asynchronous)	15.74% 17	29.63% 32	20.37% 22	19.44% 21	14.81% 16	108	3.12
Face-to-face courses only	15.74% 17	12.04% 13	17.59% 19	15.74% 17	38.89% 42	108	2.50
Blended - combination of online lectures and face-to-face lectures	32.41% 35	17.59% 19	17.59% 19	23.15% 25	9.26% 10	108	3.41
Hybrid - during the lecture some of the students are in-class while the rest are present online	10.19% 11	15.74% 17	27.78% 30	21.30% 23	25.00% 27	108	2.65

Conclusion & further research

The conclusions of this research paper are quite clear and agree with most of the literature reviewed. The results obtained by the survey continue to bolster the need for blended forms of learning and a mix of online and campus classes.

The survey particularly agrees with the findings of the Student digital experience insights survey 2020/21 UK higher education survey findings (JISC, 2020) and builds upon its recommendations as follows:

--Students have realised that onine learning varies according to a host of factors, both intrinsic and extrinsic to the student, so the idea of imposing a one-size fits all should be avoided and pedagogical designs should be tailored to different categories of students ranging from VET to purely academic. For example, the survey clearly showed differences between the more mature students and the younger students, who need more guidance from the educator.

--Although the majority of students at ITS do have access to the technologies needed to follow an online lesson successfully, various factors may still interfere with this. From the Institute's side, it has made sure that having a strong a stable Internet access and readily available computers for those who may need them. But this does not deal with problems of access at the students' homes which seem to be underestimated by educational organisations.

--Due to ITS being one of the first educational institutions in Malta to integrate e-learning within its pedagogical infrastructure, VLE usage is quite mature due to the easy accessability of the online platform and generally reliable Internet access intrastructure on the campus grounds. This does not preclude certain problems such as the lack of usage by some lecturers, particularly the part-time educators and this is a *lacuna* that needs more investigation to be remedied.

--One of the major criticism against online learning is a lack of interaction with the educator. Although the survey did record some problems regarding this aspect of teaching, it is not a major concern at ITS, but needs to be addressed, particularly regarding the more practical and hands-on modules such as food and beverage and tourist guiding.

--The way the ITS VLE is structured showed that access to support and online materials was rated high by a majority of the students. Support materials are plentiful and online resources easy to access and download. This was clearly recorded in the survey.

--Most of the lecturers have opted to record lectures, particularly during the pandemic and the general response was good as it helped particularly in the more academic and complex subjects. Lecture recording does need more research due to certain GDPR and personal issues and guidelines need to be set regarding this practice, so that it is not abused by both the student and the educators.

--The survey was very important because it provided essential feedback regarding the needs and the problems of the students regarding online education at ITS. Although many students reported that communication with and accessibility of

lecturers was good, there is lack of research regarding why students do not provide enough constructive feedback to the lecturers. Communication seems to be overwhelmingly uni-directional from the lecturers to the students and this offers a new avenue of research.

Our assessment of the impact of the COVID-19 pandemic on VET and higher education will probably never be complete as scholars will continously study the impact of the pandemic well after this is officially declared over. However, the studies that have been done so far are pointing towards a watershed moment in education in terms of the use of e-learning, especially in the developed countries with an established information technology infrastructure. Blended learning, sometimes also referred-to as 'hybrid' learning, seem to be the way forward. For certain, there is no turning back to the situation where face-to-face classes were the only option.

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