Student readiness: Training and re-training in online higher education

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Abstract
The COVID-19 pandemic experienced placed considerable pressures on education. This paper explores the challenges faced by university students when operating in a blended learning environment. Students were asked to interact with a Moodle-based online environment. An initial focus group, followed by a series of in-depth interviews, was carried out with a group of undergraduates from the University of Malta. Thematic analysis was adopted to identify the main themes highlighting their concerns. The findings suggest that students had an incomplete set of competences required to interact effectively with the online environment. They were having great difficulty in self-managing their time between study and other commitments. When training was provided, student online interactivity increased and the quality of the work submitted improved. The study reiterates the need for students to be given the right combination of knowledge, skills and competences which need to be continually updated due to the evolving nature of online learning environments.

Keywords
Online learning, blended learning, soft skills, thematic analysis

Introduction
Hew and Chung (2014) indicate that the following five pre-conditions are critical to the implementation of blended learning:

1. Institutional support
2. Infrastructural readiness
3. Content readiness
4. Instructor readiness
5. Learner readiness
Porter et al. (2014) refer to the need to have a shared blended learning ‘vision’, to have the necessary resources and attract potential ‘adopters’, yet also to allow them sufficient academic freedom when it comes to pedagogical decisions.

The above needs to be understood within the context of a small island economy such as Malta’s. Prior to the COVID–19 pandemic, the Maltese economy had been undergoing a period of sustained growth (EC, 2019). However, this was being hampered by the lack of a suitably skilled workforce, including graduates. In spite of the number of foreign workers relocating to the Maltese Islands, which amounted to around 14% of the overall population in 2019 (Baldacchino, 2019), sectors such as tourism still experience difficulties in filling up vacancies.

There is pressure on all the educational institutions to respond rapidly to these changes. However, there are some aspects that require consideration in order to understand these pressures.

Overview of literature

Effective teaching in higher education

To achieve an effective teaching environment, Biggs and Tang (2011) suggest the following:

a) Student involvement in learning (motivation);

b) An improvement in the teaching/learning climate;

c) Reflective teaching (transformative reflection);

d) Teacher development.

Herrington et al. (2010) arrive at similar conclusions when defining the elements of authentic e-learning.

Student involvement

In higher education (HE), there are many facets of teaching that discourage student engagement and thereby lead to student demotivation. Teachers need to identify these factors and work to minimise them within their teaching
and learning activities. To increase student engagement, the activities set for students must be:

a. Important – that is, the learners attribute some value to it and therefore consider it worth doing;

b. Learners expect some level of success when engaging with a given task. (Biggs & Tang, 2011, p. 35).

Teachers must ensure that academic activities are meaningful and worthwhile for their students. One way of doing this is to revert to problem-based learning. Real-life situations may provide an interesting learning context for students as they allow them to appreciate the need for both academic rigour and more practical professional skills in the attempt to resolve real-life problems.

**Teaching/learning climate**


Theory X teachers assume that students do not want to learn and that they will cheat if they are allowed – therefore, they must not be given any control over their learning. At the other end, Theory Y teachers think that students perform best when given freedom and space to use their own judgement. A minimum of formalisation is required for the institution to function properly, but too much is seen as counterproductive towards good student learning.

**Transformative reflection**

Biggs and Tang (2011) use the term *Transformative Reflection* when they argue that by reflecting on a past teaching experience one is able to see what may have gone wrong and improve it. This implies that teachers must constantly stay up-to-date with the latest research. In this way, they can reflect on their own teaching and transform it in order to improve it.
Improving teaching

It is argued that if teachers are truly engaged in a form of transformative reflection, using for example, action research, it would help them improve their teaching strategies and techniques.

It may be argued that the teaching and learning environment does not always support a true action research approach (Wolfram Cox, 2012). This is because of the everyday challenges faced by teachers. Nevertheless, feedback upon the quality of teaching may be obtained from:

- One’s own reflections on his/her teaching,
- The students,
- A colleague in the role of a ‘critical friend’,
- A staff developer who can offer informed advice. (Biggs and Tang, 2011, p. 53)

The challenges faced by higher educational institutions (HEIs)

Tomlinson (2012) argues that constructive alignment may provide answers to enable HEIs to respond to the challenges faced today. This sentiment is shared by Brown et al. (2011).

In spite of, for example, increasing numbers and limited funding, universities are expected to retain a high quality of return in terms of the ‘quality’ of graduates provided. That is, graduates who would be able to respond effectively to the challenges posed by the 21st century society. Biggs and Tang (2011) identify the following issues that merit discussion:

- The increase in student numbers;
- The HE student ‘type’;
- The Bologna Process.

The increase in student numbers

The number of students aiming to acquire university education amounts to around 40% in most developed countries, with some nations setting a target of 60%. Indeed, the European Union’s educational policy originating from the
Europe 2020 strategy (EC, 2012) sets a 40% target for those who will be in the 30–34 age bracket by the year 2020.

The HE student ‘type’

This increase in numbers has also increased student diversity. Hoskins and Sallah (2011) and Gregersen–Hermans (2015) both refer to the world-wide movement of international students who choose to pursue their studies elsewhere, with Europe being one of the main destinations. This poses challenges in terms of adaptation as not all students may be used to the mode of learning found within a particular institution. However, if provided with an appropriate support structure, most students seem to be able to adapt (Hoskins & Sallah, 2011).

Biggs and Tang (2011) argue that another significant aspect of student diversity lies in their motivation behind enrolling for a university course. They refer to this as the ‘Robert and Susan problem’. ‘Academic’ Susan, according to the parable, hardly needs any teaching as she is highly motivated and actively learning. She is able to analyse and reflect upon the material covered, in practice almost teaching herself. On the other hand, ‘non-academic’ Robert who, in earlier times (when university entry was more restrictive) would not have been in tertiary education, is rather passive. Quite probably, his goal is simply to get a degree and improve job prospects. Robert sticks to note-taking and memorising, hoping to get through the course (Biggs & Tang, 2011).

The Bologna Process

Its origins go back to ensuring free movement of workers within the countries that make up the European Union.

One of the factors identified as limiting freedom of worker movement was the diversity of the EU member states educational systems. It was thought that by facilitating the mutual recognition of academic and professional qualifications, mobility within Europe for work and study would improve. This process started in 1999 when the so-called Bologna Declaration was formulated with the aim of creating the European Higher Education Area (EC, 2017).
Research Methodology

A qualitative approach was adopted so as to try and probe in depth. A series of semi-structured interviews were devised in order to gather data from a representative sample of students at the University of Malta’s Institute of Tourism, Travel and Culture (ITTC), where the research was being carried out. From a yearly cohort of around thirty students, seven gave their consent for the interviews. Semi-structured interviews were deemed ideal as, according to McIntosh and Morse (2015), they can be employed in situations where there is sufficient objective knowledge about an experience or phenomenon but where subjective knowledge is lacking. It is suggested that semi-structured interviews are “designed to ascertain subjective responses regarding a particular situation or phenomenon they [interviewees] have experienced” (McIntosh and Morse, 2015, p. 1).

Their uniqueness lies in retaining relevance to the subject treated while remaining responsive to the participant (McIntosh & Morse, 2015). McIntosh and Morse refer to Irvine et al.’s work (2013) which shows how this permits the researcher to rephrase questions to elicit either more information or clarification regarding a particular issue. Consequently, the design of the semi-structured interviews in this study consisted of a schedule indicating the issues to be treated and the related questions. Each of these was followed by a series of ‘probes’ which delved into the respondents’ responses in more depth. Probes may be ‘scripted’ – but unscheduled probes (i.e. when the researcher ‘improvises’) may be carried out based on the respondents’ responses. This allows the interviewer an element of freedom to diverge from the ‘script’ questions if he/she thinks that further probing is required.

Data analysis

Thematic analysis was adopted, as while relatively easy to use, it is quite suitable for dealing with pattern-based methods, as suggested by Yin (2012). In their contribution to the APA Handbook of Research Methods in Psychology, Braun and Clarke (2012) put the case that thematic analysis has become as unique and valuable in its own right as the other qualitative approaches. Not only is it an accessible and flexible method of qualitative data analysis, but it can provide the foundation to other approaches which require an experienced researcher.

All the participants were referred to by code in order to preserve anonymity. Student participants were referred to as SP – SP1 being Student Participant 1. SC was used to indicate any of the researcher’s comments (Simon Caruana) or questions within the quoted interview citations.

Findings

Preliminary preparation

The first step to establish patterns along the codes was carried out both manually and using the pivot table. Data was first viewed to gain familiarisation. It was then reviewed more in detail and coded. The lists of codes were reviewed and updated periodically.

At this stage, some elements of the literature that were previously reviewed were looked into again to avoid the trap of what Braun and Clarke (2013) call the ‘theme emerging from the data’. That is, a shallow approach to the analysis of the codes which assumes that themes bubble up to the surface as if from the depths of a deep black sea. In reality, it is the researcher who has to ‘dive’ down in the data and identify the themes that the coding exercise touches upon. Instead of just ‘surface’ data-derived codes, these latent codes ‘hidden’ in the data need to be detected and exposed. Therefore, the researcher needs to move away from the ‘obvious’ and into what lies beneath the surface.

The lack of engagement with blended learning, learning activities, and assessment tasks (differing from the established versions of these) suggested that participants had issues with ‘trusting’ the system. Further analysis identified another factor: the attitudes of the actors in question. These included their attitudes towards working within a blended learning environment, reciprocal trust in the ‘others’, the significance of intercultural competence as a skill, and their views on assessment – all of which make up the research question being investigated.
Theme 1: A question of attitudes

Reference to the ‘right’ attitude cropped up frequently in the interviews and all the participant groups saw it as particularly significant. It was only after going over the transcripts various times that the significance of the attitudes of the research participants became apparent. Clearly the participants’ attitudes were determining their interaction during the teaching and learning processes taking place within the Institute for Tourism, Travel and Culture (ITTC) and the University of Malta (UoM). With further probing, it was possible to identify distinct attitudes that manifested themselves during this research process.

Sub-theme 1: Attitude towards working within a blended learning environment

One persistent aspect was the preference for face-to-face contact. Many participants expressed their preference towards a face-to-face environment over an online one. This corroborates Rogerson-Revell’s (2015) point about there being a gap between the potential offered by information technologies and their actual use in supporting teaching and learning. It must be pointed out that the customised manuals were reviewed and updated. Yet, still, face-to-face learning was preferred.

Yes. The manuals, I think they were sufficient but it’s better, as I said before ... it’s better to explain face to face and like everybody has an own idea to work and like that. And if you remember I sent you an email with problems. (SP3)

Student participants insisted on having a face-to-face component as ‘face-to-face is better’. Physical presence was literally reassuring, as if seeing someone in person is a guarantee of quality in terms of the teaching and assessment. The face-to-face stages were also viewed as an opportunity to actively participate in the course organisation and put forward suggestions to the lecturer/co-ordinator of the course being covered.

I think, the fact that we were having face-to-face sessions especially as a group, from what I remember, emm, we got to give our feedback. Emm our opinions, our thoughts, our ideas. Emm, and obviously that helped us to continue the exercise together and also as individuals. (SP5)
This suggests that the difficulties outlined by Garrison and Vaughan (2008) are still there to this day; the mission to engage learners in higher-order learning via an online environment is still incomplete. Therefore, Bath and Bourke’s (2010) recommendation to strive to find better ways of supporting student learning so that they have the best possible learning experiences within a blended environment still holds. Having appropriate communication channels remains key (Biggs, 2014).

Students emphasised that they had very little exposure to the Moodle-based e-learning platform. Moreover, there was never any type of induction session to learn how to interact with it (Vogel, 2017b). It was remarked that the majority of academics use the e-learning platform rather sparingly, others not at all. Academic staff were summarily labelled traditionalist at best.

Therefore, students’ exposure to the e-learning platform was less than initially imagined. This seems to indicate that Foo’s (2014) five pre-conditions set for blended learning development are clearly not being considered when implementing blended learning at the UoM.

I was at ITS. And, going back to VLE, because I came in, in second year, I was not really given much guidance on ... here we have this platform this is how you use it. Kind of I had to sift and learn and teach myself and ask colleagues ... my classmates. (SP6)

As far as I remember, working with other lecturers, working online, no! I mean they take, post stuff on VLE and we access it. But ... Acquisition of downloading material, viewing notes or things like that. Nothing where you sort of had (to) use something. (SP1)

Students viewed the online environment as adequate once they familiarised themselves with it. It was seen as a way to facilitate access to information and communication between themselves and academics (Sherman & Channon, 2017). However, they were not at all impressed with the e-learning platform/interface, summarily described as ‘old-fashioned’. A more informal ‘social network’ feel would work better in their view.

I think everyone opens Facebook daily. However, they don’t open the university account daily! Unless you really need to. Emm, secondly ehh, as I said before, it is more user-friendly, I think. (SP2)
I think it happened because Facebook nowadays has, is the biggest communication platform. And VLE is more positioned within the students as a, as an academic ... as you need to upload assignments, you need to check your academic material and it’s not targeted to ... specifically communicating with your ... with your peers. (SP4)

Therefore, students see little value (Cajander et al., 2012) in using the e-learning platform itself as they are not aware of what they can do with it. Students have set up their own communication networks through social networks, with the main one being Facebook. Unlike the UoM e-learning platform, social networks are seen as easier, need-fulfilling, and continuously available.

This mirrors Barry et al.’s (2015) concern about how while students’ ICT and social media use has increased, this is unrelated to course activities. The findings of this study align with their conclusions that students utilise ICT to seek out information related to their studies during lecture times. However, they also serve as a distraction from the actual learning activity (typically a lecture or a tutorial) going on. This results in ‘deconstructive misalignment’ – one that impedes rather than facilitates learning (Barry et al., 2015).

Sub-theme 2: Commitment counts

Working online was perceived by the student participants as requiring more effort and focus. It also resulted in, to use their words, ‘more workload’ – as they needed to review others’ work, assess it, and provide feedback (Wilson, et al., 2015). Students lamented that they are already overloaded with lectures, exams and assignments, and they often have little time to get a deliverable ready. A peer-review exercise requires the participants to concentrate and focus on the task in order to review the work and provide adequate feedback (Neumann, 2017). Some students complained that they are now asked to do the job of the academic (Wilson et al., 2015).

I mean as a lecturer, professor, whatever, ultimately have to sit down and, and correct an assignment. I think it’s part of their job, right? But I don’t think students or any traditional way, students they don’t expect to sit down at home, after carrying out their assignment, compiling the assignment, I don’t think they expect to have an amount of assignments to go through. (SP6)
This appears to contrast with Sinicrope et al.’s (2007) idea of involving both students and academics in the teaching and learning process. It rather reinforces Flint and Johnson’s (2011) views that little has been done to actively involve students within the assessment process. Students do not see any advantage to using technology-based assessments as the tasks given seem detached from their realities (Herrington et al., 2011). Therefore, Borges’s (2007) ‘dated’ assertion that 20th-century teaching and learning techniques are still being used with 21st-century students is still relevant in this case, along with the resulting consequences.

Student participants were not against the process per se, but against the additional workload, when they argue they are already overloaded and barely coping at times (Sherman & Channon, 2017).

So apart from saying you have to enter class, you have assignments, they have fieldwork, then you have to think about whatever it was, and then, now, you also have to mark the … work. So, the day is 24 hours! 8 hours of sleep…, what’s left then? 2 hours of traffic. And (laughs) 5 hours at university … (SP2)

Wilson et al. (2015) suggest that including students in the development of the assessment rubric may improve the students’ notion of fairness. In this study it is clear that they appreciated the fact they were involved in the development of the assessment criteria themselves. Their involvement instilled confidence in the fairness of the system.

Again. It takes getting used to, but nothing too complicated to understand. Once you do the first marking, then the others are free-flowing. Yes, you need to have your criteria. (SP6)

No, as I said, the first, the first … time I tried it, it was a bit challenging but then as I knew what I had to do exactly … it was easy. (SP4)

This seems to suggest that the approach advocated by Flint & Johnson is to be encouraged. Flint & Johnson’s (2011) four recommendations for an authentic assessment, particularly those of problematizing assessment and prioritising first-year students, help create autonomous learners who are key for a successful implementation of a blended learning environment. In this way, the ‘Robert’s do not miss out on the learning opportunities provided (Brabrand, 2007).
A positive aspect was that student participants found the grading exercise helpful to their own work as they were ‘forced’ to reflect on the issues being assessed (Vogel, 2017a). This was a formative exercise and therefore they could then use this experience in their final submissions. Students were able to monitor and take responsibility for their own progress (Ogden, 2017). Students increased trust both in the system and in their abilities. This is backed by Wilson et al.’s (2015) study.

I think that feedback obviously is more time-consuming but at the same time, it gives both individuals a broader explanation as to why, that opposing persons marked your piece of work in a certain way and vice versa. So, it allows you to understand another person’s expectations as well as your own. (SP6)

This shows that when students find value (Cajander et al., 2012), they are willing to engage with the system. Moreover, it suggests that Flint and Johnson’s (2011) notion of what constitutes an authentic assessment has been achieved. The feedback given also suggests that none of the practices associated with poorly designed assessment tasks were encountered by the student participants during their work.

Theme 2: A question of trust – again

The students’ historical lack of opportunities to peer-review exercises may lie behind their inclination towards retaining some distance between students and academics. Students were rather sceptical of giving themselves more say in the course design, the setting up of learning outcomes and, in particular, in issues related to assessment.

I think, as I said before, that the higher education, well I think the lecturer always is the, has to have the …

Final say if you like … (SC)

Yes, because … you know best. But as I said, if you, the higher you go, the education level, I think yes, there should be more involvement by the students. (SP1)

In spite of these reservations, they rated their involvement in this exercise positively. All the tasks were seen as both fair and meaningful (Herrington et al., 2010). This reaffirms the importance of having real-life situations included in the
teaching and learning activities and the assessment tasks (Biggs & Tang, 2011; Herrington et al., 2010).

We developed it, together, right? When we were discussing ... Yes. That would be good. Even for other assignments.

Now, the peer review process. Emm, how would you rate it? In the sense, whether it’s a good idea and whether you think ... it is successful, it makes sense, at this level? (SC)

I think it could be ... it could get ... like but as I told you, the lecturer should have the final say. (SP3)

Sub-theme 1: Student maturity

Students made it clear that a high level of maturity is required from those participating in the online assessment exercise. Their concern was that of being burdened with more work and responsibility. ‘Too much involvement’ may result in the alienation of the participants, i.e. seen as a further addition to their workload and nothing else (Wilson et al., 2015).

Biggs and Tang (2011) make an explicit reference to student involvement. At the same time, they acknowledge that one of the challenges faced by HEI is the increase in student intake and the diversity of student ‘types’. Not all students enrolling for university courses have the right combination of academic orientation and commitment required.

No. I found it very useful, but I feel that if the students had to devote their time to do this for every single lecture, for every single assignment, it might get a bit tedious. And the importance will start to diminish from the side of the student.

But I don’t think students or any traditional way, students they don’t expect to sit down at home, after carrying out their assignment, compiling the assignment, I don’t think they expect to have an amount of assignments to go through. (SP6)

Others suggested that Maltese students are not comfortable with taking an active role and would therefore prefer not to be involved at all. Many students just want to get through to get a qualification. Moreover, like other higher education learning environments (Tam, 2014), the general learning environment does not encourage much student participation. Student participants pointed
out the importance of involving students as this increases student reflection and critical analysis.

It helps you think about your own work, because when you’re given assignment after assignment, you are ... you sort of get bored and lose the whole purpose of the work. So, it helps you reflect on your own work and how you present it. So, I think yes, it was a fairly beneficial exercise. (SP4)

The fact that the student participants attributed value to their own involvement is a good starting point which may be used to encourage further student participation (Biggs & Tang, 2011). As discovered during the design of this learning intervention, it is certainly not easy (Herrington et al., 2010) and this suggests that students may require support.

Conclusions
Overall, the findings revealed that all the participant groups held the view that intercultural competence provides an essential set of skills and that ICT would facilitate the acquisition and assessment of intercultural competence.

However, they felt the actual adoption and correct implementation of the principles outlined above was dependent upon the attitudes held by the stakeholders involved, together with the degree of trust existing between them. Trust affects the level of interaction and the attitudes influence the value which the participants attribute to a given issue.

Students need to train and re-train

The lack of confidence in working within a blended learning environment contributed to a general feeling of mistrust in both the system and the other individuals working with it (a factor which became evident during the assessment of the work of others). This is affirmed by the students’ preference for a face-to-face environment. Training would allay this. However, any training provided needs to be tailored to the students’ requirements. An exercise in determining the UoM student ‘type’ needs to be carried out. The findings suggest that the training carried out during this research study did help the student participants to become more confident when working in the blended learning environment. Thus, it reinforced Flint and Johnson’s (2011) view that adequately prepared students were more confident using the systems available.
Training cannot just be limited to the use of the blended learning platform. Other knowledge and skill sets need to be considered. Students need to be able to manage their learning. Moreover, they should be made aware of the basic work that goes into the design of a learning environment to ensure that their contribution towards designing the learning environment is a meaningful one, as advocated by Biggs and Tang (2011).

Engaging with a blended learning environment

The lack of training was clearly felt by students. Interaction was initially limited to the bare minimum, such as uploading or downloading of material. Students lost interest trying to interact with a ‘boring’ setup and resorted to setting up their parallel systems on social networks.

Learners can play a role in both the design but also in the implementation of the blended learning environment. In this study, student participants were asked to contribute to parts of the learning intervention. Student involvement (Herrington et al., 2010; Biggs & Tang, 2011) in the design of a blended environment approach (Porter et al, 2014) enabled the students to use it much more confidently.

The use of real-life scenarios (Flint and Johnson, 2011) also improved the students’ confidence in the system and increased their trust in it. As predicted by Biggs and Tang (2011), students felt more involved as the process progressed. It also allayed their fears in terms of the commitment of their counterparts. Their involvement in the development of the rubric and other parts of the assessment process made them more confident assessing others. More importantly, they ceased to see it merely as a transfer of responsibilities (students doing the teachers’ job).

The ability to manage his/her own learning

Blended learning environments place the onus on the learners. Learners need to be able to manage their learning, in terms of time and commitment to the learning process with respect to other commitments, such as work, family and others.
Almost all student participants acknowledged they had difficulty managing their time. This seems to suggest that Herrington et al.’s (2010) earlier assertion that the conative domain may not be given sufficient importance in the design of learning outcomes is valid.

Therefore, course designers should have adequate training to ensure that all domains are factored into the intended learning outcomes. Moreover, they must devise learning activities that develop one’s ability to commit, act, and be able to take the appropriate decisions in a given situation (learning-related or otherwise), together with appropriate assessment tasks to determine the level of conative competence acquired by the learner.

Notes on contributor

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References


