Students' preparedness for distance learning – Gaps identified by MCAST educators

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Abstract
This study, conducted during the COVID-19 pandemic, investigated students' preparedness for distance learning. The main catalyst for the identified gaps derives from Maltese obligatory education being delivered face-to-face. Findings revealed that during online tuition, The Malta College of Arts, Science and Technology (MCAST) foundation and diploma-level students lacked digital literacy. Questionnaires completed by lecturers, who shifted online, divulged four e-competencies and skill categories whereby, in the metacognitive segment, these students lack learning style, self-direction and time management. Additionally, foundation students experience deficiency in the cognitive group, mainly, the ability to apply the material learnt, do research and articulate comments and questions. No technological gaps were identified for all four course levels; however, in the affective category lack of netiquette and the challenge to stay motivated were uncovered for foundation-level students. No gaps in any of the categories were identified for Master and Bachelor-level students. In light of the exposed gaps, educators and school management teams need to reconstruct their practices to enhance learning equity.

Keywords
Distance learning, digital literacy, adult learners

Introduction
Functionalists view education as an important social institution that contributes to both manifest and latent functions, which incorporate the educational institutions' purpose to shape up individuals' lives and careers (Little, 2014). Indeed, higher education is tremendously responsible for developing transferable skills which prepare students for the workplace. In fact, learning should be designed to develop numerous interpersonal and transferable employment

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skills (Swan, 2017). Owing to the rapid development of distance learning, thorough understanding of the online learning environment is vital (Peterson & Roseth, 2016) especially when considering that students' autonomy and self-regulation are critical for meaningful distance learning (DL) (Hussein-Farraj, Barak, & Dori, 2012). Indeed, understanding online self-regulated learning (SRL) is important for both students and educators since Kramarski and Michalsky (2010) posit that these can positively influence cognitive development and learning outcomes. Such is even more crucial when considering that cognitive skills were reported as one of the essential skills required for the 4th Industrial Revolution (World Economic Forum, 2018).

Responsibility of educational institutions

The Future Workforce Report of 2018 reported that remote working is on the increase, and, following the COVID-19 pandemic, such is likely to increase at an even higher rate. This element shed light on how important it is that educational institutions prepare their students for teleworking and ideally, Malta follows in the footsteps of Germany, which set out initiatives for "skills for the digital workplace of tomorrow" (ETF, 2018, p. 42). Furthermore, Oxbridge Academy (2019) claims that "distance learning can be regarded as the college education equivalent to remote working" (p. 3); therefore, the Maltese curriculum needs to include students' digital competences while school management teams need to look into the pedagogical demands to meet the latest educative frameworks. In its essence, tutors' digital literacy poses a number of challenges since it is constantly evolving and changing; hence, practitioners need to keep themselves updated with the latest developments and trends (Ghomi & Redecker, 2019).

The Council of the European Union (2018) claimed that all citizens need to develop digital competencies since these are fundamental for employability, lifelong learning, personal fulfilment, sustained active citizenship and social inclusion. Parallel with this, the European Digital Competence Framework (2017) sought to establish a context which equips students with creative and critical skills, while emphasizing that educators need to encourage students' digital competences. Likewise, Levy and Ramim (2017) emphasize the importance of uncovering online competencies gaps. Identified by educators, these should be incorporated in educational institutions aiming at delivering successful online teaching.

Education repercussions owing to COVID-19 pandemic

In March 2020, the infectious disease of COVID-19 spread at an alarming rate leading to the World Health Organisation declaring it a pandemic. This called for local schools to close and shift teaching online. Yet, such unprecedented conditions brought about multiple challenges to both educators and students, who had to adopt an attitude of 'emergency preparedness' since DL demands different competencies from both learners and instructors. As a matter of fact, DL not only lacks instructors' personal and direct supervision but also places learners at a risk of feeling isolated and experiencing lack of engagement (Barak, Watter, & Haick, 2016). Experts cited in Barak, Hussein-Farraj and Dori (2016) highlight that distance learners have to assume more responsibility during their learning process, whereby SRL is fundamental to success, since the element of autonomy is central. On the other hand, assumptions made by educators on students, such as technological capacity and proficiency, serve little to support and facilitate learning (Gillett-Swan, 2017). Furthermore, one of Busuttil and Farrugia's (2020) reported concerns was that the COVID-19 emergency situation widens the gaps concerning the learning outcomes and opportunities of disadvantaged students.

Holistic view of Malta's students' and schools' preparedness to learn and teach remotely

The above results, published by the Organisation for Economic Co-operation and Development (OECD) in 2020, concern the global efforts required to tackle the challenges presented by COVID-19. In general, Malta fared above average in most of the categories; yet, results indicate that Malta still needs to address issues related to pedagogical digital competencies and students who struggle to have a quiet place to study at home.

Importance of online learning

Educational institutions, government agencies and corporations are incorporating e-learning systems as their platform for continuous professional development (Levy & Ramim, 2017); consequently, online learning has proliferated. The underlying reason for this increase relates to increase in accessibility and affordability, and distance education providing the possibility to learn according to the learners' needs and pace (Allen et al., 2016). All these

Table 1: Malta – Learning remotely when schools are closed (Adapted from OECD, 2020)

	Malta's results obtained in the Programme for International Student Assessment (PISA, 2018)	
	Above OECD average	Below OECD average
Percentage of students that have access to a quiet place to study		X
Percentage of students that have Access to a computer that they can use for schoolwork	X	
Percentage of students that have access to a link to the internet	X	
Percentage of students in schools whose principal agreed or strongly agreed that teachers have the necessary technical and pedagogical skills to integrate digital devices in instructions		X
Percentage of students in schools whose principal agreed or strongly agreed that teachers have sufficient time to prepare lessons integration digital devices	X	
Percentage of students in schools whose principal agreed or strongly agreed that effective professional resources for teachers to learn how to use digital devices are available		X
Percentage of students in schools whose principal agreed or strongly agreed that teachers are provided with incentives to integrate digital devices in their teaching		X
Percentage of students in schools whose principal agreed or strongly agreed that that the school has sufficient qualified technical assistants	X	
Percentage of students in schools whose principal agreed or strongly agreed that an effective online learning support platform is available	X	

factors promote inclusivity and equity since students with work and family responsibilities do not miss out on the possibility of enhancing their career prospects. Also, online learning systems offer the additional element of greater adaptability to the students' learning experience to suit their personal learning style with greater precision than traditional classroom settings can possibly provide (OECD, 2020).

Reflecting on adopting online delivery

Prior to implementing online teaching, the major elements which render online learning successful need to be considered. Indeed, studies show that there is a misalignment between the skills that students think they need to become successful distant learners, as opposed to what instructors expect online students to have (Levy & Ramim, 2017). In fact, it has been widely documented that lack of perseverance and self-determination are persistent problems. On the other hand, results obtained from Barak, Hussein-Farraj and Dori (2016) highlight that face-to-face (F2F) students are more concerned about attaining knowledge while DL students are more concerned about the effective application of the knowledge gained. These authors also concluded that DL students also pose more questions when compared to F2F students. This metacognitive component is strengthened by participating in online forums where discussions can be lengthier.

On the other hand, DL students reported that they have more control on their learning process since lecture videos can be stopped, fast-forwarded, and replayed. While these results strengthen the claim that DL does not diminish the quality of the learning process, it also puts into perspective the pedagogical skills required by the online educators. Moreover, these authors attest that DL students, contrary to F2F students, acquire certain skills better, mainly controlling, planning and evaluation. The success of DL also depends mainly on the teachers and schools' preparedness, how well accustomed and equipped educational institutions are and how engaged and prepared teachers are with respect to online learning (OECD, 2020). Another element outlined by OECD is that DL's success is highly dependent on students' ability to keep a close relationship with their educators, especially disadvantaged students who lack parental support, learning engagement/strategies and resilience.

Instructors also need to be aware that during DL, students might adopt new personas as they may not feel pressured or obligated to give their contribution in online communication. Additionally, OECD (2020) emphasises the importance of teachers' guidance and support since only one out of nine students were capable of differentiating opinions from facts. Furthermore, providing a computer is not enough for better DL. This is even more important during the COVID-19 pandemic when online learning has become the only option. Such a conclusion is in line with Beaudoin and Kurtz (2009) who posit that online

learners' success is more dependent on self-determination than on institutional support. These findings imply that key competencies for online learning success emanate from the learner, rather than from characteristics associated to the learning environment. Ozbek (2015) determined that metacognitive skills and competencies identified for successful e-learning are not related to the learning activities but are skills and competencies that help students become autonomous learners. In fact, while designing online courses, due consideration should be given to assist learners into developing these competencies, as being successfully autonomous is a "process and not a product" (Thanasoulas, 2000, p. 7).

The creation of a sense of community might be a solution for the isolation challenge identified in numerous studies. Yet Beaudoin and Kurtz (2009) state that the importance of the sense of collegiality may differ due to differences in culture and values. Indeed, Zhu (2017) mentions research which suggests that computer-supported collaborative learning (CSCL) promotes metacognitive processes, problem-solving, critical thinking and reflective interaction; however, the students' cultural background influence DL participation, interaction, and communication. The main cultural factors identified by Zhu are power distance, individualism, certainty and openness. Indeed, low power distance cultures influence DL students' perception regarding appropriateness of interaction as teachers and students are regarded as equals, which leads to frequent two-way communications. This is contrary to students hailing from high power distance cultures where "teachers are viewed as possessing wisdom and are held in high esteem" (Zhu, 2017, p. 486).

The role of vocational education and learning

In 2018 the European Training Foundation (ETF) highlighted the important role of vocational education and training (VET) to cater for the changes beyond 2020. ETF accentuates that this education and training sector needs to reflect the digital transformation which will be witnessed at the future workplace, as VET has a key role within the lifelong learning continuum. Indeed, it provides young people with the needed initial qualifications for a smooth transition from school to labour market, together with offering adults upskilling and reskilling opportunities.

Furthermore, VET is centric for better employment and social inclusion, yet this can only be reached if functions within VET are aimed towards responding to the economy's needs and developing people's skills. As a matter of fact, the ETF stresses on VET policies to be responsive to technological changes by taking mitigating steps for skills obsolescence and skills anticipation. Indeed, VET should serve as a tie between industry and learning. Furthermore, through the implementation of DL, participants can experience and develop their competencies which are in line with those present at the workplace.

Recurring classification of themes required for successful distance learning

A study published by Ozbek (2015), a qualitative content analysis of twenty articles and books, indicates the collection of 58 students' skills and competencies classified as (i) **metacognitive**, (ii) **cognitive**, (iii) **technological** and (iv) **affective** competencies and skills. Likewise, an empirical study conducted by Levy and Ramim (2017) identified three categories of a successful e-learning skillset: **learning** skills, **independent** skills, and **research** skills.

Current study

Realism paradigm is the epistemology and ontology embraced for this study, whereby the state of The Malta College of Arts, Science and Technology (MCAST) students is analysed with respect to their relation to the perspective of their educators. This approach reflects the research findings based on MCAST educators' beliefs, thoughts, experiences, and knowledge. The researcher opted for a qualitative research method. Results were captured through analysing the completed questionnaires whose content was based on the elements gathered from the literature reviewed. The population of this study comprised of forty-six educators. This figure reflects the educators based within MCAST who, following the spread of COVID-19, shifted from traditional to online teaching. A non-random sampling was adopted, whereby the approach of purposive sampling was implemented, having the person's enrolment in Master in Vocational Education Applied Research (MVEAR) 4.0 as a criterion.

Methodology

The survey was structured to start with demographics to enable the researcher to depict the characteristics of the participants. At the beginning, a filter question was included to instruct which individuals could progress in

answering the following questions and identify others who were part of MCAST administration reading for the MVEAR 4.0 course, yet do not have experience in online teaching. The last section consisted of four sub-sections which grouped the four competencies categories as identified in the literature reviewed, these being metacognitive, cognitive, technological, and affective. Since studies outline a plethora of skills and competencies, the researcher cross-checked the most commonly identified skills and competencies from three previously conducted document analysis studies and identified the six subcategories for each category as illustrated in Table 2.

The participants

The response rate of this study was 39%. From these eighteen individuals, two persons did not experience a change in teaching methodology as they are part of MCAST management team. This resulted in a total of sixteen educators who proceeded to answer all the sections of the survey instrument. The majority of the study's eligible respondents hold a high level of education: 62.5% have a Level 7 qualification as their highest education achieved. Also, most are new to this profession: 62.5% have five years or less experience in lecturing. Additionally, none of the contributors form part of the Gozo campus and the Institute of Agribusiness. In fact, the participants are based at the remaining seven institutes. Finally, the gender of the participants is equally distributed as it comprises of eight males and eight females, whereby nine fall under the age bracket of 31–40 years, five are aged between 41 and 50 years, while the remaining two have an age between 51 and 60 years.

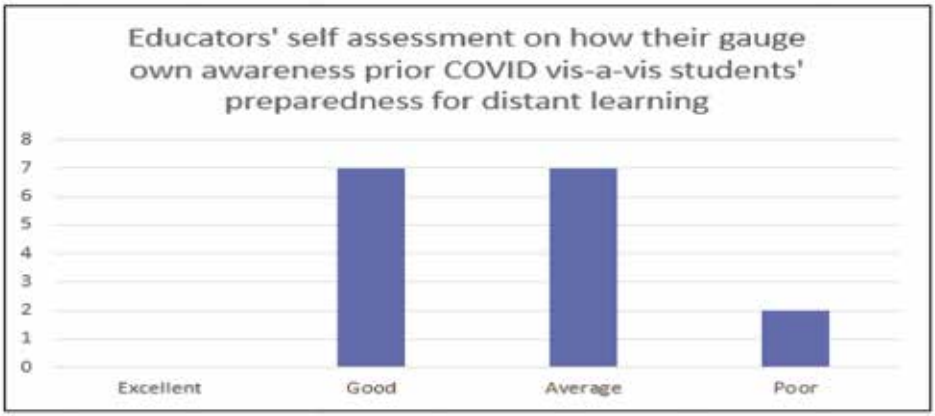
Results and findings

The sentiment that online learning requires a different skill set from the traditional learning context is widely expressed. However, owing to the pandemic, online learning proved to be a critical platform for MCAST to reduce as much as possible the negative multiple effects on the education of a generation of learners. However, through this study's findings it emerged that there is a misalignment between what the participants reported as opposed to their original views preceding the COVID crisis. This concern was also shared by Levy and Ramim (2017). Results presented in Figure 1 shed light on this as none of the study participants gauge their level of awareness with respect to the students' preparedness for successful online learning as 'excellent'.

Table 2: Subcategories studied for each category

Metacognitive skills and competencies
1. Having self-discipline
2. Having effective time-management
3. Having the responsibility to contact instructor when they face a problem
4. Having self-direction
5. Having an idea of own learning style
6. Having the ability to identify sources for learning
Cognitive skills and competencies
7. Studying regularly
8. Submitting assignment on time
9. Being able to apply material learnt
10. Being able to do research
11. Being able to express thoughts, feelings, comments and questions in written form
12. Being able to work collaboratively with peers
Technological skills and competencies
13. Having access to a computer and the internet
14. Having the necessary hardware to log in to the online session
15. Having computer literacy
16. Feeling comfortable with technology for educational purposes
17. Being able to use communication and collaboration tools
18. Being able to use ICT to do research, store, analyse and share information
Affective skills and competencies
19. Following netiquette
20. Being able to control emotions in online discussions
21. Staying motivated
22. Allowing others to participate in discussions
23. Having social communication with peers
24. Feeling part of a learning community

Figure 1: Participants' personal assessment of students' preparedness for online learning prior to the COVID–19 pandemic



A plausible reason was captured through the answers gathered when questioned if they believe that there is a misalignment between their students' expected skills and the actual skills that the students demonstrated during their online learning experience. Twelve lecturers answered that there was a misalignment between their expected students' skills and competencies when compared to the actual skills and competencies their students demonstrated during the lockdown COVID–19 period. This element is in contrast with the sentiment expressed in the European Framework for the Digital Competence of Educators (2017), where it is proposed that educators acquaint themselves with their online learners to be better–able to empower them. This will indeed lead to more inclusion, differentiation and personalisation of material and methodology of presenting content, as well as increase the rate of actively engaged learners.

Yet the pandemic caused by the COVID–19 was an extraordinary, unexpected situation which found most educators unprepared for their teaching process. It is pertinent to point out that online teaching requires a reconstruction of the teachers' practices, responsibilities, and roles since the notion of transactional distance is debated, while the element of communication gap might increase. DigCompEdu (2017) states that a possible way forward is for the instructors to create an environment which stimulates the interaction between the students.

On the other hand, 92% of the respondents declared to have created a sense of community between their online students, which characteristic was emphasized by Beaudoin (2009) as being vital for successful online learning. Indeed, a strong sense of community translates into motivation, acknowledgment, and appreciation as well as encouragement between the learning community. A possible justification behind the effort of MCAST's educators to create this sense of community emerges from the response obtained when they answered the question pertaining to whether or not they agree that the students' sense of collegiality contributes towards successful online experience: 94% of the participants stated that they 'strongly agree' / 'agree' that the students' sense of collegiality contributes towards successful online experiences. Only one individual selected that s/he 'strongly disagrees' with this statement.

The results obtained agree with the view shared by Swan (2017) who posits that the sense of collegiality translates into "an intrinsic desire to engage, participate and actively contribute to the learning experiences" (pp. 26–27). Hence, lecturers are responsible for finding a platform which effectively encourages and develops this sense of community which extends to reducing the anxiety usually associated with enrolling for online courses. Finally, thirteen out of the sixteen participants reported witnessing a change in their students' personality after they switched from in-person to online teaching. This finding agrees with Shackelford and Maxwell (2012) who suggest that possible reasons for such change relates to the absence of social cues and lack of emotions which set the stage for an increase in uninhibited behaviour.

Metacognitive skills and competencies

The findings point out that the students lectured by MVEAR educators exhibited below-average ability in all six subcategories in this category as no 'high' responses were obtained. This is a clear indication that the students were not completely ready for a non-structured learning setting and that they struggled to cope during their distance learning experience. The course levels which scored low levels of ability were foundation and diploma courses. Such results might be correlated to the students being novices to post-secondary education.

It transpires that the weakest metacognitive skills and competencies relate to three specific areas: foundation and diploma students having 'low' **knowledge of own learning style**, **ineffective time management** and **not having self-direction**. Furthermore, only 10% of the replies obtained reflected that diploma students have a 'high' level of responsibility to **contact instructors when facing a problem**. However, this does not necessarily indicate that other students in higher levels also lack this ability, as students reading for a degree might be self-sufficient in finding solutions for any difficulties. This would be in line with the prerogative indicated by various scholars who postulate that personality traits have a direct positive effect on students' performance, which includes achievement, dominance, and exhibitionism, among others.

Cognitive skills and competencies

In this category, the researcher observed three distinctive results, as 75% of lecturers perceive students reading for a diploma or degree course as having a 'high' ability to **submit assignment on time**. This element might be linked to the level of maturity that such students might have, as this might not be their first year studying at tertiary level. Furthermore, this sense of maturity might be correlated to the lack of procrastination which Ozbek (2015) considered as a crucial factor towards successful DL, as well as "a reflection of how learners apply their metacognitive decisions into practice" (p. 179). On the other hand, 70% of the lecturers believe that students at foundation level have 'low' **ability to do research** and **apply material learnt**.

This last result might be influenced by students applying for foundation-level courses possibly having weak academic skills, since researchers cited by Xu and Smith Jaggars (2013) claim that low-grade point average (GPA) students have more difficulty adapting to an online learning context. Indeed, the entry requirements for MCAST foundation courses are finishing compulsory education or obtaining the MCAST introductory certificate. Moreover, 70% of the participants believe that foundation students **are not able to articulate their thoughts and feelings**, yet this trait is of crucial importance as numerous academics postulate that it is a common practice for employees to cooperate and collaborate with colleagues via synchronous and asynchronous discussions. Therefore, such a trait might be considered a prerequisite, not only for future teleworking students, but for most of the students to successfully contribute when they are working in forums and discussing on boards.

Technological skills and competencies

In this particular category a shift in results was observed, as no gap was identified since in each of the six subcategories all scores ranged from 'high' to 'good'. Actually, 92% of the results obtained reflect that degree and diploma students have a strong hold on all six specific skills and competencies outlined in this study. Needless to add, at-home accessibility positively affects the students' performance in online learning (Xu and Smith Jaggars, 2013). A possible reason for such results is that the younger generation is proficient in ICT. This contrasts with statements made by MCAST personnel who claimed that 1.5% of the students lack technology beyond the classroom, yet the educators who participated in this study might not be aware of such sensitive issues. However, the same claim was reported in an article published on 14th April 2020 (Times of Malta, 2020) which serves as a testimony that in reality there is a problem with access to technology. Besides, the above scores are in parallel with Beaudoin and Kurtz (2009) who speculate that, while technical skills tend to be regarded as a prerequisite, a fair degree of mastery in technology might suffice for one to also master online course content. This became more evident with the proliferation of fast and affordable internet together with the rise in smartphones and tablets which render information easily available.

Affective skills and competencies

Of the participants, 62% believe that diploma and degree students have a high level of netiquette as opposed to foundation students, who **lack netiquette** according to 78% of the responders. No lecturer reported whether Master-level students follow netiquette or not, yet this might be because none of the active participants deliver lectures to Master-level students, since such courses are in the minority at MCAST. Furthermore, 80% of the individuals who completed the questionnaire claimed that students at foundation level have **difficulty in staying motivated**.

A plausible reason for the latter might be that such students are of a younger age, hence they might lack maturity to appreciate the importance of successfully following and completing an academic course. Broadbent and Poon (2015) indicate that online students are at a higher risk of going 'under the radar'. Indeed, their challenges remain unnoticed by the respective facilitators, leaving a negative effect on the student's motivation since the latter misses

out on assistance and support. As a matter of fact, in traditional teaching, the lack of physical attendance might be a silent demand for help. This aspect poses an extreme challenge in the online learning environment where the level of engagement, interaction and observation of non-verbal cues can be non-existent, especially if cameras are not switched on during synchronous video conferencing lessons.

Summary of research findings

Table 3 below represents the skills and competencies gaps identified in this empirical study, as indicated by the MVEAR participating educators.

Table 3: Summary of research findings

Course Level	Online Skills and Competences area researched			
	Metacognitive	**Cognitive**	**Technological**	**Affective**
Foundation	• Learning style • Self-direction • Time Management	• Apply material learnt • Do research • Express thoughts, articulate comments and questions	NIL	• Netiquette • Stay motivated
Diploma	• Learning style • Self-direction • Time Management		NIL	

Recommendations

Based on the study findings, several recommendations are presented for the benefit of creating a more inclusive learning community while addressing the gaps identified for distant learners.

Autonomy and motivation

A crucial starting point is for tutors to sideline their own assumptions and deliver their lectures according to the students' personal baggage (Swan, 2017). Additionally, Thanasoulas (2000) suggests that, to **promote e-learner's autonomy**, students should be trained in conducting effective self-reports and

completing evaluation sheets to reveal their own honest opinions. This view is also supported by Berenson, Boyles, and Weaver (2008) who postulated that educators need to give more importance to their students becoming emotionally intelligent (EI) rather than focusing on developing technical skills. Also, Van der Zee, Thijs and Schakel (2002, cited in Berenson, Boyles, & Weaver, 2008) recognised that EI served not only as a predictor for success in online learning, but also as a transitional tool to the corporate world.

Besides, Boyles and Weaver postulate that there is a correlation between students' EI and their motivation level. Indeed, through this study it becomes apparent that MCAST foundation-level students (the majority being novice adult learners) face a **challenge in staying motivated**. Scholars claim that educators are required to instil resilience in their students to witness progress in metacognitive and cognitive skills. Likewise, Roper (2007) suggests that at the beginning of the course students should create a self-motivation plan to assist them to stay engaged and not lose interest as the course progresses. Furthermore, teachers should select challenging material which heightens students' contribution levels. Finally, tutors also need to engage with their students, which can be achieved if they present material according to the students' level of understanding and future personal goals.

Self-direction

With respect to the absence of understanding non-verbal cues, Salmon (2014) suggests that lecturers would benefit from including live videos for their delivery. Additionally, to accommodate the challenge associated with lack of motivation, Salmon proposes incorporating drop-in sessions and interactive sessions. In return, these strategies support the view of building a strong learning community, both between the teacher and the students, as well as between the students themselves. Also, Morrison (2015) posits that **self-direction** is a skill which can be learnt. This element is vital, considering that a gap was identified in both foundation- and diploma-level students. Three suggestions presented by Morrison include (i) recording due dates and reviewing assignment instructions which should serve as a road map for the entire course, (ii) planning regular study time, and (iii) logging weekly onto the course home page.

Apply material learnt, conduct research and uphold netiquette

With regards to the lack of ability in **applying the material learnt**, a shortage was exposed at foundation level. Literature suggests that learners should be exposed to real-life case studies together with being assessed in project format, which requires cooperation and collaboration with their peers. Shackelford and Maxwell (2012) suggest a balance of whole-class and small-group discussions to investigate the subject in greater detail, a tactic which is also fundamental at the workplace where sharing ideas, and giving and receiving feedback are basic requisites between co-workers (Ozberk, 2015). This strategy will have a two-fold ripple effect since completing projects will better equip students with the skills required for **conducting research**, which ultimately is another challenge that emerged in foundation-level students. Regarding the aspect of **lack of netiquette**, Ash (2008) propounds that at the beginning of the course, tutors set the standards for code of conduct, as otherwise, they might risk overworking.

Sense of community and personal learning style

Shackelford and Maxwell (2012) provide several recommendations for educational institutions to promote a **sense of community and collegiality**. Primary examples are introductions, collaborative group projects, sharing personal experiences, entire class discussions, and exchanging resources. Indeed, DL technologies offer a multitude of ways to build interaction into online courses to support learning. These tactics are very much possible due to Malta's positive ratings outlined in Table 1. Furthermore, students benefit when they **understand their own learning style** which includes instructors disseminating a learning style questionnaire since students might not be aware of their individual learning penchants (Kolb, 1984).

Time management and articulation of thoughts

In a bid to reduce the challenge that online learners face with respect to **poor time management**, educators might look into training their students to adopt time management tools, such as setting milestones and implementing Gantt charts. Such tools help to reduce the level of procrastination which is also a contributor towards anxiety (Swan, 2017). Lastly, educators need to train their students to be reflective in the way their **articulate their thoughts**, since the

latter needs to be aware that words chosen can be misunderstood and/or taken out of context.

Recommendations for further studies

The researcher recommends that further studies in the area of digital literacy would be beneficial to capture additional knowledge gaps and identify further suggestions. However, it would be constructive if the population of the study is expanded to include all local educators.

Limitations

The main limitation revolves around the study being conducted within one specific education institution, whereby the perspectives gathered might not be representative of the general population of tertiary level educators. The second limitation is that the effects of the pandemic were still ongoing at the time of writing, so newer perspectives might be uncovered should a similar study be undertaken. Lastly, the questionnaire itself was limited by the amount and the depth of the questions asked.

Conclusion

MCAST's prestige could be further elevated if the college includes courses which prepare students for online courses, whereby, concurrently, students gain skills for tomorrow's digital workplace. Indeed, such a course would better equip MCAST future students with robust preparedness for teleworking. It is further being suggested that this course would be included with the present Malta Qualifications Framework (MQF) Level One Skills Kit course (offered at MCAST at an entry level) aimed at arming students with personal skills and employability skills.

In line with the above suggestion, the importance of online pedagogy skills needs to be addressed to reduce the current misalignment between the educators' expectations and the real skills and competencies held by the students. Also, since the issue of students' personality was expressed by various authors, MCAST might look into conducting profiling exercises to better guide and support its students. This decision would have a three-fold effect as, besides being more inclusive, it will also provide further education possibilities to lifelong learners and develop students with skills needed for the emerging trends.

Finally, this study captured the importance of educators taking a reflective stance to identify what they have done/are doing, what worked and what did not, and lastly, reflect on the possible rationale why they did not obtain the desired results. Such behaviour would support the implementation of any required changes, so that the education community would witness improvements which are conducive to reducing anxiety while increasing students', educators', and management's motivation. In due course, such approach will also uphold the principle of increasing empowerment and humanization while decreasing robotization.

Notes on contributor

Christine Muscat studied Marketing (University of Malta) and Business Management (Institute of Hospitality, UK). In 2019 she received a Bachelor's degree in Public Project Management, while in 2021 she obtained her PGCE. Currently, she is reading for an MBA at the University of Suffolk. Her interests are students' transversal skills, inclusivity, and students' transition to the corporate world.

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