

Australian student engagement, belonging, retention and success: a synthesis of the literature



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Student engagement: core definition

Student engagement is a construct that facilitates examination of the relationship between students' learning outcomes and the quality and degree of their involvement with academic peers, teachers and wider communities, and with institutional processes and disciplinary learning.

The definition of student engagement typically used in Australian literature is “students' involvement in activities and conditions that are linked with high-quality learning” (Coates 2008). This definition draws on the widely referenced work of Kuh (2001, 2009) who defines engagement as “students' involvement in educationally purposeful activities” (Hu & Kuh 2001, p.3). A specific focus on students' activities posits that constructive engagement is more likely for students who interact with a wide range of university stakeholders and contexts. These contexts fall into three broad categories as follows: i. physical and/or virtual as in teaching, social, administrative, and student support spaces; ii. affective in terms of interpersonal interactions; and iii. conceptual as in the fields of discipline and curriculum (see Krause 2011, p.204, for a model that depicts these dimensions of engagement). Framed by a combination of inter-related physical, social, cognitive and psychological dimensions, the concepts and patterns of student belonging, retention and success are measures and indicators of engagement.

In Australian higher education, retention refers to the numbers of students who enrol and continue an undergraduate programme of study within a single institution. First-year undergraduate student retention (i.e., retaining students in the same institution from first to second year) is a widely used national indicator in the university sector. Success in Australian higher education is measured in the form of graduation rates, progress to postgraduate study and employment outcomes. The constructs of retention and success are commonly held to be positively correlated to a student's sense of belonging in the first year of university and their intention to persist with their studies (Krause et al 2005; Krause & Coates 2008). Between 2003 and 2012 the Australian federal government provided performance funding on the basis of universities' first-year retention rates. This funding – formerly known as the Learning and Teaching Performance Fund - ceased in 2012 and was replaced by mission-based compacts.

Overview

This literature synthesis conceptualises student engagement, belonging, retention and success as integrated parts of a complex structure rather than a linear process. This approach is supported by Horstmanshof (2007) who describes engagement as a construct that should be understood systemically and holistically. Conceptualising student engagement as a system necessarily requires investigation into how these indicators work in relationship as well as in temporal sequence. In this synthesis, the indicators of belonging, retention and success in Australian literature concerning engagement are examined as both separate concepts and ‘events’, and also in relation to broader contexts in which they interact and are shaped relationally.

The synthesis is primarily limited to the Australian field though it draws on the international context where relevant. It opens with an *explanatory context* of the development of student engagement scholarship in Australia. The government-level drivers of engagement research, policies and practices in Australian universities are then outlined. A selection of *indicative research studies* spanning the last two decades in Australian higher education is summarised briefly. This is by no means intended as an exhaustive representation of the comprehensive work on student engagement across Australian higher education over time, particularly at the first-year undergraduate level. Various research studies are featured, including the four national trend studies of the first-year experience. These studies span 15 years and chart the changing nature of student experiences and engagement at a national level. All the studies included in this section are recognised for their role in shaping institutional and national policy development, quality assurance and improvement initiatives in the Australian higher education sector.

The *overall synthesis* of the literature presents a range of national and institution-level studies of *student engagement in Australia*, including those with specific relevance to the *key themes* of *belonging*, *retention* and *success*. These themes inform the main discussion and are then summarised in terms of issues and trends emerging in the Australian student experience literature. Finally, *implications for international policy and practice* are presented, which include recommendations for the future directions in student engagement research, policy and practice. A sample of *practical applications* in the form of resources generated from Australian studies of engagement is then outlined. These resources are useful for policy makers and practitioners, including curriculum developers, programme leaders, and academic staff in the disciplines. To conclude the synthesis, selected

literature reviews specifically concerned with student engagement from Australia and New Zealand are provided.

Explanatory context

Australia has a substantial history of research on the student experience dating back over four decades. As a nation, Australia also has a strong track record of national survey implementation for the purposes of accountability and performance-based funding. Major national surveys of aspects of university students' experiences have been administered since 1972. The Course Experience Questionnaire (CEQ) is one such example (Scott 2005; also see Palmer in Radloff 2011 for an overview of other relevant survey instruments in Australia). Little (1970; 1975) investigated the student experience from a psycho-social perspective; how the individual student is influenced within typologies of university 'learning climates'. He advocated that the most productive types to foster student integration and development were 'cultivating climates'. He identified the characteristics of cultivating climates as high academic standards, and support and recognition. In the development of Australian student engagement research, pivotal studies have built on Australian scholarship such as that of Anderson (1975), Beswick (1980) and Ramsden (1989, 1992).

Australian research in this area has been informed by foundational international studies of student involvement (Astin 1985; 1993), the student experience (Hu & Kuh 2001; Pascarella & Terenzini 2005), educational sociology (Tinto 1975, 1993, 2005) and the conceptualisation and design of research measures (Pace 1990; Kuh 2009). These studies are influential and in the Australian literature reviewed for this synthesis are commonly cited as informing both national and institutional engagement scholarship, practice and evaluation.

In particular, Australian studies of engagement draw definitional shape from Kuh's focus on involvement in "educationally purposeful activities" (Hu & Kuh 2001, p.3) as reliable predictors and measures of a student's educational progress. Developments in Australian engagement research also follow Kuh's expanded definition that incorporates "the time and effort students devote to activities that are empirically linked to desired outcomes of college *and* what institutions do to induce students to participate in these activities" (Kuh 2009, p.683, emphasis in original).

This emphasis on engagement as a reciprocal compact between university and student has shifted in parallel with global trends in the participation of historically under-represented groups in tertiary study. Australian higher education government policy has articulated a commitment to widening participation which has, in turn, informed the focus of research at the national and local levels. Much current student engagement literature is concerned with diversity and holds with the imperative that a student's background and historical circumstances *should* influence how universities construct the types of support provided to students as they transition to and through university. Krause (2012) points out that for some students who are first in their family to enter higher education, engagement with university studies may be a battle and a challenge rather than a fulfilling experience. She challenges the notion of engagement as a perpetually positive construct, for it may involve some challenging experiences that confront some students' sense of identity, as well as familiar ways of knowing, thinking and behaving. Devlin and colleagues (2012) found that the sociocultural incongruity that exists between students from low socioeconomic status backgrounds and the institutions in which they study can be bridged through the provision of an empathic institutional context.

Widening participation has a shorter history than 'student experience' research, from which concepts and understanding of 'student engagement' have emerged. Nevertheless, in Australia as elsewhere, the contemporary challenge is to engage and retain students who in economic and socio-cultural terms have traditionally not 'belonged'. In response to these challenges, the higher education sector in Australia is in a process of significant reform.

In Australia, widening of 'non-traditional' student participation in higher education is a government initiative based on social and economic imperatives. The most often cited driver of widening participation and subsequent sector reform is the *Bradley Review of Higher Education* (Bradley, Noonan, Nugent, & Scales 2008) which linked growth in educational attainment firmly with the nation's future economic and social wellbeing. The *Bradley Review* recommended that by 2025, 40% of 25–34-year-olds attain a qualification at bachelor level or above; and, by 2020, 20% of higher education enrolments at undergraduate level should be people from low SES (write out SES in full?) backgrounds (Bradley et al 2008, p. xiv). It was also recommended that funding for all publicly resourced higher education institutions be linked to quality teaching and student engagement outcomes.

The growth of the higher education sector in Australia concerns volume as well as diversity of the student body. The striking change in the nature of the student body and associated implications for student engagement and retention in higher education is explored in a forthcoming publication outlining the changes in higher education since the unified national system was introduced 25 years ago (see Krause & Reid, forthcoming). In addition to government policies framed by the *Bradley Review*, the rise in retention rates of high school students (Goold, Craig & Coldwell 2007), the development of alternate pathways to higher education (Abbott-Chapman 2006; Cullity 2006) and the growth of international and offshore student enrolments in Australian universities (Samarawickrema 2005) has resulted in a “shift from elite to mass participation” (Grebennikov & Skaines 2008, p.58). More recently, the focus on institutional funding based on per-student income from uncapped enrolments has further ‘massified’ Australian universities. This exponential increase in numbers of students entering higher education coupled with complex difference, places pressure on contemporary universities to respond to the changing needs of learners (Marshall 2010) and, in particular, to challenges that may present barriers to their engagement, retention and success.

Under these conditions of growth and accountability, perceived variously by HE providers as enablers or constraints, enhancing student engagement has moved on from the cottage-industry stage to become a high stakes, enterprise-wide imperative. Quality improvement and assurance frameworks now “encompass the whole student experience” (Burdett & Crossman 2012, p.208). Frameworks to both conceptualise and measure student engagement must account for multi-dimensional aspects of the student experience and also multiple types of students. In planning, governing and evaluating student engagement, Australian higher education institutions are concerned with long-standing theoretical links between students’ involvement in events (both scholarly and social) and learning outcomes. Increasingly the concern in the literature is also with the relationship between student characteristics, and levels of engagement that may impede opportunities for success. In response, the dimensions of institutional responses require innovation, organisational efficiency, and the re-imagining of curriculum and models of learning. Importantly a focus on equity is required.

Institutional purposes for evaluating and enhancing student engagement are also diverse. Policy reforms on a systemic level shape the motivation for relevant local quality assessment and improvements. In Australia focus has shifted from student engagement as a funding incentive to a student-centred, per-place system introduced in 2012. Government funding for quality

improvement programmes and learning and teaching strategies for the enhancement of student engagement are built into uncapped per-enrolment revenue on a student-need basis (DEEWR 2011). In this emerging policy context the purposes, incentives and motivations for institutions to monitor students' experiences of engagement will most likely also shift.

Key research on student engagement in Australia: an indicative overview

This section outlines a number of key research studies on the issue of student engagement in Australian universities. It is by no means exhaustive; rather the studies represent indicative investigations deemed to have had a significant impact on Australian higher education policy and practice. Further research is included in the *overall synthesis* that follows.

National studies of the first-year experience, 1995-2010

1. McInnis, C., James, R. & McNaught, C. (1995) *First Year on Campus: Diversity in the Initial Experiences of Australian Undergraduates*. Centre for the Study of Higher Education, University of Melbourne.
2. McInnis, C. James, R. & Hartley, R. (2000) *Trends in the First Year Experience in Australian Universities*. Centre for the Study of Higher Education, University of Melbourne.
3. Krause, K., Hartley, R., James, R. & McInnis, C. (2005) *The First Year Experience in Australian Universities: Findings from a Decade of National Studies*. Canberra: Australian Department of Education, Science and Training.
4. James, R., Krause, K.-L. & Jennings, C. (2010) *The First Year Experience in Australian Universities: Findings from 1994 to 2009*. Centre for the Study of Higher Education, University of Melbourne and Griffith University, Queensland.

Four national studies of the first-year student experience and engagement have been undertaken at five-year intervals. Commissioned by the Australian Government and conducted by the Centre for the Study of Higher Education, University of Melbourne, the aim of the research was to investigate, in particular, the social contexts of first-year undergraduates' learning experiences in universities across Australia.

The first 1995 report presents findings from data that comprised 4028 student responses to surveys taken at the close of their first year, first semester across seven diverse universities. Qualitative interviews were conducted with 60 staff and 120 students and a survey of institutional responses to enhancing the first-year experience was also undertaken. The authors argue for a broader evaluation of the beginning-student experience than student perception of teaching quality, the latter eliding other important aspects of involvement beyond classroom contexts. Students provided answers to demographic questions and were asked to provide reasons for enrolling in university. The following scales were used to measure aspects of the student experience:

- academic orientation;
- student identity;
- sense of purpose;
- academic application;
- teaching;
- course;
- workload.

Areas of key concern and recommendations to respond to diverse learning needs are reported as: the need for professional development of imaginative course and teaching material design, and teaching strategies outside traditional frames; creating a transitional culture that reinforces students' motivations for study; comprehensive evaluation of the total student experience to include integration and identity building; institutional enhancement of teaching quality and higher value placed on first-year teaching; the setting of and communication of clear expectations to students; a focus on quality and timely feedback to students. Finally, a review of the link between curriculum load and student satisfaction and learning outcomes was recommended.

Ten years later, the third national study (Krause and colleagues 2005) focussed on questions particular to student engagement, reflecting the international recognition that this aspect of learning is a strong indicator of the quality of the first-year experience. Questions specific to a student's sense of belonging to the learning community were included in the 2004 survey instrument, as well as a set of items to examine the upward trend in students' commitments to paid work while studying. The report notes the significant changes in the delivery of higher education due to the

uptake of information and communication technologies. Relevant questions included in the survey aimed to understand when and how first-year students use technology for learning.

The fourth national First Year Experience study (James and colleagues 2010) provides comprehensive analysis of trends in transition across a 15-year period. The important contextual aspects of the 2010 study are cited as the Australian government's reform agenda of expanding participation and social inclusion. The report links the drive to enrol students from low socio-economic backgrounds to the need for quality improvement in higher education. It is also noted that the cohort surveyed is the last of those who entered university before the *Bradley Review* (2008) that prompted sector reform.

It was found that students spent fewer days on campus, were less involved in extra-curricula activities, and made fewer friends at university. Paradoxically, students also reported an increase in group work for assessment and study purposes, both in the formal teaching context and outside of class. What's more first-year students were more organised, happier with their course choices and direct school leavers felt more prepared. A concerning change in student engagement was the increase in hours spent in paid employment, with a corresponding drop in campus-contact hours and 'time on task'. However students did not view their employment as having significant negative impacts on their study.

While student satisfaction in key aspects of their experience is reported to have risen, students' satisfaction with staff interactions scored below the previous two studies. Fewer students than previously had confidence in their teacher's interest in their progress or personal circumstances. The authors speculate that the increase in flexible, ICT-enabled delivery may account for the lower levels of student-staff interaction reported. In identifying implications for institutions, recommendations include: strengthening staff/student relationships; monitoring the effects of paid work on time for academic tasks; more careful matching of student to course and institution; setting clear first-year academic standards and expectations for students and responding early to students who are disengaged and therefore at risk.

Kift, S. (2009) *Articulating a transition pedagogy to scaffold and enhance the first-year learning experience in Australian higher education*.

Australian Learning and Teaching Senior Fellow.

The federal government, through its Office for Learning and Teaching (formerly the Australian Learning and Teaching Council) funds Fellowships to support nationally significant strategic initiatives in learning and teaching. Professor Kift received a Senior Fellowship to examine approaches to engaging students through fit-for-purpose approaches to curriculum design, delivery and review, particularly in the first year of higher education.

The starting point for this Fellowship was recognising that, in all their diversity, students come to higher education to learn and that it is within the first year curriculum that students must be inspired, supported, and realise their sense of belonging; not only for early engagement and retention, but also as a foundation for later years' learning success and a lifetime of professional practice. The adoption of a curriculum focus to the FYE seemed to be the missing link in current FYE theorising and practice. This Fellowship has therefore focussed on harnessing the curriculum as having an important role to play in first year transition, success, and retention. In the lead-up to the Fellowship it became clear that there is a dearth of shared wisdom available and very few accessible case study exemplars to which innovators in this field could relate. Teachers, academic managers, and institutional learning and teaching leaders were looking for both theoretical and practical assistance in designing customised first year curriculum in response (particularly) to increasing diversity in entering cohort preparedness. The enabling of academic and professional partnerships in the pursuit of this agenda also quickly identified itself as a critical issue.

A major Fellowship outcome has been the articulation of a research-based 'transition pedagogy' (Kift & Nelson 2005) – a guiding philosophy for intentional first year curriculum design and support that carefully scaffolds and mediates the first year learning experience for contemporary heterogeneous cohorts. This transition pedagogy is framed around the identification of six First Year Curriculum Principles that stand out as supportive of first year learning engagement, success, and retention (Appendix 1). These interconnected organising principles are:

- *Transition*
- *Diversity*
- *Design*
- *Engagement*
- *Assessment*
- *Evaluation and monitoring.*

Other outcomes include several discipline case studies exemplifying intentional first year curriculum design for transferable implementation, an extensive engaged dissemination strategy which featured two symposia on FYE curriculum design and a substantial web presence.

Source: <http://www.olt.gov.au/altc-senior-fellow-sally-kift>

Jardine, A. (2012) *Indicators of persistence and their influence on the first year experience of university students from low socio-economic backgrounds.*

PhD thesis, Centre for the Study of Higher Education, Melbourne Graduate School of Education, The University of Melbourne.

This study focuses on the first-year experience of Australian university students from low socio-economic status (SES) backgrounds. Firstly, it examines pre-commencement expectations and post-commencement experiences from the perspective of six indicators of persistence identified from the literature. It then explores considerations of university drop-out and transfer from the same perspective.

The conceptual framework of the study is informed by two key sources. Firstly, it draws on the student persistence literature. Secondly, it is underpinned by Bourdieu's field theory of capital, habitus and field. These sources provided the basis for the development of six indicators of persistence which were designed to identify differences due to SES. The individual, social capital and external indicators are influenced by the individual habitus of the student. On the other hand, the academic, social and institutional indicators are shaped by the institutional habitus of the university.

The findings indicate that in many cases students enter university with unrealistic and unmet expectations. However the emergent patterns appear complex. The discord between expectations and experiences is greatest with the three indicators of persistence that are influenced by the institutional habitus. However, significant differences between low SES students and their peers are more likely to occur across the indicators influenced by individual habitus. The findings lend support to the concept of habitus and support the assumption that students from low SES backgrounds enter with less capital.

Results indicate that the processes involved in considering dropping out differ from those related to decisions to transfer to another university. While SES plays no role in drop-out considerations, it does play a role in students' transfer plans. However, findings reveal that students from low SES backgrounds are less likely to consider dropping out than their peers. The processes involving transfer appear more complex for all students, regardless of SES. The key processes in drop-out considerations involved the individual, academic and institutional indicators of persistence. The major contributing influence relates to aspects of the academic environment. Individual, academic, external and social indicators of persistence all played a significant role in students' transfer considerations.

Several implications for national and institutional policy and practice emerge from the study. The implications at a national level focus on university application processes, measure of SES and monitoring of retention across the sector. Institutional implications relate to student retention strategies, their focus and the scope and timing of such strategies.

Source: Available online:

http://dtl.unimelb.edu.au/R/EK66YUNJFJKQIIRST4D8PPXQS547IQ45UBFBXXMEN48QPKU3G4-02103?func=dbin-jump-full&object_id=290220&local_base=GEN01&pds_handle=GUEST

Scott, G. (2008) *University student engagement and satisfaction with learning and teaching: Review of Australian higher education*. Canberra: DEEWR.

This report, commissioned by Bradley as part of the National Review of Higher Education (Bradley et al 2008) analysed longitudinal data from the Course Experience Questionnaire (CEQ). In particular, the qualitative data derived from open-ended questions in the CEQ informs the analysis. These questions, regarding students' evaluations of the best aspects and areas in need of improvement in their university experience, are distilled into the students' most relevant expectations and concerns.

Students expected courses to be personal and vocationally relevant; timely responses and guidance from all university staff, including administrative, academic and support workers; clear communication of the university's expectations of the student; clear curriculum and assessment guidelines and feedback; opportunities to interact with teachers and peers; effective, well-managed

administrative processes and services and that universities fulfil stated missions and commitments to students.

While the expectations listed above are common to most students and have remained stable in the longitudinal data, Scott identifies new changes in student expectations in line with the diverse and changing student body. These include fluctuations and variances in students' understanding of what university study will entail; the uptake of paid work has resulted in the expectation of flexible forms of educational delivery, and in particular ICT-enabled delivery. Scott emphasises that the positioning of students as consumers with high expectations of quality service impacts student expectations.

Scott's proposition for a quality assurance model specific to learning and teaching comprises four inter-related elements: course design; delivery; support and outcomes.

The Australasian Survey of Student Engagement (AUSSE)

The Australasian Survey of Student Engagement (AUSSE) is managed by the Australian Council for Educational Research (ACER) and was first administered to 25 collaborating universities in 2007, subsequently in 2008 with 29 institutions and in 2009 with 35 participating institutions. Students targeted in the AUSSE are first- and third-year undergraduates, and postgraduate course-work students. Staff provide data through the Staff Student Engagement Survey (SSES). The AUSSE was built on previous work in Australia (McInnis et al 1995; 2001), in close connection to the National Survey of Student Engagement (NSSE) in the United States (Kuh 2001; 2009) and in reference to foundational theories of student engagement (Pascarella & Terenzini, cited in Coates, 2010). Coates describes the aims of the AUSSE to “focus educators’ attention on some of the most important aspects of university education” (2010, p.3).

The AUSSE distinguishes itself from studies that focus on student “satisfaction and agreement” (Radloff & Coates 2010, p.iv). Instead, the survey is meant to provide “evidence about what students are actually doing, highlights the most critical aspects of student learning and development ... a learner-centred, whole-of-institution perspective, and gives an index of students’ involvement in both study and other relevant activities” (p.iv).

The survey instrument, the Student Experience Questionnaire (SEQ), contains a range of questions about learning-specific and learning-related activities as well as demographic questions. Aspects of student engagement are conceptualised into the following six major scales, based on the National Survey of Student Engagement (NSSE) (Kuh 2009). The sixth scale regarding work integrated learning was added to the AUSSE:

- academic challenge (the extent to which students are challenged to learn);
- active learning (student efforts to actively construct knowledge);
- student/staff interactions (the degree and qualities students' contact with teaching staff);
- enriching educational experiences (student involvement in educational experiences that develop);
- supportive learning environment (students' perceptions of recognition and support from the university community);
- work integrated learning (embedding vocational experience into learning).

Synthesis of key research findings

Student engagement in Australia

Research into university student experience and engagement in Australia is exemplified by large national quantitative studies that span the student life-cycle and allow for cross-institutional benchmarking. Key points in the student experience are targeted. At the undergraduate level, surveys include the Australasian Survey of Student Engagement (AUSSE) (Coates 2008; Coates 2010), the First Year Experience Questionnaire (FYEQ) (McInnis, James & McNaught 1995; McInnis, James & Hartley 2000; Krause, Hartley, James & McInnis 2005; James, Krause & Jennings 2010), and at postgraduate level the Postgraduate Research Experience Questionnaire (PREQ) (Edwards, Coates, Guthrie, Radloff & Tilbrook 2010) and the Post-graduate Survey of Student Engagement (POSSE, see <http://www.acer.edu.au/ausse/survey-instruments>). The Course Experience Questionnaire (CEQ) is administered to all recent graduates (Scott 2008). The Graduate Destinations Survey (GDS) (GCA 2010) and Graduate Pathways Survey (GPS) (Coates & Edwards 2009) collect data on students' experiences and outcomes as alumni.

These studies encompass a wide range of aspects of a student's experience and engagement with university but are designed with specific foci. Palmer (in Radloff et al 2011, p.46) makes distinctions between the purposes of the range of instruments cited above and groups them into three categories:

- surveys specific to particular groups of students, for example commencing or equity students;
- surveys that elicit an evaluation of student satisfaction with their university experience;
- those that collect data about students' involvement in activities relevant to their studies.

Student engagement surveys fall into the third category in Palmer's typology and are deemed to be concerned primarily with what a student does, rather than what a student perceives, judges or feels. In the constructivist framework of engagement theory however, this "behavioural focus" (Palmer in Radloff et al 2011, p.49) is in itself multi-dimensional and can indicate a variety of nuances of learning as an inherently social activity. In current student engagement discourse the definitional boundaries of the concept of behaviour have shifted in order to capture "aspects of teaching, the broader student experience, learners' lives beyond university and institutional support" (Coates 2010, p.3). Solomonides (forthcoming) observes that engagement research in Australia has tended to focus on individual or academic engagement rather than a more relational approach. He reflects on the growing recognition in Australian student engagement research of the affective dimensions of engagement as lived by the student.

Just as the conceptual boundaries between students' activities, perceptions and background circumstances are not entirely separable, analysis of student engagement is not separable from evaluative reports of university experience or descriptive reports of student characteristics as differentiated by Palmer (2001) above. These overlaps are evident in smaller, institutional-focused studies of student engagement and experience where data yielded by national surveys are used in combination and complemented by internal surveys and disciplinary studies. Relationships between these types of data also characterise research partnerships between institutions concerned with enhancing student engagement (Chalmers 2010).

While definitions and measures of student engagement are contested (Hagel, Carr & Devlin 2012), and the foci and intentions of studies are broad, Australian literature in the field provides evidence

of motivated and comprehensive activity to support students to become involved in their studies in ways that are known to improve their success (Lomax-Smith, Watson & Webster 2011). This overall synthesis includes discussion of the findings of the key research so far summarised and is triangulated by a sample of wider Australian studies conducted within approximately a ten-year period. These include variously, quantitative and qualitative studies that are cross-institutional, single institution focused and also discipline/school based. This literature has been selected and organised by key aspects and indicators of student engagement: belonging, retention and success. Salient findings relative to these aspects are grouped and discussed below.

Student engagement and belonging

A student's sense of belonging is developed commensurate with their level of participation and integration into academic culture (Tinto 2005). Involvement in social and collaborative learning activities and positive interactions with university staff and peers are keys to a student building a resilient identity, and who can participate confidently in an institution and a disciplinary community (Reid & Solomonides 2007). There is an established body of Australian literature explicating the ways in which universities can and do invite and guide students to belong and persist (Kift 2004; Baird & Boin 2008; Creagh, Nelson et al 2010), however, crucial aspects of this process are often left to chance (Krause 2011).

The Australian studies reviewed here that address the aspect of belonging mostly theorise the concept in the emotional, affective domain of student engagement. Within the frame of belonging is included the interpersonal development and associated intellectual opportunities that active and collaborative learning provides in concert with wider social opportunities. Theories driving Australian research concerned with belonging are particularly influenced by the work of Vincent Tinto (1993) regarding causes of, and solutions for, student attrition. Tinto focused on the extent to which the institutional environment influences a student to integrate academically and/or socially. These domains are conceived separately and in relationship, and represent informal and formal contexts of learning and sociability. For a student to persist, they must be able to connect in either the social or academic domains, which are mutually influential.

Applied studies that address student belonging (meaning those that implement and evaluate specific programmes and projects) attempt to capitalise on the mutual influence of academic and social domains (Kift 2008; Krause 2011). This is particularly so in efforts to enhance engagement for

commencing students, hence major scholarly and organisational focus on the first-year experience (McInnis, James & McNaught 1995; McInnis, James & Hartley 2000; Krause, Hartley, James & McInnis 2005; Kift & Nelson 2005; Nelson, Smith & Clarke 2011). While the 2009 *Australasian Survey of Student Engagement* (AUSSE) data indicated that numbers of students considering dropping-out had lowered slightly (Kift & Coates 2009a), the evidence is established that a significant minority of students in Australia are uncertain about their intentions to stay in year one (Coates 2010). Feeling supported by the institution to belong can be highly influential in a decision to persist (Radloff & Coates 2010). Hence the importance of belonging as a 'softer measure' on which the harder statistics of retention depend.

The evidence is also established that strategies to acculturate students in the first year need to be diverse and institution-wide in order to reach numbers of students as well as diverse students. Hence, a major theme in first-year experience (FYE) engagement studies is the importance of a whole of institution, co-ordinated and coherent response (Kift 2008). Kift outlines strategies in the operationalising of institutional reform agendas for the FYE, as does Krause (2011). These reforms include prioritising key programmes for orientation which are usually scheduled at the opening of semester. Quality orientation programmes need to include course advising, and disciplinary-focused induction. Being uncertain about course and unit choice can affect students' decisions to discontinue (Krause, Hartley, James & McInnis 2005). More recently, Crosling, Heagney and Thomas advise "longer and thinner" orientation programmes extending beyond the first weeks (2009, p.12).

Devlin and colleagues (2012) outline some of the characteristics of empathic institutional contexts that provide welcoming, engaging experiences for students who may be unfamiliar with university cultures. These characteristics include:

- value and respect for all students;
- an institution-wide approach that is comprehensive, integrated and co-ordinated through the curriculum;
- inclusive learning environments and strategies;
- a commitment to empowering students by making the implicit, explicit;
- a focus on student learning outcomes and success.

These characteristics were derived through the project's literature analysis and are supported by the evidence from interviews with 26 experienced staff and 89 successful students from low socioeconomic backgrounds (LSES). Synthesis and analysis of the interview data revealed four key themes to which institutions and staff need to attend to ensure the effective teaching and support of LSES students. Further, the study found that the empathic institutional context:

- employs inclusive teaching characteristics and strategies;
- enables student agency;
- facilitates life and learning support;
- takes into account students' financial challenges.

Academic preparation and bridging courses provide generic skill development as well as opportunities to form friendships and networks. Facilitating peer-led learning programmes are shown to be significant (Elliot & Lynch 2010), in particular if they are designed in participation with student facilitators (O'Shea & Vincent 2011). The Peer Assisted Study Sessions (PASS) programme has been adopted widely across Australian universities and is considered effective in building learning communities that are discipline and unit specific (Rogan & Austin 2009; Williamson & Goldsmith 2012). Carefully designed mentoring programmes for commencing international students are advised, as support for negotiating the university environment, and also to help students engage with the community beyond the university (Burdett & Crossman 2012; Owens & Loomes 2010).

While the balance of literature on student belonging is concerned with the transition period, some studies have scaffolded this knowledge with initiatives that use a whole of student life-cycle approach (Carlin, Clarke, Wilson, Lukas & Morieson 2012). Carlin et al's current pilot study focuses particularly on the belonging aspect of engagement in a faculty-based project spanning a three-year undergraduate programme. Engagement initiatives and interventions are scaffolded and aligned to the particular needs of students in each year of their degree. The research process is also designed to encourage interaction between students at different year stages. The project employs a narrative approach in an action research cycle that allows for the participation of all staff and student stakeholders to plan and evaluate the project.

The assumption that developing student belonging can be secured in the first year is problematised by Errey and Wood (2011, p.28). This study of 87 undergraduate students found that those closer

to the completion of their course were the most disengaged. First-year students were more likely to be highly engaged. In another variation of the temporal aspects to student engagement, Horstmanshof and Zimitat (2007) studied first-year students, but examined how students' orientation to time, that is their focus on the past, present or future, effected their academic integration and persistence. Based on their findings these authors recommend that a student's *Time Perspective* (that is how past experiences can influence present actions and future goals) can be explicitly developed towards *Future Orientation*, which is linked to higher levels of engagement.

There is growing attention in the literature to the physical spaces in which student engagement activities and interactions occur (Keppell, Souter & Riddle 2011; Matthews, Andrews & Adams 2011). This aspect is particularly important in light of the evidence that student attendance is linked with the development of belonging (McRae 2007). In 2005 students who reported spending more time on campus were significantly more likely to feel as if they belonged and were part of the learning community than those who spent fewer days per week on campus (Krause, Hartley, James & McInnis 2005, p.9). However factors such as increasing hours in paid work and online learning can influence students to limit their face-to-face experiences. Recently, James, Krause and Jennings (2010) reported that students spent less time on campus, were less involved in extra-curricula activities, and made fewer friends at university than in previous years. Paradoxically, those students also reported an increase in group work for assessment and study purposes, both in the formal teaching context and outside of class. These students did not believe that time away from campus affected their levels of engagement with study. Perhaps wider opportunities for collaborative learning meant they were enabled to make the time they did spend on campus productive. It follows then that the formal learning spaces of the university, as well as the informal, need to be considered in terms of the learning opportunities they provide to students who are time poor and at risk of disconnecting.

Matthews, Adams and Ganaway (2009), in a quantitative study, found that students who used informal learning spaces (defined as those outside of class) reported significantly higher levels of engagement than those students who did not. The authors developed a framework for evaluating social learning spaces. This study was further developed by Matthews, Andrews and Adams (2011) with qualitative research into students' experiences of university spaces. The study affirmed that social learning spaces were pivotal in facilitating students' sense of belonging. What emerged from the data was the importance students placed on design, and the authors argue that future research

is needed on this aspect. Another focus on space is the constraints that 'massified' lecture spaces place on the active learning aspect of student engagement. Cavanagh (2011) presents solutions for delivering lectures in a mix of traditional and active group learning tasks. These approaches were evaluated by 113 students who indicated high levels of engagement.

The relational nature of belonging to a learning community also requires that interactions between peers, support staff and, in particular, teachers provide spaces for engagement. Student teacher interactions are reported by students to be highly important to their sense of belonging (Lomax-Smith, Watson & Webster 2011). Large studies show that dissatisfaction with this aspect of Australian students' experience is a trend (Coates 2010), also that there is often a mismatch between student and staff perspective on student levels of engagement (Sheard, Carbone & Hurst 2010; Baron & Corbin 2012). Accessibility and approachability of teaching staff is known to be crucial to student success generally (Hastings 2010). Lomax-Smith, Watson & Webster (2011) propose that crowded classes contribute a lack of student access to teachers. Pearce and Down (2011) point to the significant 'casualisation' of the academic as an important impact on staff-student engagement. They assess tutor's work conditions and practices as counter-productive to the kinds of interactions that underpin engagement.

Studies concerning the importance of relational engagement for non-traditional students are prevalent. Pearce, Down and Moore (2008) studied the experiences of working-class students who encountered and negotiated cultural bias and stereotyping in education. These authors propose that social class as an inter-cultural concept needs reconsidering in engagement practices and in institutional discourses of inclusion and exclusion (see also Nelson & Creagh 2011). Developing trusting relationships with teachers has shown to be crucial in engaging and retaining Indigenous Australian students (Pearce 2008; Day & Nolde 2009; Gruppetta & Mason 2011) who face multiple historical impacts on educational attainment (Rose, Lui-Chivizhe, McKnight & Smith 2003). This is particularly important to Indigenous students who are often regionally or rurally based, and study by distance or through block-mode delivery and so have limited face-to-face opportunities to interact with teaching staff (Gibb 2006). The development of online learning environments that respond to what Indigenous Australians consider a cultural need for relational pedagogy is presented by McLoughlin and Oliver (2000) and Doherty (2002).

Online experiences have become critical in contemporary campus-based learning (Coates 2006), but all distance students who do not attend campus face particular challenges in becoming part of a learning community (Palmer & Holt 2009; Bliuc, Goodyear & Ellis 2010; Davey & Tatnall 2011). A human teacher presence in the conduct of online learning communities has been found to be critical to distance students' integration into academe (Garrison & Anderson 2003; Garrison & Vaughan 2008). Interestingly, while student discussion boards are ubiquitously used to foster online learning communities, the lack of teacher moderation can, in fact, cause some students to disengage. This was so for mature, female and working students who cited lack of teacher guidelines and unchecked social use of the discussion board by other students as a reason to stop contributing (Lewis 2009; Meyers, Bennett & Lysaght 2004).

Institutional strategies to enhance a student's sense of belonging are multi-dimensional and multi-directional. They must occur in all social, learning and teaching and administrative domains of student engagement and should be implemented across the student life-cycle (Krause 2011). In this "complex work" (Kift 2008) the commonality is the relational nature of student belonging and that "personal interactions are generally the most powerful, and can also be the simplest – but not always the most obvious – route to action" (Carlin et al 2012, p.43).

Student engagement and retention

The studies reviewed in the previous section on belonging all link the concept and attendant strategies firmly to the aim of student retention. These studies, in terms of student belonging, could be described as concerned mostly with processes and practices. Retention is a construct that also relates to multi-dimensional processes of engagement, but it is also heavily weighted as a nominal indicator of institutional quality and reputation (Devlin, Brockett & Nichols 2009). At a systems level and in relation to accountability and allocation of resources, retention is defined by the Department of Employment, Education and Workplace Relations (DEEWR) as the:

number of students who re-enrol at an institution in a given year (x), as a proportion of students who were enrolled in the previous year (x-1), less those who completed their course ... It does not count as retained in the system those students who defer their study or transfer to another university (DEEWR 2008).

This definition compares with the Higher Education Funding Council for England's measure of retention (cited in Jones 2008). Jones, reviewing retention and success in the UK higher education sector, points to the narrow parameters of the UK definition that do not account for part-time students or those who may transfer institutions, or plan a return to education. Criticism of government focus on retention is echoed in Australia; Kift (2008, n.p.) describes it as "blunt". However retention as it relates to student engagement practices and institutional quality improvement takes a wider view. In this wider view that is nevertheless framed by policy imperatives, retention and its relations to student engagement can be conceived variously as a social justice commitment (Pearce 2008), as a key in driving transformative, sustainable education reform (Krause 2011) and as an opportunity for sector-wide collaborations (Chalmers 2010). Importantly, inquiries into the conditions that enable a student to persist can present participation opportunities in themselves (Nair, Adamis & Mertova 2008).

Within a social justice frame, provision of education addresses barriers to engaged learning, rather than merely remediates incapacities for engaged learning (Nelson & Creagh 2011; CSHE 2008). Student engagement data can problematise the deficit discourse of widening participation that links the phenomena to poor retention rates. Globally (Tinto 2005), and in Australia, reports that many teachers perceive diversity as a threat to academic quality are prevalent (Kift 2008). However, studies have shown that students who belong to equity groups can, in fact, have higher levels of persistence than the normalised, traditional students they are measured against. For example, in Australia, students from non-English speaking backgrounds have been found to be more likely to persist with their studies than students from an English speaking background (Long, Ferrier and Heagney 2006; Grebennikov & Skaines 2008; Marks 2010). While there is an overwhelming body of literature on low rates of participation in tertiary study by Indigenous Australians, Devlin (2009, p.2) points to the "many hundreds of Indigenous graduates who have defied the odds and achieved success".

Retention conceived as singularly nominal for institutional reporting purposes positions students as the acquired. Conceptualising and understanding retention from the student perspective positions students as agents who have drawn on resources to remain engaged. From the student perspective, a distinction can be made between the terms 'retention' and 'persistence' (Horstamshof & Zimitat 2003) in order to identify both attitudes and conditions that support student success. Horstamshof and Zimitat (2007) found that a student's clarity and focus on future goals predicted

persistence; Jackling and Natoli (2011) found that in a large cohort of diverse business students, relationships with administrative staff rather than academic staff influenced their decision to continue studies. Sharrock and Lockyer (2008) state that a “multi-mode enrolment” which includes block release programmes, has increased Indigenous Australian retention rates (p.29). This mode of delivery is conducive with the high level of family responsibilities Indigenous Australian students report (Gibb 2006). Mature students, despite preferring campus-based learning are enabled to study by flexible provision (Miller 2006). Students generally report that the relevance of their course to vocational goals is highly significant in influencing their departure intentions (Scott 2008). This finding affirms the importance of Work Integrated Learning as a scale to measure student engagement (Coates 2008).

Despite the value of strength based approaches to understanding student persistence, the need to investigate the causes of attrition specific to students’ social histories is also essential. In particular people from low socioeconomic backgrounds and Indigenous people in Australia are significantly under-represented in higher education despite an extended period of government reform to wider participation (Krause, Hartley, James & McInnis 2005). Enabling equitable access needs to be followed by attention to providing equitable conditions to succeed at university. While the relationship between low socioeconomic background and completion is questionable (Marks 2007), Indigenous students successfully complete 25 per cent less units/subjects than non-Indigenous students (CSHE 2008). CSHE’s (2008) study on the participation of low socioeconomic background and Indigenous student in Australia reports that students in 2006 experienced more financial pressures on their study than in 2000. It is likely for Indigenous students that they will belong to several equity groups including low socioeconomic background (Grupetta & Mason 2011).

Research into access and retention of Indigenous higher education students often focuses on barriers that include negative pre-tertiary education experiences, complex family responsibilities (Rose, Lui-Chivizhe, McKnight & Smith 2003) and the lack of culturally appropriate educational content and modes of delivery in university courses (McLoughlin & Oliver 2000). Such approaches often emphasise the difference between Indigenous and non-Indigenous learners at an individual level and rest on a comparison of performance between the two (Harrison 2007). Harrison contends that the bulk of research trained at finding solutions for Indigenous education results in either students or teachers being “blamed for the lack of outcomes” (p.1). Emerging in the

literature are calls for research that investigates 'what works' from student perspectives (Devlin 2009), that supports both Indigenous and non-Indigenous educators and that unpacks how Indigenous student engagement is affected within tensions created by "political and pragmatic forces reshaping educational delivery" (Gibb 2006, p.23). Interestingly, in terms of conditions for Indigenous engagement and success in learning, Barnes (2000) found that teaching materials and methods specifically designed to cater to Indigenous students "simply conform to what is considered 'good teaching practice' and would be useful in most classes" (p.14).

While it is acknowledged that the capacity of retention statistics to reflect good teaching are not clear (Devlin, Brockett & Nichols 2009), retention as a reporting requirement at a systems level has stimulated quality improvement in Australia (Crosling, Heagney & Thomas 2009; Lomax-Smith et al 2011). A strong theme in the Australian literature regarding retention is the centrality of teaching quality. In turn current discussions of teaching and learning are commonly embedded by the broader principles of student engagement. Institutional studies of students' reasons for discontinuing affirm that while factors are complex, decisions often hinge on experiences of learning and teaching. In a cross-institutional study Long, Ferrier and Heagney (2006) found that while decisions could be largely correlated with students' background characteristics or 'types', similar proportions of each type left university due to academic difficulties and dissatisfaction with their programme. Crosling, Thomas and Heagney (2009) examine retention from a learning and teaching perspective, and make the point that learning and teaching is the one aspect of the student experience the institution does have control of. The authors make an argument from the literature that while the link between retention statistics and quality improvement are not clear, a student's engagement with learning is a significant factor in retention.

Engagement data collected in national quantitative studies such as the AUSSE only account for a partial picture of student engagement (Radloff et al 2011). As that concept relates to learning and teaching quality, national studies are understood as insufficient to analyse and guide learning and teaching reform (Hagel, Carr & Devlin 2012). There is increasing analysis of how national studies of student experience and engagement can be used effectively in combination with institutionally generated data, particularly internal teaching evaluation (Barrie, Ginns & Symons 2008). In a cross-institutional collaboration, the Teaching Quality Indicators Project was designed and piloted in eight Australian universities (Chalmers 2010). The aim of the project was to develop a shared teaching quality indicator framework that could be adapted to institutionally specific conditions. As well as

providing the means to guide and sustain reform in learning and teaching governance and practice, the framework was developed to open opportunities to make national comparisons where relevant. Devlin, Brockett & Nichols (2009) report that Deakin's participation in the Teaching Quality Indicators Project contributed to a whole of institution reform programme. In this sub-project, the concept of student engagement was embedded into all governance and teaching systems with the central aim of recognising and rewarding teaching excellence.

Critiques of national quantitative surveys, such as the AUSSE, have been that they do not capture disciplinary nuances of engagement (Hagel, Carr & Devlin, 2012). Jackling & Natoli (2011) point to the gaps that whole of institution studies can also contain in addressing the issues and conditions for disciplines and faculties. Their large student sample was heavily represented by non-English speaking background and low socioeconomic students, which the authors emphasise is a national trend in business studies. They point to the value of understanding distinct student profiles and needs within disciplines in order to inform national analyses. In the Belonging Project, Carlin et al (2012) point to the value of undertaking faculty wide transition and retention projects as a way of adapting to structural change in an institution. Their study aimed to develop the learning culture in a newly amalgamated design school.

As well as quality teaching, student support services play an important role in influencing a student's departure decision. Simpson and Ferguson (2012) review the literature on the impact on retention of students' emotional and mental well-being. In their study of students at risk, they found that the likelihood of retention increased with the number of counselling sessions they attended at university. This finding is important in the light of Long, Ferrier and Heagney's (2006) findings that a majority of students who considered leaving study discussed their decision with family and friends over university staff. So becomes vital not just the response to student engagement for the collective cohort, but identifying individual students at risk systematically. Nelson, Duncan and Clarke (2009) trialled a contact management system where students at risk were identified by their failure to submit their first assignment. A portion of at risk students were able to be contacted with a support phone-call and that portion achieved significantly higher grades and rates of persistence than those who could not be contacted.

Equally, academic support services in forms of learning advisors and learning centres are cited as crucial contributors to retention. The importance of generic study skills guidance for students is

however only one dimension of academic support delivered extrinsic to programme curriculum. Baird and Dooley (2012) studied students' participation in a learning centre as a process of cultural development. In their study, which incorporated an analysis of students' texts, the researchers were able to identify patterns of students' conceptual and writing difficulties and so develop appropriate resources and methods to respond. In the literature regarding the best conditions for the retention of Indigenous students, a dedicated Indigenous centre, that combines academic and social supports is pivotal (Day & Nolde 2009).

Student engagement and success

Within the construct of engagement, student success can refer to the achievement of sufficient grades for a student to progress, the completion of a programme of study and graduation (Scott 2008), employment (Coates & Edwards 2011) and postgraduate education outcomes (GCA 2010), and the personal attributes that a student develops through study (Barrie 2009). In the literature, definitions of student success can vary according to a focus on either student, institutional or national perspectives (Horstmanshof 2007). These perspectives are inter-related and have in common an interest in the conditions that promote engaged and active learning (Trowler 2010). This focus is on learning as an inherently social and ethical activity and the aim of university education to develop work-ready students as well as reflective and responsible citizens (Scott 2008). Scott emphasises that it "is the total experience of a university that engages students in productive learning, not simply what happens in the traditional classroom" (p.9).

In examining the student perspective of success, studies focus variously on the relationship between student satisfaction and performance outcomes (for example the Australian Survey of Student Engagement (AUSSE) and the Course Experience Questionnaire (CEQ); the particular psychological attributes that students bring to study that will shape their approach to learning (Rochester, Kilstoff & Scott 2005) and the impact that a student's historical circumstances will have on their chances of successful learning and its benefits (Shah & Widin 2010; Pearce & Down 2011; CSHE 2008). While the student experience remains the anchor to studies of engagement, there is increasing concern for, and analysis of, institutional strategies for successful student engagement (Chalmers 2010; Krause 2011). The research literature from this perspective features discourses and practices of cultural as well as structural reform in specific reference to wider national changes and political imperatives.

National surveys that analyse institutional conditions for student success have used Little's (1975) theories of learning climates. These climates are: *Cultivating*; *Training*; *Indulging* and *Neglecting*, and refer to both cultural and functional aspects of the university. Cultivating climates show best outcomes and student satisfaction rates and are characterised by high academic standards and challenge, effective support and the recognition of students as part of the community. The Australasian Survey of Student Engagement (AUSSE) uses Little's typology of institutional climates to categorise data. Student satisfaction results and grades are presented according to the four learning climates. The findings are consistent with Little's typology where support and challenge in combination are significant to both satisfaction and performance (Coates 2008).

Little's framework has been translated in institutional studies that report and evaluate reform agendas to enhance student engagement. Devlin, Brockett and Nichols (2009) outline how "institutional climate and systems" (p.116) are a target for analysis and improvement in Deakin University's overall change programme. Principles of student engagement are specifically embedded via the Teaching Quality Indicator (TQI) project that form part of Deakin's reforms. Devlin et al explain how the project has facilitated "significant cultural change ... [and] ... which has allowed conversations about student engagement to take place" (2009, p.116). The TQI project also involves cross-institutional collaboration and conversation (see Chalmers 2007; 2010).

The literature reviewed here holds in the balance an emphasis on the quality of teaching and curriculum design in enhancing the conditions for student success. Particular concern with appropriately scaffolded and constructively aligned curriculum in the first year (Krause et al 2005; Kift 2008) is coupled with attention to teaching approaches that facilitate beginning students' to develop both collaborative and independent learning skills. Crosling, Heagney and Thomas (2009) call for a "student-responsive curriculum" which refers to "students being immersed in authentic curriculum contents and tasks that are challenging and relevant to students' lives and futures, appropriate orientation or induction procedures and the integration of study skills" (p.11). Student-responsive curriculum is crucial to foster the success of students with varying degrees of preparation, external support and financial resources and whose expectations and aspirations are also complex (Scott 2008). In terms of institutional success, current funding arrangements in Australia are linked to the success of traditionally under-represented students providing incentive for curriculum that is shaped in reference to socially situated cohorts (Gale 2011).

A further strong focus within these learning and teaching domains is the quality and nature of assessment and feedback. Student success in the form of adequate grades for progression is an important condition for retention and positions assessment as the key vehicle for both the enactment and measurement of engaged learning. National surveys on student experience and engagement draw clear links between the nature and quality of assessment feedback and student satisfaction with university learning (Coates 2010). It has been established that poor academic performance is a strong reason for early departure from study (Sharma & Burgess 1994) and Abbott-Chapman, Hughes and Wyld (1992) (cited in Jackling & Natoli 2011) and under-performing students are commonly dissatisfied with the availability and consistency of clear and timely feedback (Scott 2005; McInnes, James & Hartley 2000; McGregor & Merchant 2008).

Studies regarding the improvement of feedback mostly acknowledge the constraints of large student numbers and increasing staff workloads on timeliness and quality (McGregor & Merchant 2008). McGregor and Merchant propose a novel way of providing feedback via voice recordings. In their study, student assignments were graded and a 1.5-minute, voice-recorded comment on their work sent by email was added. Students overwhelmingly reported in focus groups that they valued the audio feedback and were “less likely to discard the audio feedback compared with written comments” (2008, p.10). The authors note the lack of research on this approach in relation to the wide-spread availability of the technology to deliver audio feedback.

Discussions regarding assessment feedback in relation to theories of student engagement often focus on teacher feedback (Hagel, Carr & Devlin 2012). Hagel et al, in a critique of quantitative engagement surveys, note that “feedback that enhances engagement can take other forms or derive from sources other than teachers” (p.481). These authors emphasise the importance of feedback that arises from the task itself, in particular from student peers in group work. Peer and self-assessment strategies are proposed for managing quality feedback in large classes, but also to promote deep, as opposed to surface, student learning and higher order thinking. These attributes are considered important in the context of graduate attributes necessary for life-long learning in the employment market (Willey & Freeman 2006; Hallam & Creagh 2010).

Willey and Gardner (2010) note that while the effectiveness of self and peer assessment in improving learning outcomes is proven, the general perceptions of both students and academics are that such forms of assessment support ‘free-loaders’ (p.429). These authors investigated the

multiple uses of self- and peer-assessment processes within a single subject. They found that while effort was necessary to counter students' resistance to self and peer assessment, students reported that "the feedback they received, in a number of different contexts, particularly in the peer learning exercises, increased engagement and successfully supported them to learn" (2010, p.442). Weaver and Esposto (2012) found that peer assessment activities encouraged student attendance and enhanced engagement. In their pilot study of introducing peer assessment in a third-year business unit, the researchers moderated, de-identified and collated peer feedback before forwarding it to the receiving student. This process allayed student concerns about the 'public' nature of peer feedback. The authors suggest careful consideration of how to manage 'non-contributors' in learning groups and are currently investigating software applications to counter any increase in staff workload in delivering peer assessment activities.

Peer assessment and group work support student engagement and encourage independent learning. Presenting undergraduate students with research opportunities has also been found to facilitate engagement with learning and independence (Naug, Colson & Donner 2012; Naug & Colson 2010). These opportunities also maximize interactions with staff where effective feedback can be communicated and foster a sense of belonging to a discipline. This interest in undergraduate research for engaged learning is international (Turner, Wuetherick & Healy 2008). In Australia, Brew and Jewell (2012) conducted a survey of opportunities offered by 39 universities and 31 external funders of undergraduate research. They found that undergraduate research programmes are widespread in Australia and commonly act to pipeline students to postgraduate research. Constraining factors to the development of such programmes are cited as unstable funding sources and low remuneration and recognition for supervisory staff. Jewell and Brew note that despite growth in these programmes, undergraduate student experience of research work has not yet been analysed.

The studies cited above that focus on strategies to promote engaged, independent student learning emphasise the importance of developing and sustaining learning communities through the curriculum. The inclusion of the Work Integrated Learning scale into the Australasian Survey of Student Engagement (AUSSE) underscores the importance of graduate attributes that facilitate successful life-long learning in the workplace. Scott (2008) identifies a traditional narrow view of graduate success as the acquisition of declarative knowledge and basic skills. Instead, he advocates that "the core focus of higher education should be on the development of graduates capable of

negotiating effectively the combined set of social, ethical, intellectual and technical challenges of their chosen profession or discipline” (p.5).

Barrie (2009) defines graduate attributes as “an orientating statement of education outcomes used to inform curriculum design and engagement with teaching and learning experiences at university” (p.1). Barrie outlines a framework for a systematic, institutional approach to curriculum renewal spanning multi-level, conceptual and practical strategies for institutional development of authentic graduate attributes. Smith and Bath (2006) argue that “students’ perceptions of their involvement in a learning community are strongly related to their learning outcomes” (p.279). This conclusion affirms the core principle of student engagement theory that positions successful students as active learners.

Summary

Student engagement research in Australian higher education has a long and rich history and has contributed to deeper understandings of contemporary students’ lives within and beyond the university setting. This research has also played a significant role in shaping national and institutional policy. A student’s sense of belonging to a university learning community, their decision to stay or leave, and their ultimate academic and employment success are all important measures and dimensions of engagement. These dimensions are over-arching and inter-related, but not exhaustive in terms of the complex dynamics that impact both a student’s ability and motivation to engage with learning, as well as an institution’s ability and motivation to engage students. Large national surveys that elicit students’ perceptions of the ways in which they engage, or not, with university study provide an instructive framework for ‘big picture’ analyses and evaluations. Increasingly, however, institutions are focusing as well on contextualised frameworks to research student engagement. These multi-level research approaches and instruments are symbiotic, for example, the recently developed national University Experience Questionnaire (UES) provides facility for individual universities to develop and include context specific indicators (Radloff et al 2011).

While this literature synthesis has canvassed concepts and measures of student engagement that have wide-spread acceptance in the Australian higher education sector, there remains a need for further development and critique of the construct. In particular, it is important that “old paradigms which depict engagement in solely positive terms” are challenged (Krause 2005, p.11). Baron and

Corbin (2012) for example, highlight the need for governments and institutions to examine the ways that disengagement is unintentionally fostered, rather than a sole focus on promoting engagement. It needs to be recognised that some students may succeed in their studies without being engaged or ever feeling that they belonged to a learning community (Hagel et al 2012). Also that some students who may not continue with their studies, and are not therefore considered 'successful', may nevertheless benefit from their time at university in meaningful and socially productive ways. Hagel et al (2012) remind us that the construct of student engagement is not value free and that universities need to be clear on how their ideological orientation to student engagement aligns with their institutional missions, as well of those of their wider communities. What remains constant, and should, in these emerging and diverse conversations about student engagement, is that learning is an inherently social rather than individual endeavour. Working from this core principle student engagement has the potential to develop inclusive and responsive learning communities with all their tensions.

Implications for international policy and practice

The Australian research on student engagement has much to offer in terms of national and international higher education policy and practice. Key implications include:

I. A systems approach to interpret the student engagement challenge at institutional, national and international levels.

In a globalised higher education sector, there is much to be gained from sharing cross-national research findings and resources in the area of student engagement. Systemic approaches are pivotal to addressing the challenges of managing changes in the ways students engage, along with changes in academic work and reduced public funding for higher education. Systems thinking at international and national levels should, in turn, inform approaches at the local institutional level. This includes sharing strategies on managing external drivers of change including social, economic and political drivers. Closely connected to these drivers are those relating to community and industry expectations of higher education and associated beliefs about the purposes and outcomes of higher education. Dynamic and innovative leadership at government and institution levels is particularly important for progressing the debates and for managing the complex policy and practical issues surrounding student engagement in today's higher education institutions in informed and visionary ways.

2. New research paradigms to address changes in student learning in 21st-century higher education.

With the unbundling of higher education content and the growth of anywhere, anytime learning (for example in massive open online contexts), institutions and governments need informed, evidence-based strategies to guide policy and practice in such areas as funding and quality assurance mechanisms for higher education provision that is increasingly fragmented, modularised and freely accessible across transnational boundaries.

3. Fresh approaches to engaging staff – both academic and professional – and to configuring academic roles.

The findings from student engagement research provide compelling evidence of the fact that, to engage students, institutions must ensure that staff are engaged. As new learning paradigms emerge and as students engage in different ways with higher learning, so academic and professional staff need to be supported to adapt to this new world. The academic workforce is more diversified and specialised as the lines between academic and professional staff become increasingly blurred. While institutions must tackle these issues from a policy and practical perspective, there is considerable merit in sharing strategies and research findings across institutional, national and international boundaries if we are to ensure enhanced student engagement for an increasingly global student community.

Practical applications

Deakin University

Baker, L. & Devlin, M. (2009) *Strategies for student engagement: For teachers*. Melbourne, VIC: Deakin University.

Available from: <http://www.deakin.edu.au/herg/assets/resources/SSE-teacher.pdf>

This guide for teachers provides practical strategies to enhance student engagement that are aligned to Deakin's eight principles of Teaching Learning and the Student Experience.

Australian Council for Educational Research (ACER)

Enhancement Guides.

Available from: <http://www.acer.edu.au/research/ausse/enhancement>

A series of guides to assist staff and students with the enhancement of student engagement with learning.

University of Western Sydney

UWS Student Transition, Retention and Success (STaRS) programme.

Available from:

http://www.uws.edu.au/idvceducation/idvc_education/strategic_projects/first_year_experience

A whole of institution strategy for supporting the quality of first-year transition to university, along with student retention and success.

Queensland University of Technology

Nelson, K., Creagh, T. A., Kift, S. & Clarke, J. A. (2010) *Transition pedagogy handbook: A good practice guide for policy and practice in the first year experience*. Brisbane, QLD: QUT.

Available from: http://www.fye.qut.edu.au/documents/RES_TransitionPedagogyHandbook.pdf

Practical resources for designing and delivering FYE curriculum that outline adaptable principles of engagement.

Griffith University

Krause, K.-L. (2011) *Enhancing student engagement in the first year: 10 strategies for success*.

Available from: http://www.griffith.edu.au/gihe/pdf/gihe_tipsheet_web_ese.pdf

A guide for academic and professional staff comprising ten strategies for engaging students in higher education in the first year of study.

Macquarie University

Student Engagement Principles.

Available from: http://staff.mq.edu.au/teaching/curriculum_development/engagement/

This document provides an overview of the activities, systems and processes that facilitate student engagement.

Selected literature reviews relevant to student engagement

Chalmers, D. (2007) *A review of Australian and international quality systems and indicators of learning and teaching*. Sydney, NSW: Carrick Institute for Learning and Teaching in High Education Ltd.

Available from;

http://www.olt.gov.au/system/files/resources/T%2526L_Quality_Systems_and_Indicators_0.pdf

Harvey, L., Drew, S. & Smith, M. (2006) *The first-year experience: A review of literature for the Higher Education Academy*.

Available from:

<http://www.qualityresearchinternational.com/Harvey%20papers/Harvey%20and%20Drew%202006.pdf>

Zepke, N., Leach, L., Anderson, H., Butler, P., Henderson, J., Hoffman, J., Isaacs, P., Ross, C., Russell, B., Slater, G., Solomon, K., Wilson, S. & Wiseley, A. (2008) *Improving student engagement in post-school settings: An annotated bibliography*. Available from: <http://ako.aotearoa.ac.nz/ako-aotearoa/ako-aotearoa/resources/pages/improving-student-engagement-post-school-settings-annotate>

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- Baird, C. & Dooley, P. (2012) Learning in transition: Culture to culture. *Journal of the Australia & New Zealand Student Services Association*. **39** (April), 9-20.
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