



Improving Student Engagement in Post-compulsory Education: A Synthesis of Research Literature

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Introduction

Institutions, educators and students in post-compulsory education are increasingly challenged by governments to contribute to national economic achievement. One aspect of this challenge is a drive to improve student success, understood as increasing or widening participation, achieving high levels of course completions and attaining a passport to employment with a positive attitude to lifelong learning (Yorke, 2006). Research into how to achieve student success has been extensive; for example in retention and completion studies. Major syntheses have been completed over the past three decades, primarily in the United States (Astin, 1993, 1997; Pascarella & Terenzini, 1991, 2004) but also in Australia (McInnis, Hartley, Polesel, & Teese, 2000), the United Kingdom (Yorke, 1999) and New Zealand (Zepke & Leach, 2005). Another well researched area since the 1990s focuses on how students engage with their studies and what they, institutions and educators can do to improve student engagement and hence student success (Horstmanshof & Zimitat, 2007). Approaches to engagement research have varied. The sociopolitical context in which education and engagement take place is one focus (McInnis, 2003; McMahan & Portelli, 2004; Yorke, 2006); the effect on students of environmental factors such as family background and economic status has been another (Law, 2005; Miliszewska & Horwood, 2004). Student motivation as a factor in engagement has also been studied extensively (Schuetz, 2008), as have the roles of institutional structures and cultures (Porter, 2006) and the way educators practise and relate to their students (Kuh, 2001; Umbach & Wawrzynski, 2005).

Student engagement, then, is a complex construct. It is not easily defined, although the attempt by the Australian Council of Educational Research—“students’ involvement with activities and conditions likely to generate high quality learning” (ACER, 2008, p. vi)—comes close to a working definition. It has the virtue of inclusiveness and thus enables numerous factors such as student background and circumstances, institutional structures and cultures, teaching practices and approaches to learning to be considered. While some engagement research, such as that drawing on results from the National Survey of Student Engagement (NSSE) in the United States can “provide a direct measure of students’ involvement in key educational processes” (Coates, 2007, p. 122), such research can only provide an indirect measure of overall student outcomes. It cannot easily take account of values and dispositions of students or institutions. Nor can it adequately incorporate emerging social and economic trends. For example, as McInnis (2003) and Yorke (2006) point out, social and economic factors are changing student motivation. Consequently, they change students’ engagement in learning. According to McInnis, changed attitudes to institutions means that engagement must be negotiated. Yorke, in a similar vein, argues that students modify their engagement strategy to “satisfice” their goals in complex times. Moreover, engagement research usually uses students’ perceptions of how they engage in their learning and thus produces evidence more in line with experientially founded soft outcomes of success (Marsden, McKibben, & Anderson, 2006; Zepke, Leach, & Isaacs, 2008). Despite these

limitations, engagement research can provide valuable insights into what works and why it works in post-compulsory education.

Keeping in mind the complexity of engagement, this paper examines research from the United States, the United Kingdom, Australia, New Zealand, South Africa, Spain, South Korea, Israel, China and France for ideas about how student engagement works. It attempts to answer the question: “How does a synthesis of research literature help us generate an integrative conceptual framework for student engagement and workable propositions for enhancing student engagement in post-compulsory education?” First, the paper explains the methods used to develop this synthesis; second, it develops a conceptual framework from the engagement literature; and third, it synthesises findings about the four perspectives identified in this conceptual framework into nine propositions for improving student engagement.

Method

We employed a qualified librarian to conduct searches on library databases and the Internet. The richest databases were Web of Science, PsycINFO, ERIC and A+Education. Other databases, Index New Zealand, Academic Search Elite, General OneFile and Google Scholar, also yielded some sources. She was asked to conduct a broad sweep of the databases to map the field of research reports on engagement. She initially mined 283 items in abstract form. Most were research articles but there were also a number of books and dissertations. These items were reduced to 151 that were judged to have potential for helping answer the research question. Each of the 151 items was reviewed by two members of the project research team who used both content and process criteria to include or exclude items. Of the 151 items, 93 met both content and process criteria and were used in the review. Items selected for inclusion were summarised on a template used as a basic reference. The selected items reported research from a variety of countries: United States (41), Australia (28), United Kingdom (11), New Zealand (7), South Africa, Spain, South Korea, Israel, China, and France (1 each).

Content criteria

For deciding, in terms of content, which studies to include, we began by using the six key themes from Kuh (2005) as a framework but allowed for new themes to emerge from the literature as we became familiar with it. In the end we identified five primary content perspectives. The first perspective (19 studies) concerned student motivation and dispositions to engage with learning; the second (51 studies) concerned engagement facilitated by transactions between students, teaching, and support structures within institutions; the third research perspective (19 studies) consisted of work investigating effects of institutional support on engagement; the fourth (25 studies) considered engagement that was influenced by social factors; while the fifth perspective (11 studies) reported research on the effects of external influences on engagement, such as family,

friends, work and cultural commitments. Because some studies covered more than one perspective, the number of studies in this list exceeds 93.

Process criteria

The second set of inclusion criteria tested for analytic rigour and richness of data. We decided that five types of studies could meet these requirements. The first were multi-institutional and quantitative studies using large samples (37 studies). The second were quantitative studies carried out in a single institution (19 studies). The third type reported qualitative data from multiple institutions (7 studies). The fourth was also qualitative, generally using interview data in a single institution (18 studies) and the fifth was work that was theoretical in intent but informing empirical studies (12 studies).

Basing our synthesis on a mixed-methods research base was both necessary and deliberate. We could not have achieved our synthesis by relying on large-scale, multi-institutional quantitative studies alone. There is evidence from the retention literature that multi-institutional studies deliver different results to single institution studies with the same research questions. This point was highlighted by Braxton and Lien (2000) who found that Tinto's academic integration construct gained statistically significant support from research conducted in multi-institutional studies but only very modest support in single institutions. Moreover, the evidence produced from quantitative studies tends to be explanatory and reductionist. Qualitative studies are necessary to help understand the finer-grained reasons for engagement or disengagement. Indeed Krause and Coates (2008) call for the use of both quantitative and qualitative measures. We also wanted to avoid both mixed-method experimentalism in which quantitative research has the lead role and mixed-method interpretivism in which qualitative research is dominant (Howe, 2004). We sought research reports that demonstrated contextual sensitivity, creativity, conceptual awareness, coherence and critical awareness (Mutch, 2007). In addition, we distinguished between quantitative studies using descriptive and inferential statistics, preferring those that used inferential statistics, testing correlations and significance. For qualitative studies we identified those that used a clearly conceptualised sampling design and semi-structured data gathering. Related to rigour were issues about sample size. We excluded studies that researched individual classes or subgroups of institutions, preferring larger-scale studies or those that provided in-depth data about smaller groups.

Limitations

Any synthesis of literature has limitations. There is always more literature than is found or used, including studies reported in languages other than English. Also, no matter how closely defined by selection criteria, the choice of research to include or exclude is subjective and the perspectives or key themes identified also reflect the reviewers' subjectivities. There may also be criticism that

the synthesis does not calculate effect size. We acknowledge that we traded off this feature in favour of richness of data provided by qualitative and theoretical work.

Towards an integrated understanding of student engagement

Research approaches student engagement from different perspectives (Bryson & Hand, 2007). We identify five of these in our synthesis. We chose perspectives that fairly represented the engagement research literature and captured the complexity of student engagement. Each perspective is supported by strong empirical and theoretical evidence. The first perspective focuses on student motivation and agency and how engaged students tend to be motivated when they feel they can work autonomously, feel competent to do the work asked of them and relate to teachers, administrators and other students. The second examines the transactions that occur between students and teachers and students with other students. The third perspective considers how institutions support student needs by providing an environment conducive to learning. The fourth perspective considers engagement in a wider frame by examining how student engagement connects learning to active citizenship, enabling students to live successfully in the world. The final perspective examined in this synthesis looks at the effect influences outside the academy have on student engagement. We now present the research evidence that supports these five perspectives.

Motivation and agency

A constructivist view that education is about students constructing their own knowledge underpins engagement research (Krause & Coates, 2008). This assumes that students are their own learning agents, able to achieve their goals. The first perspective focuses on the agentic, constructivist learner. Studies informing this perspective found that motivation and willingness to act are important explanatory factors in whether learners engage or not (Ainley, 2006; Schuetz, 2008; Yorke & Knight, 2004). However, researchers report quite different views about what motivates learners. A few studies investigated the influence of personality on engagement: the effect of perfectionism, extroversion, intrinsic interest, approaches to knowledge acquisition and futures orientation. Results of these studies were often inconclusive. In China, Zhang, Gan, and Cham (2007) found that non-compulsive perfectionism aided motivation and engagement; compulsive perfectionism led to burnout. Caspi, Chajut, Saporta, and Beyth-Marom (2006) found that extroversion had a positive effect on student participation and subsequent engagement in face-to-face situations, but had no effect in online situations. Ainley (2006) and Venturini (2007) report that student interest in subject matter generates feelings of arousal, leading to cognitive activity. Horstmanshof and Zimitat (2007) found two aspects of personality influenced motivation and engagement. First, that approaches to learning emphasising a thorough understanding of

subject matter enhanced engagement; second that a strong future focus was an important factor mediating learners' academic engagement.

Other researchers emphasise learners' self-belief as a key motivator. Yorke and Knight (2004) found that the self-theories learners bring to their learning affect motivation, agency and engagement. Those with fixed self-theories tend to have fixed views on their own abilities, adopting performance goals for their learning and losing motivation when these are not achieved. Those with malleable self-theories tend to adopt learning goals, seeing challenges as opportunities for learning. Such learners tend to stay engaged independent of their performance. Yorke and Knight suggest that somewhere between 25 percent and 30 percent of learners have fixed self-theories that could have a negative effect on their engagement. Related to this work is what Llorens, Schaufeli, Bakker, and Salanova (2007) designate a personal resources-efficacy-engagement spiral. They found that, where learners believed they had the personal resources to complete a task, their self-efficacy grew and consequently so did their engagement. Fazole and Fazole (2001) reported that self-perceived competence is a key motivator for engagement. Students' confidence in their own competence within their context was a strong motivator for ongoing active learning. Such learners stayed motivated and engaged even in the face of short-term failure. Russell (2007) also found that collaborative learning added to feelings of academic competence.

With such varied findings, there can be no single explanation for motivation and engagement. Schuetz (2008) attempted to construct a theoretical framework to explain results obtained from the very large Community College Survey of Student Engagement (CCSSE). She tested the fit between selected survey results obtained in 2005/6 and various motivation theories. She found that self-determination theory (Deci & Ryan, 2000; Ryan & Deci, 2000) was an excellent fit for CCSSE data. While not specifically about engagement, self-determination theory enables a synthesis of the varied findings about how motivation and learner agency lead to engagement. It focuses on agentic individuals who have set clear performance and learning goals, have positive self-theories and interact with their social environments in both positive and negative ways. Self-determination theory suggests that understanding human motivation requires an appreciation of innate psychological needs for competency, autonomy and relatedness (Deci & Ryan, 2000). Intrinsic motivation enables individuals to meet these three human needs. Together they enable healthy development and effective functioning; they allow "for prediction of the social conditions that promote high quality development and performance and of the person factors that, at any given time, contribute to that high-quality development and performance" (Deci & Ryan, 2000, p. 263). Self-determination theory is well supported by large-scale empirical studies. Deci and Ryan cite 229 studies that support aspects of self-determination theory. With its emphasis on competence, autonomy and relatedness, self-determination theory seems well suited to explain the motivation and agency needed for engagement.

Transactions

We labelled a second perspective in the engagement research “transactional engagement”. This includes all transactions occurring in educationally purposeful activities between teachers and students in institutional settings. Assumptions, conceptual underpinnings and empirical evidence supporting this perspective are dominated by the work of George Kuh and associates working with the American National Survey of Student Engagement (NSSE) (Hu & Kuh, 2002; Kuh, 2001). The NSSE builds on assumptions that what students do while studying is more important than who they are or where they are studying and that effective teaching and institutional support will enhance their engagement. Kuh (2001) acknowledges the contribution of Chickering and Gamson’s (1987) seven principles of good practice in undergraduate education to the conceptual underpinnings of the NSSE. These principles are also strongly connected to the scales used in the Community College Survey of Student Engagement (CCSSE) and the Australasian Survey of Student Engagement (AUSSE). The surveys cover level of academic challenge, active and collaborative learning, student–teacher interaction, enriching educational experiences, supportive campus environments, general educational gains, practical competence gains and personal social gains. Both NSSE and CCSSE surveys have created strong empirical support for the indicators in the transaction perspective. Articles regularly report results from more than 50,000 student respondents in more than 100 institutions (Hu & Kuh, 2002; Community College Survey, 2006). While the occasional critique of individual indicators emerges (Payne, Kleine, Purcell, & Carter, 2005), the results of the surveys are relatively stable from year to year and the psychometric properties seem sound. Such evidence, according to Kuh (2001), suggests that the validity and reliability of the instruments are strong. In short, the indicators for this perspective provide a trustworthy picture of the transactional aspects of student engagement.

Over time, researchers have used data from these and other surveys to investigate specific engagement transactions. One attracting attention concerns notions of disengagement, alienation and passivity. Coates (2007) constructed a model of four engagement styles. Those who were below both an academic and social norm he designated passive learners who rarely participate in productive learning activities. Similar engagement categories were used by other researchers to conceptualise disengagement. Hu & Kuh (2002) found that students were less likely to be disengaged where institutions emphasised high-level thinking, where high quality relations existed between groups and where vocational and practical learning were emphasised. Hockings, Cooke, Yamashita, McGinty, and Bowl (2008) found that “the student we describe as ‘disengaged’ appears to take a ‘surface’ approach to learning (copying out notes, focusing on fragmented facts and right answers, jumping to conclusions, accepting). Her life experiences and course content remain separate. She may appear distant or isolated, distracted or distracting to others” (p. 192). Case (2007) used the term alienation to describe students who were disengaged from other students, teachers and support staff. Krause (2005) found that, for those who do not have the social and cultural capital required to “talk the talk” and “walk the walk” of complex university systems, engagement is like being in a battle. Subsequently they disengage.

Another frequently researched aspect of the transaction perspective of student engagement focuses on relationships between students and teachers. The quality of this relationship matters. Umbach and Wawrzynski (2005) found that the educational environment created by teachers' behaviours, beliefs and attitudes has a dramatic effect on student learning and engagement. Raciti and Mitchell (2006) reported that relationships between students, teachers and institutions are so important that the business practice of relationship marketing would improve engagement and retention. According to Mearns, Meyer, and Bharadwaj (2007), if the teacher is perceived to be approachable, well prepared and sensitive to student needs, students are more committed to work harder, get more out of the session and are more willing to express their own opinion. Bryson and Hand (2007) concur. They concluded that students are more likely to engage if they are supported by teachers who establish inviting learning environments, demand high standards, challenge, and make themselves freely available to students to discuss academic progress. Reason, Terenzini, and Domingo (2006) found that improvement in academic performance was significantly more likely in first-year students who perceived having had academic support from teachers than those who did not. Students who were more academically engaged by spending large amounts of time on studying, who reported that their teachers emphasised understanding, and who had frequent contact with new and diverse ideas also reported advantages in academic competence over those who did not.

Student–student relationships are also well researched. In general, findings acknowledge that active learning in groups, peer relationships and social skills are important in engaging learners. In a study examining the extent to which student–teacher interaction, quality of student effort and peer interaction contributed to students' perception of engagement, Moran and Gonyea (2003) found that peer interaction had the strongest predictive capacity for engagement and outcomes. Umbach and Wawrzynski (2005) reported a positive relationship between active and collaborative learning techniques and student gains. Ahlfeldt, Mehta, and Sellnow (2005) found that students' levels of co-operative learning, levels of cognitive challenge, and the development of personal skills were highly correlated and statistically significant. In a large study Lambert, Terenzini, and Lattuca (2007) found that increasing use of active and collaborative experiences contributed to student engagement. Some researchers have extended the idea of group learning to working as part of learning communities. Zhao and Kuh (2004) identified four kinds of learning communities: curriculum, classroom, residential and student generated. In their study, learning community experience was positively associated with student gains in personal and social development, practical competence, greater effort and deeper engagement. Similarly Krause (2005) found that working in learning communities enhanced students' sense of belonging, particularly when they were full-time students. Some small-scale studies investigated whether group learning improves engagement (Beven, 2007; Law, 2005; Lizzio & Wilson, 2006). The latter studied the effects of self-managed group work on engagement. They found that risk and safety considerations could inhibit groups deciding to engage with development activities unless they had support.

Another line of enquiry focuses on engagement in web-based learning. Laird and Kuh (2005) found engagement with information technology is positively associated with academic challenge, active and collaborative learning, student–faculty interaction, enriching educational experiences and a supportive campus environment. The strength of the positive relationships between academic uses of information technology and engagement suggests that engagement in one area often goes hand in hand with engagement in other areas. Other researchers investigated the role of course tutors and the effect of social interaction. Richardson, Long, and Woodley (2003) found that the teacher’s support was crucial to the students’ perception of the academic quality of their courses. The quality of this relationship influenced how students engaged with the web-based environment. Jung, Choi, Lim, and Leem (2002) investigated interactions in the web-based environment between learners, their teachers and their tasks. While all interactions had positive outcomes, the students focusing on peer interactions did best. They conclude that online interactions can enhance engagement. Wang (2007) examined the effects of an important cultural dimension, power distance, on learners’ perceptions of their web-based learning experiences, finding that there were significant differences between Chinese, Korean and American students. American students were more engaged with their online teachers because they perceived less power distance between themselves and teachers.

Institutional support

A third perspective in the engagement literature, institutional support, examines what institutions do to engage learners and achieve student success. An overview of what institutions can do is provided by Kuh, Kinzie, Schuh, Whitt, and associates (2005). In a project that researched the practices of 20 successful institutions in the United States, they found that these institutions had cultures that focused on student success, foregrounded student learning in their mission, established high expectations, aimed for continuous improvement, invested money in support services, asserted the importance of diversity and difference and prepared students for learning in higher education. A number of these features are supported by data from the large NSSE surveys. Porter (2006) found that institutional features such as selectivity, student body size and student–staff ratio have significant effects on engagement. Interestingly, Porter, as well as Pike, Smart, Kuh and Hayek (2006), found that spending money by itself did not improve student engagement. What mattered was institutional culture and mission. Kezar and Kinzie (2006) found that levels of engagement were higher in institutions where the mission included statements about valuing diversity, providing appropriate academic challenges, support and active and collaborative learning. Kuh and Gonyea (2003) investigated the effect of the library on engagement, reporting that, when institutions set high academic standards, students use the library most intensively. Such students are likely to work hard and attempt projects requiring integration and application, using higher order skills. Hu and Kuh (2003) assessed the connections between institutional learning climate, student gains and engagement. They found that similar students spending similar effort engaging in similar activities while attending different institutions report making different kinds

and amounts of gains. This suggests that some institutions are more learning efficient; that their values and practices make a difference.

The first-year learning experience is very important because it is the time when students are most likely to fail; are most at risk financially, socially and emotionally. It is the time when the patterns of engagement are set (Pittaway & Moss, 2006). Consequently the first year of study has attracted much attention from researchers (Astin, 1993; McInnis et al., 2000; Krause & Coates, 2008). Reason et al. (2006) found that, where organisational cultures and structures provided a comprehensive, integrated and co-ordinated approach to the first-year experience, students reported being engaged. A number of researchers investigated specific approaches to make the first-year experience engaging. Pittaway and Moss (2006) found that orientation processes were important in helping students settle into academic life as it helped students to connect socially with peers, mentors and staff, to gain familiarity with the campus and to clarify expectations of academic study. Kiernan, Lawrence, and Sankey (2006) found that special support in essay planning engaged students while Dewart, Drees, Hixenbaugh, and Thorn (2006) found that matching experienced students with first-year students in a mentoring scheme, including e-mentoring, helped first years to engage. Kift (2004) argued that the first-year curriculum must be rethought. Teachers need to provide engaging learning experiences, scaffold learning by providing extra tutorials and encourage the formation of communities of learners.

A third area of research in this perspective focuses on how institutions handle diversity. Kuh et al. (2005) found that successful institutions used a proactive approach to diversifying the student and teaching bodies and to exposing them to different ways of thinking. They suggest:

Ultimately what really matters is that students encounter in their studies perspectives that reflect a range of human experiences and that encourage them to interact with others in ways that force them to think and respond in novel, more complex ways. (p. 308)

However, many institutions are not as successful as the 20 studied by Kuh et al. (2005). Deci and Ryan (2000) suggest that to be engaged, students must feel that they are accepted and affirmed, that they belong. On the evidence we found, students with cultural backgrounds that labels them “non- traditional”, often do not have that sense of belonging and consequently do not feel engaged. Johnson, Soldner, Leonard, and Alvarez, et al. (2007) reported that it should not be left to “non-traditional” students to seek a sense of belonging. Rather, institutions need to adapt their cultures to meet the needs of students from diverse backgrounds. These findings are supported by Laird, Bridges, Morelon-Quainoo, Williams, et al. (2007) and Harper, Carini, and Bridges (2004), who found that “non-traditional” students often feel uncomfortable in traditional institutions. Gavala and Flett (2005) found that, where Māori students experienced stress and discomfort and a low sense of academic control in their courses, they were significantly more likely to experience a lowered sense of well-being, and reduced feelings of academic enjoyment and motivation.

But institutions are limited in what they can provide to engage students. They work within limits set by government policies, finances and the social and economic factors shaping students’ engagement. McInnis (2003) identifies new realities determining the priority students give to

study. Students appear to be less engaged as they increasingly study part time. Krause (2005) found that the proportion of students in paid employment increased from 51 percent to 55 percent in five years; 57 percent said paid work interfered with their academic performance; paid workers were more likely to consider withdrawing and spent less time on campus. Such students expect study to fit their lives; they do not want to fit their lives to institutional expectations. The American CCSSE survey produced similar statistics: 64 percent of students are enrolled part time; 51 percent work more than 20 hours per week; and 29 percent spend 11 hours or more per week caring for dependents (McClenney, 2003). McInnis (2003) suggests that engagement can no longer be assumed; it must be negotiated with students. Institutions must understand the challenges posed by this generation of students and respond to them. York (2006) also places student engagement in a new reality. He offers some suggestions for increasing the level of engagement, differentiating between students' performance goals and learning goals. The former are adopted by surface learners, the latter by engaged learners. Given the sociocultural context, institutions cannot demand that their students adopt learning goals without question. But they can negotiate a strategic approach to learning in which students choose which approach to adopt in any given situation. Therefore, to be supportive and encourage engagement, institutions can adopt the characteristics of Kuh et al.'s (2005) engaging institution, and create opportunities to negotiate appropriate levels of engagement with students.

Active citizenship

A fourth perspective in the engagement literature takes us out of the field of transactions, operations and procedures into what we call active citizenship; a deeper, socially aware form of engagement. This perspective emerges from critiques of the way engagement is generally constructed in the literature. McMahon and Portelli (2004) view the literature as too conservative and/or student centred. Conservative views interpret engagement as psychological dispositions and academic achievement leading to learning that lacks social context. They concede that student-centred conceptions of engagement do recognise context, require engagement by teachers as well as learners and are nested in the relationships they share. But both views, they argue, are too narrowly focused on operational matters. What is needed is a democratic-critical conception of engagement that goes beyond strategies, techniques or behaviours; a conception in which engagement is participatory and dialogic, leading not only to academic achievement but success as an active citizen. Barnett and Coate (2005) expand this critique by distinguishing between operational engagement and ontological engagement. The former encompasses conservative and student-centred engagement; the latter reflects a level of commitment aligned to active citizenship in which the student commits herself, seizes opportunities and tries to extend the boundaries of the curriculum. They see three curriculum projects in ontological engagement for active citizenship. The first is the project of knowing—how students can learn to make legitimate claims in a world of uncertainty and how to negotiate challenges to such claims. The second is the project of acting—how students can learn to act constructively in the world. The third project

involves students becoming aware of themselves and their potential in a world that is open, fluid, contested and in need of right actions and courageous knowledge acts.

Yet within a dominant, operational discourse of engagement, students may find it difficult to achieve engagement for active citizenship. Krause (2005) draws on student surveys in Australia to suggest that some students lack the social capital, such as extensive social networks and cultural literacy, to engage critically as active citizens. Case (2007) noted that, for many students, strong social relationships were a key factor in students acquiring the social capital needed to engage in learning as a citizen. Experiences of individualised academic tasks and discipline outside their experience led to total alienation from all learning in some instances. Gavala and Flett (2005) similarly found in New Zealand that where Māori students lacked social capital and lacked social relationships, they experienced difficulties in adapting to university culture, felt a lack of academic control, a lower sense of wellbeing and a reduced sense of motivation and engagement. Read, Archer, and Leathwood (2003) show how traditional higher education culture inhibits engaging for active citizenship. Even before students have attended their first lecture or attempted their first essay they will have begun the process of confronting and negotiating the largely unwritten “rules of the game” of university life. Read et al. (2003) found a significant number of students who expressed feelings of confusion and alienation at some “accepted” university practices and often contrasted them with previous known experiences of learning. They found that the dominant discourses of knowledge, communication and practice comprise an academic “culture” that inhibited full engagement. Read et al. found that students from “non-traditional” backgrounds are particularly disadvantaged by an institutional culture that places them as “other”.

What can students, teachers and institutions do together to create learning cultures that enable engagement for active citizenship? The evidence so far is that students will need the social capital that goes with a sense of belonging, of active relationships with others (Case, 2007; Gavala & Flett; Krause, 2005). Teachers must foster such feelings and offer curricula that enable students to acquire knowledge, skills and attitudes that go wider than the skills needed to survive in the workplace (Barnett & Coate, 2005; McMahon & Portelli, 2004). Institutions must adapt to the ways, knowledge and ontologies of groups other than those belonging to the mainstream (Berger, 2000; Author, 2005) and negotiate their engagement (McInnis, 2003; Yorke, 2006). Johnson et al. (2007) found that Tinto’s integration discourse put too much emphasis on the efforts of the individual. They argue that a more appropriate goal may be attending to students’ sense of engagement through nurturing a mutual responsibility, shared by the individual and the institution. Rather than placing the burden on students to adapt to an unalterable campus context, Johnson et al. reinforce the importance of understanding students’ perceptions of their college environments and experiences, including such perspectives in developing institutional climates and curricula. While Laird et al. (2007) did not find uniformly that “minority students” feel alienated from their institutions, they did note that their findings are “an indication of the varied cultures that exist across the institutional groupings and that there is a need to ask more refined and deeper questions, which will help expand our knowledge of how all institutions can better serve the educational needs of ... students” (p. 53).

External influences

A fifth lens focuses on research that identifies non-institutional factors that affects student engagement. In research on student decision making about whether to go to College, Leach, and Zepke (2005) found that factors such as family background and finances played important roles in decisions. Zepke, Leach, and Prebble (2005) found that “there was too much going on in my life” was the single most important reason for students thinking about abandoning study. Almost half of their sample considered early departure because of external pressures. Yorke (1999) lists a number of non-institutional factors—for example, needs of dependents, emotional difficulties with others, personal health problems, and demands of employment—as reasons for considering early departure. Yorke and Longden (2008) produced seven factors from their study of early departure in the first-year student experience in the United Kingdom. While five of these factors related to institutional issues such as poor-quality learning experiences and to personal considerations such as choosing the wrong course, two factors concerned non-institutional matters: problems with finance and employment, and social integration problems. Problems with finance and employment were experienced more frequently by older, male and non-white students. Problems with social integration with others were experienced by younger rather than older students, and by students without dependents rather than those with them. Krause et al. (2005) found that more than half of the students in part-time employment offered family reasons for seeking employment. Some wanted to gain greater financial independence from their family; others, and this was particularly so for aboriginal students, were supporting their families. Together, these studies suggest that non-institutional factors are important when considering student success.

Propositions to enhance student engagement from an institutional point of view

Despite the limitations identified, this synthesis can sustain some propositions that can lead to enhanced student engagement. We recognise that engagement is a complex matter, decided and influenced by a number of different people and circumstances. Students themselves, teachers and institutions are jointly the primary actors in the engagement process. In this paper, though, we frame our propositions from the perspective of institutions as they are best placed to create a vigorous climate for engagement. Institutions can:

1. *Create conditions that enable learners to work autonomously, enjoy learning relationships with others and feel they are competent to achieve their own objectives*

Institutions can facilitate a human need for competence, autonomy and relatedness (Deci & Ryan, 2000) by sponsoring curricula, pedagogy and self-monitoring that encourage student self-determination and consequently intrinsic motivation and engagement. Teachers can help students to develop a positive self-theory that leads to engagement and a focus on learning rather than performance goals.

2. *Ensure that students experience enriching educational challenges that enable them to extend their academic achievement*

The evidence is compelling that enriching experiences and academic challenge are successful in engaging students. Institutions can, for example, help teachers to create inviting learning environments, expect high academic standards, support students to achieve these standards, challenge students to “stretch further than they think they can” (Kuh et al., 2005, p. 178) and be available to discuss students’ academic performance.

3. *Promote learning that is active and collaborative and fosters learning relationships between learners and with teacher*

The importance of learning relationships is emphasised constantly in the literature. Connection with other learners seems to be beneficial and deserving of encouragement. It is best achieved by enabling learners to work collaboratively on problems and real life situations, even though this may challenge traditional beliefs in transmission models of teaching to individuals.

4. *Strive constantly to improve*

Institutions successful in engaging students are never satisfied with their own performance (Kuh et al., 2005). They use self-evaluations and evaluations by students and their communities to monitor their performance. They do not hesitate to change practices if the evidence suggests they should. Continuous self-improvement is particularly important in organising engaging first-year experiences.

5. *Invest in a variety of support services*

While support services are expensive to set up and do not always attract the number of students expected, the evidence is that they are very important. They assist in achieving learning efficiency (Hu & Kuh, 2003). But, even more important than the money spent on support services is the institutional culture—it must emphasise the support of learning (Porter, 2006; Pike et al., 2006)

6. *Create institutional cultures that are welcoming to students from diverse backgrounds*

Institutional cultures are a key factor in student engagement. Findings suggest that students must feel that they are accepted and affirmed; that they belong. Students labelled “non-traditional” often do not have that sense of belonging; they feel disengaged or alienated. As the student body diversifies and sociocultural contexts change, institutions need to adapt and do more to create cultures that welcome diversity (Johnson et al., 2007).

7. *Encourage students to become active citizens*

Some researchers consider the present engagement discourse to be too focused on operational engagement; its purpose confined to helping learners become work ready. Barnett and Coate (2005) argue that this is not enough. Institutions must teach students to become active citizens: people who make legitimate knowledge claims, are self-aware and can act constructively to effect change.

8. *Assist students to develop the social capital needed to be successful learners and citizens*

Some students do not have the social networks and cultural literacy needed to succeed (Krause, 2005) and some “traditional” institutional cultures inhibit full engagement (Read et

al., 2003). Institutions can help students build strong social relationships and networks, the social capital necessary for engagement in learning and citizenship. They can also adapt their culture so students are not “othered”.

9. *Value teaching and teachers*

This suggestion overarches all others. Teaching and teachers are at the heart of the engagement literature. Their attitudes and actions create the conditions for students to: be self-determined; enjoy enriching educational experiences that challenge and extend them; engage in active learning in learning communities; feel welcomed whatever their background; feel supported in their learning; and feel encouraged to become active citizens.

Conclusion

In this paper, we have synthesised the research literature on student engagement in post-compulsory settings in two ways. We presented an integrated conceptual framework of student engagement that brings together four perspectives on student engagement we identified in the literature. We also offered nine propositions for practices that institutions might use to enhance student engagement, thus potentially increasing student retention, completion and achievement.

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References

- Ahlfeldt, S., Mehta, S., & Sellnow, T. (2005). Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction are in use. *Higher Education Research and Development*, 24(1), 5–20.
- Ainley, M. (2006). Connecting with learning: Motivation, affects and cognition in interest processes. *Educational Psychology Review*, 18, 391–405.
- Astin, A. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey Bass.
- Astin, A. (1997). The changing American college student: Thirty year trends: 1966–1996. *The Review of Higher Education*, 21(2), 115–135.
- Australian Council for Educational Research. (2008). *Attracting, engaging and retaining: New conversations about learning. Australasian student engagement report*. Camberwell, Victoria: Author.

- Barnett, R., & Coate, K. (2005). *Engaging the curriculum in higher education*. Maidenhead, UK: Society for Research into Higher Education and Open University Press.
- Berger, J. B. (2000) Optimizing capital, social reproduction, and undergraduate persistence: A sociological perspective. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 95–124). Nashville: Vanderbilt University Press.
- Beven, J. P. (2007). Bridging diversity to achieve engagement: “The Sentence is Right” game show rip off. In *Student Engagement. Proceedings of the 16th Annual Teaching Learning Forum*, 30–31 January 2007. Perth: The University of Western Australia. Retrieved 15 July 2008, from <http://lsn.curtin.edu.au/tlf/tlf2007/refereed/beven.html>
- Braxton, J., & Lien, L. (2000). The viability of academic integration as a central construct in Tinto’s interactionist theory of college student departure. In J. Braxton. (Ed.), *Reworking the student departure puzzle* (pp. 11–28). Nashville: Vanderbilt University Press.
- Bryson, C., & Hand, L. *The role of engagement in inspiring teaching and learning. Innovations in Education and Teaching International*, 44(4), 349–362.
- Butcher, B., Foster, H., Marsden, L., McKibben, J., & Anderson, C. (2006). *Soft outcomes universal learning: A practical framework for measuring the progress of informal learning*. Summary report RS8716. Retrieved 2 August 2007, from <http://www.theresearchcentre.co.uk/soul/Documents/SOUL%20Project%20Summary%20Report.pdf>
- Case, J. (2007). Alienation and engagement: Exploring students’ experiences of studying engineering. *Teaching in Higher Education*, 12(1), 119–133.
- Caspi, A., Chajut, E., Saporta, K., & Beyth-Marom, R. (2006). The influence of personality on social participation in learning environments. *Learning and Individual Differences*, 16, 129–144.
- Coates, H. (2007). A model of online and general campus-based student engagement. *Assessment and Evaluation in Higher Education*, 32(2), 121–141.
- Community College Survey of Student Engagement. (2006). *Act on fact: Using data to improve student success*. Retrieved 17 September 2008, from <http://www.ccsse.org/publications/CCSSENationalReport2006.pdf>
- Deci, E., & Ryan, R. (2000). The ‘what’ and ‘why’ of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry*, 11(4), 227–268.
- Dewart, H., Drees, D., Hixenbaugh, P., & Thorn, L. (2006). *Engaging first year students at a metropolitan university: Is electronic mentoring an effective strategy? First year in higher education*. Paper presented at the First Year in Higher Education Conference, Griffith University, Gold Coast Campus.
- Fazey, D., & Fazey, J. (2001). The potential for autonomy in learning: Perceptions of competence, motivation and locus of control in first-year undergraduate students. *Studies in Higher Education*, 26(3), 345–361.
- Gavala, J., & Flett, R. (2005). Influential factors moderating academic enjoyment/motivation and psychological well-being for Maori university students at Massey University. *New Zealand Journal of Psychology*, 34(1), 52–57.
- Harper, S., Carini, R., & Bridges, B. (2004). Gender differences in student engagement among African American undergraduates at historically Black colleges and universities. *Journal of College Student Development*, 45(3), 271–284.
- Hockings, C., Cooke, S., Yamashita, H., McGinty, S., & Bowl, M. (2008). Switched off? A study of disengagement among computing students at two universities. *Research Papers in Education*, 23(2), 191–201.
- Horstmanshof, L., & Zimitat, C. (2007). Future time orientation predicts academic engagement among first year university students. *British Journal of Educational Psychology*. 77(3), 703–718.

- Howe, K. (2004). A critique of experimentalism. *Qualitative Inquiry*, 10(1), 42–61.
- Hu, S., & Kuh, G. (2002). Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43(5), 555–575.
- Hu, S., & Kuh, G. (2003). Maximizing what students get out of college: Testing a learning productivity model. *Journal of College Student Development*, 44(2), 185–203.
- Johnson, D., Soldner, M., Leonard, J., Alvarez, P., Inkelas, K., Rowan-Kenyon, H., & et al. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Development*, 48(5), 525–542.
- Jung, I., Choi, S., Lim, C., & Leem, J. (2002). Effects of different types of interaction on learning achievement, satisfaction and participation in web-based instruction. *Innovations in Education and Teaching International*, 39(2), 153–162.
- Kezar, A., & Kinzie, J. (2006). Examining the ways institutions create student engagement: The role of mission. *Journal of College Student Development*, 47(2), 149–172.
- Kiernan E., Lawrence J., & Sankey, M. (2006, July). *Preliminary essay plans: Assisting students to engage academic literacy in a first year communication course*. Paper presented at the 9th Pacific Rim First Year in Higher Education Conference, Gold Coast, Australia.
- Krause, K-L. (2005, September). *Engaged, inert or otherwise occupied? Deconstructing the 21st century undergraduate student*. Keynote paper at the Sharing Scholarship in Learning and Teaching: Engaging Students Symposium, James Cook University, Townsville.
- Krause, K-L., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies*. Canberra: Department of Education, Science and Training, Australian Government.
- Krause, K-L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment and Evaluation in Higher Education*, 33(5), 493–505.
- Krfit, S. (2004, July). *Organising first year engagement around learning: Formal and informal curriculum intervention*. Paper presented at the 8th Pacific Rim First Year in Higher Education Conference.
- Kuh, G. (2001). *The national survey of student engagement: Conceptual framework and overview of psychometric properties*. Indiana University Center for Postsecondary Research and Planning. Retrieved 17 September 2008, from http://nsse.iub.edu/pdf/conceptual_framework_2003.pdf
- Kuh, G., & Gonyea, R. (2003). The role of the academic library in promoting student engagement in learning. *College and Research Libraries*, 64(4), 256–282.
- Kuh, G., Kinzie, J., Schuh, J., Whitt, E., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco: Jossey-Bass.
- Laird, T., Bridges, B., Morelon-Quainoo, C., Williams, J., & Salinas Homes, M. (2007). African American and Hispanic student engagement at minority serving and predominantly white institutions. *Journal of College Student Development*, 48(1), 39–56.
- Laird, T., & Kuh, G. (2005). Student experiences with information technology and their relationship to other aspects of student engagement. *Research in Higher Education*, 46(2), 211–233.
- Lambert, A., Terenzini, P., & Lattuca, L. (2007). More than meets the eye: Curricular and programmatic effects on student learning. *Research in Higher Education*, 48(2), 141–168.
- Law, B. (2005). Experiential learning in the context of educating for a sustainable future: Is it an appropriate pedagogy for shifting teachers' thinking and engaging learners? *set: Research Information for Teachers*, 3, 15–20.

- Leach, L., & Zepke, N. (2005). *Student decision-making by prospective tertiary students: A review of existing New Zealand and overseas literature*. Wellington: Ministry of Education. Retrieved 12 August 2008 from http://www.educationcounts.govt.nz/__data/assets/pdf_file/0005/7448/student-decision-making-final-report.pdf.
- Lizzio, A., & Wilson, K. (2006). Enhancing the effectiveness of self-managed learning groups: Understanding students' choices and concerns. *Studies in Higher Education*, 31(6), 689–703.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior*, 23, 825–841.
- McClenney, K. (2003). *Engaging Community Colleges: A first look*. Community College Survey of Student Engagement 2002 findings. Austin: Texas University Leadership Program.
- McInnis, C. (2001). *Signs of disengagement? The changing undergraduate experience in Australian universities*. Inaugural Professorial Lecture, August 2001. Retrieved 18 November 2004, from <http://www.cshe.unimelb.edu.au/downloads/InaugLec23-8-01.pdf>
- McInnis, C. (2003). New realities of the student experience: How should universities respond? Paper presented at the 25th annual conference of the European Association for Institutional Research, Limerick.
- McInnis, C., Hartley, R., Polesel, J., & Teese, R. (2000). *Non-completion in vocational education and training and higher education*. Canberra: Department of Employment, Education, Training and Youth Affairs.
- McMahon, B., & Portelli, J. (2004). Engagement for what? Beyond popular discourses of student engagement. *Leadership and Policy in Schools*, 3(1), 59–76.
- Mearns, K., Meyer, J., & Bharadwaj, A. (2007). *Student engagement in human biology practical sessions*. Refereed paper presented at the Teaching and Learning Forum 2007, Curtin University of Technology.
- Miliszewska, I., & Horwood, J. (2004). *Engagement theory: A framework for supporting cultural differences in transnational education*. Proceedings of the HERDSA Conference, Miri, Malaysia, July. Retrieved 17 September 2008, from <http://www.herdsa.org.au/wp-content/uploads/conference/2004/PDF/P016-jt.pdf>
- Moran, E., & Gonyea, T. (2003). *The influence of academically-focused peer interaction on college students' development*. (ERIC Document Reproduction Service No. ED478773).
- Mutch, C. (2007). *Mixed method research: Methodological eclecticism or muddled thinking?* Paper delivered at the annual conference of the New Zealand Association for Research in Education (NZARE), Christchurch, December.
- Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey Bass.
- Pascarella, E., & Terenzini, P. (2004). *How college affects students: A third decade of research*. San Francisco: Jossey Bass.
- Payne, S., Kleine, K., Purcell, J., & Carter, G. (2005). Evaluating academic challenge beyond the NSSE. *Innovative Higher Education*, 30(2), 129–146.
- Pike, G., Smart, J., Kuh, G. & Hayek, J. (2006). Educational expenditures and student engagement: When does money matter? *Research in Higher Education*, 47(7), 847–872.
- Pittaway, S., & Moss, T. (2006, July). *Contextualising student engagement: Orientation and beyond in teacher education*. Refereed paper presented at the 9th Pacific Rim First Year in Higher Education Conference, Griffith University, Gold Coast Campus.
- Porter, S. (2006). Institutional structures and student engagement. *Research in Higher Education*, 47(5), 531–558.

- Raciti, M., & Mitchell, M. (2006, July). *Engaging first year students through relationship marketing*. Paper presented at the 9th Pacific Rim First Year in Higher Education Conference, Griffith University, Gold Coast, Australia.
- Read, B., Archer, L., & Leathwood, C. (2003). Challenging cultures? Student conceptions of 'belonging' and 'isolation' at a post-1992 university. *Studies in Higher Education*, 28(3), 261–277.
- Reason, R., Terenzini, P., & Domingo, R. (2006). First things first: Developing academic competence in the first year of College. *Research in Higher Education*, 47(2), 149–175.
- Richardson, J., Long, G., & Woodley, A. (2003). Academic engagement and perceptions of quality in distance education. *Open Learning* 18(3), 223–244.
- Russell, B. (2007). With a little help from my friends: Pre-service teacher education students' perceptions of the importance of peer support. *New Zealand Journal of Adult Learning*, 35(1), 71–87.
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well being. *American Psychologist*, 55(1), 68–78.
- Schuetz, P. (2008). A theory-driven model of community college student engagement. *Community College Journal of Research and Practice*, 32, 305–324.
- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153–184.
- Venturini, P. (2007). The contribution of the theory of relation to knowledge to understanding students' engagement in learning physics. *International Journal of Science Education*, 29(9), 1065–1088.
- Wang, M. (2007). Designing online courses that effectively engage learners from diverse cultural backgrounds. *British Journal of Educational Technology*, 38(2), 294–311.
- Yorke, M. (1999). *Leaving early: Undergraduate non-completion in higher education*. London: Falmer Press.
- Yorke, M. (2006, July). *Student engagement: Deep, surface or strategic?* Keynote address delivered at the Pacific Rim First Year in Higher Education Conference, Griffith University, Gold Coast Campus, Australia.
- Yorke, P., & Knight, P. (2004). Self-theories: Some implications for teaching and learning in higher education. *Studies in Higher Education*, 29(1), 25–37.
- Yorke, M., & Longden, B. (2008). *The first year experience of higher education in the UK: Final report*. Retrieved 15 August 2008, from <http://www.heacademy.ac.uk/assets/York/documents/resources/publications/FYEFinalReport.pdf>
- Zepke, N. & Leach, L. (2005). Integration and adaptation: Approaches to the student retention and achievement puzzle. *Active Learning in Higher Education*, 6(1), 46–59.
- Zepke, N., Leach, L., & Prebble, T. (2005). Now you've got them, can you expect to keep them? Factors that influence student departure and persistence. *New Zealand Journal of Educational Studies*, 40(1&2), 181–199.
- Zepke, N., Leach, L., & Isaacs, P. (2008). *Foundation learning in the ITP sector: Experiences of foundation learners*. Institutes of Technology and Polytechnics of New Zealand (ITPNZ). Retrieved from <http://www.itpnz.ac.nz/index.htm?http://www.itpnz.ac.nz/reports/index.htm>.
- Zhang, Y., Gan, Y., & Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation modeling analysis. *Personality and Individual Differences*, 43, 1529–1540.
- Zhao, C., & Kuh, G. (2004). Adding Value: Learning communities and student engagement. *Research in Higher Education*, 45(2), 115–138.