

# **Managing credit transfer from TAFE to university: the case for cross-sectoral collaboration**

*Barbara Cram and Louise Watson  
University of Canberra ACT*

## **Abstract**

Federal and state governments in Australia are committed to improving the opportunities for vocational award holders to make a successful transition to higher education. However the outcomes of many students granted entry to university on the basis of a vocational award are generally worse than students admitted on the basis of a Year 12 qualification. With weakening domestic demand for university places, unstructured or overgenerous credit transfer may compound the difficulties faced by articulating students.

This research explores the structures for admission of students to the University of Canberra (UC) on the basis of a vocational award completed at the Canberra Institute of Technology (CIT). Under a long-standing articulation agreement between the two institutions, over 170 articulation pathways have been created to enable holders of a CIT Diploma or Advanced Diploma to enter UC Degree courses, and the way in which credit is granted can vary between courses. The authors examine three models for determining the credit granted for completed TAFE awards. The management of each model and the learning outcomes of articulating students under each model are analysed and compared.

From their analysis of the students' experiences under each of the three models, the authors suggest that student transition from TAFE to university is most effective when credit transfer arrangements are characterised by high levels of collaboration at the course delivery level. The authors explore the nature of effective cross-sectoral collaboration and identify the ways in which institutions can support collaboration to enhance opportunities for articulating students. The extent to which the outcomes of this study can be generalised to other institutions is discussed.

## **Introduction**

Participation in education and training has changed dramatically over the past two decades. Increasing numbers of young people now follow education-to-work pathways that involve non-traditional, concurrent and/or sequential combinations of education and work (Dwyer and Wyn 1998). Divisions between the sectors of post-compulsory education and training are breaking down and students are moving from the vocational education and training (VET) sector into the higher education (HE) sector in greater numbers. Between 2001 and 2005, the number of students admitted to university on the basis of a vocational award increased by 46 per cent (DEST 2007).

Although students are being admitted to universities on the basis of a VET award in greater numbers, their pathway to successful completion of higher education is not

assured. Former VET students are traditionally less likely to succeed at university than students admitted on another basis (Urban et al. 1999). A recent survey found that 24.4 per cent of students with an apprenticeship, trade, vocational, or other qualification dropped out in the first year of university, compared to 13.7 per cent for all students (Long, Ferrier and Heagney 2006 p 30).

Australian governments at the state and federal level have promoted credit transfer and articulation arrangements as key policy instruments to support the transition of vocational students into higher education. In 2005, the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) endorsed a set of “Good Practice Principles for Credit Transfer and Articulation” and commissioned a national study of the practices in credit transfer and articulation from vocational to higher education, mapped against these principles (MCEETYA 2005). Policy makers now recognise that credit transfer alone is not a sufficient mechanism to improve the learning outcomes of vocational students. In many cases, universities offer generous credit transfer arrangements which are so poorly conceived that they compound the disadvantages faced by articulating students (Watson 2006, Harris et al. 2005)

The MCEETYA-commissioned report on Credit Transfer concluded that the future success of credit transfer arrangements depended heavily on the extent to which articulating students were supported by structured pathways negotiated between the sectors. Courses such as dual sector awards or fully articulated programs with VET and HE components are perceived to offer students more certainty, consistency and support than unstructured credit transfer arrangements (PhillipsKPA 2006). Several national initiatives now provide a framework for structured cross-sectoral qualification linkages and cross-institutional programs (AQF 2004, MCEETYA 2006).

This paper examines the experience of students making the transition from the Canberra Institute of Technology (CIT) to the University of Canberra (UC) under articulation and credit transfer arrangements negotiated between the two institutions. We describe collaborative programs developed by staff and report the experience of students within those programs in terms of retention and completion of university studies. We identify three collaborative models for the admission of students to the University from CIT, describe each model, and compare the outcomes of students in different programs. The experience of vocational students in structured articulation programs is compared with the experience of vocational students in non-articulated courses.

## **Research Method**

The Canberra Institute of Technology (CIT) and the University of Canberra (UC) have experienced a decade of collaboration under a Memorandum of Understanding (MOU) that was renewed in October 2007. The broad aims of the agreement are to strengthen articulation pathways and professional opportunities for students in the ACT region through improved arrangements for admission and advanced standing and through the sharing of educational resources and expertise. In the MOU, ‘the parties agree to give priority to the articulation of the Institute’s Diploma and Advanced Diploma courses with

undergraduate Degree courses in the same or related fields offered by the University' (Memorandum of Understanding, 2002, 2007). The agreement is supported with governance structures including a Joint Liaison Committee and the CASR Advisory Group. As a result of improvements in infrastructure and processes, students at CIT are now offered over 170 articulation and credit transfer arrangements with UC; these are listed on the Pathways websites at both institutions (Canberra Institute of Technology 2008, University of Canberra 2008).

Articulation arrangements between UC and CIT are designed on a course-by-course basis between courses in related fields. Status is granted for the completion of a nominated course, which may include relevant field placement, work and other practical experience. Some CIT qualifications articulate to more than one degree program (or vice versa) and credit provision may vary for each arrangement. In 2008, CIT graduates in over 75 programs are guaranteed a place into 38 related undergraduate courses (or combinations of these) at UC and are granted automatic credit at enrolment.

For this study, student enrolment data were collected and disaggregated to identify patterns of participation, success rates and retention rates among students admitted to the University of Canberra on the basis of a CIT award. The authors identify three dominant models of credit transfer and articulation and present the enrolment data for each of these three groups. The specific research questions addressed in this study are: which type of credit transfer and articulation models offer the best outcomes for students admitted to university on the basis of a CIT award?; and what are the distinguishing features of the most successful models of articulation?

***Credit transfer and articulation models***

It is difficult to arrive at agreed definitions of and terms for credit transfer and articulation arrangements in Australian post-compulsory education and training. We draw upon the definitions in the recent MCEETYA-sponsored study and classifications from the Memorandum of Understanding (2002, 2007) to illustrate how we have grouped students under the different models of articulation in this study (Figure 1).

**Figure 1 Credit transfer and articulation models (groups) for UC/CIT collaboration**

Term and Definitions	Pathways		UC/ CIT Study
Credit Transfer  Processes to determine the type and amount of credit to be granted on the basis of relevant prior or concurrent studies	Structured Advertised at course level		GROUP C
	Unstructured Negotiated at student level		
Articulation arrangements  A process of collaborative curriculum development and/or course design negotiated by staff from institutions in each sector	Dual Sector Award	Sequential	GROUP A
		Concurrent	
	Linked single sector awards		GROUP B
	Nested awards		

Credit transfer arrangements are “processes used by institutions or faculties/ schools/ departments to determine the type and amount of credit to be granted to a student on the

basis of relevant prior or concurrent studies” (PhillipsKPA 2006, p.10). Credit transfer arrangements may be structured (ie. advertised at course level) or unstructured (ie. where individual students apply for credit). In this study, students enrolled in courses offering *unspecified credit* are defined as Group C.

Articulation arrangements are a continuum of structured credit transfer arrangements and involve the explicit design of pathways by staff from both sectors. These collaborations in curriculum development can result in: new dual sector awards (sequential or concurrent); separate but linked awards in each sector; or nested awards with multiple exit and entry points (PhillipsKPA, p. 12). In this study, students in Group A are enrolled in two types of dual sector award programs: sequential and concurrent. Separate but linked awards are classified as Group B courses. A brief description of each course group follows.

**Group A** courses lead to AQF accredited Advanced Diplomas (and Diplomas when this is the highest level of award available in a specified field at the Institute) and Degrees which have been jointly developed as articulated courses through collaborative course design. The two courses in this category are in the fields of: Education in Early Childhood Teaching; and Interior Design.

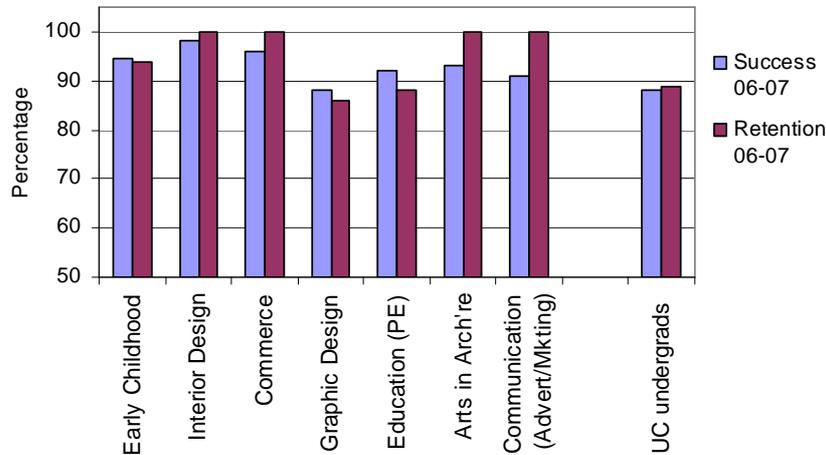
**Group B** courses lead to AQF accredited Diplomas, Advanced Diplomas and Degrees (and Certificate III or IV qualifications which are the highest level VET qualification available in the field) which have not been designed as joint courses, but for which a prima facie case of comparability of content exists and which are the product of collaborative curriculum development. The five most popular courses in this category are in: Commerce; Graphic Design; Education (Health & PE); Architecture; and Communication (Advertising and Marketing).

**Group C** courses lead to AQF accredited Diplomas, Advanced Diplomas, and Degrees (and Certificate III or IV qualifications which are the highest level VET qualification available in the field) where substantial comparability of content does not exist. These courses are the remainder of the courses in which students admitted on the basis of a CIT award are enrolled at the University of Canberra. Structured credit transfer arrangements exist for most of these courses, but they are not the product of specific collaborative curriculum development and/or course design.

## **Findings and discussion**

Articulated courses (Groups A and B) are the most popular courses of study for students admitted to the University of Canberra on the basis of a CIT award. In 2007, 263 students were enrolled in 47 UC undergraduate programs following enrolment on the basis of completed or co-enrolled CIT studies. Forty-one students (16 %) were enrolled in Group A courses and 192 (73 %) were enrolled in Group B courses. Of these 85 (32 %) were enrolled in the five most popular Group B courses shown in Figure 2. Only 30 students (11 %) were enrolled in structured and unstructured courses classified as Group C.

**Figure 2 Summary of outcomes for UC students whose basis of enrolment is a CIT qualification: Most popular articulation programs, 2006-07**



Student outcomes in terms of successful completion of a unit of study and retention in the most popular courses are presented in Figure 2. The first two columns (Early Childhood and Interior Design) are Group A courses and the remaining columns are courses in Group B. While success and retention rates for the period 2006-2007 varied for different courses of study, it is evident that students who articulated to UC on the basis of a CIT qualification achieved at or better than the average for all UC undergraduate students. Retention rates (Semester 1 to Semester 2) for CIT graduates reach 100% in some courses, even when students have failed some units of study. A description of what Group A and B programs offer and how they were developed is provided below.

**Diploma of Children’s Services (CHC50302) and Bachelor of Education in Early Childhood Teaching (CIT): concurrent Group A course**

The Joint Bachelor of Education in Early Childhood Teaching (CIT) at the University of Canberra is a concurrent dual sector award (which could also meet the definition of a nested award) in Group A. The course is the product of over a decade of collaboration between staff in both institutions. The structure of the course has altered in recent years in response to client demand, indicative of the high level of trust and communication established between the collaborating staff. In the current program, students are taught by staff from both CIT and UC and graduate with both a Diploma of Children’s Services after 2 years and a Degree in 4 years.

Collaborating staff have addressed sectoral dichotomies through an advanced curriculum mapping process. In the first two years, when students study concurrently for the Diploma and Degree (see Figure 3), integrated CIT-based units are taught by CIT teachers on the University campus. As an example, the unit ‘Health Practices in Early Childhood (CIT 5107)’ is taught in Semester 1 of Year 1 and integrates the following CIT subjects and competencies: Ensure children’s health and safety (CHCCN1C); Participate in workplace safety procedures (CHCOHS301A); Identify and respond to children and young people at risk of harm (CHCCHILD1C); Respond to illness, accidents and emergencies (CHCCN4C); and First Aid. While the unit is taught as a unit at UC, it also

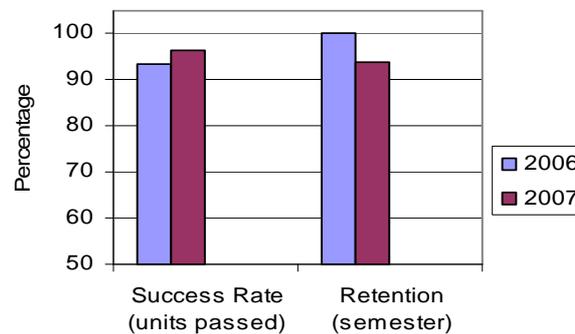
contributes to students' achievement of a nationally portable VET qualification in Children's Services.

**Figure 3 First two years of study in the four-year Bachelor of Education in Early Childhood Teaching**

	Semester 1	Semester 2
Year 1	Education Foundations Literacy for Teachers Introduction to Early Childhood Teaching CIT* Health Practices in Early Childhood CIT*	Indigenous Education: What Works Information Technology & Education Reconstructing Mathematical Understanding Human Development & Early Childhood Pedagogy 1 CIT*
Year 2	Responding to Individual Needs in Education Science Education 1 Arts Education 1 Human Development & Early Childhood Pedagogy 2 CIT*	Language Education 1 Mathematics Education 1 Early Childhood Curriculum Studies CIT* Human Development & Early Childhood Pedagogy 3 CIT*
Diploma of Children's Services awarded		

The success of this student-focused, collaboratively designed Early Childhood program is demonstrated through student outcomes illustrated in Figure 4.

**Figure 4 Student success and retention rates, Bachelor of Education in Early Childhood Teaching, 2006-2007**

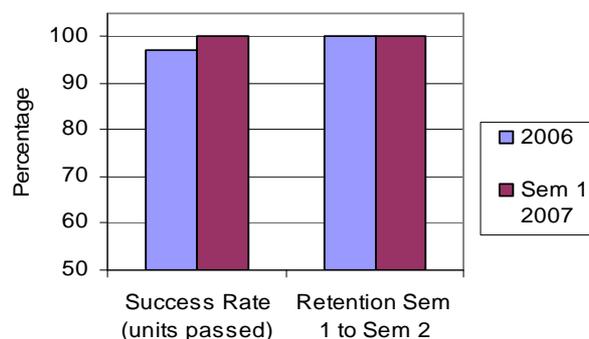


**Advanced Diploma in Interior Design (CIT program AD-2G26) into Bachelor of Interior Design: sequential Group A course**

The Bachelor of Interior Design is described as ‘an articulated program of study offered jointly by the Canberra Institute of Technology (CIT) and the University of Canberra’ (UC website, 2008). The first two years of study lead to an Advanced Diploma in Interior Design at CIT, the third year comprises two semesters of full-time study at UC. The course is only offered as a two-year plus one-year program and is designed to build on the skills students have already acquired.

This sequential program has been offered since the late 1980's and is attracting 20 to 25 students each year. The success of the program is confirmed through the outcomes. In 2006 and 2007, students passed over 98 percent of their units (104 units of study) and *all* students progressed and completed the course (Figure 5).

**Figure 5 Student success and retention rates, Bachelor of Interior Design, 2006-2007**



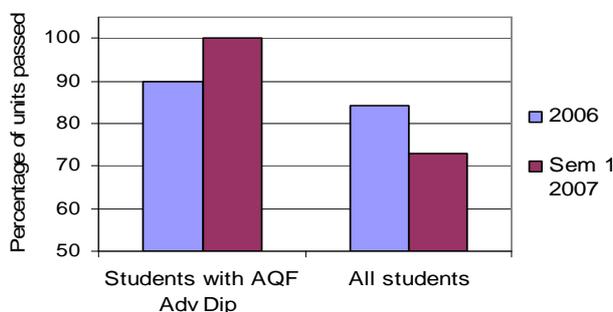
**Five Group B courses**

Although Group B courses are not dual sector awards, they represent fields of study with a high degree of compatible content between the vocational and higher education sectors. Each articulation program has been developed through cross-institutional mapping of related courses to determine: the comparability of skills and knowledge; potential gaps or difficulties for articulating students; and the amount and type of credit to award.

Figure 2 illustrated student achievement for the five most popular Group B courses: Commerce; Arts in Architecture; Communication in Advertising and Marketing; Education in Health & PR; and Graphic Design. Overall, the success and retention rates for Group B courses tend to be comparable or better than the rates for all UC students. Each program, however, has been customised to suit the needs of the student cohort.

The *Bachelor of Commerce* is the most popular Group B course, with 27 CIT graduates in the 2007 student cohort. To optimise the student experience, changes in curriculum and accounting industry standards are reviewed annually. In addition, CIT students are encouraged to study electives that will maximise the credit they receive at UC and are supported by CIT teachers to develop a sound understanding of core concepts.

**Figure 6 Student success and retention rates, Bachelor of Commerce, 2006-2007**



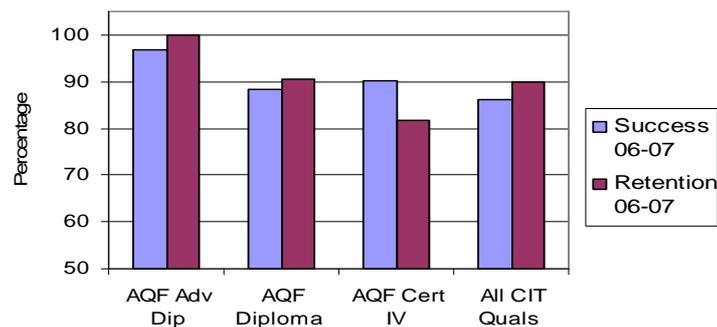
The majority of students articulate from the CIT Advanced Diploma, as this cohort can achieve professional industry qualifications in just over a year and a half! Even though

many of these students are employed in the accounting industry, they tend to achieve higher success rates than non-articulating Commerce students, as shown in Figure 6.

The articulation and credit transfer process from the *Advanced Diploma in Building Design* into the *Bachelor of Arts in Architecture* has been reviewed and refined to ensure that UC units include essential skills and content that may not have been covered at CIT. Like many of the Communications courses, the *Bachelor of Communication in Advertising and Marketing* articulates from several Diploma and Advanced Diploma programs. Students who require extra support for high-level tasks are assisted through the Academic Skills program, and success and retention rates remain high (see Figure 2).

Both the *Bachelor of Education in Health and PE* and the *Bachelor of Graphic Design* enrol many students who have a CIT qualification below Diploma level. The students with lower qualifications are not part of the cross-sectoral articulation program and do not receive credit for prior studies. As shown in Figure 7, however, students who enter articulation programs with qualifications below Diploma level also appear to benefit from the structured support provided through the collaborative project.

**Figure 7 Success and retention rates at UC, by CIT Qualification level of student**

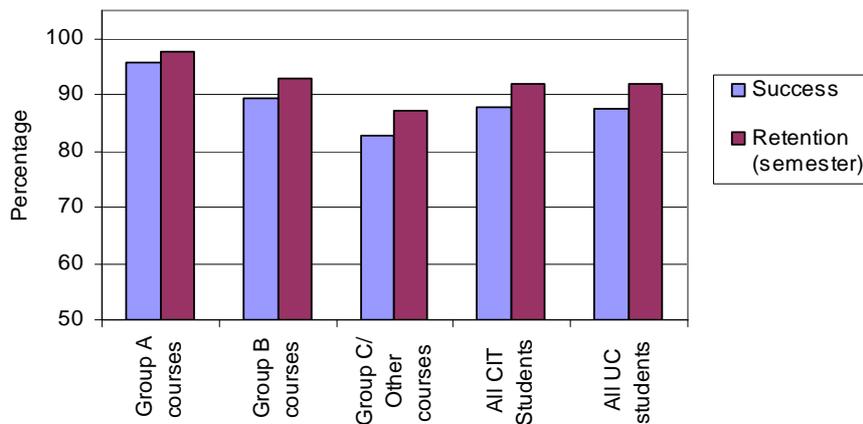


### Group C courses

In addition to the articulating courses described as Group A and Group B, CIT graduates enrolled in a further eleven undergraduate degree programs in 2006-2007 (Group C). Structured Group C courses are characterised by looser curriculum mapping and less intense levels of collaboration than Group A and B courses. An example is the Bachelor of Education in Primary Teaching, which offers the equivalent of one semester of credit for Open Electives on completion of ‘any two-year CIT Diploma or Advanced Diploma’ (University of Canberra 2008). CIT graduates also enrolled in ‘unstructured’ courses such as Law, where no formal agreement exists and credit is assessed on an individual basis. These courses attract small numbers of students with CIT qualifications.

As Figure 8 suggests, success and retention rates for CIT graduates in Group C courses is generally lower than in collaboratively developed articulations (Groups A and B).

**Figure 8** Success and retention rates for CIT graduates by course group, 2006-2007



## Conclusions

This research demonstrates that student transition from CIT to the University of Canberra is most effective when students enrol in highly articulated programs of study, rather than enter through less structured credit transfer arrangements. Highly articulated cross-sectoral programs such as dual sector awards and linked single sector awards are the product of a time-consuming investment by staff in both sectors. The articulated courses in Groups A and B of this study are characterised by collaborative curriculum mapping and gap identification, joint workshops and planning sessions, joint teaching activities and in some cases joint student projects. As universities struggle to balance survival with growth, this type of collaboration avoids quick solutions that may disadvantage students.

From discussions with staff involved in the successful models of articulation, the authors conclude that the effort involved in establishing cross-sectoral relationships would not occur in most instances without governance and facilitation sponsored by the executives of both institutions. Members of staff usually need assistance and support to establish and maintain cross-sectoral relationships and to undertake the curriculum mapping and course design work that is a feature of successful models of articulation. In Canberra, this support has been provided under the auspices of a long-standing memorandum of understanding that may be a useful model for other institutions.

The main message from this study is that the investment of time and resources in cross-sectoral collaboration in curriculum development “pays off” for institutions and for students who are admitted on the basis of a vocational qualification. Our findings demonstrate that the most highly articulated courses were the most popular among CIT students. These courses also had the highest rate of success in terms of student retention and achievement, with outcomes comparable or better than the outcomes of all UC students. The authors are currently undertaking research on the impact of institutional infrastructure and support on cross-sectoral credit transfer arrangements (see Cram et al. 2008) and are investigating the characteristics of student satisfaction and participation under different credit transfer models.

## Acknowledgements

The authors acknowledge that the collaborative work reported in this paper has been supported by a three-year grant from DEST for the *Beyond Articulation* project, funded under the Department's Collaboration and Structural Reform program.

## References

- AQF (Australian Qualifications Framework) (2004). National guidelines on cross-sector qualification linkages. Australian Quality Framework website: <http://www.aqf.edu.au/>
- Canberra Institute of Technology. (2008). W: <http://www.cit.act.edu.au/future/pathways/>
- Cram, B., Croucher, V. and Lines, B. (2008). What's it like for students? Enhancing the student experience from VET to University. AVETRA 2008, conference proceedings.
- DEST (Department of Education, Science and Training) (2007). Higher Education statistics. Published on Australian Government, Department of Education, Science and Training website: <http://www.dest.gov.au>.
- Dwyer, P and Wyn, J. (1998). Post-compulsory education policy in Australia and its impact on participant pathways and outcomes in the 1990s. *Journal of Education Policy*, 13:3, 285-300.
- Harris, R., Sumner, R., and Rainey, L. (2005). Student Traffic: Two-way movement between vocational education and training and higher education. NCVET, Adelaide.
- Long, M., Ferrier, F., Heagney, M. (2006). Stay, play or give it away? Students continuing, changing or leaving university study in first year. Monash University, Centre for the economics of education and training, October.
- MCEETYA (2005). Good practice principles for credit transfer and articulation from VET to higher education. Published on the MCEETYA website: <http://www.curriculum.edu.au/mceetya/default.asp?id=11908>
- MCEETYA (2006). Principles for good practice information provision on credit transfer and articulation from Vocational Training and Education to Higher Education. Published on the MCEETYA website: <http://www.curriculum.edu.au/mceetya/default.asp?id=11902>
- Memorandum of Understanding between the University of Canberra and the Canberra Institute of Technology (2002, 2007). Information available at: <http://www.canberra.edu.au/business-community/uc-cit-collaboration/mou>
- PhillipsKPA Pty Ltd (2006). Giving credit where credit is due: A national study to improve outcomes in credit transfer and articulation from Vocational and Technical Education to Higher Education. Final Report, Department of Education, Science and Training (DEST), June.
- University of Canberra (2008). Student Opportunities Choices and Pathways website, at <http://www.canberra.edu.au/cit-pathways>.
- Urban, M., Jones, E., Smith, G., Evans, C., Maclachlan, M., and Karmel, T. (1999). Completions, undergraduate academic outcomes for 1992 commencing students. Higher Education Division, Department of Education, Training and Youth Affairs, Occasional Paper Series No. 99-G, August.
- Watson, L. (2006). Pathways to a profession; Education and training in early childhood education and care. Australia. Final Report, Australian Government, DEST, August.