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# A view through the long lens: Pre-service teachers' perceptions of multi-campus course delivery

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# A view through the long lens: Pre-service teachers' perceptions of multi-campus course delivery

## **Abstract**

This paper explores the results of a survey that was conducted with 277 pre-service teachers studying at two regional university campuses in Victoria, Australia in 2014. Data showed that participants expressed high level of satisfaction with the quality of their undergraduate courses in education including the flexible teaching and learning experiences. However, many reported experiencing frustration with accessing cloud-based learning materials and support services, including communication with lecturers. Challenges in accessing learning materials were mainly attributed to slow internet speed which increased the time taken to download resources. Access to support services and lecturers was made difficult because many key staff were located at the larger, urban campuses, thus sometimes causing delay in communication with them.

This study recommends that university faculties review the accessibility of services, facilities and resources for rural and remote students. Recommendations include greater attention to the presentation of online learning materials to ensure accessibility for all students, regardless of internet speed and location. Moreover, findings showed that by closer examination of the accessibility of services to reflect the reality and complexity of students' lives, universities could increase equity for rural and remote students.

## **Keywords**

teacher education; off-campus study; rural and regional students; multi-campus teaching; cloud-based learning

## Introduction

Most universities in Australia are committed to providing increasingly flexible and equitable study experiences. For example, Monash University's strategic plan (Monash University 2015) highlights excellence, inclusivity and international perspectives. Similarly, Deakin University's Strategic Plan (Deakin University 2015) focuses on globalisation, academic excellence and inclusivity in a digital world. The current project began as a consequence of imperatives from a university strategic plan that prioritises online and cloud-based, flexible learning for all students, and the coming together of academics from the regional sites to explore communication and collaboration across two campuses in one institution. Alongside the university's strategic plan are the challenges faced in ensuring rural and regional communities' access to resources and quality education in the face of an increased focus on metrocentric policy and agendas (Walker-Gibbs, Ludecke & Kline 2015).

The project aimed to investigate students' perceptions of the multi-campus delivery of two initial teacher-education courses in a university with two campuses in regional and rural Victoria, Australia. The university also has a large urban campus as well as many off-campus students enrolled in its courses. Specifically, the project focused on pre-service teachers' study experiences in early childhood education and primary education undergraduate teaching courses. The regional campuses have a large cohort of students who study in off-campus modes, and thus may have a different study experience from those studying on campus. Hence in this study, we aimed to identify students' perceptions of services, facilities and support.

Furco (2012) suggests that developing communities of learners are significant in managing students' learning outcomes, as they support students' identity. However, universities may experience challenging teaching and learning issues such as fragmentation, duplication, inconsistency and lack of equity in opportunities for students in certain designated groups (Sife, Lwoga & Sanga 2007). This has been reshaped by online educational technology, and ubiquitous access has enabled Australian universities to rethink how they deliver programs (Smith, Ling & Hill 2006). Such a paradigm and technological shift provides opportunities to meet the challenging demands of serving multiple campuses (Bock & Burgos-Mira 2010), especially those in regional areas.

This article will focus specifically on a study that investigated the perceptions of pre-service teachers studying at one university via off-campus modes of delivery from one regional and one rural campus in Victoria, Australia. The aim of this research was to identify the aspects of pre-service teachers' learning environments that students perceived as being successful, and factors that they found challenging to their learning. An analysis of the findings will be presented and the implications of these findings will be discussed.

## Background

Gerlič (2009) posits that education delivered by distance modes has experienced many transitions in recent years. For example, the model discussed in this study incorporates a range of different digital technologies, where in previous decades, hard-copy study material would have been provided to supplement class-based learning. Such shifts to the use of digital technologies corresponds to the need to retain value for learners by providing the desired outcomes effectively and in an economically prudent manner, as well as retaining authenticity. Furthermore, Monaghan et al. (2011) suggest that when learning via electronic media, students are required to take more responsibility for their own learning and to develop digital literacies and the emotional competencies that enable them to take responsibility for their study. Paatsch, Cloonan and Hutchison (2015) found that educators in universities need to understand their students' digital funds of knowledge and provide rich opportunities to support these students in developing the digital literacies that they will encounter in their own learning and in teaching practice. However, Monaghan et al. (2011) further suggest that there is a greater need for lecturers to be clear about the outcomes they intend to achieve and to be critically aware of the most effective ways to achieve these outcomes with their students.

Participants from two regional campuses of the selected university in Victoria generally live in rural and remote areas, some more than two hours' travel from the campus. Many are mature-age students who have families and are in part-time employment, and therefore often need to balance work and family responsibilities with their study. To make this more achievable, the university in which the

researchers are located offers multi-modal delivery and flexible learning opportunities. For example, the early-childhood education course incorporates face-to-face teaching in intensive classes that are held once a month with interactive video conferencing and cloud-based learning (which is similar to online learning, but includes multimedia resources and other opportunities to engage students with materials online). The monthly intensive classes encourage students to engage with learning materials independently and online for the majority of their study. In contrast, students enrolled in the urban campuses attend weekly face-to-face lectures and tutorials, and engage with on-line materials and discussions.

We wished to consider four main factors in this study: (1) the specific perspectives of students living in remote and rural areas; (2) the relationships with academic and support staff; (3) the accessibility of academic and support staff; and (4) the relevance of material effectiveness of teaching methods. Chanock, Horton and Stephenson (2012) state that many students come unprepared for the demands of academic study, and experience difficulties with managing their time, accessing resources and developing academic-literacy skills. Although students are supported in developing many of these skills throughout their attendance at university, we were particularly interested in the specific or additional challenges faced by those students living in rural and regional areas in a multi-campus university. Winchester and Sterk (2006) argue that universities may experience challenging teaching and learning issues such as fragmentation, duplication, inconsistency and lack of equitable opportunities for students across the various sites. As Semke and Sheridan (2012) suggest, in a multi-campus educational setting, the larger sites tend to dominate decision- and policy-making, often not giving consideration to the smaller campuses. This is similar to usual trends in rural areas, where the knowledge is more likely to be produced in urban settings (see Walker-Gibbs, Ludecke & Kline 2015), and therefore students are less likely to consider challenges and opportunities afforded in these contexts. Thus, it is important to understand the opportunities and challenges for different cohorts of students' experience to provide a high-quality learning experience and environment for *all* students.

## Methodology

This research project collected both demographic and qualitative data in the form of an anonymous online survey. As Denzin and Lincoln (2005) point out, methodologies that are described as qualitative essentially involve people as individuals. Such methodologies sit comfortably with the complexities of human concepts and contexts, with the involvement of the researcher shaping research processes and findings. Denzin and Lincoln (2005) define qualitative research as "a situated activity that locates the observer in the world. It consists of a set of interpretive material practices that make the world visible. These practices transform the world...making sense of meanings people bring" (p.6).

Participants for this research, involved students enrolled in either an early childhood education undergraduate course or a primary education undergraduate course at one of the two regional/rural campuses of the selected university. Both courses are four-year, full-time Bachelor of Education courses. A total of 227 complete surveys were manually collected from 73 early childhood education pre-service teachers and 154 education primary pre-service teachers. Table 1 shows the participants' demographic details, including gender, age and the course in which they were enrolled at the time of data collection. Results show that there were more females enrolled in both courses, with only 3% of those enrolled in the early childhood education course being male. The majority of participants (71%) enrolled in the Bachelor of Education (primary) course were aged between 20-29 years and were enrolled full-time. Participants enrolled in the Bachelor of Early Childhood Education course were evenly spread across the three age groups of 20-29 years, 30-39 years and  $\geq 40$  years, with almost one-third (32%) enrolled part-time.

**Table 1.** Demographic details of the participants (N=227)

		<b>Bachelor of Education Early Childhood (n=73)</b>	<b>Bachelor of Education (Primary) (n=154)</b>
<b>Gender</b>	Female	97%	77%
	Male	3%	23%
<b>Age (Years)</b>	$\leq 19$	0%	10%
	20-29	37%	71%
	30-39	31%	10%
	$\geq 40$	32%	9%

<b>Enrolment status</b>	Full-time	68%	97%
	Part-time	32%	3%

Participation was voluntary, and data were gathered by inviting participation at the end of an on-campus class during the final two classes of the trimester (weeks 10 and 11). A research assistant who was unknown to the students explained the study and distributed the Plain Language Statements and surveys. This removed any feelings of pressure to participate or coercion from the academics in the research team, some of whom would be known to the students. Consent was deemed by voluntary participation. Students returned completed anonymous surveys in a box collected by the research assistant at the end of the class.

The survey invited the participants to respond to five open-ended questions related to cloud-based learning, content delivery and overall communication:

1. What challenges are you experiencing in the following aspects of your teacher education course: cloud-based learning, content delivery, communication?
2. What have been the most helpful sources of support for your study?
3. What have been the least helpful aspects of your study?
4. What have been the most innovative aspects of your course?
5. List any suggested recommendations for change to the teaching and learning arrangements at this university in your current teacher-education degree.

Analysis of the data involved descriptive analyses of the survey responses. Thematic analysis (i.e., an identification of common themes) occurred across the five open-ended questions of the survey. The information gathered from this project is being used as a pilot for ongoing development of future collaboration, communication and connectedness across the two campuses.

## Findings

This section discusses each of the questions posed to students separately. The following section discusses the implications of the data.

1. What challenges are you experiencing in the following aspects of your teacher education course: cloud-based learning, content delivery, communication?

Students reported that they loved the flexibility of cloud-based learning as it enabled them to be more flexible with their studies and fit their learning around other commitments, such as family. There was a positive sense of being able to go back and access materials in order to review and re-engage with the work at a later date.

However, some students felt that cloud-based learning was isolating and difficult to adjust to without face-to-face support. Technology issues such as finding support and slow/limited Internet speed challenged the way the students were able to engage with the materials online. Confusion with how and where to locate specific material and delays in lecturers' response to questions were highlighted as difficulties.

Internet speed particularly affected rural students, who frequently referred to the Internet "crashing". These comments were often made in conjunction with material being difficult and slow to download. This is consistent with the findings of Taghikhani and Babalhavaeji (2015), whose participants referred to slow Internet and Internet costs as challenges in online study. Moreover, similar to Kirkwood (2014), Taghikhani and Babalhavaeji (2015) reported that non-user-friendliness of sites also made study difficult. However, Taghikhani and Babalhavaeji (2015) found that flexibility of study and being able to work from home were considered significant factors in making study possible.

Students focused on the technology in terms of feeling frustrated that some material could only be downloaded onto an iPad, and that some material could be hard to interpret when learning online. Interestingly, not only the "how" of the technology was challenging but, just as importantly, the way that students were able to understand and comprehend the content online also presented challenges, which were linked to the *differences in the nature and presentation of material and large quantities of material to read and digest in a short time.*

Although students' responses were divided between wanting more and less class-based learning, this is partly explained by the findings of Kirkwood (2014), which determined that content needs to be delivered in ways that serve the value of the learning material rather than as determined by the technology.

### **Communication:**

Responses related to challenges with communication were also a common theme that emerged from the data. This is consistent with the findings of Gok (2015, p.85) that "face-to-face personal interaction between students and instructor might be limited in online courses". As Gerlič (2009) asserts, communicating with students can be complicated by the transfer from more direct forms of teaching (face to face) and multi-modal learning, where students are able to access information from a variety of sources with greater flexibility. This could be because, as Carville and Mitchell (2000) found, lecturers also need to learn how to use new technologies and apply them effectively in their teaching. Significantly, students mentioned that as unit chairs (i.e., academics responsible for the administration and development of the unit) are often located on the other campuses, sometimes there is a delay in getting answers to questions.

#### 2. What have been the most helpful sources of support for your study?

Helpful lecturers, a supportive learning environment and flexibility in study options were the most common responses to this question. Similar to the themes occurring in the previous question, responses to this question showed that students were reflecting on the fact that the online technology and flexible learning options made it possible to study with work and family commitments.

Face-to-face classes and the ability to ask questions that they provided were seen as strengths, but there was a recognition that the flexible ways of delivery could work alongside other supports such as the "library service that delivers material to our homes", "learning academic literacy skills" and "seeing excellent teaching examples".

Students' comments show the value of a university approach that is designed to support both on- and off-campus learning. These findings echo those of Wingate (2012), who highlighted the value of students learning how to use technologies effectively and to apply the necessary skills for successful study. This also indicates that learning how to study and apply academic writing and research skills need to be taught in ways that fit within the lives of students in contemporary society (Wingate 2012). Overall, there was a sense that the combination of cloud learning and intensives, alongside "having information at my fingertips on the cloud", when combined with ease of access to resources, enabled the students to be engaged in their learning.

#### 3. What have been the least helpful aspects of your studies?

Many students reported the slow Internet and challenges of accessing online materials as being the greatest impediments to their studies. Comments included:

- *Readings can be hard to download.*
- *It can feel isolating when the Internet is not working well.*
- *Horrible lecture times. Too early!*
- *Reading online material can be horrible.*

Other students commented that having lectures based at different campuses made their study feel more remote:

- *With lecturers or unit chairs not being on campus, getting answers means having to rely on cloud or email answers.*
- *Different people taking tutorials can sometimes mean difficulties in getting clear information.*

Students' responses suggest that because many senior academic staff were situated at the larger campuses, communication seemed to feel more remote and less accessible. These findings suggest that those academics holding the greatest ability to answer questions for the students were not generally available on the smaller, regional campuses. Furthermore, distance from regional and rural campuses could mean that sessional staff taught on these campuses because permanent academic staff who lived nearer the larger urban campus wished to avoid travel costs.

4. What have been the most innovative aspects of your course?

Although there were many negative comments about information and communications technologies, this also drew the greatest number of responses in relation to innovation. Comments included:

- *Using Smart Boards and iPads.*
- *Learning to use ePortfolio.*
- *Putting technologies into practice.*
- *Resources on [the cloud] and being able to look back on lectures.*
- *Learning to use digital presentation resources.*
- *Electronic resources in the library.*

The digital focus of these comments suggests an increasing recognition that access to technological skills and tools aids both personal study and professional teaching. Sharkova (2014) suggests that when using digital resources, students have a greater sense of agency in their studies. She also points out that the attractive nature of many digital resources makes them exciting to use in the classroom. The responses to this survey question also support the findings from a recent study that investigated pre-service teachers' understandings of the capabilities afforded by technology-based tools as vehicles to explore and enrich 21st-century literacy learning in ways that provide the students with agency (Paatsch, Cloonan & Hutchison 2015). Findings from both studies highlight the importance for educators in higher education to support pre-service teachers' use of these technologies in ways that promote student learning and foster creativity and innovation.

5. List any suggested recommendations for change to the teaching and learning arrangements at this university in your current teacher-education degree.

Feedback about recommended changes was mainly divided between increased face-to-face classes and fewer classes. Some appeared to prefer online study, while others found it limiting. Interestingly, although the model of learning was a more blended approach of online, face-to-face and intensive, the responses were given in terms of an either/or binary; face-to-face teaching was characterised as either good or difficult and vice versa for online/cloud. Face-to-face was seen to be "better", allowing the learner to stay within their comfort zone of preferred learning, but online was seen as minimising travel time, allowing opportunities for reflection on materials presented in a face-to-face context and learning at one's own pace. Overwhelmingly, students' relative discomfort with learning online and difficulty in accessing resources were seen as definite disadvantages:

- *Can be hard for students who don't learn well from online courses. Depends on how each student learns.*
- *Online access makes it difficult at times.*
- *Online has some limits when questions are needed to be asked.*

The responses indicated contradictory thinking about the course. However, as Lucas (2014) states, the introduction of new technologies in university education challenges the status quo about how learning occurs. He points out that blended-learning models, where class time is reduced and independent learning increased, increases flexibility for students, but also gives them greater responsibility for their own learning. Hence, as Sharkova (2014) found, cloud-based learning challenges the way learning and teaching are understood, and learners need to be given greater autonomy in making learning choices so that the level of engagement is consistent with the mode of learning and relevant to the learner.

## Discussion

As pointed out by Channock et al. (2012), multi-modal delivery does require students to be prepared to spend a high proportion of their study time working on their own. In contemporary academic settings, this will typically include expectations of engaging with digital technologies. However, more than the technical knowledge of using the hardware and software involved, it is also necessary for students to have the emotional competencies such as self-efficacy (Bandura 1997) and intra-personal intelligence (Gardner 1993) to take responsibility for their own work ethic. Gupta (2006) refers to the importance of self-understanding as a characteristic of teacher effectiveness.

Similar to the findings of Gok (2015), students in the current study were strongly focused on the challenges of technology and Internet speed, and how these impeded their study. Sharkova (2014)



referred to concerns of this nature when she pointed out that the introduction of new and advanced technologies in higher education does not, in itself, improve teaching and learning. However, when combined with the respondents' comments about face-to-face classes, travel and communication with lecturers, their comments about modes of learning and content appeared largely underscored by the frustrations of managing study within already busy lives. No feedback was given on what they were learning, with the focus predominantly being on how the content was delivered and the implications of that delivery method (both positive and negative), rather than the content itself. This, along with the participants' responses, suggests that material and study modes need to be adapted to how they will be used. Kirkwood (2014) suggests that delivering higher education by modes that depend on technology may still be an area of development for university faculties. Moreover, academics providing learning materials and delivering face-to-face classes may need to adapt their approach to accommodate different learning contexts.

The students' feedback about mixed-mode learning suggests that flexibility is a key to enabling successful study in contemporary teacher education, and that there is a strong need for faculties to focus on it. It is equally likely that learners confronted by advanced technologies might have expectations based on previous learning experiences in which less learner responsibility was expected (Lucas 2014). As Gourlay (2009) explains, a student's first year at university can be daunting, and can cause some students to feel exposed and vulnerable if they perceive themselves to be lacking the skills to complete, or even understand, tasks. Wingate (2012) takes this point further when she discusses the power relationships that can exist through the emphasis on academic literacy skills, referring to "academic socialisation" (p.28), which seems to suggest the importance for students to have the knowledge and skills of academic literacy in order to belong. Devlin (2011) also notes that universities operate from discourses, assumptions, values and expectations that may be difficult for some first-time students to comprehend.

The implications of multi-modal delivery of higher-education courses, combined with students' being based at smaller, regional campuses, are a potential reduction in the immediacy of communication, guidance and support. The students in this study appeared to expect that their concerns or questions would be promptly addressed. When such expectations are not realised, the sense of dislocation can be intensified. Malinovski, Vasileva-Stojanovska, Jovevski, Vasileva and Trajkovik (2015) found that many distance learners have limited financial resources, energy and time for study. Hence, they need to be able to use the time they do have to devote to learning effectively and efficiently.

Gok (2015) suggests that preparing students with learning strategies relevant to their context is essential to ensure that they understand the concepts of their courses. However, Gok also points out that the structures of university faculties might need to be reframed, including expanding their hours of availability, scheduling classes at different times and modifying how they provide academic support so that it is accessible to students who are studying and working along with family responsibilities. This is consistent with the perspectives of the student-participants in this study, who largely fit within this demographic.

## **Conclusion**

Information and communications technologies have increased the opportunities for those living in regional and rural areas. For many it has made study a possibility that hitherto would not have existed. However, for students in smaller, regional university campuses, communication with support and guidance from lecturers and other services can remain challenging.

Overall, the biggest challenge for students was found to be the speed and efficiency of Internet services, combined with the accessibility of learning materials on cloud sites. Although students were, in the main, happy with their courses of study and with the opportunities that their regional campuses provided for them, it was clear that specific aspects of the facilities and services needed to be more in tune with the issues and challenges pre-service teachers face in contemporary regional and rural communities. With increasingly metrocentric policies that see a greater focus on metropolitan campuses as a consequence of "caps off" funding models that prioritise short-term quantifiable outcomes (Lynch, Walker-Gibbs & Herbert 2015) for access and aspiration, findings such as these are significant. To improve equity for regional and rural students, faculties need to rethink some areas of

service provision including lectures and support services, and to pay greater attention to how cloud learning is presented.

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