

The rise of online initial teacher education: what do we know?

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Online study in higher education is growing at a rapid pace in Australia. This is particularly the case for initial teacher education (ITE). The past decade has seen a dramatic rise in the numbers of ITE students choosing to prepare themselves for teaching by enrolling away from campus.

Despite this growing trend, little is known about online ITE in Australia, particularly with regard to who studies it, where they live, what influence it has on outcomes and graduate quality, and what quality assurance mechanisms are in place to support quality delivery.





The vast majority of ITE students engage in a blend of online and face-to-face study

What is online initial teacher education?

The age of digitisation has seen a radical shift in the delivery of higher education in Australia. Where face-to-face tutorials and lectures once typically characterised on campus attendance in higher education, the integration of a range of pedagogical tools - including online learning platforms, video conferencing and recorded lectures - has blurred the distinction between on and off campus study. In 2014, over half of all higher education students enrolled on campus reported that half or more of their study was undertaken online (Norton & Cakitaki, 2016).

This blurred distinction between on campus and off campus study extends to ITE. Today, most ITE students participate in some form of blended learning. Even ITE students who are enrolled only in 'online' or 'off campus' units of study participate in face-to-face professional experience placements in schools. Two-year ITE programs require a minimum of 60 placement days, while four-year programs mandate at least 80 days.

Since online delivery – in part or in full – is increasingly common in ITE, it is important to consider the opportunities – such as greater accessibility for people previously unable to participate in ITE – and risks – such as the difficulties and complexities in engaging and supporting students who may live long distances from campus. A look at the most recent data comparing ITE students enrolled off campus with those enrolled on campus, taken together with insights into the experience of online ITE at two of Australia's prominent ITE providers, offers interesting insights into the benefits that could be achieved from leveraging opportunities afforded by online delivery.



How can you access ITE?



Enrolled on campus

All units of study are undertaken through attendance at the higher education provider



Mixed-mode enrolment

At least one unit of study does not require attendance at the higher education provider



Enrolled off campus

All units of study do not require attendance at the higher education provider and are delivered 'online'



25% of ITE students were enrolled off campus in 2016

Over the past decade the proportion of ITE students enrolled off campus increased by 12%

Quick fact

The largest providers of off campus initial teacher education in Australia by student enrolment (2016)*.

5.747

Swinburne University of Technology

3,385

The University of New England

2.652

University of Southern Queensland

2,576

Charles Sturt University

1,222

Deakin University

1.217

Charles Darwin University

1.018

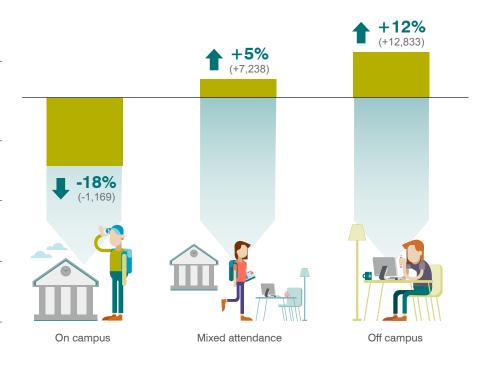
University of Tasmania

The increase in off campus enrolment in initial teacher education

In 2016, 25 per cent (n=22,100) of ITE students studied all of their units off campus. This was an increase of 12 per cent over the past decade, from 13 per cent (n=9,267) in 2007 (Figure 1). This means the total number of ITE students enrolled off campus has more than doubled from under 10,000 in 2007 to over 22,000 in 2016 (Department of Education and Training, 2016a).

This steep increase in off campus delivery has not been observed across the higher education sector as a whole, where there has only been a 2 per cent increase over the past ten years, from 13 per cent (n=125,249) in 2007 to 15 per cent (n=211,219) in 2016. (Department of Education and Training, 2016a.).

Figure 1 Enrolled initial teacher education students by mode of attendance, 2007 – 2016



Source: AITSL, forthcoming 2018

^{*}These figures are from the Higher Education Student Data Collection (HSDC). While Curtin University is one of the largest providers of off campus ITE in Australia, many of its ITE programs were not coded with an 'ITE identifier' into the HESDC and so are missing in this analysis. Curtin University informed AITSL that there were 2,400 students enrolled in off campus ITE programs in 2016.

Compared to ITE students enrolled on campus, off campus ITE students are more likely to be:



Studying part-time





25 or older



From lower socio-economic backgrounds



From regional or outer metropolitan locations.

The characteristics of students enrolled in off campus initial teacher education

The evidence suggests that off campus study may provide increased access for people who have traditionally faced barriers to participating in ITE and higher education. Given this, the availability of off campus ITE programs has the potential to contribute to increased diversity in the teaching profession.

In 2016 ITE students who were enrolled off campus had a very different profile compared with those who were enrolled on campus. They were more likely to be: studying part-time, female, older, from a low socio-economic background, and from regional or remote areas, or outer metropolitan areas where access to a campus can be difficult (Figure 2). Their entry pathways into ITE were different. They were more likely to be admitted through a VET or TAFE qualification and they were less likely to start directly from secondary education (Department of Education and Training, 2016a).

Thus, it appears that off campus enrolment offers ITE to a wider range of applicants. Online accessibility can alleviate the geographic constraints faced by people living far away from campus. Part-time, older students may be employed, have family responsibilities and find studying more accessible with the increased flexibility afforded by off campus attendance. Students from lower socio-economic backgrounds may find the costs associated with travel and attendance at a higher education provider prohibitive and these barriers are overcome through off campus enrolment.

Figure 2 Profile of commencing initial teacher education students by on campus and off campus enrolment, 2016*



Source: Department of Education and Training, 2016 a

^{*}The percentages show the proportion of on campus and off campus students for each characteristic. For example 22% of on-campus students were 25 or older and 70% of off campus students were 25 or older.



Off campus initial teacher education at Curtin University and Charles Darwin University:

A case study

AITSL spoke with the Dean and two Directors of the School of Education at Curtin University, and the Dean of the College of Education at Charles Darwin University. Curtin and Charles Darwin are amongst the largest providers of off campus ITE in Australia. The experience of these providers has shown increased opportunity for, and diversity in, their ITE student enrolments.

Curtin University

"We began offering off campus ITE programs in 2009 and were overwhelmed by the interest. It was clear from day one that this was providing an opportunity for a lot of people that wasn't available before.

About 60 per cent of the students are female, aged over 30 and with a family, which tells us something in terms of access. We're very conscious that this gives access to tertiary education for people who may not have had access before. So I'm talking about people with family responsibilities who could not logistically manage on campus attendance. We know that we have people who are living long distances from campus who could not do it otherwise. A lot of them are in regional areas but some are also in outer metropolitan areas where travel to a university campus is just too difficult, too expensive, too time consuming."

Charles Darwin University

"The primary reasons that students choose to study off campus are access and convenience. A high percentage of our students have families, they work and study part time, or they don't live within range of a University, making on campus study difficult. So, we tend to have a high proportion of students in regional areas, across the Northern Territory but also in other parts of Australia. Our students tend to be mature age, particularly women who may be caring for children at home or may have paid work responsibilities, and by studying online they can access their studies at a time that suits them."



Almost a third of off campus ITE students live in a different state / territory to their ITE provider



This figure varies significantly by state / territory



The separate locations of ITE students and program providers may present logistical challenges for professional experience placements.



However, there are potential opportunities for meeting demand for teachers in typically difficult-tostaff areas by providing access to ITE for people who already live in the community.

Where do off campus initial teacher education students live?

With the increased popularity of off campus enrolment in ITE, it can no longer be assumed that students live in the same state or territory as the campus location of their ITE provider. AITSL analysed higher education student data to explore this trend further.

Nationally, around one in three (28 per cent, n = 6,071) off campus students lived in a different state/territory to their institution, in 2016. There was, however, large variation across states and territories (Figure 3).

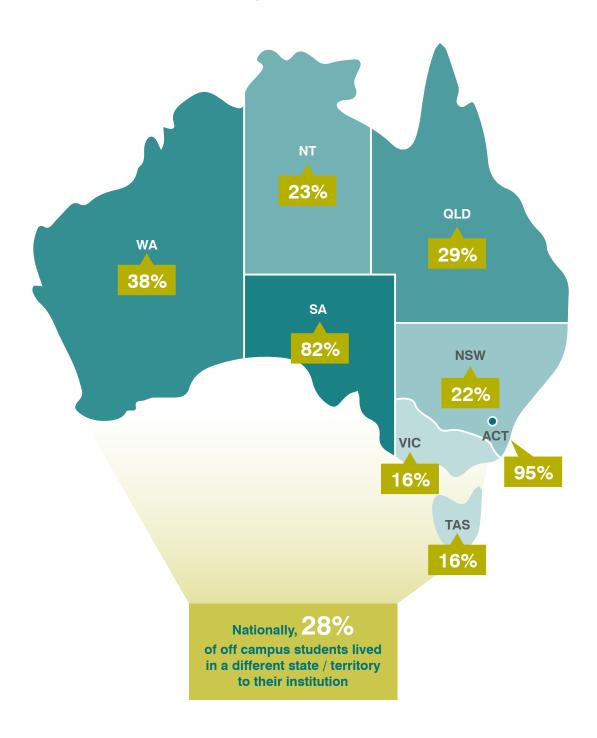
In South Australia, 82 per cent (n=1,034) of off campus students who resided in the state, were enrolled with a provider located in another state, predominantly in the Northern Territory (n=590). In fact the Northern Territory ITE provider - Charles Darwin University - was responsible for educating twice as many off campus South Australian residents than were ITE providers located in South Australia.

At the other end of the scale, only 16 per cent (n=129) of off campus students in Tasmania were enrolled with a provider outside the state, the majority of which were in NSW.

This may present logistical challenges for ITE providers in supporting off campus ITE students to access professional experience placements in schools. ITE providers will increasingly need to address how they can offer support and supervision during placements to students living far away from their institution. Evidence of this growing challenge has been identified in NSW (BOSTES, 2014). The use of new technologies has a role to play in mitigating this. For example, some ITE providers are using new applications that allow students to map evidence from their professional practice, obtain sign off from their supervisors on the completion of set activities, and to enhance timely communication between schools and ITE providers.

Figure 3

Percent of off campus initial teacher education students living in a different state / territory to their initial teacher education provider



Source: Department of Education and Training, 2016 a



Off campus initial teacher education at Curtin University and Charles Darwin University: A case study

While off campus ITE may create some logistical challenges for ITE providers in managing their students' placement experiences, some geographical opportunities associated with this mode of attendance have been observed at Curtin and Charles Darwin.

Curtin University

"We have one student who is a mum, is over 40, and has been working as an educational assistant in a regional senior high school. She had always wanted to be a teacher but didn't have an opportunity to study ITE before starting our online Bachelor of Education (Secondary). She's committed to staying in that region and she's committed to the community there and to the school. She's now able to bring another element to education in that community. And that's just one example.

We're aware that over the past 20 or 30 years it's become increasingly difficult to persuade city-raised graduates to take positions outside of the metropolitan area. The further away from the city we get, the more difficult it's been. If people who already live in those areas have increased access to study without having to move, then that barrier disappears.

With our Master of Teaching program, what we've seen this year is a high number of students from regional areas across WA – from right up north, to East Kalgoorlie to right down south. These are students who have a degree and are either not working in their area of study or they are but they want a career in teaching. They are mostly from regional and remote areas, and haven't had the opportunity to undertake a postgraduate teaching qualification until now. These people aren't looking to move; they have a family or their own farming business, but they're looking to do something more for their community."

Charles Darwin University

"Many of the students we take in are already living in regional or rural communities – the small towns in SA, WA, and NSW, for example. Online study gives them opportunities to undertake placements within the community they're part of, in the local schools. The connections that are built through placements and the relationships with school based mentors, provide good opportunities for employment."



There is no evidence that mode of attendance affects graduate quality

Mode of attendance and initial teacher education graduate quality

While there is limited research in the field, a small number of Australian studies in ITE have indicated mode of attendance is not an integral factor in graduate quality.

For example Martin (2010) found there was no association between delivery modes and performance on graduate teacher preparation exams and McMahon and Thompson (2014) concluded that ITE students' perceptions of their "classroom readiness" were not adversely affected by a fully online tertiary environment. Data from a large scale 2016 higher education graduate survey found off campus ITE graduates were only 1% less likely to indicate their degree prepared them well or very well for employment, when compared to on-campus ITE graduates (Department of Education and Training, 2016b).

This Australian research is backed by some international literature. For example, Mollenkopf, Vu, Crow and Black (2017) determined there were no significant differences in learning performance outcomes between ITE students in online programs compared with face-to-face options.

BOSTES (2014) noted that:

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"when pedagogy is appropriately adapted to suit the online environment, online programs can be as effective as on campus programs in preparing teachers in most subject areas".



Off campus students have similar levels of satisfaction with their higher education experience but are less engaged learners

Mode of attendance and initial teacher education student satisfaction and engagement

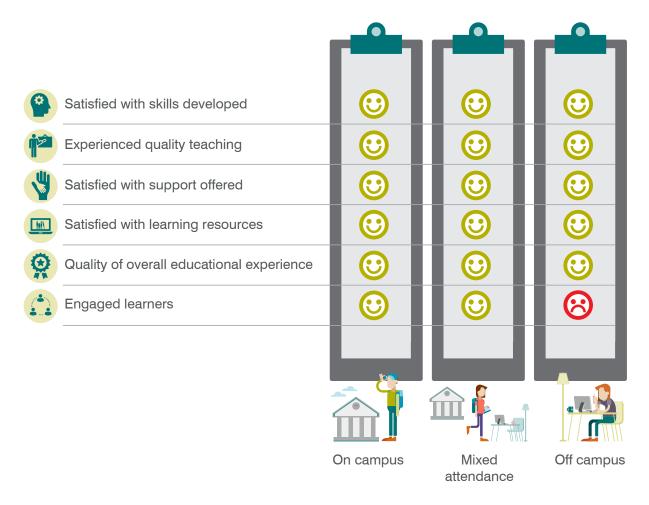
Data from a large scale survey of current higher education students (2016) showed there were no significant differences in satisfaction between on campus and off campus ITE students, with regards to the:

- · skills they developed through their studies;
- · quality of teaching they experienced;
- · learning resources provided by their institution; and
- overall quality of their educational experience.

Off campus students were slightly more satisfied with the supports they received, but were significantly less engaged with their studies (Figure 4). The survey items used to measure learner engagement ask about the extent to which students feel they belong to their institution and their level of interaction with other students. Given the nature of study for off campus students, it is logical that they rated lower on this measure. However, this is an interesting finding for the delivery of online courses. There could be opportunities for providers to improve teaching and learning in ways that have not previously been possible by utilising the online tools that are becoming a regular feature in program delivery. For example by providing interactive learning experiences that encourage collaboration and using data analytics to track student progress.

On a slightly different note, traditional measures of student engagement may need to be reviewed in light of the increased uptake in off campus attendance. For example, off campus ITE students may be less interested in a feeling of belonging or having high levels of interaction with other students given their choice to undertake off-campus study.

Figure 4
Satisfaction and engagement with the higher education experience, undergraduate initial teacher education students by mode of attendance, 2016



Source: Department of Education and Training, 2016 b



There is no evidence that mode of attendance by itself affects completion rates.

The demographic profile of off campus ITE students, and the typical study challenges they face, most likely has a greater influence on completion than mode of attendance itself.

About completion rates



Six-year completion rates show the proportion of students in a cohort completing their ITE program within six years of starting it.

Mode of attendance and completion rates in initial teacher education

The AITSL ITE Data Report series include cohort analyses that review the progress of ITE students six years after starting their programs. The most recent analysis shows that only 50 per cent (n=2,508) of off campus students completed their ITE program compared with 66 per cent (n=13,578) of on campus and 68 per cent (n=1,753) of mixed attendance students (Figure 5).

However, these data should not be confused. Off campus ITE programs have higher proportions of students with demographic characteristics that are also associated with lower completion rates, such as part-time and older students. As a result, these data alone cannot tell us for certain that off campus enrolment contributes to lower completion rates in ITE.

Recent statistical modelling of higher education data has revealed that mode of attendance has little influence on completion rates. The research measured a range of demographic factors – such as socioeconomic status, mode of attendance, part-time or full-time attendance, gender, age, location, etc. The analysis suggested that mode of attendance contributed only very slightly to non-completion and that other factors are likely to have a greater influence on a student's probability of completion (Australian Government Department of Education and Training, 2017).

Figure 6 provides some insight into other factors that might explain failure to complete from ITE students considering early departure. For those students who had seriously considered an early departure from their studies, off campus students were significantly more likely to select 'family responsibilities', 'paid work responsibilities', 'workload difficulties' and 'study/life balance' compared with on campus students (Figure 6). It would seem that these life stage factors are more likely to affect off campus students because of the differences in the profiles of these two cohorts. On campus students, who are more likely to be younger and studying full time, may have more capacity to focus on their studies because they don't have the same financial and family obligations faced by many older, part-time students.

Further research is required to fully understand the circumstances that lead to student non-completion as it may provide important insights into the effective delivery of online ITE. More broadly, the costs and rewards for ITE for providers and governments in enabling increased access is an area that warrants further attention.

Figure 5
Six-year completion rates in initial teacher education by mode of attendance, 2016



Source: AITSL, forthcoming 2018

Figure 6

Factors more likely to affect off-campus students compared to on campus students, in their decision to quit initial teacher education, 2014 - 2016



Source: Department of Education and Training, 2016 b

Quality assurance of ITE programs are the same regardless of their mode of delivery but are designed to ensure students can achieve the same learning outcomes in different educational contexts.



Quality assurance of online education

There are two main layers of quality assurance related to ITE programs. The Higher Education Standards Framework (Threshold Standards) 2015 sets out the requirements that a higher education provider must meet in order to be registered by the Tertiary Education Quality and Standards Agency (TEQSA) to operate in Australia as a provider of higher education.

Those providers which do not have self-accrediting authority (predominantly private higher education providers) must submit applications to TEQSA for course accreditation. Additionally, ITE programs are assessed against the national Standards and Procedures for accreditation of initial teacher education programs in Australia 2015 (ITE Program Standards and Procedures) by the teacher regulatory authority in the state / territory of the ITE provider.

The Threshold Standards and ITE Program Standards and Procedures do not include prescriptive requirements related to quality assurance of online education. Rather they focus on educational outcomes and seek to ensure that standards and quality are equivalent for all modes of learning. Equivalency is not about treating face-to-face and online programs the same. Rather, it means that students can achieve the same learning outcomes in different educational contexts. Within an integrated framework, the quality assurance of online ITE education requires contextual interpretation of standards to ensure a standard is met.

The ITE Program Standards and Procedures are designed to ensure that all graduates of ITE meet the Graduate career stage of the Australian Professional Standards for Teachers (APST). In order to graduate, all final year ITE students are required to successfully complete a rigorous Teaching Performance Assessment (TPA) that covers the breadth of teaching practices, skills and knowledge described in the Graduate career stage of the APST. The TPA is required to be a statistically valid and reliable tool which is embedded in a classroom environment, such as a student's final professional experience placement. The TPA will enable ITE providers to ensure all of their graduates, regardless of their mode of attendance, are ready to commence classroom teaching.

The national approach to accreditation of ITE programs is based on providers collecting, analysing and acting on evidence about the impact of their programs. These requirements apply equally to online and on campus programs, and to different cohorts within programs. The combination of an accreditation system based on evidence of impact, and the requirement for all graduates to pass a rigorous Teaching Performance Assessment, will provide confidence in the effectiveness of all programs, regardless of mode of delivery. This approach will also generate an improved evidence base on what works best in the online delivery of ITE.



Off campus initial teacher education at Curtin University and Charles Darwin University: A case study

Curtin University and Charles Darwin have tailored the delivery of their off campus ITE programs to provide for the specific needs of students studying away from their institution.

Curtin University

"All of the off campus programs are integrated with the on campus ones. The content is equivalent and there is one course coordinator per program regardless of the mode of delivery.

Although the units in the courses are the same, full-time on campus students do four units each semester with mid-year and end-of-year breaks, whereas full-time off campus students complete two units at a time spread across four study periods that run right across the year. This enables them to juggle their studies along with their other responsibilities and still finish within four years.

We have a student community website specifically for our online students, which includes an overview of their course and how units interact with each another. It hosts information on the Teacher Standards and how their course helps them to meet those criteria. In addition, it has further details and guidance about the things that will be important to them as they transition into the teaching profession. So instead of just interacting via the learning management system within each unit, it provides a bigger picture about their course and their future career.

There is a professional experience team with dedicated staff who are there to assist our online students only. Regarding professional experience placements, our on campus students will have a school-based mentor and a university-based supervisor, whereas off campus students will have a school-based mentor and a school-based supervisor. This supervisor is usually the deputy principal or principal. Since these are paid roles, all school-based mentors and supervisors need to meet a set of minimum requirements and complete the AITSL Supervising Pre-Service Teachers' online training program.

Once these positions are confirmed, our professional experience team swings into action and ensures there is a common understanding about what needs to happen and what assessments need to be completed.

We've received so much wonderful feedback about the high levels of achievement our online students have demonstrated during their professional experience placements. Many students go on to work in the schools where they undertook their professional experience. This is an ideal outcome for our graduates."

[→] Case study continues on next page



Charles Darwin University

"We build student engagement in a number of ways. For example, we use discussion boards to enable structured, yet student-led inquiries. When used appropriately discussion boards will generate an environment where students take leadership in dealing with the inquiry. This picks up on the 'flipped classroom' approach which centres on reversing or rethinking the way we structure and facilitate student learning.

The technology surrounding this idea can be used in a range of ways, either poorly or creatively. Importantly, it isn't the technology that causes issues, it's the pedagogical practices of those using the technology. We try to push back against the view that online teaching is all about recorded lectures or tutorial sessions that are uploaded for off campus students to sit down and listen to – that kind of approach doesn't facilitate student engagement.

On a practical note, another important component of online ITE is a consideration of time differences - most of our activities in our education programs don't require a synchronous connection. In fact that just wouldn't work as we have students from WA to QLD.

Attempts to replicate the face-to-face learning experience really miss the point of off campus learning and how technology can be used to take advantage of social engagement. It's important to utilise the technology in ways that link back to students' motivations for studying off campus – access and convenience."

Conclusion

"Across sectors, we're changing the way people engage in learning and how we, as higher education providers, support learning. This is already happening in schools. So the key question is, what will the world of education look like in the next 10-20 years, and how will learning change? It's going to be a different space for higher education providers and teachers alike, so it's important to be proactive now."

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Greg Shaw, Dean of the College of Education at Charles Darwin University

For aspiring teachers living in regional or remote locations and juggling work and family commitments, the rise in online ITE courses in Australia has brought higher education within reach. This increased access to ITE has great potential to diversify the workforce, as students enter higher education from increasingly varied pathways and at varied life stages. It also might assist with teacher shortages, particularly in areas of the country that are typically difficult to staff.

With these significant benefits come challenges. There is evidence to suggest that the key barriers to participation in higher education, such as geography, family and work commitments, may impact online ITE students' course completion. However, course completion is affected by myriad factors, including but not limited to, mode of attendance. Therefore, it is important to consider the issue of completion rates holistically to better understand how higher education providers can support off campus students and students with particular life stage characteristics that may impact their studies.

Online ITE providers also face logistical challenges in helping students to access professional experience placements in schools. This is due to the number of ITE students studying at institutions located in a different state or territory to their homes. Working closely with schools to increase the supervision of ITE students during their placements may be one strategy to address this problem.

With each challenge identified, it is vital to ask how ITE providers can utilise new technologies to enhance pedagogy, student engagement and student support.

Get more data on ITE



The ever changing nature of technology necessitates innovation in all aspects of higher education. This is particularly true for online ITE providers. Student engagement in the online space, supporting students via distance and online pedagogy are topics that require further investigation and research, including consideration of the costs of implementing innovative approaches to delivering quality online ITE. In light of the potential benefits of online ITE, this area of research is particularly important.

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