Integrating pedagogy, curriculum & graduate attributes: an Australian case study.

Dr Madeleine Mattarozzi Laming
Faculty of Education
Australian Catholic University

Email madeleine.laming@acu.edu.au

Abstract: This paper describes an teaching and learning model adopted in first year education units that integrates Tinto’s learning communities with Wenger’s idea of communities of practice to address issues of pedagogy and curriculum simultaneously. It was developed in response to the increasing diversity of students entering pre-service teacher education courses. The challenge has been to provide support to students who may be finding the transition to university study difficult, while assisting their academic progress and preparing them for their professional role as teachers. The integrated model also allows staff in the School of Education to model effective teaching to their students who will take their example into schools during their professional placement.

Keywords: learning communities, communities of practice, pre-service teacher education

A More Diverse Population of Students
Like many developed nations, Australia experienced a surge of development following the Second World War. Two aspects of that process have a particular relevance to the topic of student diversity: expansion of the tertiary education sector and immigration. Even before the war had ended, the Australian government was making plane to increase the number of students enrolling at university. Some of these were school leavers, but a significant number were older civilians and returned service people planning to upgrade their qualifications, for example people with technical diplomas returned to take degrees in science or engineering. Immigration added to the population as a whole, but it also added to the number of potential students since many migrant families were highly aspirational and did not intend to allow their children to become unskilled workers. Nevertheless, change was slow and the cliché that university students were the sons of doctors and lawyers was largely true until the 1980s.

Based on a long-standing ideological commitment to improving educational opportunities for all young people, and in response to an urgent need to lower the youth unemployment figures, the Hawke government implemented a number of policies aimed at increasing the number of students completing Year 12 and going on to university. Between 1983-1985 it also funded an additional 14,000 university places and introduced quotas to ensure that a

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1 Australian Catholic University has the distinction of being Australia’s only national university, with six campuses across three states and the Australian Capital Territory. The Faculty of Education spans the entire university and is made up of four schools based in Queensland, New South Wales, the Australian Capital Territory and Victoria. This project involved staff and students the School of Education in Victoria and I would like to acknowledge the generosity of Ms Trish Young who pioneered the use of Tertiary Learning Communities on the Ballarat Campus.
substantial number of them were to be allocated to non-traditional students including Aboriginal and Torres Strait Islanders, women, migrants, low-income groups and people with disabilities (Smart & Dudley, 1990). The drive towards diversity was increased in 1988 with the creation of the unified national system of higher education – the Colleges of Advanced Education were subsumed into existing universities or merged to form new ones.

At the same time the worst effects of the re-introduction of tuition fees were avoided because HECS did not require students to pay on enrolment (Edwards, 2001). One final factor that has contributed to the diversity of the university student population in the early twenty-first-century is the universities themselves. Thirty-two of Australia’s thirty-nine universities were established between the 1940s and the 1990s; they encompass a wide diversity of organisational cultures and educational traditions that are explicitly inclusive in some instances. Even the elite sandstone universities have developed programs to admit small numbers of students from disadvantaged areas. The number and type of degrees has also proliferated almost beyond counting as universities have added new courses to attract students. Just as the increasing size of the middle class led to an increase in demand for university places, the increase in the number and type of Australian universities has led to greater diversity among the student population. As a consequence, the population of Australian university students became highly diverse in terms of their age, gender, ethnicity and socioeconomic status, although this diversity is not spread evenly across the system.

The period 1996-2007 was difficult for Australian universities. Under the leadership of Prime Minister John Howard, the government adopted a neoliberal approach to economic policy that reduced university funding and shifted the cost to individual students thereby discouraging potential students from low SES backgrounds or minority groups to aspire to a university education. At one point the Minister for Education, Brendan Nelson, offered the opinion that many school leavers wanting to go to university had unrealistic career expectations and should be directed into TAFE or apprenticeships (Nelson, 2002); policies released prior to the election in October 2004 gave new prominence to alternatives to university including apprenticeships and vocational training. The outcome was predictable: overall numbers continued to rise but the proportion of low SES, indigenous and rural applicants declined while the proportion of part time students and deferrals increased.

The Bradley Review
In March 2008, Julia Gillard, the Minister for Education, initiated a Review of Australian Higher Education to examine the future direction of the higher education sector and its ability to meet the needs of the Australian community and economy over the next decade. The review was triggered by the realisation of the extent to which Australia had lost ground: in 1998, Australian ranked 7th among the 30 OECD countries in terms of the proportion of 25-34 years olds with degree-level qualifications, but in 2008 it had slipped to 9th place. This was a matter for urgent action primarily because economists were predicting a shortage of
qualified personnel that would undermine the country’s economic well-being (Access Economics, 2008).

The review committee, chaired by Professor Denise Bradley, recommended a simple solution: more young people must be encouraged to go to university. The report recommended specific targets for enrolment - 40 per cent of all 25-34-year-olds should have at least a bachelor-level qualification by 2020 (Bradley et al, 2008, p 21). However, the committee also acknowledged that achieving this solution would be a long and complex process. Analysis of demographic data showed that there were insufficient numbers of traditional middle class school leavers to meet the projected shortage in the professions and skilled occupations, the committee came to the conclusion that the Australian government would need to encourage participation by members of groups that were under-represented within the university system, in particular “those disadvantaged by the circumstances of their birth: Indigenous people, people with low socio-economic status, and those from regional and remote areas” (Bradley, Noonan, Nugent & Scales, 2008, p xi). Expressing concern that participation by members of these groups had been falling over the previous few years the committee identified a separate target of 20 per cent for students from low socio-economic backgrounds (Bradley et al, 2008, p 45).

To achieve these targets, the committee also recommended the greater collaboration between the technical and adult education sectors, the extension of bridging courses and the creation of clear pathways from vocational to professional courses that would not necessarily include the completion of a traditional matriculation course. Many young people, who had the capacity for university level study, were not engaged in education and would need assistance to return and to enrol in programs that would ultimately lead to a degree-level qualification. It recognised that more extensive financial support would help, but it also recommended that the universities examine their own approaches to teaching and learning to ensure that the courses on offer were relevant and sufficiently engaging to ensure that students completed their course of study and proceeded to graduation.

Access and Retention
Access to university study is only half the problem. The ambivalence of young people from minority groups and/or low SES backgrounds who do enrol at university has been well documented over a period of years (Little, 1975; Isaacs, 1981; Tinto, 1987; Long, Carpenter & Hayden, 1999; Archer & Hutchings, 2000; Reay, 2001; Brooks, 2004). There are fewer family and community pressures for them to stay and often considerable pressure for them to leave; they may not be as certain about their future plans or convinced that the time and effort invested will improve their employment prospects (Long, Carpenter & Hayden, 1995; Hatcher, 1998; Reay, 2001). At the same time, they often find their studies more difficult; they may lack specific academic skills, but more importantly they lack the social capital that allows their classmates from mid or high SES backgrounds to take the experience of being at university for granted (Little, 1975; Isaacs, 1981; Teese, 1981; Teese, 2000). However, it should be noted that students from all sociocultural backgrounds may face difficulties that
lead to dissatisfaction with their studies and withdrawal. The solution lies in providing experiences on campus that all students find relevant and engaging.

**Australian Catholic University**

Australian Catholic University is a public university funded by the Australian Government and open to students and staff of all beliefs. It was opened on 1 January 1991 following the amalgamation of four Catholic tertiary institutions in eastern Australia. The university has a particular commitment to social inclusion and has a long tradition of accepting students from a very wide range of social and cultural backgrounds. In recent years it has also introduced a number of alternative entry programs including the Non-Year 12 Entry Program, *accessACU* and the Clemente program. These initiatives have resulted in greater numbers of students from rural or disadvantaged areas and/or low socio-economic backgrounds, and greater numbers of mature age students, enrolling in courses of all types including preservice teacher education. Over the last decade, ACU has also developed strong connections with the Indigenous community; there is a support unit for Indigenous students on the Melbourne campus and enrolments are growing. Another factor contributing to the rapid increase in diversity among students is the location of the Melbourne campus. The campus is located on the fringe of the central business district and is readily accessible by public transport to students living across the entire metropolitan area.

Although the diversity of the student population is growing, Australian Catholic University is determined to maintain the quality of its courses; the ACU Strategic Plan emphasises the importance of improving and maintaining the quality of learning at all levels and two of the three priority targets identified in the ACU Learning and Teaching Plan 2009-2011 are concerned with improving the quality of learning and teaching and enhancing the student experience at ACU.

In keeping with national and international developments (Barrie, Hughes & Smith, 2009) ACU has developed a set of graduate attributes as one way of ensuring that the quality of teaching remains high and that graduates are employable. The graduate attributes for Australian Catholic University are described in Table 1.

**Table 1: Australian Catholic University Graduate Attributes**

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<th>ACU courses enable graduates to be:</th>
<th>Ethically informed and able to:</th>
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<td>• Demonstrate respect for the dignity of each individual and for human diversity.</td>
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<td>• Recognise their responsibility to the common good, the environment and society.</td>
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<td>• Apply ethical perspectives in informed decision making.</td>
<td>• Apply ethical perspectives in informed decision making.</td>
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<th>Knowledgeable and able to:</th>
<th>Skilful and able to:</th>
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<td>• Think critically and reflectively.</td>
<td>• Solve problems in a variety of settings taking local and international perspectives into account.</td>
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<td>• Demonstrate values, knowledge, skills and attitudes appropriate to the discipline and/or profession.</td>
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These attributes are embedded and assessed in the learning outcomes of each unit that students complete within their courses. The challenge has been to determine the best way to achieve these outcomes and meet the needs of a highly diverse population of students. The adoption of a learning/teaching model based on the concept of “learning communities” seemed to offer the solution.

**Learning Communities and Communities of Practice**

While much of the focus in recent years has been on the integration of students through transition programs of various types, the inescapable truth is that teaching and learning are the core business of a university and what happens in the classroom is crucial to the quality of students’ experiences. Consequently, there has been a great deal of interest in the development of a “learning community” approach to education in a number of countries, however the term is used with a variety of meanings in the literature and often it is not defined in any detail. Nevertheless, it is possible to identify two major interpretations: one that focuses on the way in which the curriculum is organised and one that focuses on classroom dynamics and the shared experience of learning (Kilpatrick, Barrett & Jones, 2003) which is sometimes referred to as a “community of practice”. This term originated in the literature on learning (Lave & Wenger, 1991; Wenger 1998) and applied to the fields of organisational theory and management (Stewart, 1996; Wenger, 2000; Lesser & Storck, 2001), but it was quickly adopted in educational settings as well (DuFour, 1997; Eaker, DuFour & DuFour, 2002).

**Reorganising the Curriculum - Tinto**

One model that exemplifies the curriculum centred approach is the learning community as defined by Tinto. In fact, Tinto (2003) outlines three types of learning community. In the simplest version of the model units are linked to each other. The units forming the pair are not chosen at random, but share common themes or support each other in some fashion; typically a history, politics or cultural studies unit will be paired with a writing unit so that students are able to practice skills while exploring or rehersing particular content knowledge.

**Figure 1:** Linked courses

![Linked courses](image)
In a more complex version of the learning community model, units may also be linked to interdisciplinary interest/discussion groups led by a tutor or teaching assistant.

**Figure 2: Units Linked by Interest Groups**

![Diagram showing units linked by interest groups]

An alternative version of this model consists of similar or related units such as political science and history that are linked to each other and to an interdisciplinary seminar.

**Figure 3: Cluster Courses**

![Diagram showing cluster courses]

In the most complex version of the Tinto’s learning community model units are presented in a fully co-ordinated manner. While individual units continue to exist on the timetable, explicit links are drawn between the content of the units which are usually taught by an interdisciplinary team.

**Figure 4: Co-ordinated Studies**

![Diagram showing co-ordinated studies]

Tinto (2003) asserts that where any one of these forms of learning community has been adopted, student engagement with the college community has improved. Students reported an increase in their involvement in academic and social activities; they participated more actively in class, they spent more time talking about course content, they spent more time...
working on class exercises or assignments and they also became more engaged with other aspects of campus life because they knew more people who were involved in a variety of activities. The learning communities allowed them to develop a network of friends and acquaintances that extended well-beyond the initial group in their co-ordinated studies program. Tinto argues that each college or university should adopt the model that best suits their circumstances, but in one study that compared a learning community based on freshman interest groups with one that used a co-ordinated studies approach he found that students in the co-ordinated studies program appeared to derive a greater benefit from the experience. Students enrolled in the co-ordinated studies program reported that the multiple perspectives provided by staff from different discipline areas added to the richness of their experience and their learning outcomes had improved significantly; not surprisingly many of them also reported an improvement in perceptions of themselves as learners (Tinto, 1997).

Reorganising the Classroom – Wenger
Although communities of practice have grown in popularity in recent years, they are in fact a very old model of learning: the master teaching a group of apprentices is an early and informal version. Its more recent antecedents can be traced to the constructivist approach to learning in which the learner takes control of the process (Johnston, 2001). Drawing on developments in cognitive psychology and social theory Lave and Wenger (1991) proposed a model of learning as a social relationship. Their model - called situated learning - asserts that learning relies on appropriate social engagements which provide a suitable context for learning. Learning is tied to particular contexts and involves engagement with a community of practice; a group of people brought together by joining in common activities. They argued that that situated learning and communities of practice provided a more naturalistic model of learning as an intensely social activity. People engaged in common activities observe and share information with others. This shared or collective learning results in practices that reflect both the activity involved and the social relationships that surround that activity while the nature of the situation has a profound impact on the type and extent of the learning process. Situated learning challenged the assumption that learning was a process of transmission from teacher to learner, asserting that it was distributed across time, place and activity; learning was embedded in the social norms and practices of the day and exemplified them to a certain extent.

Wenger (1998) went on to define the nature of a community of practice along three dimensions:

- The domain: what it is about, the joint enterprise in which all members are engaged
- The community: how it functions, the nature and extent of the mutual obligations that bind members together
- The practice: what capabilities it has produced, the shared repertoire it has produces including vocabulary, routines and artefacts.

While the earliest applications of Lave and Wenger’s model were in the reorganisation of the workplace and workplace training (Stewart, 1996; Lesser & Storck, 2001). Wenger was fully aware of its implications for education which must strive “to open new dimensions for the negotiation of the self” (Wenger, 1998, 263). To achieve this, education had to be an
engaging, imaginative, dynamic process negotiated between members of the learning community. Not surprisingly, his approach appealed to educators who were dissatisfied with the limitations of traditional learning methods (Johnston, 2001). Constructivist approaches to learning were already understood to be particularly suited to adult learners who could apply existing knowledge to new situations (Knowles, Holton and Swanson, 1998); establishing communities of practice would be a refinement of that approach. O’Donnell and Tobbell (2007) provided supporting evidence by demonstrating that communities of practice could assist mature age students make the transition to university successfully.

Learners as Teachers: Teachers as Learners
Academic staff teaching first year education students are confronted by a unique situation; they are required to find ways of engaging their students and assisting in their transition to higher education, but they must also find ways of enculturating their students into the profession. Other professions such as medicine or law work hard at the development of a professional identity among their students from the outset, but in education, as in no other discipline, the skills and knowledge that are the subject of lectures, tutorials and seminars are modelled by teaching staff and practised in the class room. Novice teachers learn to become teachers by participating in learning and teaching practices and through using the language of learning and teaching (Lave & Wenger, 1991); in this way their identities as teachers are formed through belonging to a community of learner/teachers-teacher/learners (Wenger, 1998). The inclusion of field experience units in education courses, which require pre-service teachers to deal with real students in real schools, ensures that these communities of practice are genuine, not merely “practice fields” employing simulations or role plays (Squire & Johnson, 2000).

In Victoria, there is an additional, and related, impetus for introducing a learning model based on communities of practice: in 2007 the Catholic Education Office for the Archdiocese of Melbourne established a working party to examine its approaches to learning and teaching to ensure that they were able to meet the contemporary challenges of learning and teaching. The working party was charged with Identifying emerging issues and suggesting solutions; one of the most significant of these solutions was the sector-wide adoption of a learning-centred model that draws on communities of practice.

Contemporary learning is personalised. It requires learning and teaching strategies that develop the competence and confidence of each and every learner … the curriculum also takes account of the local context and the demands of contemporary learning, and clearly defines developmentally appropriate, authentic and rigorous standards for students to achieve. The learning and teaching programs that constitute the formal curriculum are coherently structured, yet flexible in their implementation and responsive to change … In a learning centred school teachers engage in collaborative exploration and ongoing professional learning guided by relevant school-based experience and contemporary educational research (Catholic Education Office Melbourne, 2009).
Throughout 2008-2009, the Catholic Education Office Melbourne initiated a program of professional development for staff in catholic schools to ensure that the new approach was understood and supported; postgraduate education students at Australian Catholic University were also briefed on the model and encouraged to adopt it in their own professional practice, the next step was to introduce undergraduate preservice teachers to the model as well given that the majority of teachers graduating from Australian Catholic University will be employed in Catholic schools.

**Integrating Curriculum and Pedagogy for First Year Education Students**

The model on trial at Australian Catholic University addresses these aims by integrating curriculum based learning communities and pedagogic or organisational communities of practice to provide a richer learning experience that engages students, supports their transition to higher education facilitates the development of their professional identities as teachers.

The first year of the Bachelor of education has the theme “Learning and the Self as Learner”. In Semester 1 students take three compulsory units and one elective; the pattern is repeated in Semester 2 with the addition of the first field experience unit. In Semester One, two of the education units, Contexts for Learning and Development and Children’s Literature for Literacy, are taught as a linked pair. Staff in each of the units make explicit reference to the material being taught in other unit, e.g. material on the physical development of the brain is used to augment information about teaching literacy and the examples used to illustrate point about aspect of development will reflect issues discussed in relation to literacy or children’s literature. In addition, students taking all three units attend a weekly seminar on issues relating to transition to university or academic skills. These seminars, called Tertiary Learning Communities or TLCs for short, are also used to introduce the principles or collaborative learning which are then put into practice in tutorials for Contexts for Learning and Development.

**Figure 4: Integrated Model in Semester One**
In the first week of term, students are allocated into communities of practice using the tutorials in Contexts for Learning and Development as the initial point of face to face contact. Within the first two weeks of term, these communities of practice are provided with access to a private discussion forum through Blackboard allowing them to communicate at all times both on and off campus, share ideas and complete assignments. It is intended that students will remain in these linked communities of practice throughout the whole year.

In Semester Two the core education units will be taught as a cluster. In addition, students will continue to be linked through the online communities of practice. As the TLC seminars do not continue into Semester 2, the online communities play an important role in maintaining the integrity of the groups. Ideally, members of each community will share at least some face to face tutorials, however online communication will enable members to communicate during field experience.

**Figure 6: Co-ordinated Studies in Semester Two**
Concluding Comments

At present, this model is a work-in-progress that has not been formally evaluated. The most significant outcome that we hope to achieve is that students will find the experience of studying at Australian Catholic University satisfying, leading to an improvement in their academic performance and improved retention and completion rates in the long run. In terms of their professional development as teachers, we believe that students will develop a deep understanding of the learning/teaching process, more positive attitudes to learning and teaching all of which will result in a higher level of capacity to meet the demands of teaching in the 21st century in which the boundaries between subjects will become permeable and the emphasis will shift away from content to concepts and skills.

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