Perceptions of teacher competencies in a new higher education blended learning programme: An exploratory study

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Abstract
In a post-digital world, blended teaching and learning is now considered a mainstream approach to pedagogy in higher education. While it is not new, the adoption of this approach was accelerated by the enforced move to emergency online teaching and learning during Covid-19. Research has shown that blended learning in higher education is more effective than online learning and face-to-face learning conducted separately. Currently, one university in the Middle East is embarking on an ambitious digital transformation project that involves the development of a new degree programme and the transition from a predominantly face-to-face teaching model to a blended learning teaching model. This includes the use of a bespoke, digital learning platform and a range of general education courses which are underpinned by an active, flipped learning approach. Together these have created an entirely new blended teaching ecology. Implementing and sustaining such an approach depends on teachers embracing a new mindset and developing new teacher qualities. It also requires the acquisition of both adaptive and technical skills related to new pedagogical approaches and new technology platforms and tools. This exploratory, autoethnographic study focuses on the lived experiences of two higher education teachers who started teaching in this new programme. The study focused on and analysed their journal entries using a systematic teacher competency framework to identify which competencies were more significant in their transition to a blended...
teaching approach. The findings of the study show that seven competencies feature more heavily in the journal entries, including orientation towards change and improvement, grit, use of instructional strategies and instructional tools. The paper highlights some relevant implications for teachers and university management, who may be considering a similar transformation that uses a blended learning model of teaching. It also suggests that further research into the experiences of teachers could benefit the field.

1. Introduction

1.1 Digital transformation in higher education

According to Rampelt et al. (2019), a digital transformation in higher education is “a process that influences all activities of higher education institutes (HEIs) and includes the development of new infrastructures, increased use of digital media and technologies, research, administration, support services and communication”. It is often seen as a necessary response to the technological advancements resulting from the Fourth Industrial Revolution (4IR) and a priority for HEIs to remain competitive (Benavides et al., 2020). In particular, such a digital transformation can help attract students who want to develop the necessary technological knowledge, skills and competencies that are required for the workplace upon graduation (Kaur & Chhibber, 2022).

Some of the digital technologies being developed and used in HEIs include artificial intelligence, the Internet of Things (IoT), cloud computing and big data analytics. In terms of teaching and learning, innovative digital platforms are now being used for both synchronous and asynchronous teaching. A blended model of online learning combined with face-to-face learning takes advantage of what Castro (2019) calls “educational technology capabilities (ETC)” (p. 2535). These include human-to-human technology-enabled interactions (e.g. asynchronous online discussion groups, synchronous video conferencing) and datafication (data collection, data analysis and date-drive design). At the same time, blended learning provides an opportunity for human-to-human contact in a physical space where students can engage in meaningful dialogue with each other and the teacher, without a screen, microphone and keyboard mediating the interaction (Aristova, et al., 2021; Zeqiri et al., 2021; Buhl-Wiggers et al., 2022; Knie et al., 2022).

1.3 Blended learning in higher education

With the increasing need for effective learning environments, a major trend has been established towards the development of more student and teacher-friendly blended learning programmes in higher education (Castro, 2019, Ohanu et al., 2022). These programmes often employ both synchronous and asynchronous tools through a virtual learning environment, such as Blackboard Ultra or Moodle. With the lock-down policies of many governments during Covid-19, there was also a huge increase in the reliance on general video-conferencing platforms, such as Adobe Connect, Microsoft Teams and Zoom, as part of an Emergency Remote Teaching and Online Learning Response (Bond et al. 2021). This sometimes led to more positive attitudes towards blended learning by teachers in higher education (Bamoallem & Altarteer, 2022). There are also examples of universities using purpose-built platforms based on specific theories of learning and teaching (Kosslyn et al., 2017; Bond et al., 2021; Lock et al., 2021).
There is a growing consensus that the blending of online learning with face-to-face learning in an integrated and coherent way is an effective approach to teaching and learning in higher education (See for example Ahmed, 2020; Alsalhi et al., 2021; Müller & Mildenberger, 2021; Nayar & Koul, 2020; Zhao 2022). Student feedback has shown that while they value the convenience, flexibility and time efficiencies of online learning (Adams et al., 2017), they also very much value the face-to-face sessions on campus in which they can engage more directly with their teacher/instructor and where they are less easily distracted by other digital attractions and devices (see for example Mulyadi et al., 2019; Attard & Holmes, 2020; Lomer & Palmer, 2021).

1.4 Ecologies of teaching and learning

With the adoption of a blended learning and teaching approach to higher education, teachers are required to enter a new ecology of teaching. This is characterised by the use of new resources in new contexts and settings which are reconfigured to create new ecologies of learning (Barron, 2006; Barnett & Jackson, 2019) and are highly mediated by the use of technology (Johnson et al., 2022; Lai et al., 2022). It may require teachers and students to invest considerable amounts of time to learn how to use new digital platforms and tools for different pedagogical and learning purposes. It can also involve a new pedagogical approach that may reshape the roles of teachers and students. For example, in a flipped learning approach, teachers may adopt a less prominent position in the act of teaching, because the students are expected to take on greater responsibility for their learning by completing tasks before, during and after each teaching session (Brewer & Movahedazarhouligh 2018).

1.5 Blended teacher competencies

We believe that the overall success of a blended learning programme depends on the attributes, knowledge and skills of teachers. One way to conceptualise these is to describe the key competencies required for effective teaching and learning to take place. In this paper, competency is defined as the “characteristics and capabilities of an individual which directly lead to superior job performance” (Competency, 2010). It is important to note that competencies are not static and can be developed through professional development activities such as feedback from experts (Prilop et al., 2021). There may also be a difference between the teacher’s perceived level of competency and their actual level of competency as judged by others, such as colleagues, teacher trainers and managers. With the use of technology in a blended learning approach, competencies can also become inextricably intertwined with one another and present a complex ecology of teaching that blends subject knowledge, pedagogy and technology (Mishra & Koehler, 2006).

In line with the above, the present exploratory study focuses on our own lived experiences as we started to teach on a new blended learning programme, which is structured around a new, specially designed digital platform. The study attempts to highlight the most significant competencies that emerged in weekly reflective journal entries that we wrote about our teaching over a period of 12 weeks. This study also reflects on how useful a blended teaching competency framework is as a tool for professional development for teachers who are new to a blended teaching approach.

2. Literature Review

2.1 Overview / Introduction

The literature review presented here focuses specifically on three main areas of previous research: models of blended learning, teacher roles in blended learning environments and blended teacher competencies. To give our literature review a better focus and greater precision, we limited our search to journal articles that were peer-reviewed and written within the last 10 years.

2.2 Models of blended learning

Several attempts have been made to categorise different models of blended learning. Christiansen et al. (2013) have identified four main models of blended learning which differ according to the balance between the online and face-to-face elements, and the roles of the teacher and learner (See Table 1). The models reveal a continuum in terms of modality, from mainly online at one end to mainly f2f on campus at the other end and provide a framework within which these different elements can be identified and discussed. It should be noted that these models are idealised and are often convenient summaries of the wide range of different ways that blended teaching and learning are organised in higher education.

2.3 The role of teachers in blended learning

Several studies have identified the key success factors for adopting a blended learning approach in higher education (UNESCO, 2016). One of these key factors is that “teachers and administrators should be well prepared, motivated, and have sufficient time and resources” (Ossiannilsson, 2017, p. 14). With the move from traditional, face-to-face teaching to the development of online teaching, the role of the teacher...
Table 1. Description of blending learning models (Christensen et al., 2013, p. 26) * There are 3 other sub-models, but this one is considered the most common.

<table>
<thead>
<tr>
<th>Model of BL</th>
<th>Overview</th>
<th>Student Role</th>
<th>Teacher Role</th>
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<tbody>
<tr>
<td>1. Rotation Model - Flipped Classroom*</td>
<td>Learning takes place through asynchronous, online learning off-campus and synchronous sessions on campus. Primary instruction is online.</td>
<td>Students complete pre-class work online and off-campus. They attend regular f2f classes on campus to practice this material.</td>
<td>The teacher facilitates synchronous, guided practice of activities and projects around the pre-class work on campus. There are no lectures or additional input of new material.</td>
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<tr>
<td>2. Flex Model</td>
<td>Online learning is the backbone of a course, but there is some f2f contact between students and teachers - the balance between online and f2f teaching and learning can vary.</td>
<td>Students have an individualised / customised learning path which is mostly online. They attend some f2f classes or support sessions.</td>
<td>The teacher provides f2f support on a flexible and adaptive as-needed basis through activities such as small-group instruction, group projects, and individual tutoring.</td>
</tr>
<tr>
<td>3. A La Carte Model</td>
<td>The whole programme is blended - Some specific courses are purely online, and some are purely f2f. The courses themselves are not blended.</td>
<td>Students attend online courses at home and attend f2f courses on campus as a blended programme.</td>
<td>The course teacher works entirely online or entirely f2f. Types of teaching &amp; support can vary.</td>
</tr>
<tr>
<td>4. Enriched Virtual Model</td>
<td>The course is mostly f2f with some complementary online learning.</td>
<td>Students attend classes or support sessions on campus.</td>
<td>The teacher delivers f2f classes and some online support sessions.</td>
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</table>

has often changed from being a ‘sage on the stage’, where they are the dominant performer in a lesson, to more of a ‘guide on the side’, in which they are much less prominent. However, some feel that this shift has downgraded the role of the teacher to a ‘facilitator’ as part of a trend towards “teacher de-professionalisation” (Bayne, 2015; Selwyn, 2014), in which “the role of the teacher as subject matter expert and pedagogic architect is undermined” (Bayne et al., 2020, p. 26). More recently, there has been some re-balancing in the way the teacher is viewed, with “a more interventionist, meddler-in-the-middle approach” being emphasised in some higher education contexts (Kirk & King, 2022, p. 3). This could be particularly important in the first year of university when many students are transitioning from secondary school into higher education and may lack the necessary degree of autonomy in their learning. They may also encounter new digital platforms structured around unfamiliar pedagogies, which require some degree of navigational guidance. We thus argue that the role of the teacher and the concept of teacher competencies are significant and relevant considerations.

2.4 Teacher competencies in blended learning

There has been considerable research that highlights the role of different teacher competencies in the success of blended learning, including teacher beliefs and attitudes, teaching skills and technological skills. Anthony et al., (2019, p. 3461), for example, argue that academic faculty’s attitudes, responsiveness, course management and ease of use influence students’ perception of and performance in a blended learning environment. Similarly, Taghizadeh & Hajhosseini (2021, p. 459) maintain that students’ satisfaction with a blended learning educational environment mainly depends on their teachers’ attitudes towards this approach and the quality of education the teacher provides. Schechter et al. (2017) show that teachers’ active engagement in a blended learning programme influences students’ use of the blended learning environment and consequently improves the quality of teaching (p.14). Teacher attitudes are in turn affected by other factors, such as the institutional expectations of teachers (Bervell et al., 2020, p. 3), job compatibility, task complexity and experience with technology (Anthony, 2022) p. 3118).
Overall, the concept of teacher competencies is a complex and multifaceted construct, which involves the teacher as a whole person with their philosophy of teaching, as well as their cognitive, behavioural, emotional and attitudinal tendencies. Teacher competencies in a blended learning environment can be affected by the interaction between different psychological factors, namely teachers’ attitudes and motivation, institutional factors, such as course management and pedagogical models, the architectural constraints of digital platforms, as well as the degree of support from a network of colleagues. We believe that the key domains of teacher competencies in a new blended teaching ecology are teacher beliefs and attitudes, adaptation skills, pedagogical skills and technological skills. It is within these domains that we examine the existing literature.

2.4.1 Teacher attitudes and qualities

It has been shown in several studies that underlying teacher beliefs and attitudes are essential for effective blended learning programmes. In a study of Chinese teachers of English, Ye et al. (2022) highlight that during Covid-19, teacher attitudes toward a blended learning approach and the use of technology can have a direct impact on teachers’ effectiveness in such a teaching environment. Similarly, Bervell et al. (2020) argue that factors such as performance expectancy, effort expectancy and facilitating conditions should be critically addressed while implementing a blended teaching approach through a Learning Management System (LMS). This is because these factors have a direct effect on the overall attitude of teachers towards using blended learning for distance education delivery. In turn, teacher mindsets and their perceived teaching performance in a blended learning environment can be influenced through professional development opportunities and communities of practice sessions that focus on blended teaching and learning issues (Naidoo & Singh-Pillay, 2020).

Teacher qualities also play an important role in engaging the students in meaningful learning processes. For example, Milthorpe et al. (2018) maintain that for effective teaching in a blended learning environment, teachers should value innovation, collaboration and flexibility in their pedagogical practice. In a similar vein, through interviews with expert teachers, Bruggeman et al. (2021, p.8) identified several important teacher attributes that enable successful blending learning. These include being academically oriented, valuing education, and being open-minded and flexible when it comes to change.

2.4.2 Adaptive skills

The ability to continuously adapt and hone their skills to fit a new educational ecology is another important competency for teachers working in a blended learning environment. Learning to be flexible is not simply a desirable trait, but a required one, especially where the entire pedagogical context and settings are being reconfigured (Barron, 2006) and where the learning content is being mediated through the use of a new digital platform. A key process competency in this area is the ability to reflect on teaching experiences and apply lessons from these reflections to future teaching. Smith (2021, p. 188) shows how his reflections on teaching in a blended learning environment helped him develop expertise in technology integration, subject matter, and the ability to use synchronous and asynchronous comment tools for coaching.

2.4.3 Pedagogical and technological skills

In a blended teaching environment, it can often be difficult and perhaps slightly artificial to separate pedagogical and technological skills, when they are often integrated. Nevertheless, there are some key pedagogical skills and instructional strategies that are seen as vital in blended teaching, such as creating the right environment, focusing on the quality of interaction and the way that feedback is provided. Heilporn et al. (2022, p. 11) examined and highlighted the effects of instructional strategies and showed that creating an environment of trust, making sure that it is clear for the students how the materials are relevant to the course and having the right pace hugely affected the students’ cognitive and emotional engagement in a blended learning course. Ranjan (2020), in a study of blended learning for undergraduate students in education, found that it is the quality of the interaction between the course teacher and the students which is of paramount importance in a blended learning environment because it improves student motivation and achievement. Finally, Engelbertink et al. (2021, p. 13) argue that providing timely and clear feedback as well as establishing clear expectations added to students’ intrinsic motivation and improved students’ achievements in a blended learning course.

Correspondingly, a blended learning environment is by nature heavily dependent on the use of technology. Therefore, it is vital that teachers can understand and use different technologies effectively and meaningfully because the competent use and integration of technology positively affects students’ learning and achievement (Antonio, 2022). This can include learning how to use the tools and features of new digital platforms in an effective way or how to
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exploit big data to evaluate students’ progress. In addition, Zhu et al. (2021, p. 6154) purport that learning technologies are of crucial importance in a blended learning environment when their use has been clearly defined and made simple for the student. This, coupled with timely feedback from the instructors, enhances the effectiveness of the blended learning experience for the students. Finally, professional development is a significant factor in being able to use the features of technology more effectively and to better understand the user’s perspective in a blended learning environment, which can then positively influence a teacher’s technological and pedagogical skills (Evans et al., 2020).

2.5 Justification of study and research questions

While there have been numerous studies that have identified relevant teacher competencies for effective blended teaching, few have conducted in-depth studies into the lived experiences of teachers who are relatively new to a blended teaching and learning context. In addition, where these do exist, they have rarely applied an existing competency framework to the analysis of these experiences. We attempt to fill this gap by reflecting on our own experiences within a particular digital transformation and using the lens of a competency framework developed by a reputable educational association. As such, we seek to answer the following questions:

1. Which teacher competencies are perceived as significant for teachers when starting to teach in a new blended learning environment?
2. Which teacher competencies are not seen as significant for teachers when starting to teach in a new blended learning environment?
3. How useful is a teacher competency framework as a tool for the professional development of teachers who are new to a blended teaching and learning approach?

3. Theoretical framework

For this study, we have used one particular framework of blended learning teacher competencies - INACOL Blended Learning Teacher Competency Framework (Powell, et al., 2014) to help us analyse our lived experiences as new blended learning teachers. This framework consists of four overarching domains, two of which are underlying psychological constructs—Mindsets, Qualities—and two which are more visible—Adaptive Skills and Technical Skills. Within each of these domains, several key competencies have been identified which contribute to the overall description (see Table 2).

We selected this framework because it contains detailed descriptions of each domain and key competencies and serves as a useful guide for teaching within a blended learning environment from both a theoretical and practical perspective.

4. Methodology

4.1 Context

This study was conducted within a Middle Eastern university which is currently pursuing a digital transformation in terms of course delivery and pedagogy, moving from a predominantly face-to-face model of teaching and learning with some online support to a fully integrated, blended learning model based on the principles of active learning. The goals of this transformation are to ensure students receive a high-quality education that develops underlying skills such as creative thinking, strategic thinking and entrepreneurship, which ultimately improves their employability. This transformation includes the use of a custom-built, digital learning platform and the introduction of a new general education programme underpinned by a blended, active learning model. For each course in this model, students have two online classes a week as the backbone of the course, but also attend one face-to-face class a week on campus. Students are required to do online, pre-class work, including reading and writing tasks, before each class. This pedagogical approach could be categorised as a flipped blended learning model (Christensen et al., 2013). This is the initial phase of the transformation and involves students in the first year of a four-year undergraduate degree programme.

The new digital platform has been specifically designed to facilitate active learning in an online synchronous teaching environment. It features various activity types that attempt to engage students throughout the class. These include regular prompts which students have to respond to with a written response, and breakout rooms where students complete spoken and written tasks in small groups. Individual lessons and teaching materials have been developed and loaded into the online platform by a course manager for all teachers to follow so that the content and pedagogy of each lesson are standardised.
Table 2. iNACOL Blended Learning Teacher Competency Framework (Powell et al., 2014, p. 7)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
<th>Key Competencies</th>
</tr>
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<tbody>
<tr>
<td>1. Mindsets</td>
<td>Core values or beliefs that guide thinking, behaviours and actions that align with goals of educational change and mission.</td>
<td>- New Visions for Teaching &amp; Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Orientation Toward Change and Improvement</td>
</tr>
<tr>
<td>2. Qualities</td>
<td>Personal characteristics and patterns of behaviour that help an educator make the transition to new ways of teaching and learning.</td>
<td>- Grit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Transparency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Collaboration</td>
</tr>
<tr>
<td>3. Adaptive Skills</td>
<td>Higher complexity skills that are generalised across domains/jobs. Help people tackle problems and tasks where the solution might be unknown.</td>
<td>- Reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Continuous Improvement &amp; Innovation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Communication</td>
</tr>
<tr>
<td>4. Technical Skills</td>
<td>Domain-specific “know-how” and expertise that educators use to execute the known tasks in their jobs. They are acquired and mastered through instruction and training.</td>
<td>- Data Practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Instructional Strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Instructional Tools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Management of Blended Learning Experience</td>
</tr>
</tbody>
</table>

4.2 Research design

In this study, we took an analytic, auto-ethnographic approach (Anderson, 2006) in which the researchers were also the participants recording their own thoughts and observations about their teaching in journals. The rationale for this was that we were both new to a blended learning and teaching approach and wanted to reflect on our own lived experiences, as we started to teach on a new course using a new digital platform. After the journal entries were completed, we used the theoretical framework identified above to analyse these. This enabled us to provide some structure to the analysis and better interpret the meaning of the journal entries. The study is exploratory and aims to provide a better understanding of the most significant teacher competencies.

4.3 Participants

We are two university teachers each with more than two decades of teaching experience in higher education in different contexts including Europe, East Asia, the Middle East and Australasia. We have mainly taught courses in the areas of Education, Applied Linguistics, Second Language Acquisition and English for Academic Purposes. We both have extensive experience in teaching in both face-to-face and online modes, but separately rather than integrated. We work at the same HEI, and we have recently started teaching in a new department in which the course is taught through a blended learning approach. Before the course started, we were provided with some initial training and one practice class, but blended teaching competencies were not explicitly discussed during this training.

4.4 Data collection

During the first twelve weeks of teaching the new course, we recorded weekly entries in personal journals, which are considered a recognised data collection instrument (Creswell, 2014, p. 245). Our entries were related to any aspect of our experience of blended teaching, such as the use of technology, the role of the teacher, and students’ responses to the course and the digital platform. Overall, we wrote 24 journal entries (one per week per participant). Each entry included information about our lived experiences, our analysis of these experiences and our cognitive and affective responses to these experiences. The entries often reflected the daily challenges we faced in our teaching, and what we did to deal with these challenges.

4.5 Data analysis

In order to create meaning out of our experiences, we applied the competencies contained within the iNACOL Blended Learning Teacher Competency Framework (Powell, et al., 2014) to all of the 24 journal entries that were
collected over the 12 weeks. We did this systematically using an iterative process of reading and re-reading the journal entries to identify the relevant competencies that were visible in each entry whether directly or indirectly. We then coded each entry according to the competencies being illustrated and then recorded the total number of times each competency was exemplified. We both re-visited the data until we agreed upon the relevant competencies.

5. Findings

In this section, we first present the frequency counts for each of the competencies in the framework (i.e. how often they were exemplified in the journal entries) and highlight those that appeared most frequently. We then comment on these competencies in more detail and support our comments with vignettes from the personal journals. For convenience, we use T1 and T2 to distinguish between entries (T1 = Amir / T2 = Michael).

5.1 Frequency of competencies

As Table 3 shows, the domains of adaptive skills and technical skills were most frequently observed in the journal entries. ‘Reflection’ was the most frequent competency overall, while ‘Continuous Improvement and Innovation was also a significant adaptive skill. Within the domain of technical skills, ‘Instructional Tools’ was the most frequent, closely followed by “Management of the Blended Learning Environment’ and ‘Instructional Strategies. The other two competencies that appeared to be significant were ‘Orientation toward change and improvement’ and ‘Grit’.

5.2 Most significant competencies

In this section, we focus on the seven most frequent competencies identified above.

5.2.1 Mindsets: Orientation toward change and improvement

Our journal entries provide evidence of our underlying orientation toward change and improvement, particularly in terms of embracing uncertainty and tolerating ambiguity. We are required to teach within the architectural constraints of a new digital platform and deal with various challenges to our previous practice, as shown by this entry from T2.

In f2f lessons, students are usually required to interact in pairs or small groups physically in the classroom and then complete answer boxes with their own text in their own individual breakout rooms on the learning platform. This is obviously to provide accountability on the part of the students and to record what they did so that the instructor can go back after the class to grade this or give feedback, which is very useful. However, this sometimes hints at completionism—the need to complete these boxes for the sake of it rather than learn anything meaningful or have meaningful engagement during the F-2-F classroom. The actual blended part of the course is still confusing for me.

Table 3. Frequency of competencies in journal entries
T1 also focuses on a face-to-face class where the digital platform does not support his pedagogical practice but finds a way around this:

Today, in my f2f class, my students had to access each other’s assignments, but the platform did not have the facility for this purpose, and students had to exchange laptops for this purpose. I thought this was a good change, and students seemed more engaged when using another student’s laptop to type in their feedback. The peer-review session went well; had I wanted to solely rely on the platform, I might not have been able to achieve the learning goal.

5.2.2 Qualities: Grit

We show throughout the journal entries that we try to stay focused, connected, and committed to dealing with ambiguities that we experience in a blended learning environment. The entries reveal a degree of grit, perseverance, and persistence in our teaching. T1 finds the transition to the online component of blended learning somewhat disconcerting initially and observes:

I started teaching on a new online platform which requires thorough prior preparation despite the fact that each lesson is highly structured based on lesson plans that have been specially developed to be used on this platform. Moving from one teaching and assessment task to another and trying to stay focused can be a hugely demanding cognitive task. I believe; however, the platform helps reduce teacher talk and focus on the oral contributions of students.

Similarly, T2 notes how a specific feature of the digital platform could be made more accessible at the planning stage to facilitate more effective teaching:

In the Breakout Rooms, you cannot see the actual instructions and tasks that students can see in their individual workbooks unless you actually enter the particular session, open the Breakout room and then enter one of the individual breakout rooms. This means I feel like I am teaching blind unless I copy and paste the whole task from the individual breakout before the lesson and save it on a word document for myself. This is a bit of a fiddle, but doable.

5.2.3 Adaptive Skills: Reflection

Our journal entries show that we are both deeply reflecting on all aspects of the blended teaching and learning experience, including the course design, the effectiveness (or not) of the digital platform and how to create a seamless link between online and face-face classes. As the vignette below shows, T1 is also reflecting on his new role as a blended learning teacher:

I tend to think that an online platform is not completely a technological platform; there is the use of language that helps facilitate using the platform for me and the students; sometimes I am lost, as I am not sure all is clear...
to me. Is this the linguistic aspect or the technological one? Which affordances make it difficult for me? The technological ones? Or is it because as an experienced educator, I am used to a certain diction, a way of using the language in the ecology of learning and teaching and when things are different, I feel unsettled, and uncomfortable, thinking that I am not where I am supposed to be fulfilling my role. I am learning new things; new jargon, new tools, and more importantly new roles for myself.

T2 reflects on one specific feature of the digital platform:

It seems one major issue with the platform is that the work that students do during the online lesson remains buried in the lesson. It would be nice if it automatically saved somewhere on each student’s workbook which builds up over time and provided an ongoing record of each student’s progress. They could then easily find their work for each stage and refer to it more easily in their assignments.

5.2.4 Adaptive Skills: Continuous improvement and innovation

Many of the journal entries related to reflection are also evidence of our trying to improve our teaching. T1 describes below how he is responding to the design of the digital platform and the standardised lesson format:

I now understand better how the new technology mediates both teaching and learning based on an active learning philosophy. I am beginning to see the important role that technology can play when used effectively in helping learners become more efficient and skilled users of the language to discuss their perspectives on different topics explored in the course. The students in this blended learning environment seem to be more accountable and thus responsive, as they are assessed regularly on in-class tasks and activities. At times, I feel the structure of the course can provide a cognitive framework like none other, namely, students have to carefully pay attention, engage in discussion with other students in Breakout Rooms and be prepared to share their thoughts and to be assessed accordingly. I am still not completely sure about my role, as it seems a highly structured lesson only requires me to be able to navigate through the lesson competently.

T2 also focuses on a particular incident where he received some feedback from the course manager that helped him recalibrate his approach to online synchronous teaching:

This was a study week for students, so there were no classes. I had a coaching session with the course manager for 20 minutes, and she gave me some feedback on my online teaching. I welcomed the discussion, but it was more one-way, her telling me what was effective and what I needed to improve on. One piece of feedback was not to speak too much during the whole-class stages of the lesson session. Instead, I should enable the students to speak more and use more probing questions.

This shows that T2 is open to learning how to improve his online teaching. He values the feedback on teacher talk to avoid creating another teacher-fronted class for his students.

5.2.5 Technical Skills: Instructional strategies

In terms of instructional strategies used, we both draw on our previous experiences to ensure that we can teach effectively despite some of the technological constraints of the digital platform. An example of this is when T2 does not have access to the online class section that he is substituting for:

For a f2f class that I covered for another teacher, I didn’t have access to the online platform, but I had previously copied the task from the Workbook and put it on a word document which I printed off and gave to students to write on with pens (This also allowed me to reformat and edit the task and instructions to make them clearer for students). Having a paper handout seem to have a positive effect, and I felt that I could control the activity better and I saw students engaging and discussing with each other face-to-face. Could this be a case where technology gets in the way of interaction and learning? I understand how the use of the platform in f2f classes creates a kind of seamless experience for students —they know that everything is going to be the same as the online classes in terms of features and it does reinforce accountability. But I wonder whether we could make the
f2f a different experience where they are different kinds of activities and interaction—students move around the classroom, for example.

On the other hand, T1 is engaged in a more sense-giving and sense-making process that enables him to see and define the course learning outcomes and learning objectives for each lesson more clearly:

I remember reading Jerome Bruner, the famous educational psychologist, highlighting the importance of structure and designing effective curricula. I seem to think that as the professor on the course, I am consistently endeavouring to make sense of how I can use my teaching experience and my knowledge of pedagogy in conjunction with technology seamlessly to create a meaningful unity for myself and my students. This week, I have been trying to more rigorously work on defining both learning goals and learning objectives in the course I am teaching, more specifically based on the use of technology. When I have a better sense of the combinatorial nature of tasks, I seem to do better.

5.2.6 Technical Skills: Instructional tools

Both of us seem to be enjoying the new learning journey and discovering new digital tools that were not aware of at the beginning. T2 highlights a feature of the platform that enables him to see the extent of oral participation by each student:

Today I learnt how to use the “Talk Time” function effectively during an online class. By pressing the ‘T’ key on the keyboard, I could easily see at a glance which student hadn’t said anything in the class in the first 30 minutes. One colour indicates that a student has spoken more than average, another colour that a student has spoken an average amount and a third colour that they have spoken less than average. This is a very clear visual sign for the instructor. I used this feature about 2 or 3 times during each class, and each time I wrote down the names of quieter students on some paper and deliberately called on them during the next stage of the class (Cold Calling)—either in debrief stages or whole-class discussions. I think this helps keep students on their toes as well, as they know that they can’t hide away in the back of a classroom or online—everyone is visible.

T1 expresses his satisfaction with how easily he can give feedback on different learning outcomes, as they are already integrated with each assignment on the digital platform.

Today I have been grading assignments based on the relevant criteria. It is easy to see how each criterion has been developed on the platform to dovetail with each part of the assignment, and this makes giving feedback simpler and more effective. As the professor who has taught the course, the visual aspects of the platform help me to clearly see the connection between the criteria and the relevant parts(s) of the assignment. I think the students can also easily establish this relevance as all appear to be in the right place in the assignment and on the platform. I think the visual component of the online platform is significant, especially when giving feedback, as it creates a richer context by combining the linguistic and visual elements.

5.2.7 Technical Skills: Management of blended learning experience

We both refer to episodes in which we had to focus on some aspect of students’ online behaviour. T2 believes that certain acceptable actions contribute to better online presence and participation:

In the first week of teaching, I noticed that some of the students (mainly females) had their web cameras pointed up, so that only the tops of their heads or eyes or even a view of their bedroom ceiling was showing in their video boxes. This seemed to affect their presence in the classroom and the degree of engagement I felt from the students or was it them expressing their individuality? I had to explain what the requirements were in terms of showing the whole of their head and the reason why. I also had to name individual students and asked them to physically adjust the direction of their webcams so that their heads were in the middle of the video box. Do I need to keep mentioning it or leave them be as long as they are still participating?

While reminiscing about the good old teacher-fronted classroom, T1 does admit that the new platform provides him and the students with better opportunities for more communicative teaching and learning:

There are times that I miss the teacher-fronted classroom wherein the professor with a specific sartorial and linguistic demeanour lectures to an audience, and they take notes and seem to be voluntarily engaged as they want to; I mean they are already motivated instead of a technological platform constantly keeping the students on their toes, as they might be called upon to answer a question based on the control features that show which students have not been participating and then asking
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them a question to see if they are with it! Do we all not decide sometimes not to pay attention? To have that mental break even though we are supposed to stay alert, paying attention? Is it not part of being human? Well, perhaps, but I have to remember that for optimising learning, students have to remain alert, attentive and even competitive at times; this is the only way the overall output will be improved!

6. Discussion

In this section, we refer directly to the research questions and discuss the key findings in light of the previous research.

6.1 Which teacher competencies are perceived as significant for teachers when starting to teach in a new blended learning environment?

As the findings reveal, some competencies appeared more frequently than others in our journal entries. Both of us refer to episodes in which we demonstrated a positive mindset towards change, particularly the ability to “embrace uncertainty and ambiguity as part of improving teaching and learning practices” (Powell, et al., 2014, p 10). The findings in this study are in line with those of Ye et al. (2022) who identified the importance of having a positive mindset and attitude towards teaching in a blended learning environment.

We also found evidence of the quality of grit as we engaged in “deliberate practice and persevere towards ambitious long-term educational professional goals” (Powell, et al., 2014, p 10). As teachers new to blended teaching and learning, this quality enabled us to face ambiguities and overcome problems and issues with an open mind. This is especially true when faced with a new digital platform that has a rigid architecture and places constraints on how we approach teaching. As Taghizadeh & Hajhosseini (2021) argue, these positive attitudinal tendencies can then impact students’ perception of and satisfaction with the education they receive in a blended learning environment.

Not surprisingly, considering the data collection method, the entries also displayed a significant amount of reflection which is a key competency in the domain of adaptive skills. Both of us were actively engaged in reflective practice as highlighted in our interpersonal and intrapersonal dialogical activity. We noted what was and what was not working and identified a plan of action to address this (Powell, et al., 2014, p 11). We tried to clarify course-related issues for ourselves either by re-visiting the digital teaching platform or by seeking advice from our colleagues. One aspect of reflection that was not found in the journal entries was seeking out feedback from students, parents and colleagues. This sub-competency may develop later once teachers feel more confident about their role in the new ecology of teaching.

Some of the journal entries also revealed our tendencies to improve and adjust our teaching by engaging in problem-solving and to “use technology appropriately, innovatively, creatively and purposefully to work effectively and efficiently” (Powell, et al., 2014, p 16) in a way that met the requirements of specific lessons. This importance of the tendency to improve teaching in innovative pedagogical ecologies has been shown by other researchers as well (See Şahan, 2020; Guida & Cinganotto, 2021, Gil-Quintana & Osuna-Acedo, 2020; Fan et al., 2022). As teachers with extensive experience in teaching online and teaching face-to-face, we need to be adaptive and flexible as we reconfigure our own ecology of teaching in a blended learning setting (Barnett & Jackson, 2019).

Concerning technical skills, the journals show that we have been trying to apply the use of familiar instructional strategies in conjunction with knowledge of new instructional tools, such as using the ‘Talk Time’ function, on the digital platform to better manage the new blended learning experience for our students. This supports the findings of Heilporn et al. (2022) who show that having effective instructional strategies within a blended learning environment creates clarity and better engagement for students. Although we did not interview students, we hope that as we continue to develop our competent use of the digital platform and seamlessly integrate the online and face-to-face elements of the course, we can help facilitate better student learning (Antonio, 2022).

Some of the journal entries tell stories about how the architectural constraints of the platform prevented us from enacting our previous teaching practices, but that we found ways to circumvent these by being pedagogically innovative. For example, providing students with hard copies of the task and completing it offline in face-to-face sessions led to greater communication and collaboration between students than doing the same task online in breakout rooms. This shows how we have applied adaptive skills to both our lesson planning and in-class pedagogical decision-making that then inform the selection of instructional strategies. In this way, competencies themselves were blended and merged together in a more holistic way.
6.2 Which teacher competencies are seen as less significant for teachers when starting to teach in a new blended learning environment?

Only one competency—Data Practices—was not identified at all in any of the journal entries. We did not mention either the use of quantitative or qualitative data from the platform to “understand individual skills, gaps, strengths, weaknesses, interest and aspirations of each student” nor “use that information to personalise learning experiences” (Powell et al., 2014, p. 17). This is slightly surprising when the use of learning analytics is often cited in the literature as one of the main benefits of using technology for educational purposes for both teachers (Tsai et al., 2020) and students (Zamecnik et al., 2022). This could be because the data analytics on the digital platform we use are not very visible or relevant, or because we mainly perceive it as a tool for institutional management (Tsai et al., 2020). Another explanation could be that because we are still relatively new to a blended learning approach and are still learning how to exploit all the features and tools of the digital platform, we simply had not yet discovered some of the learning analytics available and how they could inform our teaching.

In terms of qualities, the competencies of ‘transparency’ and ‘collaboration’ were also not very visible and therefore seen as less significant. While the willingness and ability to “openly and frequently share successes, failures and dilemmas” and “proactively seek to learn from and with others” (Powell et al., 2014, p. 15) seem important, perhaps in our case we wanted to be more confident in our blended teaching skills first before being more open about them with colleagues. There was a WhatsApp Group for some of the teachers teaching the same course, and we did use this for commenting on immediate, in-class issues and sharing ideas for possible solutions. Therefore, it could be the case that these competencies of ‘transparency’ and ‘collaboration’ are more process-orientated and were not so prominent in our minds when reflecting on our practice. They are still important in facilitating changes in instructional strategies, for example, but they are less visible.

Another key aspect of blended learning that did not appear in the reflective journals of the teachers was any mention of student control or ownership over the time, place, path and pace of learning (Banditvilai, 2016). This was mainly due to the highly structured nature of this particular blended course in which all of the online sessions are synchronous, and all students are expected to attend the class at the time given. They can, however, also watch a recording of the lesson later. In addition, there was no mention in the journals of “creating customised learning pathways with students” which are “matched to the individual student’s learning performance level and preferences” (Powell et al., 2014, p. 18). In these courses, students complete the same online assignments, such as a writing journal and essay with the same learning outcomes. Although the students have agency over the content of these assignments, there are few individualised learning pathways based on identified student weaknesses.

6.3 How useful is a teacher competency framework as a tool for the professional development of teachers who are new to a blended teaching and learning approach?

If, as Ossiannilsson (2017, p. 14) argues, one of the key factors in utilising an effective blending learning approach is that teachers are “well prepared, motivated, and have sufficient time and resources”, then a teaching competency framework can be a very useful tool to guide and support professional development activities. In this study, we have found that a competency framework is a useful bank of key qualities and skills that are important for developing as teachers in a new blended learning environment. It is especially effective when we can reflect on our thoughts, beliefs and behaviours, and measure these against clear, written standards. It has also raised our awareness of the inherent expectations on teachers within a blended learning environment and provided a clear benchmark and target that we should aim to reach. Finally, we believe that using a competency framework such as this provides teachers with a greater sense of agency and a way to slow down the trend towards “teacher de-professionalisation” (Bayne, 2015; Selwyn, 2014), especially in an online teaching environment in which pedagogical practices are more constrained.

At the same time, one weakness of this particular competency framework is that it only employed absolute descriptors of standards for each competency—either it existed, or it did not. In reality, every teacher is at different levels of competency, so it would be better if each descriptor distinguished between three or four different levels. For example, there could be descriptors for Beginning, Developing, and Proficient levels of ability in each competency. This would enable teachers to self-assess their current perceived level of competence and set goals or targets for higher levels of competence in the future.

Another weakness of using a competency framework is that taking an analytical approach to teaching in a blended learning environment in which different pedagogical and technological skills are separated is slightly artificial and can reduce the complex and unpredictable process of teaching.
and learning to a box-checking exercise. It can also mean missing some important observations that come from taking a more holistic, ecological view of teaching and learning in which the pedagogy and technology are more integrated and overlapping. Therefore, it may be better to identify specific critical teaching moments that involve complex combinations of blended competencies and then analyse these to identify particular competencies, as we have done in this study.

Finally, it could be argued that there is a technology bias in some of the standards, in that the use of technology is privileged over not using it. The example from one of the journal entries about using a paper-based worksheet in a face-to-face class is a case in point where actively choosing not to use the digital learning platform ended up enabling greater communication and collaboration between the students. We believe that in a blended learning approach, it is important that the online element of a course is not positioned as the privileged mode of teaching (Bayne et al., 2020).

7. Conclusion

In this study, we reflected on and analysed our own lived experiences when starting to teach in a new blended learning programme that is part of a wider digital transformation within a particular HEI. The university in which we work has already implemented new technological infrastructures for academic administration, support services and communication (Rampelt et al., 2019). However, it is now the areas of teaching and learning, particularly course management, synchronous online teaching and online assessment, in which further transformation is taking place. In our context, the integration of online and face-to-face learning, through using a highly structured digital platform, in combination with a flipped, active learning model of pedagogy has created an entirely new ecology of teaching and learning. It is our view that teachers are key to ensuring that this transformation is successful, so it is important that teachers develop the relevant competencies in terms of mindsets, underlying qualities, pedagogical skills, and technical abilities that work together holistically.

The findings from our study show that as teachers new to a blended learning approach, some competencies appear to be more significant than other competencies. For example, within the domains of mindsets and qualities, we identified the competencies of ‘orientation toward change and improvement’ and ‘grit’ more frequently in our journal entries than ‘transparency’ and ‘collaboration.’ In terms of adaptive skills, ‘reflection’ and ‘continuous improvement and innovation were more significant than ‘communication’. Finally, within the domain of technical skills, three of the four competencies were significant. Developing our online instructional strategies and learning how to use new instructional tools within the digital platform helped us to better manage the blended learning experience. In many cases, it was the architectural constraints of the digital platform that shaped our pedagogical response. Overall, these competencies should be seen as constantly shifting, overlapping and often working together to help shape our own ecology of blended teaching.

We believe that our findings can have implications for both teachers and management in HEIs when attempting to implement a blended teaching and learning model. For teachers, it might be more beneficial to view some competencies as more significant than others and initially focus on these before other competencies, rather than all at once. For example, if teachers first work on developing one or two underlying mindsets and qualities, such as an ‘orientation toward change and improvement’, they may then be more open to developing their adaptive and technical skills when they first start using new digital platforms and tools. In addition, it may be better to approach the development of these competencies in a more holistic way rather than a reductionist way, by seeing the connections and overlaps between competencies. A good example of this is how the use of instructional strategies interacts with the use of instructional tools to help teachers better manage the blended learning environment.

Secondly, professional development programmes may be more successful if they are structured around the required teacher competencies which are made explicit at all levels. This could enable teachers to better self-assess their current, self-perceived level of competency and notice the gap with the desired target competency. The blended learning teacher competencies could also be linked to an initial needs analysis which then feeds into the development of individualised professional development pathways that run throughout the implementation period of a new blended learning approach (Owens, 2012). The inclusion of such a professional development programme will not only enable teachers to be better prepared before they start teaching, but also provide greater ongoing support and guidance as they continue to develop mindsets, qualities, and new pedagogical and technical skills. This is even more important in digital transformations where the content knowledge, the pedagogical approach, and the digital platform are all new to teachers and need to be viewed in an integrated and holistic way (Mishra & Koehler, 2006).
There are several limitations to this study. Firstly, the use of only one data collection method—personal journals—means that it is not possible to triangulate the findings with other data. For example, we did not gather any data from other related participants, such as students or management, which could provide additional insights and perspectives. A second limitation is that data were only collected from two teachers, which also reduces the generalisability of the results. The content of the teachers’ reflections is very individual and may not necessarily apply to other teachers involved in other blended teaching contexts. We also only recorded weekly reflections, and it is possible that we could have missed other critical moments and events in our teaching that took place on other days. Finally, while the use of a competency framework helped structure this study and the data analysis, it could be argued that a more open-ended analysis might have revealed other salient themes within the journal entries.

In terms of further research in this area, it would be worth conducting a follow-up to this exploratory study that involves a larger cohort of teachers within our programme. As well as asking them to keep weekly personal journals, we could also conduct in-depth interviews to gain a wider understanding of the emerging and shifting competencies of other teachers engaged a new blended learning approach. In addition, to provide better triangulation of the data we could construct a survey instrument that draws on the competencies and standards in the iNACOL competency framework (Powell, et al., 2014) as well as other skills and attributes (See for example Short et al., 2021). This survey could be given to both teachers new to blended teaching and those who are more experienced at different points in a semester to identify any shifts in their competency levels. This would also allow us to identify any differences based on a variety of demographic factors, such as age, gender, and amount of teaching experience, and help inform a differentiated professional development programme that aims to develop specific competencies for effective teaching in a higher education blended learning programme.

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