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A Review of Undergraduate Education Student Responses to the Online Component of Blended learning: A Cautionary Tale

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Abstract: Calls for enhancing the digital interface for teaching and learning within tertiary institutions have played out in one School of Education, with variable results. Online learning tasks were added in 2018 to regular classes to provide more flexibility for student engagement. A team of lecturers developed a questionnaire for students to be completed after the first semester pilot. Data and findings indicated that one-third of students identified online learning as an enhancement to their learning. A second survey was conducted one year later to assess changes made and analyse the longer-term impacts. During the COVID-19 lockdown, fully online pedagogy was required; anecdotal observation indicated an improvement in satisfaction and engagement, but perhaps only because online was the only way possible to complete assessments. The conclusion contains recommendations and a cautionary tale, when introducing online learning across existing courses.

Introduction

“Online learning, that’s not what I signed up for!” or “No one told me this was an online programme”, were common complaints to programme leaders following initial attempts to introduce a blended learning programme into the Bachelor of Arts (Education), Bachelor of Education (Primary Teaching) and Bachelor of Education (ECE Teaching, Early Childhood Education). These responses prompted the research team to initiate a survey to understand in more detail students’ issues with online learning and thus, responding to the call for, “better understanding of what influences students’ learning experiences in the online formats of professional bachelor programs” (Nortvig et al., 2018, p. 54). Students completed two surveys: one in 2018 after one semester of online learning and one in 2019 after one-and-a-half years of online learning. Subsequently the COVID-19 pandemic struck. At the direction of the New Zealand Government all non-essential workers, including lecturing staff and students, went in and out of extended periods of lockdown from 25 March 2020 until late 2021. The lessons gained from the 2018 and 2019 surveys were brought forward into a situation where online learning was no longer peripheral, but central in teaching and learning.

Online learning is evidenced in more and more educational institutions around the world, without a necessarily robust development process (Keengwe & Kidd, 2010). Blended learning, online learning, and e-learning have been key organisational foci in tertiary institutions since the early 2000s (Garrison & Kamuka, 2004; Mozeliuss & Hettiarachchi,

2017; Marshall, 2006). For teacher education, these foci have been given further emphasis through the evolution of a digital curriculum (Ministry of Education, 2017). Within this national educational context, this study examined a blended learning initiative in the School of Education, Auckland University of Technology, in Auckland, New Zealand.

The initiative involved the development of online tasks to complement face-to-face lectures across all papers in the Bachelor of Arts (Education) and Bachelor of Education (Early Childhood and Primary Teaching). The programme development team researched trends in online learning, e-learning and blended learning, regarding e-learning as a term that is not limited to online technologies, and that blended learning was a concept that best guided the programme development because of its breadth and fluidity. It was critical to review key literature on blended learning to guide programme development for this learning initiative, with blended learning being an overarching term for the student experience, that included online and face-to-face dimensions. During Covid lockdowns, the programme pivoted to a completely online delivery.

The first section of this article engages with research of the three modes (online, e-learning and blended learning programmes and the expectations of the university for online learning, with particular attention to research on teacher education. A critical analysis of the literature provided a context for this study and led to working definitions for 'online' and blended learning which underpinned programme development. The article then details the development and implementation of an anonymous online survey and an analysis of responses. In the Discussion, the research team explores key findings including the student preference for face-to-face learning, issues including the role of assessment and how the lecturers responded to the surveys during the COVID-19 lockdown by making changes to their approach to online learning, and initial reactions from students with attention given to literature outlined in this introduction. The research team makes the case that in a considered approach for a blended learning programme, learning outcomes, activities and assessment are clearly aligned through face-to-face sessions and online tasks seamlessly. In addition, a blended approach needs to integrate the best features of face-to-face instruction, so relational aspects are not lost when there is a focus on online tasks. The conclusion outlines the research team's recommendations, considerations for online learning and potential future research. For example, the political context requires lecturers not only to design more blended programmes but also to cultivate buy-in from students. Several ways to ensure student satisfaction include explicit discussion of the value of online tasks, demonstrating links between online activities and assessments, and to ensure online activities are interactive. The article ends with a warning based on this experience and is thus, a cautionary tale.

Blended Learning

More and more educational institutions around the world are adding online components to their pedagogical approaches (Chan, 2019; Lim & Wang, 2017). In a review of tertiary institutions in the United States, the Babson Survey group has found year-on-year a continuous upward trend in the implementation of online education (Allen, et al., 2016). As part of an annual review on the importance of online learning across the Asia Pacific region, Lim and Wang (2017) stress the value of blended learning, comprising of online learning and face-to-face instruction. They note there were enhanced opportunities for independent learning and collaboration and the ability to study in one's own time. Lim and Wang (2017) argue that blended learning "provides a means to enhance quality, equity, and access to life- long learning opportunities" (p. xiii). Moreover, they claim that the creative

use of online activities accompanying face-to-face teaching lays a foundation for quality teaching and learning (Lim & Wang, 2016).

Blended learning refers to a range of different practices but most simply, “that of the combination of physical and virtual environments...many definitions refer to face-to-face and online learning” (Stacey & Gerbic, 2009, p. 2). Face-to-face environments are synchronous whereas online learning can be asynchronous and can privilege learning independently and flexibly (Stacey & Gerbic, 2009). If a course is blended, it must involve a reduction in face-to-face time (Vaughan, 2007). Stacey and Gerbic (2009) suggest the possibilities that blended learning offers can lead to both improved learning outcomes and cost reductions. Though cost reductions might result from reduced building costs, the expectations for students and lecturers are not minimised.

For specific examples regarding the potential of blended courses, Olakanmi (2017) analyses the assessment results for a group of sixty-six chemistry students; some of whom were taught using a ‘flipped’ blended course while others experienced the ‘traditional’ class-based instruction. The data indicate that those who had online tasks to complete before coming to lectures had higher assessment scores and enhanced concept knowledge (Okahanmi, 2017), and similar results are noted in a biology programme (Fan et.al., 2018). In contrast, Gambari et al. (2014) finds that although students performed better on exams in a blended biology course of secondary students, learning was retained better over a longer period of time with traditional face-to-face instruction.

In initial teacher education research, Kelly et al. (2016) identify the importance of online learning networks for pre-service and career teachers and suggest that scaffolded use of an online network would support student teachers in their future development in teaching and pedagogy. Atmacasoy and Aksu (2018) argue that blended learning in pre-service teacher education may “assist prospective teachers in attaining adequate technical, pedagogical, and content knowledge” (p. 2413). Simpson and Anderson (2009), involved in redesigning online components for initial teacher education programmes, remind lecturers involved in developing online learning components to consider “different technologies, media, models of delivery and learning activities” (p. 62) and possibilities for interactivity. These blended experiences must consider different connectivity skills of younger and older students (Simpson & Anderson, 2009). Well-designed online tasks are argued to strengthen the students’ use of online networks, and to motivate further study through written work completed at a time convenient for the students (Stacey & Gerbic, 2009).

In initial teacher education, blended learning provides opportunities for students to actively engage in knowledge co-construction within online communities rather than through transmission of information from lecturers (Chan, 2019; Geer, 2009; Keengwe & Kang, 2013). Students undertaking courses in a blended learning environment are able to learn “across different mediums and at various times” (Geer, 2009, p. 41), increasing opportunities for engagement and potentially for achievement. Geer (2009) goes on to suggest that blended learning courses provide opportunities for “interaction, reflection and collaboration” (p. 45). In Geer’s (2009) study, it is noted that initial teacher education students in discussion forums allowed for more concentrated, deeper engagement with the concepts than in face-to-face lectures or tutorial groups but cautions lecturers that the first interactions in discussion forums are critical and set the tone for the rest of the course.

Clearly, a student’s perception of their own self-efficacy in using a computer is a key element for successful engagement in the online learning, component of a blended programme, but more importantly students need to be self-directed learners rather than learners who rely on lecturers for motivation and guidance (Harun, & Mustafa, 2016). Harun and Mustafa (2016) argue that if students acquire self-direction, they are able to choose online tools that work best for them in meeting the learning outcomes for a paper.

The expansive resourcing of online learning dedicated to support education institutions funds hardware, software, digital networks, organisational networks, advisory services, online curriculum resources, and professional learning opportunities on the funding of schools for the new digital curriculum enhancing a blended learning approach. The so-called “state-of-the-art infrastructure” (Ministry of Education, 2017) has arguably come first, and the task for institutions now appears to be to get up to speed quickly in order to engage learning communities in understanding what the key educational aims and relationships should be within online learning spaces, and what challenges this presents to teacher pedagogy.

Given the complex demands on education systems in terms of aims for digital competencies and digital citizenship, the task for the Bachelor of Arts (Education) and the Bachelor of Education faculty was to provide immersive experiences of online learning. While it might not be entirely justified to replace face-to-face with blended and or online learning in terms of learning outcomes, it is essential that students studying teaching and education engage in a range of online learning experiences in order to develop their online skills, knowledge, and their ability to critically theorise the role of online learning in contemporary communities and societies. Thus, the guiding principle for programme development revolved around support of the building of a “state of the art infrastructure” in digital spaces for our students through an online learning component required in all papers in the Bachelor of Arts (Education) and the Bachelor of Education at Auckland University of Technology. A ‘blended’ approach to online learning was taken in which the students’ timetable included two-thirds of face-to-face classes and one-third of their time would be spent on a variety of online tasks generally completed asynchronously.

The Initiative

The initiative was prompted by the University’s call for an increase in blended teaching, and the then Education Council’s (teachers’ professional registration body) emphasis on teachers being conversant with digital pedagogy (Education Council of New Zealand, 2017). In addition, the importance of teacher skill and confidence in working online became critical during a series of lockdowns enforced as a response to the COVID-19 pandemic. In developing a blended programme, the aim of the additional online tasks was to provide more flexibility for where and when students study to enhance student engagement, and more opportunities to learn with different online tools and tasks in order to better prepare students for their own digital pedagogical opportunities, challenges and innovations.

Given the perceived benefits of online and blended learning, the School developed a range of innovative approaches and experiences for the students. For each paper in the Bachelor of Education and the Bachelor of Arts (Education), online tasks that would take approximately one hour to complete were added to the Learning Management System, *Blackboard™* to be completed asynchronously. Tasks were designed to supplement lecture content, support students in completing their assessments, and to give students flexibility related to when and where to complete the activities. Examples of tasks included viewing and responding to related YouTube clips, finding articles on the related topics, articulating and discussing key concepts, writing blogs, or completing a series of questions related to online readings. Students used their personal devices to complete these tasks with a range of software applications.

Following a series of complaints from students about the online component and lecturers’ concerns about the time commitment to develop the online tasks, a team of researchers, comprised of lecturers from these bachelor’s degree programmes, believed it

was important to gauge a wider range of opinions on the programme implementation. The research team developed a questionnaire for students regarding their experiences of online learning after the first semester of implementation. The overall aim of the questionnaire was to understand students' experiences in order to improve the quality of online learning. Students completed a second survey one year later to ascertain any changes after a full 1.5 years of implementation of the online learning component. This paper explores the students' experiences and in particular their views about their experiences, with a particular focus on their perceptions of the effectiveness of blended learning for their study.

At the time we considered that blended learning was not a panacea but might provide new opportunities for students to engage with the learning outcomes for each course of study. With the Bachelor of Education programme, every attempt was made to include online activities related to the real life of being a teacher. Shu and Gu (2018) suggest that online engagement and deeper thought occurs when activities are real and authentic. It was hoped that survey responses would provide us with guidance on the range of tasks that would best help students in their achievement in relation to the paper content

Methodology

In this research study students were invited to share their experiences of the online learning component of their blending learning programme and their opinions on how the quality of the online tasks could be improved. The study focused on answering the following questions:

1. What is the nature of the activities that most engage student interaction?
2. What are issues that need to be resolved for student maximum participation?
3. What was students' perceived value of engagement in online tasks?

Participants

All students enrolled in the Bachelor of Education (Primary and Early Childhood) and Bachelor of Arts (Education) were invited to participate in this study. By completing the surveys, students indicated their consent to participate in the study.

Instruments

The research team developed an anonymous online survey for all students following completion of one semester of the embedded one hour of online tasks in each paper of their programme of study.

Quantitative questions fielded demographic information to provide the research team with some general identifying information to disaggregate data. Qualitative questions were designed to understand the students' experience of the new online component.

Procedures

In total, 533 students were invited to complete the first survey by the School Registrar, through an invitation on *Blackboard™*, the LMS (Learning Management Systems) programme described earlier, rather than through an invitation by the research

team who are all lecturers of these students. An additional posting was placed on the online and physical School noticeboards. The link to the questionnaire was available for three weeks. The survey link was sent out between semesters so there were no grades pending for participants.

Sixty-eight participants went to the link provided by the School Registrar and completed the surveys through Qualtrics, an online survey tool. The respondents were students in the following programmes: Bachelor of Education-Primary, and Bachelor of Education-Early Childhood, studying to be teachers, or the Bachelor of Arts (Education) which offers job opportunities in a variety of education-related careers or a pathway to a teaching qualification. The percentage of the students in each programme relative to the numbers invited to complete the survey were as follows:

	ECE	Primary	Bachelor of Arts
2018	14	10	13
2019	11	13	27

Though the percentage of students from the Bachelor of Arts who completed the survey increased, the relative percentage of those completing the survey from the Bachelor of Education whether ECE (Early Childhood Education) or Primary, remained about the same. Sixty percent of the participants were 18-25 years old and 64 per cent were Pākehā/New Zealand European in the first survey with a similar breakdown in the second survey. In the second survey, ninety-two students completed the survey with this breakdown for stage of the programme: year 1 (43%), year 2 (43%) and year 3 (14%), which had not been asked during the first year of the survey.

Data were collected on assessment of preferences related to an online environment versus face-to-face instruction, previous experience with online learning, amount of time spent on the online tasks, types of tasks, which papers provided the most useful and least useful online activities, and questions related to their perceptions of the blended learning experience in their current programme of study. Qualtrics online surveys produced a composite of all the responses to questions and the related comments. Each member of the research team closely analysed five to six of the thirty-four questions. The analysis prepared by each team member was presented to the wider team for critique and discussion. The following year, students completed a second survey with most of the same questions with new questions related to: what stage of the programme they were in (year 1, 2 or 3), the time they spent in online study in particular papers and what additional supports would enhance their engagement and achievement.

A qualitative research methodology was used to ascertain students' perceptions of the online learning through a questionnaire. Qualitative research provides a platform to understand individual's interpretations of events (Cohen et al., 2007). The research team wished to find students' perceptions of this new experience of online learning through use of qualitative analysis (Cohen et al., 2007). The research team, in effect became a community of practice, a group focused on a joint area of interest to gain new insights for future practice (Wenger, 2007). This qualitative research paradigm lends itself to thematic analysis, an inductive method allowing themes to emerge from the participants' responses (Braun & Clarke, 2006).

University ethics approval was granted for this study. The researchers were all lecturers in the programmes of study researched, therefore, the only staff member to interact with students was the School Registrar who does not mark student assessments. All questionnaires were completed anonymously so participants felt safe expressing their opinions which provided a clear expression of student voice. Care and respect for student

participants was critical for this research and therefore, the research was not conducted during the semester when students are busy with assessments. The researchers have no idea which individual students completed the surveys and thus have no idea who made specific comments. There were 533 students invited to participate which represents all the 2018 students in the Bachelor of Education and Bachelor of Arts (Education) programmes. There were no exclusions and participation was voluntary.

Data Analysis

Thematic analysis was used to identify key understandings which were first grouped and reviewed individually and then, the research team met to consolidate findings using dialogue; discussion of examples from each group followed by debate to refine themes (Braun & Clarke, 2006; Wellington, 2015). The analysis and interpretation were presented in written form and verbally by each member at a team meeting. Within the team these tentative findings were discussed, critiqued and summarised the interpretation and results which are presented below.

Findings

When reviewing the data, several key themes emerged to help answer the research team's initial research questions. Firstly, in this findings section, is a discussion of participants' past experiences with online learning. This initial section is followed by key factors related to online learning in the Bachelor's programmes and online experiences in specific papers. Finally, it became clear that it was important to consider online learning and lecture engagement. In this section, unless explicitly stated that the data is from the 2019 survey, it is 2018 survey data that is reviewed.

Past Experiences with Online Learning

Results from the survey highlighted the fact that many of the students had limited experience with online learning: one student had completed four courses online and three had tried online learning unsuccessfully and were specifically avoiding any online programmes; others had limited experience with various online educational technologies.

In response to the question, *What previous experiences do you have with online learning?* a wide array of experiences was noted but generally the experiences were extremely limited. Some examples of experiences included having completed a couple of short courses online; undergoing research for school projects; and engaging with classroom tasks through Google classroom.

Many of those who had previous experiences with online learning noted that they did not like online learning and did not see the purpose of online tasks. Thirteen participants indicated that they had very little or no experience with online learning which is nearly 20% of respondents in the first year of the survey whilst 38% of those completing the survey in 2019 had little or no experience with online learning.

Learning Online in the Bachelor Programmes

Most participants (93%) felt they learned effectively in an online environment. Nearly half of the students reported that their online learning had a positive impact. However, many stressed the positive impact of the relational elements of face-to-face instruction.

The online component was expected to take one hour per week to complete but there was a spread of responses to how long it took the participants with 20 students reporting they spent only 15 minutes on the tasks compared with 15 students spending 30 minutes, 17 students needing up to one hour and 15 students spending over one hour; one participant did not respond to this question.

Those who could do the tasks quickly appeared to regard the online component more favourably. One respondent cited tasks took shorter time when they were *thought provoking and relatable to assignments*. A participant who identified as a self-directed learner felt there was no need to require students to engage in online learning; they should be able to choose. In contrast, several others with less experience felt the online tasks should be required and should be counted as part of the final mark for the paper. Of those surveyed, 40% were positive about the introduction of online learning *if* they had previous experience with the technological skills required and the task helped them to complete their assignments. Improvements in expressing themselves were reported by 40% of participants as a result of completing the online tasks which suggests that online tasks might have a positive impact on the face-to-face sessions. In fact, when asked the reason they spend more time on the online tasks, 39% chose *helps with assignments* which increased to 44% when specifically asked the question if completing the online tasks helped them complete assignments.

Comments from students surveyed expressed a range of reasons why they engaged in the online tasks:

It connects me with my lecturer.

It helps me reflect on my learning.

It helps me prepare for class.

Online Experiences in Specific Papers

Table 1 indicates that a range of activities were reported as being engaging including interacting and learning from an online study group, completing wikis and blogs, social media and podcasts. All first-year papers exceeded results for second- and third-year papers, except for *Introduction to Te Reo [Māori language]* paper (which focused on oral communication). These responses indicate that first year students were more amenable to the online component than students in the second or third year of their programme.

First year papers (BEd)	
Human Development	8 individual mentions
Education in Aotearoa New Zealand	4
Whānau Family and Society	4
Introduction to Te Reo	1

Table 1: Question 17: In which papers do you find the online tasks most engaging?

The related question asking which paper required the least amount of time, the *Introduction to Te Reo* was also the first-year paper reporting the least engaging tasks. The reason cited for why they did not engage for extended periods of time with the online

Introduction to Te Reo tasks was “because the face-to-face interaction was excellent”. Except for the *Te Reo* paper, in both years of the survey, students in first-year papers reported that they spent more time completing online tasks in their papers than second- and third-year students. These first-year students also reported that they received more support in their papers from lecturers to complete the online tasks.

Introduction to Te Reo	9 Number of mentions
Human Development	3
Education in Aotearoa New Zealand	2
Whānau Family and Society	2

Table 2: Papers requiring the least amount of time

A respondent who was particularly interested in the online component for *Whānau Family and Society* noted the value of the related tasks:

Because I am intrigued to learn more about the culture and how this will affect my pedagogy and classroom cultural experience. I wanted to read as much as I possibly could to further my learning.

In *Human Development*, one student highlighted the value of *Facebook* for sharing useful related information.

Certain tasks prompted participants to spend more time completing them. The most common reason was *it helps me with assignments*. Other responses included: *it helps me reflect on my learning; more interesting to me personally; I'm interested in it; my passion has been ignited*. Possibly the most honest response: *I just spend the time needed to understand and complete a required task. It isn't determined [by] what paper it is*. In contrast, some papers contained tasks that required less time to complete. One student commented that the *Human Development* tasks took less time as they were interesting, bite-sized tasks that made them easier to complete. One respondent indicated that each paper demanded equal time.

Students also indicated types of online engagement that were not organised by their lecturer, and therefore not required to be completed. For example, many students were part of an online study group through Facebook. It is likely that more students than those indicated on the survey are involved in these social media study groups as lecturers have overheard students talk about these during lecture times. These informal forums became places where students discussed concepts, their lecture readings and assignment requirements.

Online Learning and Lecture Engagement

If one purpose of online tasks is the enhanced engagement of students during lectures, the results of this survey did not indicate that such benefit was perceived. Nearly three quarters of the students indicated that the online tasks did not enhance class engagement although one quarter felt that completion of the online tasks improved their engagement in class. Furthermore, over 50% felt that completing online tasks did not help them complete their assignments, which suggests the importance of revisiting tasks so that it is clear how they support completion of assessment and learning outcomes for each paper. Similar percentages of respondents indicated that the online tasks did not have a positive impact on their understanding of the topic. Sadly, 68% felt that online tasks did not have a positive impact on freeing up time for them to devote to other things whether that included other study or activities to promote their personal wellness. Equally strong negative responses to the role of online tasks were noted for connecting with others and building

relationships.

With the focus on assignment completion, the biggest challenge identified by students was the fact that engaging with online tasks took time away from completing assignments for credit. It is interesting to note 22% of the students specifically commented that completing the online tasks had a positive impact on their attendance in the face-to-face sessions but in contrast, 45% reported that having online tasks did not increase their flexibility and they

would prefer more face-to-face instruction. When asked what other kinds of support would assist you to be successful, the predominant responses revolved around increasing face-to-face instruction time. The comments revealed that students come with preferences and that one-size pedagogical approaches do not fit all learners. Following further discussion in the research team, it was concluded that the comments suggested that the decision to replace face-to-face instruction with online or blended learning seemed to have disconnected more students than it connected, a net loss in connection. When reviewing the types of tasks students engaged in, the variety of tasks increased significantly in 2019 demonstrating greater lecturer involvement in developing a range of tasks that students would find more engaging. This range of new tasks included social media, google docs, e-portfolios and blogs after watching a series of videos.

Some students expressed a distinct dislike for many of the online tasks:

I think the online component does not add value to learning, it is tedious and seemingly pointless.

I came to uni for face-to-face interaction, relationships, and classes. If I enjoyed online learning, I would have continued with my previous study provider.

In favour of the use of online learning as part of a blended learning programme, one student commented:

Overall, I think the online component is a good idea, however it is hard to ensure everyone contributes.

In the following section we consider the themes that emerged and reflect on potential changes that can be made to current practices. We also briefly discuss the impact of COVID-19 on the online initiative based on our own anecdotal experiences.

Discussion

The findings reflect our observations over the two years of the survey unless explicitly stated and indicate a majority of students strongly favour face-to-face instruction, a recurring theme in the literature (Atmacasoy & MeAksu, 2018; Chan, 2019). At the same time, around 40% of the students either agreed or strongly agreed that they learned effectively online. There is arguably sufficient impetus then for a carefully *blended* approach to continue to be developed – in other words, an approach that maximises the experiences of both face-to-face and online experience for the students. Careful blending recognises that diversity of student experience and knowledge, the importance of clear justifications and contextualisation of experiences, and the emphasis on the synergy of the blend.

It is also important to keep in mind the wider political context within which this research sits. Online learning, digital learning, e-learning and blended learning have emerged as high educational priorities for the professional knowledge and application of all teachers in New Zealand. With this priority in mind, this School of Education research is focused on understanding the student experiences of these modes and approaches to learning

and teaching. Furthermore, we concur with Chan (2019, p. 46) that in our teacher education programmes, “Changing student-teachers’ conception of learning is not a straightforward process. It requires a collaborative effort between teacher educators and student teachers to make a shift from the traditional approaches to a new mode of learning.”

The pedagogy of blended learning provides some students with opportunities to engage in learning in a different way and possibly builds their confidence to participate more in the face-to-face environment. Therefore, as we analyse the online tasks for revisions and develop new programme, it will be important to collaborate with students when considering the pedagogy of the blended programme for course design (2019) to enhance students’ online presence. Over 50% of the students felt that completing online tasks did not help them complete their assignments, which suggests the importance of revisiting tasks so that it is clear how they support completion of assessment and learning outcomes for each paper. This is an important discussion point for lecturers as assessment is arguably the student focus and narrows their learning in each paper. How do we change our pedagogy to enhance their learning rather than their focus on assessment? Pedagogical changes as highlighted above in a teacher education programme also offer opportunities for student teachers to engage in discussion about pedagogy for their own future teaching practice.

Successful online tasks require activities that result in student engagement with new learning rather than just related to assessment completion and must clearly contribute to meeting the learning objectives of the paper. To support students in adopting less of an assessment focus in their online learning, it may be beneficial to highlight the connections between their online tasks and the expected dimensions of a beginning teacher. In addition, links can be made to the new digital curriculum element of *The New Zealand Curriculum*, and to the benefit of online teaching and learning given the important contribution of online learning during the COVID-19 lockdowns. In addition, connections can be made to the graduate profiles. For example, one goal of the Bachelor of Education graduate profile highlights the importance of being able to complete online tasks: *A researcher who locates, processes, uses and evaluates information from a range of sources by exhibiting a range of information-retrieval, information-processing, and presentation skills in locating, processing, organising and presenting information from a variety of sources* (School of Education, Auckland University of Technology, 2016). Likewise, the Bachelor of Arts graduate profile: *Demonstrate information literacy and use a range of appropriate tools and methodologies to locate, access or present information* (School of Education, Auckland University of Technology, 2016).

A critical task for the School and for each lecturer is to develop a clear and convincing argument for online learning in relation to both the learning outcomes and the graduate profile. One approach to this would be through the student’s own initial reflections on the value and importance of online learning as a tool for themselves as teachers, and for the communities in which they work. The data also reiterate a tendency for students to feel uncomfortable when the change is either unfamiliar or lacks ‘buy-in’. Although Geer (2009) noted the advantage of online tasks being students could engage at a time of their choice, this survey showed that only a few students noted that was helpful for them. This leads to the next observation from the data regarding the range of opinions shared by students.

The higher levels of acceptance from the first-year students (evident in both years of the survey) can be seen as an indication of their amenability to the development of online learning because of their lack of familiarity with any other structure for their programme. In analysing the students’ perceptions across the three stages of the Bachelor programmes, it was evident that the first-year students had more positive perceptions of their online tasks than second- and third-year students. This was particularly evident in the identification of papers in which the students found the online tasks engaging. Second- and third-year

students were not previously expected to engage in online learning beyond a storage space for readings and uploading assessment rather than for planned tasks between lectures. By the time of the second survey, second year students had engaged with online tasks in their first year of study, and this was reflected in their greater engagement and participation. Their online learning experiences were previously much more ad hoc, and generally limited to accessing resources, class notes, and study guides; submission of assessments in the plagiarism detection software, and reception of lecturer and administrator announcements.

For all students, the addition of specific tasks for each paper was a new feature of their study. For the first-year students, the addition of these tasks is arguably less remarkable or notable and so, having never known the programme without online learning, this could explain their willingness to regard their online tasks as engaging. However, it is also possible that the first-year papers were more engaging due to the development of online tasks that were designed for the particular contexts of the first-year papers. The research will need to continue to verify if first years continue to see the value of the online component or whether more face-to-face learning is preferred. As the students were not asked the stage of their study, they were at in the first survey, and there is a significant amount of no responses for the question regarding papers that were engaging, further questions will be required to deepen an understanding of the students' openness to their online tasks in relation to their stage of study. In the subsequent survey (2019), it became clear that first and second year students (who were first year students in 2018 when the online tasks were introduced), engaged more with online learning than third year students.

There was a very high percentage of students who indicated in the survey that they strongly favoured face-to-face instruction; although some students did recognise that engaging in the tasks before a face-to-face session would be beneficial. This reflects findings from Fan et al. (2018) who noted the importance of online tasks as preparation for face-to-face sessions. With around 40% of the students either agreeing or strongly agreeing that they learned effectively online, there is arguably sufficient impetus for a carefully blended approach to continue to be developed. This approach necessitates more effective attention to class discussions around the purpose of online learning tasks, and to providing tasks that link directly to learning outcomes in a way that motivates learning.

The data revealed that, for those who preferred face-to-face learning, the relational aspects of the traditional classroom were of significant value. It is particularly encouraging to see that student teachers value the relationality of their educational experiences considering observations of increases in student anxiety with regards social interactions. If online tasks are going to be effective, it is critical to develop approaches that provide opportunities for building relationships and connections, and regular feedback from lecturing staff. These tasks can also be leveraged for important discussions with student teachers about the nature of relationships and engagement in different teaching and learning environments. In other words, to explore the question of what makes a face-to-face session more or less relational. This then invites student teachers to engage with sociocultural theory in truly relevant and personal ways as they explore the impact of different social experiences on their own learning. Given much of the research on blended learning identifies the role of 'flipping' the classroom, it is also worth exploring how online tasks are not simply beneficial relational experiences, but that they enhance opportunities for working collectively in the face-to-face space.

Another important aspect of engaging with students about their engagement with online learning is to explore the challenges that they face so that lecturers can find ways to ameliorate those challenges. The surveys indicated a range of challenges that lecturers could find strategies for supporting students, but there were other challenges that were out of their control which generally related to problems with technology such as laptop malfunctions or

issues with the university connections or library or the need to reduce class sizes. On the other hand, other challenges could be alleviated: lack of participation of peers in online discussion forums and the amount of time needed for online tasks that could be used for completing assignments. Lecturers continue to look at ways to support students to engage with and complete the online tasks.

Students also suggested a range of support that could be helpful including the hopefully tongue-in-cheek 'no online learning.' Clearer expectations and instructions would be helpful especially as it relates to what is required/what is not required and linking online tasks to assignments so that completing online work does not feel like an additional burden. Other ideas included video tutorials and academic literacy support.

The previous themes point to the importance of online tasks that relate directly to individual and group understanding of learning outcomes. The current student survey results suggest that without *requiring* online tasks to be completed, and without showing a clear association between tasks and assessment, many students in the current cohort may not engage with them. Is this a critical problem? Should online learning be a choice? Should online tasks relate explicitly to assessments for credit?

In order to answer these questions, it is important to return to the impetus for the inclusion of online tasks. If online tasks are driven by the aim to provide more flexibility, to grow more opportunities for personalised and networked learning experiences, and for a wider range of more or less authentic or real learning experiences, then there is a clear tension between these aims and mandating or even incentivising student engagement. If on the other hand, the aim of online learning tasks is to build in more effective and time saving mechanisms for the teaching and assessment of prescribed learning outcomes, then it is also important to keep in mind that face-to-face teaching and learning experiences are not immune from the same conditions and challenges. Student engagement and student presence are not the same thing. Well-crafted face-to-face learning activities still run the risk of failing to engage the student.

Some participants cited the fact that when others did not engage with the online tasks, they felt de-motivated as well. The demand to prepare students for the workplace can be extended to online tasks, but in and of itself is problematic, but without that focus, graduates may not be self-motivated which is critical for completing tasks successfully in the workplace. Tasks that scaffold completion of assignments and/or require interaction with other students would be most favoured by students as 'beneficial', particularly online discussion groups and wikis.

The data gleaned from these surveys has provided an important starting point for understanding student perspectives and experiences of online learning in general, and online learning tasks specifically. There was a small, but significant percentage of participants who found the online tasks useful and that the lecturing staff needed to be more explicit about the purpose of online learning and the online tasks themselves. Given that 43% of respondents wanted online learning to cease, suggesting year 2 and 3 students prefer the status quo, these results indicate the importance of scaffolding students to understand the value of the online tasks and an introduction to the online skills required perhaps through tutorials.

Ultimately, to further enhance the online components of the programmes, the nature of these tasks needs to be considered in a way that creates an alignment with the face-to-face classroom experiences and not as an apparently separate 'add-on.' This task is significant not just for the explicit elements of the student learning, but also for the more tacit elements as they engage with pedagogical design as students. In other words, these experiences feed into their understanding of the different experiences of design and alignment that impact on teaching and learning and that will influence their experiences and

expectations as teachers. As with all educational change, developments of innovative approaches to learning online also need to address the values, beliefs and experiences of the wider education community for whom these changes will be significant.

There are three key limitations of this study. Firstly, given the number of students in these three study programmes, 69 students (2018); and 92 students (2019) were a relatively small response rate. The conclusions cannot be generalisable to the whole cohort, but a useful starting point for analysing and adjusting the online tasks created. Secondly, further research needs to be conducted considering the impact of COVID-19. Would a survey completed after lockdowns from COVID-19 produce different results? If the tasks were required, would there be greater satisfaction and clearer links to achievement? Finally, the online tasks in each paper were unique to that paper, therefore, it may be useful to conduct research around specific types of online tasks. Further research with the same cohort of students over time and with changes to lecturer practice suggested from these surveys would be useful.

Impact of COVID-19 Lockdown

Armed with the information above from the survey and confronted with lockdown, lecturers needed to quickly come face-to-face with the reality that all learning would be online even though students clearly preferred face-to-face instruction. By keeping in mind, the key themes outlined in the Discussion above, lecturers invested time in communicating with students through synchronous sessions and regular updates focused on reducing anxiety during the lockdown. Clear instructions at the beginning of each week provided students with a structure to focus on and a checklist to guide their week. Because there were no face-to-face sessions, all online activities were required and thus engagement was higher than during previous iterations of 'blended' options. The synchronous sessions provided a halfway point between face-to-face learning and asynchronous tasks providing opportunities for development of relationships between students and lecturers as well as students and students. Driven by assessment, online sessions were set up specifically to deal with preparing students for completing assessments. These sessions were well attended online.

Although the research team has not conducted a further survey to ascertain the role online learning played during and post-COVID-19 lockdowns, anecdotal evidence from conversations and emails from students, student assessment results, and satisfaction surveys, indicated that while students still preferred face-to-face sessions, the changes made to online learning during the lockdown were appreciated and more engaging and there were not significant impacts on results. The research team offers the following anecdotal accounts from their own papers:

My students preferred the practicum goal setting session in groups of ten as part of a zoom session rather than in a lecture theatre. It also reduced my time having to review each individual's goals because I was able to do that during the zoom session. Students indicated to me that it was valuable to hear ideas for goals from their classmates, which was more possible in the smaller group. The other successful strategy was using online break-out groups for student discussions and role plays rather than the lecture theatre. I was able to go in and out of each group to support their learning. Students commented that although it was online, they felt they had greater opportunity to engage with their colleagues than in the lecture theatre.
(Author 1)

One of the strategies I developed from online learning necessitated by COVID-19

was the breaking of assignments into weekly steps for completing assignments with suggested dates for completing these. Each of the steps had relevant videos from sources such as YouTube or Auckland University of Technology Library workshops. They covered topics such as understanding your assignment, writing a reflection, conclusions, proof reading, and referencing. After the first assignment, I addressed issues of concern that emerged in a large number of students such as when to use upper and lower cases and full stops. Students reported that they found this a useful approach (Author 2).

My students have always been positive about the online learning as they are different activities (with introduction to different types of platforms like Coconet TV, E-Tangata, Tagata Pasifika Plus). Also, some are actual readings linked to their assessment (to give students ideas, so that they can understand the context more), especially if they are new to Pasifika Education. My first year of online learning, I got my Year 3 class to watch 'The Orator movie' online via Kanopy, along with questions to think about. They loved that Samoan movie; we could easily spend the whole day doing endless talanoa. This year (2021) I get feedback from their Mahara page where all their online learning reflections are kept. Students appreciate the time and effort to read their work – especially my detailed comments. As one student said – I was having a lousy day, but once I read your feedback it completely lifted me (Author 3)

There were a group of students in China who had been working online earlier due to being unable to come to New Zealand. I noticed that when we all went online a solidarity was built – we felt more connected with these students and together. Overall, I noticed, that it wasn't as simple as moving material from face-to-face to online. The lockdown forced me to be more daring with online learning, such as finding tools to facilitate collaborative activities. Moreover, new rituals needed to be established (e.g., cameras on, mics muted), new modes of communication, and new understandings of who I was as a lecturer in a digital space. I lectured differently, and I still don't know if it was 'me' By the way, a deaf student told me she hated online learning, she said I was 'boring'. I take it she missed, like I did, the fullness of gesture, of being present, and the bouncing ideas off each other in the absence of the mediating digital membrane. (Author 4)

Conclusion and Recommendations

With the limitations noted above in mind, it is possible to draw some tentative conclusions from this study and some possible recommendations for changes for programmes and for lecturers considering development of online components in their courses. Two main themes have emerged from the data that guide aims for increased participation from students. Firstly, clarifying the value of online learning and its relation to specific assessments will be important. The other key principle learned would be the value of interactive tasks that include building relationships with staff and students while building knowledge of concepts for each paper. Many students enrolled in these programmes had limited experience with online learning which suggests the importance of the need to explicitly discuss the purpose of online learning and to provide tutorials to practice the specific online tasks or to 'have a play' with the software being used.

The results of these surveys are encouraging in that a small but significant percentage of participants engaged with the online tasks and found them valuable for their

learning. The research team is optimistic about proceeding with further iterations of the questionnaire to gauge the benefits of the changes following the first survey, and to target research to consider specific online tasks that promote interaction with others, contribute to co-constructed learning and scaffold technological knowledge, content knowledge and pedagogical content knowledge as well as technological pedagogical content knowledge. Further research related to specific online tasks might look specifically at the fact that many online activities became informal forums where the students discussed concepts, their lecture readings and assignment requirements and how this could become an explicit part of the online programme.

Another particularly important aspect of this research needs further expansion. There is limited lecturer voice in this research so far; limited only to a few observational notes. By interviewing or surveying lecturers, it would be useful to find out what is going well from a lecturer's point of view and what changes need to be made and what has been the impact on:

1. learning
2. assessments
3. personal/professional development
4. and lecturer wellbeing as well as other points that lecturers would like to raise.

Finally, this research indicates a few cautions to heed. Firstly, the research suggests that online tasks need to be related to assessment tasks to be completed for credit. If not related to specific, real and authentic assessment tasks for the class, aligning the online tasks to graduate profile requirements or digital citizenship would be beneficial. Secondly, the amount of time for preparation, teaching and assessment review by lecturers was not reduced in online learning and in many cases, increased. We need to see online learning as being central to the course design from the beginning. Rather than taking existing courses and adding online components, the course logic needs to be worked through at the inception phase for course development. More and more online teaching seems to be incrementally being mandated by universities, when particularly in teacher education, there is still immense value in face-to-face learning. Thus, although the research team has noted some positive benefits from this online initiative particularly after changes were made following the survey and in light of the COVID-19 lockdown, perhaps a more subterranean shift was occurring, when lecturers began to question who they were as lecturers in the sudden jolt to online teaching.

References

- Allen, I. E., Semand, J., Poulin, R., & Taylor Starut, T. (2016). *Online report card: Tracing online education in the United States*. Babson Survey Research Group and Qualitative Research Group LLC.
- Atmacasoy, A & MeAksu, M. (2018). Blended learning at pre-service teacher education in Turkey: A systematic review. *Education and Information Technologies* 23, 2399–2422 <https://doi.org/10.1007/s10639-018-9723-5> <https://doi.org/10.1007/s10639-018-9723-5>
- Braun, V. & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), 77-110. <https://doi.org/10.1191/1478088706qp063oa>.
- Chan, E. (2019). Blended learning dilemma: Teacher education in the Confucian heritage culture. *Australian Journal of Teacher Education (Online)*, 44(1), 36-51. Retrieved from <https://search.informit.org/doi/10.3316/ielapa.183764067364955> <https://doi.org/10.14221/ajte.2018v44n1.3>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge. <https://doi.org/10.4324/9780203029053>
- Education Council of New Zealand. (2017). *Our Code Our Standard: Codes of professional responsibility and standards for the profession*. Education Council. <https://www.educationcouncil.org.nz/sites/default/files/Our%20Code%20Our%20Standards%20web%20booklet%20FINAL.pdf>
- Fan, L. C., Salleh, S., & Laxman, K. (2018). Embedding video technology in enhancing understanding of the biology concept of breathing: A Brunei perspective. *E-learning and Digital Media*, 15(5), 217-234. <https://doi.org/10.1177/2042753018797260>
- Gambari, A. I., Yaki, A. A., Gana, E. S., & Ughova, Q. E. (2014). Improving secondary school students' achievement and retention in biology through video-based multimedia instruction. *InSight: A Journal of Scholarly Teaching*, 9, 78-91. <https://files.eric.ed.gov/fulltext/EJ1035855.pdf> <https://doi.org/10.46504/09201407ga>
- Garrison, D. R., & Kamuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and higher education*, 7(2), 95-105. <https://doi.org/10.1016/j.iheduc.2004.02.001>
- Geer, R. (2009). Strategies for blended approaches in teacher education. In E. Stacey & P. Gerbic (Eds.) *Effective blended learning practices: Evidence-based perspectives in ICT-facilitation education* (pp. 39-61). Information Science Reference. <https://doi.org/10.4018/978-1-60566-296-1.ch003>
- Harun, C., & Mustafa, O. (2016). Critical components of online learning. Readiness and their relationships with learner achievement. *Turkish Online Journal of Distance Education*, 17(2), 98-109. <https://doi.org/10.17718/tojde.09105>
- Keengwe, J., & Kang, J.-J. (2013). A review of empirical research on blended learning in teacher education programs. *Education and Information Technologies*, 18(3), 479-493. <https://doi.org/10.1007/s10639-011-9182-8>
- Keengwe, J., & Kidd, T. T. (2010). Towards best practices in online learning and teaching in higher education. *Journal of Online Learning and Teaching*, 6(2), 533-541. http://jolt.merlot.org/vol6no2/keengwe_0610.pdf
- Kelly, N., Clará, M., Kehrwald, B., & Danaeher, P. (2016). *Online learning networks for pre- service and early career teachers*. Macmillan. <https://doi.org/10.1057/978-1-137-50302-2>
- Lim, C. P., & Wang, L. (2016). *Blended learning for quality higher education: Selected case studies on implementation from Asia-Pacific*. UNESCO. unesdoc.unesco.org/images/0024/002468/246851E.pdf

- Lim, C. P., & Wang, L. (2017). *Blended learning for quality higher education: Selected case studies on implementation from Asia-Pacific*. UNESCO. unesdoc.unesco.org/images/0024/002468/246851E.pdf
- Marshall, S. (2006). New Zealand tertiary institution e-learning capability: Informing and guiding e--learning architectural change and development project executive summary. https://www.educationcounts.govt.nz/data/assets/pdf_file/0011/58286/20060726TeLRFSummary.pdf
- Ministry of Education. (2017). *Digital technologies and the national curriculum - What's it all about* <http://elearning.tki.org.nz/Teaching/Curriculum-areas/Digital-Technologies-in-the-curriculum>
- Mozelius, P., & Hettiarachchi, E. (2017). Critical factors for implementing blended learning in higher education. *International Journal of Information and Communication Technologies in Education*, 6(2) pp. 37-51 ISSN 1805-3726 <https://doi.org/10.1515/ijicte-2017-0010>
- Nortvig, A-M., Petersen, A. & Balle, SH. (2018). A literature review of the factors influencing elearning and blended learning in relation to learning outcome, student satisfaction and engagement. *Electronic Journal of e-Learning* 16(1)
- Olakanmi, E. E. (2017). The effects of a flipped classroom model on students' performance and attitudes toward chemistry. *Journal of Science Education and Technology*, 26, 127-137. <https://doi.org/10.1007/s10956-016-9657-x>
- School of Education, Auckland University of Technology. (2016). *Graduate profile for the Bachelor of Education*.
- Shu, H., & Gu, X. (2018). Determining the differences between online and face-to-face student-group interactions in a blended learning course. *The Internet and Higher Education*, 39, 13-21. <https://doi.org/10.1016/j.iheduc.2018.05.003>
- Simpson, M., & Anderson, B. (2009). Redesigning initial teacher education. In E. Stacey & P. Gerbic (Eds.), *Effective blended learning practices: evidence-based perspectives in ICT-facilitated education*, (pp. 62-78). IGI Global. <https://doi.org/10.4018/978-1-60566-296-1.ch004>
- Stacey, E., & Gerbic, P. (2009). Introduction to blended learning. In E. Stacey & P. Gerbic (Eds.), *Effective blended learning practices: evidence-based perspectives in ICT-facilitated education*, (pp. 1-19). IGI Global. <https://doi.org/10.4018/978-1-60566-296-1.ch001>
- Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on E-learning*, 6, 81-94. <https://www.learntechlib.org/primary/p/6310>
- Wellington, J. (2015). *Educational research: Contemporary issues and practical approaches* (2nd ed.). Bloomsbury. <https://doi.org/10.5040/9781474236966>
- Wenger, E. (2007). *Communities of practice: Learning, meaning and identity*. Cambridge University Press.

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