NATIONAL VOCATIONAL EDUCATION AND TRAINING RESEARCH PROGRAM

RESEARCH REPORT

Transitioning from vocational education and training to university: strengthening information literacy through collaboration

Sonia White SCHOOL OF EARLY CHILDHOOD, QUEENSLAND UNIVERSITY OF TECHNOLOGY



Australian Government Department of Industry





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Sonia White School of Early Childhood, Queensland University of Technology

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This research was funded through an early career researcher funding round. These grants provided an opportunity for early career researchers, from disciplines such as economics and the social sciences, to undertake a modest research project in a topic relevant to NCVER's remit.

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About the research

Transitioning from vocational education and training to university: strengthening information literacy through collaboration

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Students transitioning from vocational education and training (VET) to university can face numerous challenges, many of which have been documented in the literature. The inherent differences between the sectors — including the competency-based focus of vocational education and training compared with the curricula focus of higher education — means that transitioning students have to adjust to different learning cultures, expectations and means of assessment.

This small study focuses on information literacy skill needs and investigates how these differ between students studying early childhood-related courses in TAFE (technical and further education) institutes and those studying at university. Based on a survey and follow-up interviews with students studying at one TAFE institute and one university, the research explored the information literacy skills use and challenges faced by these students.

Key messages

- Participating TAFE and university students reported difficulties in the same aspects of information literacy; namely, understanding the assessment task, assimilating information and preparing the assessment, and adhering to the writing and referencing style.
- TAFE and university students reported a difference in the expectations relating to their capabilities in locating and using different sources of information. The different sources of information used by the two sets of students illustrate the more practical focus of vocational education and training and the academic focus of higher education.
- Both the TAFE students considering enrolling in university and the university students who had
 made the transition from TAFE indicated that a collaborative effort between VET providers and
 universities would help students to make the transition successfully. Early support even before
 commencing university study in a number of different forms was suggested as a way to enable
 students to develop the required information literacy skills.

The report concludes with a framework proposing the various supports that could be implemented at different times to help students transitioning from vocational education and training to university to gain the information literacy skills required.

Rod Camm Managing Director, NCVER

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Executive summary

The Australian Qualifications Framework (AQF) established the foundation for students with a vocational education and training (VET) qualification to receive advanced standing when entering a university program. However, VET students face many challenges when transitioning to university. While these vary, commonly identified challenges relate to information skills and university expectations associated with gathering and synthesising information as part of the learning process.

The aim of this project was to understand the information literacy experiences on both sides of the VET-to-university transition in order to develop a targeted information literacy support framework that would aid students transitioning to university. The report addresses three research questions:

- What is the nature of the information literacy skills currently embedded in diploma modules and bachelor degree units?
- What information literacy challenges do students face in their current TAFE (technical and further education) or university program?
- What improvements to information literacy teaching in both the TAFE and university sectors would ease the transition from TAFE to university?

The participants in this research were students in the field of early childhood education from one TAFE institute and one university. They were enrolled in a Diploma of Children's Services, a Bachelor of Education (Early Childhood) or a Bachelor of Early Childhood Studies. The bachelor degree participants had previously been awarded a Diploma of Children's Services and had entered university with advanced standing. The data collection was sequential, with an initial online survey used to determine the nature of the students' information literacy skills. Follow-up interviews were used to gain in-depth detail about the challenges experienced and students' perspectives on the improvements to information literacy that would ease the transition to university.

An examination of the nature of information literacy in the respective programs revealed that there was a higher expectation imposed on university students to gather and synthesise information as part of written assessments. It is interesting to note however that, while the sources of information differed in terms of complexity, the online information search strategies used were quite similar across the two sectors. Both TAFE and university students reported using various types of filters in order to judge the value of a source, but prioritised different sources of information: TAFE students prioritised recent practical Australian information from sources in the field, whereas university students looked for recent peer-reviewed sources. This example highlights that diploma students have established information-filtering strategies and that these can be built upon by university staff to support these students to adapt their online information search priorities when they transition to university.

The Australian and New Zealand Institute for Information Literacy (ANZIIL) Framework measures the information literacy of a person according to six standards:

- Standard 1 recognises the need for information and determines the nature and extent of the information needed.
- Standard 2 finds needed information effectively and efficiently.
- Standard 3 critically evaluates information and the information-seeking process.

- Standard 4 manages information collected or generated.
- Standard 5 applies prior and new information to construct new concepts or create new understandings.
- Standard 6 uses information with understanding and acknowledges cultural, ethical, economic, legal and social issues surrounding the use of information.

Of the six standards in this framework, understanding the task (Standard 1), bringing together and preparing the assessment (Standard 5) and adhering to the writing and referencing styles (Standard 6) were identified as being the most challenging aspects experienced by both the TAFE and university participant groups. These specific aspects became the focus when developing the targeted information literacy support framework for transitioning students.

Many of the current TAFE students felt very unfamiliar with university and had many questions about studying via this mode. One student suggested that 'a university experience' would be beneficial: observing a lecture, seeing what information and guidance were given, and viewing an assessment piece. It was deemed crucial to understand the expectations of university before considering enrolment. When discussing the transition, current university students represented two distinct experiences in relation to the support of their information literacy skills development: the 'internal' and the 'external' student experience. The internal students described specific support embedded in their units and specialist sessions with library staff. The majority of the external students on the other hand, who were engaged in full-time employment, reported being unable to access workshops, since they were only offered on campus during business hours. Online information literacy activities were mentioned; however, it was clear that some found the online interface challenging and a barrier to their learning. The issues of timing and student access are crucial aspects of the information literacy transitional framework proposed in the discussion section of this research report.

The new understandings gained through the data collection and analyses have contributed to the development of an information literacy transitional framework, in which three key time periods are identified. At these points targeted support needs to be made available in order to ease the transition to university. The key elements to be provided at each time period are also specified.

Introduction

This report focuses on the issue of transitioning from vocational education and training to university and explores how information literacy could be used as a vehicle to help support students through this period of transition. The research represents the insights of a small cohort of students from one TAFE institute and one university in South-East Queensland, which are co-located. The findings inform a proposal for a collaborative transitional framework that involves staff and students from across the two sectors. This introduction to the report identifies the common issues in transitioning from TAFE to university and describes some current programs supporting the transition.

Issues in transition to university

The completion, retention and attrition rates of articulating students are varied, with some studies (for example, Wheelahan 2005) reporting that VET-qualified students have higher retention rates than school leavers, whereas others (for example, Abbott-Chapman 2006; Watson 2006) specifically identify the challenges, such as information literacy skills, that lead to attrition. Watson (2006) in her report on the career pathways in the early childhood education and care sector specifically identifies that assessment practices in higher education are often challenging for articulating VET students. For example, the VET competency-based training packages are task-oriented and performance-focused. While there may be some focus on performance in the workplace in the higher education sector, students also need to demonstrate a depth of understanding of underlying theories of practice and strong analytic skills. Many students who have articulated into university with VET diploma qualifications struggle with the academic literacy requirements, including writing skills, argumentation, self-directed critical reflection, research skills and the use of theoretical concepts to inform their practice (Watson 2006). Furthermore, this 'academic literacy' factor is a frequently cited reason for attrition among early childhood students (Watson 2006). While the Watson report (2006) refers to 'academic literacy', other research (Thomas & Milne 2011) uses the term 'information literacy', in accordance with the Australian and New Zealand Institute for Information Literacy Framework (Bundy 2004). This framework describes an information-literate person according to six standards (table 1). These standards are referred to throughout this research.

ards

Standard	Description of information literate person
Standard 1	Recognises the need for information and determines the nature and extent of the information needed
Standard 2	Finds needed information effectively and efficiently
Standard 3	Critically evaluates information and the information seeking process
Standard 4	Manages information collected or generated
Standard 5	Applies prior and new information to construct new concepts or create new understandings
Standard 6	Uses information with understanding and acknowledges cultural, ethical, economic, legal, and social issues surrounding the use of information

Source: Bundy (2004, p.11).

This research report identifies the information literacy capacities developed as part of a diploma course and considers these in relation to the capacities necessary in the first year of a bachelor-degree program. The report then examines opportunities for cross-sector collaboration in the development and application of the Australian and New Zealand Institute for Information Literacy standards in order to facilitate the transition from vocational education and training to university.

This cross-sector focus is an attempt to reduce attrition among VET students articulating into university. The unique contribution of this research comes from the detailed insights gathered from students about their information literacy experiences in early childhood courses in TAFE and in the transition to university settings.

The information collected about student experiences is then interpreted across the sectors, with avenues investigated for embedding and supporting key information literacy skills towards the end of the Diploma of Children's Services and in the first-year units of the Bachelor of Early Childhood degree programs. The purpose of this collaboration is to create a practical framework for implementation across the two sectors with the capacity to ease the transition for early childhood students, thereby reducing attrition. The long-term outcome of such a framework will be an increase in university-qualified early childhood teachers. The focus on early childhood education is timely, as the profession is gaining increasing prominence and is the subject of numerous legislative changes. In order to enhance the development and educational outcomes of our children, the newly mandated National Quality Framework for Early Childhood Education and Care requires providers of child care and early education programs to increase the number of degree-qualified educators (Australian Children's Education and Care Quality Authority 2011). There is a consequent increase in the number of diploma-qualified early childhood education and care practitioners who are seeking to complete a bachelor degree at university. While the Australian Qualifications Framework (AQF Council 2013) has established the foundation for the seamless institutional transition from vocational education and training to university, there are several reports that identify the numerous challenges faced by individuals in making this transition (for example, Watson 2006; Whitington et al. 2009). It is expected that the findings of this project could be applicable across a range of industry and professional areas in which VET students articulate into university programs.

Supporting the transition to university

There are numerous examples of how information literacy can be developed and support offered when transitioning to university. It should be noted that many of these examples are focused on general transition to university, not just those students who are articulating through a VET pathway. Bundy (2004) describes the development of information literacy skills as 'learning to learn' and suggests that it needs to involve a range of stakeholders in developing support programs. Table 2 shows the various elements that make up current practice, with an embedded approach being seen as the most effective on an institutional level (Bundy 2004) (table 2).

Component	Description		
Generic	Extracurricular classes and/or self-paced packages		
Parallel	Extracurricular classes and/or self-paced packages that complement the curriculum		
Integrated	Classes and packages that are part of the curriculum		
Embedded	Curriculum design where students have ongoing interaction and reflection with information		

Table 2 Information literacy program components

Source: Bundy (2004, p.6).

Acknowledging the heterogeneity of the student body, the university at the centre of this study implements university-wide 'first year experience' (FYE) programs to support all students as they transition into university – academically, socially and administratively – based on their varied needs (Nelson et al. 2010). Relevant to the present research, the FYE program incorporates two key areas; namely, the provision of timely access to support and the development of academic and professional

partnerships to support students. The program includes early action in the form of orientation week activities, which are run by the university, the library services and individual faculties. First-year unit design is specifically student-focused and embeds information skills to encourage academic self-agency and autonomous learning at university. TAFE pathways students face a number of challenges. As a result of advanced standing or credit point transfer, they are able to commence university without completing first-year units and therefore miss out on acquiring the embedded information literacy skills. Numerous avenues of support offered by the library services both on campus and online are available for addressing this omission. These include a library and IT helpdesk, online resources and activities, scheduled group workshops and short individual study consultations.

Discussions with staff from other universities revealed different approaches to supporting information literacy. One university has a similar approach, but many of these activities are managed by academic language and literacy development advisors within the faculty of education. These staff members run on-campus workshops on academic literacy during the first four weeks of each semester, in addition to a targeted information literacy session as part of an orientation day for the faculty of education. Recognising the need to engage students who are enrolled both internally and externally, this institution has moved towards creating interactive student resources, which are available at any time. These support structures are in addition to those programs offered by the library. An important distinction is that information skills are not embedded across first-year units, but rather are offered at a faculty level as parallel or integrated components (as defined in table 2).

An approach taken by another university incorporates a common unit on academic literacies across all bachelor-degree programs. The common unit encompasses critical thinking, academic reading and writing, and information and computer literacy skills, all of which are seen as the foundation to successful university study. This university-wide approach has the unit offered on all campuses internally, while an external version is offered in every teaching period (Semesters 1, 2 and summer). In addition to this, for those students who are uncertain about managing the expectations of university or have not studied for some time, there is also an opportunity to complete a 'tertiary enabling program' (TEP), which includes study skills, computing, reading, writing and mathematics for further education. Achieving a sufficiently high standard on these core TEP units, or having successfully demonstrated a standard of academic writing in other courses, could be grounds for applying for exemption from the academic literacies common unit.

These examples demonstrate the different approaches taken by institutions; however, further complexities arise when considering students who are transitioning from a TAFE pathway into university. Penn-Edwards and Donnison (2011) focused on transitioning students and their engagement in academic support services and determined that it was not 'what' support was provided, but rather the 'how' and 'when' of the provision of the academic support that were most important. Given that many TAFE pathway students enrol in external university study, how and when the support is offered is particularly important. Acknowledging that student needs are varied, this project targets information literacy needs as a common challenge of all transitioning students (Abbott-Chapman 2006; Thomas & Milne 2011; Watson 2006). This approach allows the project to build from the existing foundations (for example, Nelson et al. 2010; Thomas & Milne 2011) in order to create a framework demonstrating how information literacy support structures could be implemented across the two sectors in a timely manner. In order to achieve this goal, it is first necessary to gain a greater understanding of the information literacy expectations on either side of the transition and the challenges experienced. Important also is drawing on student perspectives and experiences of the transition and using this evidence to improve the support structures and from there developing a practical framework that is specific to the TAFE-to-university transition.

The report aims to increase understanding by addressing the following key research questions:

- What is the nature of the information literacy skills currently embedded in diploma modules and bachelor degree units?
- What information literacy challenges do students face in their current TAFE or university program?
- What improvements to information literacy teaching in both the TAFE and university sectors would ease the transition from TAFE to university?

The present research

This research was exploratory, seeking understanding of the information literacy experiences of TAFE diploma and bachelor degree students on a small scale, with the aim of supporting the pathway to university. This research gathered information focused on the field of early childhood. The participants were students enrolled in the Diploma of Children's Services and students enrolled in a bachelor degree program specialising in early childhood. This section outlines the context of the research and the data collection and analysis undertaken to address the three research questions.

Context

The focus TAFE institute is a tertiary VET institution comprising a number of campuses across South-East Queensland. It delivers delivers certificate III, IV, diploma and advanced diploma programs across a range of full- and part-time, face-to-face, workplace training, online and distance delivery options. At the time of data collection (2012–13) and across all campuses, approximately 1500 students were currently enrolled in children's services study options, which include the Certificate III in Children's Services, Diploma of Children's Services (Early Childhood Education and Care) and Certificate III in Education Support. The participating TAFE institute is a large provider of early childhood-specific vocational training.

The focus university comprises three campuses across South-East Queensland. The Faculty of Education has a large specialist school of early childhood. The Bachelor of Education (Early Childhood) and Bachelor of Early Childhood Studies operate in a range of modes, including full- and part-time, internal and external. Advanced standing arrangements are in place for students with a TAFE diploma entering these programs. To enrol in a part-time program in early childhood, students must have a TAFE diploma. TAFE students with advanced standing represent 44% of the undergraduate student population enrolled in an early childhood bachelor degree program at this university. (Data sourced from the Student Academic Management System, April 2013.) If this enrolment pattern continues, this study will have important implications for the university and similar universities with a large proportion of TAFE pathway students enrolled in their programs.

Those students who are enrolled in the full-time Bachelor of Education (Early Childhood) receive support through an embedded approach in the first-year units, as described in the previous chapter (table 2). Students enrolled in any part-time early childhood degree or the full-time Bachelor of Early Childhood Studies must complete a unit in academic and professional communication. This unit is offered externally in an online delivery mode.

Only in recent years has a Bachelor of Education (Early Childhood) program been offered on a campus north of Brisbane. The unique situation for the TAFE institute and university reported in this study is that the institutions are located on the same campus. This close proximity provides opportunities to work collaboratively to support student career pathways. This was a factor when selecting a TAFE institution to be involved in this research, and the collaborative options proposed in the conclusion of this report are well placed to be implemented in these institutions. While this may be considered a limitation in terms of extending the findings of this research, it is believed that the overall framework proposed will be applicable to other universities and disciplines.

Data collection and analysis

The data collection involved both TAFE and university students in a two-stage sequential process:

- an online survey (appendix A)
- follow-up interviews with individual students (appendices B and C).

The online survey included four sections: 'about you', 'about your current course', 'written assessment tasks', and 'information skills'. The survey focused on the information literacy skills embedded in current diploma modules and bachelor degree units and the challenges experienced by students (first and second research questions). The information skills section used the 20 items of the Information Skills Survey (ISS generic form) published by the Council of Australian University Librarians. This instrument has been found to have a reliability coefficient of 0.87 when tested with a sample of 222 first-year education students (Catts 2005).

The analysis of the online survey focused on documenting the types of assessment completed and the types of sources consulted by the two participant groups. Question 12 of the survey was used to determine which of the Australian and New Zealand Institute for Information Literacy Standards (table 1) were perceived as being the most challenging to the student groups. This aspect was targeted for further exploration in interview. Analysis of the 20-item Information Skills Survey followed the survey's guidelines (Catts 2005), targeting ANZIIL Standards 2–6, with four items loading to each standard, as follows:

- Standard 2: items 3, 12, 16, 19
- Standard 3: items 5, 8, 14, 11
- Standard 4: items 1, 2, 6, 9
- Standard 5: items 4, 15, 17, 18
- Standard 6: items 7, 10, 13, 20.

Using the response scale (0 never, 1 sometimes, 2 often, 3 always), individual scores were used to calculate a mean for each standard for the TAFE and university student groups. Comparisons were made across participant groups and these informed subsequent interviews.

The follow-up interviews included two sections: 'about what you do' and 'thinking about the transition and the support structures'. The interviews lasted approximately 45 minutes and were conducted on a convenient campus, or over the phone. Part A (about what you do) allowed for further detailed discussion of aspects emerging from the online survey. The questions in Part B (thinking about the transition and the support structures) were slightly different for the two groups of students — TAFE and university. The TAFE students were asked to describe their current information literacy support at TAFE, as well as think ahead and predict what they believed the challenges of the transition to university might be and the support that might be necessary (appendix B). The university students described the experience of the transition and the differences between TAFE and university, as well as giving their views on what information literacy support might be required for transitioning students (appendix C).

The interview transcripts for the TAFE and university participants were analysed separately. Part A (about what you do) was analysed question by question, with a view to identifying common themes. The themes were linked back to the online responses to look for consistency. The emergent themes were then compared across groups. Similarly, the Part B (thinking about the transition and the support structures) questions were examined separately for each group: the TAFE students considering

university and the university students having made the transition. The analysis of the TAFE student responses focused on the types of information literacy support received, as well as issues of access. The consideration of future university enrolment was explored, while the most concerning academic aspect for TAFE students was also identified. For university students, the focus was on understanding the lived experience of transition, the types of support and the issues of access to support. During this analysis distinct perspectives emerged, which were related to whether students were enrolled in internal or external university studies; this distinction features in the findings section. The analysis then focused on students' ideas for support of information literacy for both the TAFE and university sectors during the transition.

From the data from the survey and interviews, a transitional collaborative framework was constructed. It focused on the 'what', 'when' and 'how' of support. 'What' support was considered through a comparison of the different expectations of the diploma and bachelor programs in assessment and the required sources of information, and the real challenges students faced. Student-reported issues of access to support were used to determine 'how' information literacy support should be offered. Perspectives from both sides of the transition were used to inform 'when' support should ideally be offered. These were the key considerations when creating the final transitional collaborative framework.

Participants

The participants approached to be involved in this research were from one TAFE institute and university in South-East Queensland. The TAFE students were enrolled in the Diploma of Children's Services (or certificate III pathway to diploma) commencing in late 2011 or early 2012. The university students were enrolled in a Bachelor of Education (Early Childhood) or Bachelor of Early Childhood Studies and commenced studies in 2011–12 or had completed fewer than ten units of study. The university participants had entered university from a VET pathway and received advanced standing in their degree program. All participants were initially approached to complete the online survey and subsequently identified whether they were willing to be involved in the follow-up interview.

A summary of the characteristics of the participants completing the online survey and the interview is provided in table 3. In addition, participants involved in the interview were asked about their current employment. All TAFE students reported working fewer than 20 hours per week. There was a wider spread of employment among the university interviewees, with two students not employed (studying full-time) and the remainder working at least 10–20 hours per week, but the majority were working full-time. The juggling of study and employment commitments will feature in the discussion of the findings.

Stage of data collection	Participant information				
	Number of participants per institution	Mean age (±SD)	Gender	Participants with English as the main language spoken at home	Mode of study
1 Online	TAFE n = 27	25.2 ± 9.5 years	26 females 1 male	24	26 full-time, on campus 1 part-time, on campus
survey	University n = 20	35.5 ± 10.6 years	20 females	20	6 full-time, on campus 14 part-time, external
2 Individual	TAFE n = 10	24.2 ± 5.3 years	10 females	9	10 full-time, on campus
interview	University n = 10	37.2 ± 12.7 years	10 females	10	4 full-time, on campus 6 part-time, external

Table 3 Summary of participants completing the online survey and individual interview

Findings

The findings are structured to align with the three research questions identified in the introduction of this report. There are three main subheadings to this section: *The nature of information literacy skills, The information literacy challenges,* and *Improvements to information literacy support to ease the transition to university.* The six standards of the Australian and New Zealand Institute for Information Literacy Framework (table 1; Bundy 2004) are used as a reference for the findings. Given the sequential data collection, the presentation of findings begins with the online survey findings and uses the follow-up interviews as a means for further explanation and understanding of the student experience.

The nature of information literacy skills

This section portrays the types of written assessment completed and the types of information accessed by students in both the diploma and bachelor degree programs in early childhood. This establishes the need for information and the nature and extent of the information required (Standard 1). Using the Information Skills Survey (Standards 2–6), students' self-reported use of information skills is presented and compared. By depicting the types of assessment completed and the sources of information utilised, the nature of the information literacy skills currently embedded in the diploma modules and bachelor degree units is revealed (first research question).

Types of assessment and sources of information

In the online survey, students were provided with a list of assessment options and were asked to indicate all the different types of assessment they had completed in their current program. The results are presented in table 4. Nearly all of the diploma students (93%) had been assessed through observation or the use of work portfolios, with fewer students completing research reports (56%) and essay-style assignments (44%). This pattern of assessment demonstrates alignment with the VET focus on practical employability skills. A different trend was evident for the bachelor degree students, with all respondents indicating that they had completed essay assignments (100%) and a majority that they had completed a research report (75%).

Type of assessment	Diploma	Bachelor degree	
	% of students $n = 27$	% of students $n = 20$	
Observation of practice	93	30	
Portfolios (for example, work samples, observations, planning)	93	65	
Oral presentations	11	15	
Research reports	56	75	
Reflection/reflective diaries	48	75	
Essay assignments	44	100	

Table 4 Types of assessment completed by students in their current program

Note: When responding to this survey item participants were able to indicate multiple responses.

In the interview, diploma students often described essay-style tasks that were broken into a series of questions on a topic, rather than an open-ended essay. TAFE teachers would go through the various modules and carefully explain what was required in each component. Many university students noted that, by comparison with their previous TAFE studies, they were given less structure in relation to

their university essays and less guidance about the types of information they should use. This disparity between TAFE and university would potentially influence a student's ability to recognise the need for information and to independently determine the nature and extent of the information needed.

Students were asked to identify the sources they typically used when preparing for written assessment. Table 5 depicts the range of information sources used by students in the diploma and bachelor degree programs respectively. Both groups of students indicated a high usage of unit/module notes, prescribed textbooks and government and online sources, but a larger proportion of degree students consulted a wider range of information sources, such as additional textbooks (85%), and academic (90%) and professional (75%) journal articles.

Sources of information	Diploma	Bachelor degree	
	% of students $n = 27$	% of students $n = 20$	
Unit/module notes	89	90	
Prescribed textbook	89	95	
Other textbooks/e-books	37	85	
Unit/module readings	48	100	
Colleagues in the field	48	45	
Professional journal articles (for example, Every Child)	22	75	
Academic journal articles (for example, Australasian Journal of Early Childhood)	26	90	
Newspapers	7	45	
Government documents (for example, Early Years Learning Framework)	93	95	
Online sources	85	80	

Table 5	Sources of information used by students when preparing for assessment
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Note: When responding to this survey item participants were able to indicate multiple responses.

Filtering of online information

An open-ended survey question asked participants to describe how they began searching for information when it was not supplied to them. Many TAFE students responded with 'the internet' or 'Google', and a few stated 'the library catalogue' or 'the Early Years Learning Framework'. These same avenues were identified by the university students. However, 'database searches' and 'the library online search' were mentioned first. Given that online sources were used by 85% of TAFE students and 80% of university students, the specific type of online information and the process of accessing information online was targeted in the interviews.

A specific interview question was 'How do you go about finding information?' The participants who described an internet search received a follow-up question asking 'What do you do when 10 000 results come back?' When using an internet search, all students identified that they had adopted some level of online filtering to locate reputable sources. These search filters included refining search terms, looking for Australian sites and using an identified author. While both TAFE and university students applied search filters, there was a distinction between the two groups because of their specific priorities. For example, one TAFE student explained their priorities as being 'the most professional site that I can find ... I look for the most practical information that you could use as somebody who was coming into the day care'. The priority on practical information for TAFE students directs them to particular sources of information and those sources represent various levels of information, as indicated in the following two examples.

TAFE Example 1

Normally I'd just Google it —'autistic spectrum disorder in young children'. A whole range came up. One of them was called something to do with mums and autism. It was a really helpful website. It was all about mums who had children with autism spectrum disorder. They were able to give me a lot of information.

TAFE Example 2

The first thing that I normally do is I will go to Google, and the second page that I go to is a page called www.aussiechildcarenetwork.com. I found them really good. They're really resourceful. They have different sections for different people but they have assignment help. The people that are doing the assignment ... will post questions. People won't obviously post the answer but they'll either give you a link or reword the question so it's a bit easier to understand. I found them really quite helpful.

In contrast, university students are encouraged to prioritise theory, recent research and scholarly/peer-reviewed sources and their search filters were therefore quite different.

I type in key words and then find those. Then I just make sure that the wesbite is a reliable website and it's not one that can be easily accessed by anyone that can change information. So I don't use Wikipedia. I use reliable websites. If I'm looking on a website and I see who the author is of the article, sometimes I'll go back onto the university website and I'll look up journal articles. If they've written journal articles that have been peer-reviewed, I know that they're a reliable source and I'll use that website.

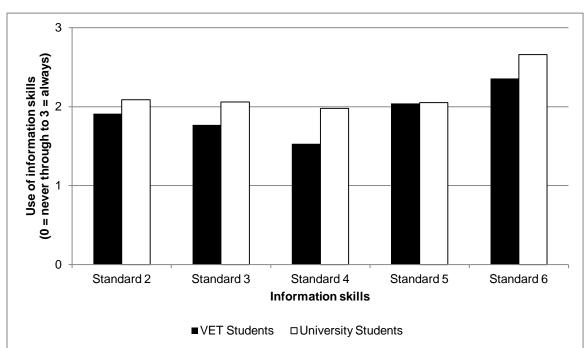
When looking at both groups of students the most important point is that filters were applied to their online search strategies. In terms of transitioning to university, it is necessary to build on the existing knowledge of search filters and enhance the specific strategies that match university priorities and the information needed (Standard 1). University lecturers must be aware of this shift in priorities that transitioning students experience.

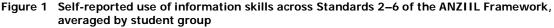
Information literacy skills

The Information Skills Survey targets Standards 2 to 6 in the Australian and New Zealand Institute for Information Literacy Framework: finding information, evaluating and managing information, applying information to create new understanding and using information appropriately. The survey instrument required participants to consider statements and indicate from 0 to 3 (0 never, 1 sometimes, 2 often, 3 always) what best represents their practices in their current studies. For example, 'To do assignments I (never/sometimes/often/always) find extra articles to support my argument'. This 20-item instrument appeared at the end of the online survey.

The TAFE and university groups had averages above 1 on Standards 2 to 6 (figure 1). This means that across Standards 2 to 6, all students were at least sometimes demonstrating information-literate behaviours. There appeared to be differences between the groups, however, with university students indicating more consistent behaviours, behaviours which relate to systematically managing the information collected (Standard 4) and using information appropriately through referencing and adhering to specific writing styles (Standard 6). The less frequent demonstration by the TAFE students of the systematic management of information may be linked to the type of assessment completed at TAFE (for example, essays broken into a series of questions), while the structured guidance in locating relevant sources means there are reduced expectations relating to information management. The different expectations in this area at TAFE and university received support from

interview responses. For example, one TAFE student described their routine as first writing the questions up and then reading through the gathered information to pick relevant bits to make a paragraph response, whereas a university student commented on the need to construct concept maps and organise their responses into subheadings, which were not prescribed in the assessment task. This same student said at the beginning of her degree: 'I didn't have a plan and I was just writing it all down. It made no sense'.





The information literacy challenges

This section reports on those aspects of information literacy that are the most challenging for students (second research question). Online survey findings from the larger participant group are presented first. The interview data are then used to demonstrate the intricacies of the challenges faced by the students.

As an initial insight into the most challenging aspect of information literacy, the online survey used the information literacy standards (1–6) and asked students to indicate how challenging they found each aspect (not at all, somewhat, very, extremely challenging) (figure 2). For both TAFE and university respondents, understanding the assessment task (Standard 1), bringing together and preparing the assessment (Standard 5) and adhering to the writing and referencing styles (Standard 6) were the three aspects most consistently identified as being the most challenging. While it is very interesting that these three aspects are evident across both sectors, the nature of the challenge is somewhat different, as was revealed in interview.

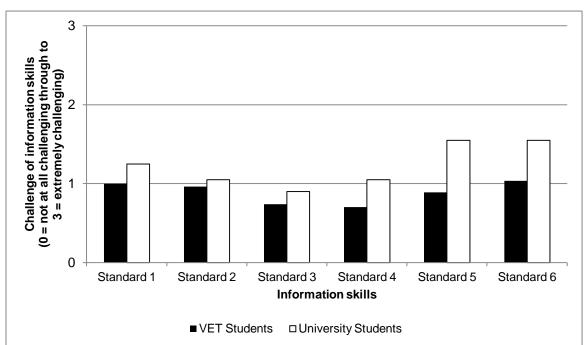


Figure 2 Student-perceived challenge of information skills across Standards 1–6 of ANZIIL Framework, averaged by student group

During the interview TAFE students spoke about writing up the information and attempting to convert it into their own words. Many students spoke about how it was clear in their head but they had difficulty presenting a clear argument on the page, with aspects of grammar also making the task difficult. Several spoke about how they lacked confidence in their ability to reference. University students also mentioned that formulating their responses, assimilating their ideas and appropriately acknowledging references were challenging. One university student described:

What I find the most challenging is keeping all the quoting and the referencing in line and to not give my opinion about something. It's what I've learnt from academic people.

Another university student found the various differences in referencing to be particularly difficult and believed that they did not reference in their previous TAFE studies, which meant a reduction in their confidence as they transitioned to university:

I don't think it's something that I did. We certainly didn't have to do it when we were in TAFE. So it was a new thing when I came to university. I knew that I had to do it but I had no previous experience.

What is interesting here is that the TAFE students who were interviewed reported using referencing. However, it was different from what was expected at university. Among the TAFE students, government documents (for example, Early Years Learning Framework) and theorists (for example, Piaget and Vygotsky) were considered to be 'referenced' if they were named in the relevant sentence. University studies require more formal in-text citations using the author-date system and an accompanying reference list. Students' understanding of what referencing entails appears to be different across the two sectors.

The discussion with university students revealed their perspectives on some of the most substantial differences between TAFE and university studies. For example, the majority highlighted difficulties in understanding the assessment criteria sheet. This was notably different from the competency-based

assessment at TAFE. University study was identified as having a higher level of expectation, with more complex tasks, which require access to a wider range of scholarly information sources.

I think a lot of the information was just handed to you on a platter at TAFE and you could read it if you wanted to. But you could still do the minimal work and you'd get through. Where, uni is certainly not like that.

What is challenging in this situation is the time commitment required by university study. Six of the ten university students who were interviewed were working and studying externally. All of them spoke about juggling work, university, family and friends and that this time pressure made them feel less confident when it came to their studies.

When you first look at it you think, oh my goodness. You're like oh, I can't do this and that makes you want to quit, because you think I'm not smart enough for this.

It is matter of developing coping strategies and avenues for support. Their previous TAFE diplomas had been completed full-time on campus, so studying externally was always going to be a big change. The small TAFE class sizes and one-on-one interaction are replaced by emails, readings, online forums and lecture recordings. This can be a very isolating experience for external students. The different transitioning experiences of an internal university student and an external university student are clearly present in the next section, which looks at student perspectives on information literacy easing the transition to university.

Improvements to information literacy support to ease the transition to university

This final section on the findings reports student perspectives from both sides of the transition, with a focus on improving information literacy support as a means to ease the VET-to-university transition (third research question). The data here are taken solely from the interviews with ten TAFE students and ten university students; that is, TAFE students looking towards university and university students who have made the transition.

TAFE students looking towards university

Information literacy support was typically provided by the individual TAFE teachers and was clearly focused on the skills necessary to complete assessments. There was some mention of using an online tool in the library that allowed access to journal articles. However, and as mentioned in the section on assessment and information literacy, priorities were on practical information 'from the field', so students did not always develop the skills of accessing, reading and comprehending journal-style articles.

General support services were offered by TAFE librarians in the 'learning hub'; however, nine of the ten interviewees reported not using these services because they 'didn't need them', or 'they were inconveniently timed' or 'it was too hard to get an appointment as it was for the whole TAFE, not just Children's Services students'. One student explained 'there was nothing offered that was specific like academic writing'; it was more general assignment help. This indicates that the chief source of information literacy skills in this instance is tied to the individual TAFE teacher, which is distinctly different from the university teaching approach, as outlined shortly.

Three of the ten TAFE student interviewees had just enrolled in university programs, none specialising in early childhood. There was a distinct perception that going to university and staying in the early

childhood field was not the best use of your time and money. One student, yet to commence her university studies, declared 'staying in child care isn't good, the pay isn't good so I am moving to primary education'. This issue is a wider professional problem for early childhood teachers. Other students would consider applying to university in the coming few years, but considered work experience to be valuable before undertaking further study. An examination of the age difference in the two participant groups of this research indicates that there is potentially a ten-year gap in the transition (table 3). This return to study after years in the field is often motivated by career advancement in the early childhood sector. The fact that the pathway from vocational education and training to university is not always a direct one is a necessary consideration in the proposed transitional collaborative framework.

Students were asked to describe what academic aspect, if they were to go to university, would concern them the most. All respondents indicated 'understanding' issues, including understanding the lectures and the assessment, and having confidence in their capabilities. They were aware of the differences in class sizes, the increase in the size of assessments and a change in standards, but the students did not necessarily have a clear understanding of the system as a whole. There is a need to convey this wider understanding of university and the opportunities available for support. TAFE students named some specific aspects that included:

What will a university degree will do for my career?How do you complete the different forms of assessment?The general stuff, how to apply? What units to enrol in?I'm not really sure how uni works, but perhaps student support sessions?

All participants preferred the idea of a face-to-face orientation or an open day, but also noted the importance of having the information easily available online and accessible any time. Students reported wanting sessions facilitated by someone who understood the TAFE-to-university transition. In terms of supporting the transition, students described what they wanted from both TAFE and university staff. One student believed it should be 'like a mutual agreement between TAFE and uni', with TAFE staff providing information and helping students to prepare for university and knowing what to expect. It was very clear that TAFE students wanted to have current university staff and students visit them and interact with them during their diploma course. This would allow for those considering university to ask important questions, which would help them to decide whether to enrol or not. When enrolled in university, the students hoped the staff would be both knowledgeable and understanding of the transition that was being made, and flexible in providing support, particularly in the first semester.

University students having made the transition

As noted earlier, the experiences of internal and external university students are different, and this distinction emerged clearly during the interviews with the university students who had made the transition from TAFE. It is important to note that, for the university reported in this case study, internal and external students complete a similar, but slightly different suite of units. External students and those enrolled in the Bachelor of Early Childhood Studies complete a unit dedicated to academic and professional communication. Those completing the Bachelor of Education (Early Childhood) internally do not complete this unit, but instead have tutorial and library sessions embedded in their first-year units. In addition to information skills support in units, additional workshops coordinated by the two different campus libraries are conducted and academic skills

advisors are present in the library, while language and learning educators (with a focus on students who have English as an additional language) are in the Faculty of Education.

When describing their experiences with information skills in the first year, the four students involved in the interviews who were studying internally commented on how many of the tutorials in the first few months focused on information skills and noted that library staff were also involved in these. Library staff explained how to navigate the library website and conduct database searches. The students commented on accessing one-on-one 'study solutions' appointments with library staff and the online 'study smart' modules. It was appreciated that lecturers responded to emails quickly and student mentors were helpful in terms of general guidance. When discussing the wider learning opportunities for gaining information skills, the interviewees all commented on being able to attend some sessions (for example, writing and referencing workshops), but not all. It was usually an issue that the timing of the session was inconvenient and only offered on campus at the beginning of the year.

The six students studying externally commented on accessing the online 'study smart' modules, but found most of the on-campus library workshops impossible to attend due to work commitments, as they were most often run during business hours. One student commented that the 'twilight' sessions were only offered 'every now and then'. Overall, these students found the academic and professional communication subject to be a 'great prerequisite for other subjects'. Students appreciated the orientation day and the information received. They were introduced to the library website and relevant online skills, such as using Blackboard Collaborate. This enabled subsequent units, which used live online sessions during the evenings or on the weekend. However, not all students had the opportunity to access the available information, as the majority of the orientation sessions were run on campus, with only a small portion recorded and accessible online. Missing out on this early information created gaps in students' skills development and their awareness of information-support structures. Some students knew how to use the online chat with a librarian and considered it to be a great help, whereas others believed they were not offered any help.

I wasn't offered any help really, and nobody particularly helped me. There is, as I know, a lot of additional support on the website. If you are having difficulty you can contact somebody who is — I'm not sure what they're called. But, I probably came across that in my second year ... I was very new to it, and quite honestly hadn't used a computer like a Blackboard website or anything like that at TAFE. So my first year was probably more about me finding my way around, and trying to work out where I can find what. So maybe I had missed something ...

Alternatively, students did receive an initial introduction but did not realise the full potential of the various online information sources.

There was a lot of information given through the lectures that were recorded ... you had things to do, activities, and then there were just the lectures themselves. You might laugh when you hear this, because I didn't realise that you could listen to them. I used to gather all the notes and I'd go through these notes. I'd look at stuff and I'd say, oh, I wish I could listen to this. Then right in the last month or so, I finally realised that — and I asked the computer specialists that lived with me and they showed me how. I felt like such a dill, because then I wanted to go back and listen to them all.

What these examples indicate is that, while the presence of information literacy skill support is important, enabling mechanisms which create a foundation of skills to navigate and access the university support systems, both as an internal and external student, must be in place.

When discussing the type of support and how it could best be offered to TAFE students transitioning to university, several suggestions were made by the current university students (internal and external). These included:

- providing an online orientation to the university, including aspects such as enrolment and where to find information on a variety of topics
- scheduling sessions on using Blackboard, academic writing and database searching at an accessible time for those who work full-time
- offering face-to-face and online information skill support throughout the entire year. Students
 appreciate seeing how to do things: 'I like the online ones, the ones where you can click on it and
 you can see how to do it'
- continuing to teach academic and professional communication, with a combination of online and in-person sessions that enable early feedback
- providing a more thorough tour of the library and library services. One student declared that 'it took a whole semester to work out how to print'
- using student mentors to answer questions. It was claimed that it would be a bonus if they were students with previous experience in TAFE.

When asked what specific advice they would offer to staff from both TAFE and the university in order to best support students making the transition to university studies, the key aspects that emerged in relation to TAFE staff centred around providing information as early as possible about university. Specific to information skills, several students commented on the desirability of raising the expectations of TAFE assessments towards the end of the diploma. This would include, in particular, alerting students to the necessity of independently searching for information and using more formal referencing. This comment links to the suggestions made to university staff. They focused on opportunities for students to get 'the university experience' before enrolling. Several students suggested participating in targeted introductory days, at which TAFE students could participate in specific university activities. One student elaborated: 'looking at a mock assignment, talking about what is right and what is wrong', and setting clear expectations of what's required university. When enrolled at university, early communication was identified as being vital. At all stages of the process, it is evident that early information is the key: information about what to expect, information about what to do, and ensuring students are able to access this necessary information.

Discussion

This section brings together the findings on the three research questions and proposes a transitional collaborative framework designed to support students and their information literacy skills as they transition from TAFE to university.

An investigation of the nature of information literacy skills across the VET and university sectors indicates that there is a distinct difference in the level of expectation in both the overall course assessment and the capabilities for locating and using different sources of information in the course. While the Information Skills Survey indicated similar patterns of behaviour, the interviews revealed that students noted more formal expectations in assessment at university by comparison with TAFE. What TAFE and university students mean by 'referencing' is distinctly different, with university students reporting the use of the formal author-date system. When considering the challenges of information literacy, it emerged that both TAFE and university students identified difficulty in the same aspects; namely, understanding the assessment task, assembling the information and preparing the assessment task, adhering to the desired writing style and referencing the assessment task. The time commitment required by university, combined with full-time work and family, was a significant burden on the students who were studying externally.

From the data collected on students' perceptions and experiences three themes emerged: first, information and support needs to be received early and prior to commencing university studies; second, there must be mechanisms to ensure that students have the necessary skills for accessing support (particularly external students, who are reliant on an online interface); and third, the timing of the support sessions needs to take into account that many external students work full-time and are unable to access support during business hours.

This summary of the key findings is applied in the proposed collaborative framework for transition students presented in figure 3, while the final section of this chapter discusses the implications of the framework for transition in general.

A transitional collaborative framework

A conceptual representation of the proposed collaborative framework for strengthening information literacy in the transition from vocational education and training to university is presented in figure 3. This diagram alone cannot convey the intricacies of the proposed collaboration; the text that follows elaborates on the framework. Consideration is given to the different time periods in the transition and the issues of who will manage the various elements and modes of delivery to ensure equitable access. The time periods of the transition structure the subsequent text: prior to enrolling in university; the period between receiving a university offer and commencing studies; and commencing university study.

Period between receiving a university Prior to enrolling in university Commencing university study offer and commencing studies Information literacy course commences before orientation Engagement with peer mentors: Session 1: Online orientation initially structured, but reducing over time. TAFE staff: 6 week information literacy core skills course Create opportunities for students - facilitated by librarians and academics University pamphlets and information booklets to develop research skills, week including searching for scholarly Offered on campus and online. sources independently, using the University orientation week activities Targeted external and internal student Early Childhood Orientation includes session 2 of the information literacy course information and establishing Studying at TAFE formal referencing skills. available The university experience: join a Students receive two key University staff: first-year unit for the afternoon pieces of information: dedicate time to explaining (talk to current students and their a link to a video assessment tasks and lecturers) - invitation to current example of how to enrol corresponding criteria sheets a phone number and diploma students and early • commit to developing learning • email for general childhood educators who are Working in the field experiences that equally engage assistance. interested in enrolling in bachelor both external and internal students. degree in early childhood. Session available in person or online.

Figure 3 Proposed transitional collaborative framework, based on evidence from the present research

Prior to enrolling in university

In relation to figure 3, it is important to acknowledge that the pathway to university is not always directly from a TAFE institute, as evidenced by the age difference between the TAFE and university participants in this study (table 3) and the fact that three of the TAFE students indicated they would only consider university after obtaining full-time experience in the field. Where possible, a transition framework needs to encompass those studying at TAFE and those working in the early childhood field. Overall, as revealed in the section, 'TAFE students looking towards university', TAFE students want to know more about university and the university experience. On a basic level, this can be achieved through the provision of pamphlets and university information booklets at TAFE institutions and would be further enhanced if TAFE staff encouraged students to consider the option of further study — at university.

On a more detailed level it is important to provide information to help TAFE students to 'understand' university. The students indicated clearly that they wanted 'the university experience' before applying and enrolling; one student commented that this experience needed to be 'a mutual agreement between TAFE and uni' and suggested that it might be desirable for visits from current university staff and students.

In the proposed collaborative framework therefore one of the major inclusions for the period prior to enrolling in university is an invitation to current diploma students and those working in the field to participate in a first-year university unit ('the university experience'). As part of overall university outreach, a lecturer would conduct a workshop and engage with all students, facilitating a dialogue between TAFE and university students. The specific content of this session could be negotiated between TAFE and university staff and students and its overall aim would be to decrease the fear of the unknown and to increase 'understanding' of university and inculcate in students a recognition that university study is achievable for those who want to pursue it.

The contribution of the TAFE staff during this period – towards the end of a diploma program – would be to create opportunities for those students who are interested in university to develop their research skills. Specific examples mentioned by students who have made the transition to university include encouraging students to independently search for scholarly information and introducing the formal referencing skills that would be expected at university. Such activities could potentially be embedded in 'the university experience' session; however, this would need to be carefully managed so that the program was sustainable. A program driven by a few individual and interested staff members would not be sustainable in the long-term. The additional workload and organisation required to reach a range of VET providers as well as educators in the field is not feasible. Sustainable implementation requires the mobilisation of the wider university network to attract participants as well as to enable access to the necessary facilities.

Period between receiving a university offer and commencing studies

This period is equally important in supporting the transition, with the framework proposing that two key pieces of information are required initially: a link to an interactive/video example of how to enrol and a phone number and email for general assistance (figure 3). Uncertainty and confusion over enrolment procedures was mentioned by both the TAFE and university students involved in this research. University staff and students often forget how hard it is to navigate an unfamiliar, complex online interface, particularly in relation to something as important as enrolment. An overwhelming

amount of information is often provided to commencing university students. The aim of this aspect is to provide the essential information in a simple and readily accessible format.

There was a clear distinction between the experiences of university students who were engaged in internal study and those who were involved in external study. The internal students described numerous occasions during the first months of study when information literacy support was offered. Conversely, external students have two potential barriers to accessing support. The first is the timing of the information literacy support: many workshops and sessions were held during business hours and 'twilight' sessions were only offered 'every now and then'. The second potential barrier relates to being able to access support online and having the prerequisite skills. Being engaged in online study places high demands on the student, who may have no prior experience in online learning and particularly if using programs such as Blackboard or Blackboard Collaborate. This point leads to the next component of the proposed framework: an information literacy course that commences prior to orientation week. This would be a required course for those enrolled in external studies and an optional course for those enrolled internally; it would be offered both internally (outside business hours) and externally online. Specifically, the first session would focus on 'online orientation' and assist students to navigate the university system and ensure they had the necessary skills to engage in external studies. This program would continue for one to two hours each week for a period of six weeks and cover the six information literacy standards and the available library services supporting their information needs while at university. Given the advanced standing awarded to students with a TAFE diploma, students are potentially able to bypass the first-year units containing the embedded information literacy skills. This 'on-entry' course will manage this situation and provide the foundation skills.

Targeted activities during orientation week are a hallmark of many faculties in universities and are an essential component in the provision of support before studies begin. In the present proposal this session will occur on the same day for both internal and external students as a means of socialising and networking across the program, regardless of study mode. Students will be free to attend other university-wide orientation activities during the week, but this session will work towards creating equal opportunity at the beginning of the degree program. This will be the forum for the introduction of peer mentors. As noted in figure 3, the peer-mentoring relationship is structured initially, but subsequently becomes more informal. During the interviews for this research project several participants acknowledged the valuable assistance offered by student mentors, commenting that if mentors come from a TAFE background then that would be a bonus.

It is proposed here that peer mentors who have made the transition from TAFE are allocated to groups of students commencing university via a TAFE pathway. The mentors will have direct knowledge of what the new students will be experiencing, the different approaches to learning (for example, large lecture halls vs Blackboard Collaborate), the shift in assessment style, the different sources of information used, and the more formal approach to referencing. The experienced mentors will be able to guide the commencing students and help them to develop management strategies. To maximise learning potential, these key support mechanisms must be established prior to the first week of study.

Commencing university study

Once university study has commenced, the process of supporting transition becomes a shared responsibility between students and university staff. The information literacy core skills course continues and is facilitated by library and academic staff. This course is completed in week 4 (with

sessions 1 and 2 completed prior to the start of semester) and in collaboration with the relevant unit coordinators. Some of the final activities could be targeted to specific mid-semester assessment items.

The peer mentors initiate contact with students in the first few weeks and again around mid-semester when the first assessment pieces are likely to be completed. Again, it must be emphasised that the mentor should be an approachable person with a direct experience of transitioning from TAFE to university and possessing the knowledge to informally guide and support the individual student. This could also include explaining time-management strategies to those students who are working full-time and studying externally.

One of the most substantial responsibilities in supporting student transition in the early stages of university lies with the university staff. The proposed framework summarises two key actions. They must:

- dedicate time to explaining assessment tasks and criteria sheets
- make a commitment to developing learning experiences that engage external and internal students equally.

The shift in assessment and expectations from one sector to the next has been noted several times, specifically in relation to the shift from competency-based assessment to grading systems and criteria sheets, both of which will prove challenging to students. Difficulties in understanding assessment tasks can also be linked to difficulties in understanding a complex criteria sheet. This is the foundation of the information literacy process: establishing the information needs. It is essential, particularly in the early units, that lecturers take time to introduce all students (TAFE pathway or otherwise) to the language of university assessment and to clearly articulate expectations.

The challenge for academic and library staff in the times ahead will be in the development of learning experiences that engage both external and internal students. Students are not always able to attend on-campus sessions and the times when students engage with university learning experiences are determined by individual situations. Running library workshops outside the traditional business hours will need to become standard practice, as will ensuring that students can participate in on-campus workshops online. The workshops need to be accessible at any time during the semester, not solely in the first few weeks. This could be achieved by sessions being recorded and/or through the development of a resource centre or a more advanced interactive interface. The same could be said about the delivery of lectures and tutorials. TAFE pathway students are transitioning from a different learning environment, most moving from one that was full-time and internal with small class sizes and a great deal of individual attention, to university study (external or internal) with larger classes in a range of lecture, tutorial and online learning formats, and with expectations for independent work. There is the risk of transition students not feeling connected, and there is a challenge for the lecturer to develop an engaging program for students studying externally, one which utilises a range of media and enables live participation.

Implications for transition to university

This research set out to understand the nature of the TAFE-to-university transition through the lens of information literacy. By exploring the information literacy expectations and challenges on either side of the transition, this study has provided insights that will further benefit the relationship between TAFE and university. One of the unique aspects of this proposal is 'the university experience'. Universities run open days and information evenings, but the approach promoted in this report aims to

target TAFE students, giving give them a real taste of what university would be like, particularly with regard to information literacy. Although this study focused on children's services students transitioning from TAFE to university, the framework proposed could be extended to other institutions and other disciplines beyond early childhood studies. The specific case reported in this research includes the 'when', 'how' and aspects of 'what' should be part of transition support. The framework, with the specific elements described in the previous text, guides the 'when' and 'how'. The exact nature of the elements ('what') included in 'the university experience' and the information literacy course could be developed to meet the needs of different students and different programs. Supporting transitioning students will always involve ongoing collaboration, reflection and adaptation.

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Appendix A: Online survey questions

AŁ	pout you					
1.	What is your gender?	Female	Male			
2.	How old are you?	Age in years				
3.	Is English the main language t	hat you speak at	home?	Yes	No	
4.	What is the highest year of sc	hool that you hav	ve completed? Ma	ark one c	ption on	ly.
			Year 12 or equiv	alent		
			Year 11 or equiv	alent		
			Year 10 or equiv	alent		
			Year 9 or equiva	llent		
			Year 8 or below			
			Never attended	school		
5.	Have you completed any post	-secondary schoo	I qualification?		Yes	No
	you answered yes , please desc cent first, and then describe a			ualificat	ion, desc	ribe the most
(a)	Level of qualification (for exa	ample, Certificate	e, Diploma, Unive	ersity De	gree):	

(b) Field of study (for example, child care, education, health, community services, hospitality)

(c) When was this qualification awarded:

(d) Other qualifications (for example, level of qualification, field of study and when awarded):

6. Are you currently, or have you ever been employed, in any care or education program with young children?

Employed means paid work for 10 or more hours per week. Yes No

If you answered yes, describe the most recent, or the current program:

(a) Nature of the program (for example,, long day care centre, after school care, family day care, preschool, kindergarten, early intervention program, aide in a school).

(b) How many years have you been employed in this program (if you are describing employment that is not current, please indicate period of employment for example, 2007–2010)?

(c) What is the total number of years that you have ever been employed in care or education programs (include the number of years that you indicated above)?

7. What course are you currently enrolled in?

(a) Course.

(b) What mode do you study (full-time/part-time, on campus/online etc.)?

(c) When did you commence this study?

(d) Prior to commencing your current course, how many years has it been since you were enrolled in some form of tertiary study?

About your current course

Thinking about the units you are currently enrolled in, or have recently completed, please answer the following questions:

8. What type of assessment do you typically comple	ete? (Circle all that are relevant)
Observation of your practice	Research reports
Portfolios (for example, work samples, observations, planning)	Reflections/Reflective Diaries
Short answer (for example, up to a paragraph) responses	Essays (without supporting references)
Long answer (for example, multiple paragraph) responses	Essays (with supporting references)
Oral presentations	Other please specify

Question 9–12 all relate to written assessment tasks

9. When reading an assessment item do you find it hard to understand the task? (circle one option only)

Never	Sometimes	Often	Always
10. When prepari	ng for assessment you need	d to find relevant inform	nation. What sources information
do you typically us	se? (Circle all that are rele	vant)	
Unit/class notes		Professional journa	al articles (for example, Every Child)
Prescribed text book		Academic journal a of Early Childhood	articles (for example, Australasian Journal)
Other text books/e-bo	oks	Newspapers	
Unit readings		Government docur Framework).	ments (for example, Early Years Learning
Colleagues in the field	1	Online sources	
		Other please spe	cify

11. When searching for information, how do you find what you are looking for?

For example, you may ask a librarian for help, or browse the internet using web search engines, or you might use a library catalogue or database search engine, or a combination of strategies – please give as much detail as you can to describe your process.

12. When completing a written assessment task, how challenging do you find the following aspects?

	Not at all challenging	Somewhat challenging	Very challenging	Extremely challenging
Understanding your assessment task				
Identifying and finding information that is relevant to your assessment				
Evaluating whether the information you find will be useful for your assessment				
Managing information you have gathered from different sources				
Bringing together all of the different information and preparing your assessment				
Adhering to the writing style and referencing of the assessment task				

For the six aspects below, please indicate how challenging you find the task.

Information skills

Below are questions that were designed by librarians to understand information skills. Remember, information is what you use in your assessment in order to demonstrate your understanding of the content of your unit. Please select the number that best represents what you do in your studies currently.

0 never		often 3 always ore than half the time)			
ltem	Statement	Never	Sometimes	Often	Always
1	I have a system that helps me organise the information I need		1	2	3
2	I keep accurate details of everything I read		1	2	3
3	I use a combination of search tools including library catalogues and web search engines		1	2	3
4	When I get a new idea, I work out how to explain it effectively		1	2	3
5	I critically evaluate each information source I use		1	2	3
6	When I make notes about the information I am reading, I include the author and title		1	2	3
7	I reference websites that I have used in my assignment		1	2	3
8	I evaluate information I read for criteria including accuracy and relevance		1	2	3
9	develop a system to keep track of the information I find and its sources		1	2	3
10	apply my institution's policies regarding plagiarism		1	2	3
11	In selecting information, I evaluate the quality of the inform	mation 0	1	2	3
12	I have a system for searching for information on a subjec	t O	1	2	3
13	I need to keep relearning because life is constantly change	ging 0	1	2	3
14	I revise my research plan and strategy if I need to gather information or data	more 0	1	2	3
15	I present the information in a medium that suits the audie	nce 0	1	2	3
16	If my searching returns too much irrelevant information, I my keywords	change 0	1	2	3
17	When I consider information I have found, I state the key my own words	ideas in 0	1	2	3
18	I compare information as I'm reading with what I already	know 0	1	2	3
19	I decide how best to find the information I require for a patask	rticular 0	1	2	3
20	I comply with stated restrictions on the use of intellectual	property 0	1	2	3

Appendix B: Interview questions for TAFE students

Part A: Questions about what you do

1. In the last units you completed, what types of assessment did you complete?

2. What type of information have you used to complete your most recent written assessments?

3. How do you go about finding information?

4. Thinking of an assessment piece you have recently completed; how did you bring together all your information and prepare your written assessment?

5. Thinking about the assessment in your most recent units, the need to find information and bring it altogether for the finished product, what aspect do you find most challenging?

Part B: Thinking about the transition and the support structures

6. In terms of developing your skills in order to gather, evaluate and use information in assessment pieces what support did you receive in your TAFE Diploma?

7. In your TAFE Diploma, were there any learning opportunities or support services that you were interested in but unable to participate in?

8. What are your thoughts on enrolling in a university program in the future?

9. If you were to enrol in a university program, what academic aspect would concern you most?

10. Thinking about university study, what do you think will be different about written assessment and how you use information?

11. What type of support do you believe would help you in the transitioning from TAFE to university?

12. What advice would you offer to TAFE and university staff about supporting those students who are transitioning from TAFE to university?

Appendix C: Interview questions for university students

Part A: Questions about what you do

- 1. In the last units you completed, what types of assessment did you complete?
- 2. What type of information have you used to complete your most recent written assessments?
- 3. How do you go about finding information?

4. Thinking of an assessment piece you have recently completed; how did you bring together all your information and prepare your written assessment?

5. Thinking of that same assessment piece you have recently completed; the need to find information and bring it altogether for the finished product, what aspect did you find most challenging?

Part B: Thinking about the transition and the support structures

6. In terms of the type of assessment and information skills required, what do you believe is the biggest difference between TAFE and university study?

7. In terms of developing your skills in order to gather, evaluate and use information in assessment pieces what support did you receive in the first year of your university degree?

8. During you first year at university, were there any learning opportunities or support services that you were interested in but unable to participate in?

9. What type of support do you believe would be helpful to students transitioning with a TAFE Diploma?

10. What advice would you offer to TAFE and university staff about supporting those students who are transitioning from TAFE to university?

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