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Improving student engagement: Ten proposals for action

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Abstract
Since the 1980s an extensive research literature has investigated how to improve student success in higher education focusing on student outcomes such as retention, completion and employability. A parallel research programme has focused on how students engage with their studies and what they, institutions and educators can do to enhance their engagement, and hence success. This article reports on two syntheses of research literature on student engagement and how this can be enhanced. It first synthesizes 93 research studies from ten countries to develop a conceptual organizer for student engagement that consists of four perspectives identified in the research: student motivation; transactions between teachers and students; institutional support; and engagement for active citizenship. Secondly, the article synthesizes findings from these perspectives as ten propositions for improving student engagement in higher education. It concludes by identifying some limitations with the conceptual organizer and one suggestion for developing a more integrated approach to student engagement.

Keywords
conceptual organizer, literature review, post-compulsory education, student engagement

Introduction

Institutions, educators and students in higher 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 completion and attaining a passport to employment with a positive attitude to lifelong learning (Yorke, 2006). How students engage with their studies and what they, institutions and educators can do to improve engagement has been well researched since the 1990s. Approaches to engagement research have varied. Some researchers focus on student agency and motivation as factors in engagement (Schuetz, 2008). Others highlight the way educators practise and relate to their students (Kuh, 2001; Umbach and Wawrzynski, 2005) and the roles of institutional structures and cultures (Porter, 2006). Yet others spotlight the socio-political context in which education and engagement take place (McInnis, 2003; McMahon and Portelli, 2004; Yorke, 2006) and the impact on students of environmental factors such as family background and economic status (Law, 2005; Miliszewska and Horwood, 2004).

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Student engagement, then, is a far reaching construct that can be variously defined. Chapman (2003) offers a possible definition – students' cognitive investment in, active participation in and emotional commitment to their learning. The Australian Council of Educational Research proposes another: 'students' involvement with activities and conditions likely to generate high quality learning' (ACER, 2008: vi). We accepted both definitions. They are inclusive, enabling a range of research perspectives to be considered. When synthesized, these research perspectives allow a multifaceted lens to be placed on student engagement. This article synthesizes literature from a variety of research perspectives. After describing the methods used to locate the data for this synthesis, the article offers a conceptual organizer developed around four perspectives on engagement located in the literature. Each perspective contributes propositions that together offer a synthesis of student engagement, a valuable insight into what works and why it works to achieve student success.

Method

Our search used a variety of databases: the Web of Science, PsycINFO, ERIC, A+Education, Google Scholar, Academic Search Elite, General OneFile and Index New Zealand. We initially conducted a broad sweep of the databases on 'student engagement' and 'higher education', 'further education', 'post-compulsory education', 'college'. We later refined the search by following up search terms revealed in the first sweep. Initially we mined abstracts of 283 items. Most were research articles but there were also a number of books and dissertations. We reduced the 283 items to 151 by eliminating those that did not fit our definitions of student engagement. Each of the 151 items was reviewed by two members of the project 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 summarized on a template and used as a basic reference. The selected items reported research from a variety of countries: USA (38), Australia (29), UK (11), New Zealand (7), South Africa (2), China (2), Spain (1), South Korea (1), Israel (1) and France (1). Although all 93 items informed the review, not all are cited.

We initially selected six of the key conditions for student success as described by Kuh and associates (2005) as content selection criteria. Research was included that reported on the effects of institutional mission on learning, levels of challenge and support, policies and practices towards diversity, active learning and collaboration, relationships between teachers and students, and learning facilitated outside the classroom. As the literature search progressed we expanded the content selection criteria significantly. This expansion resulted in the development of a conceptual organizer that recognized four conceptual perspectives on student engagement. The first focused on student motivation and dispositions to engage with learning; the second identified research investigating transactions between students and between teachers and students; the third perspective examined effects of institutional support for engagement; and the fourth considered engagement that was influenced by social, political and demographic factors. The first perspective yielded 19 useable studies, the second 51, the third 19, while the fourth produced 25 suitable studies. Some studies covered more than one perspective.

When selecting items for review we also used process criteria to include items that demonstrated contextual sensitivity, creativity, conceptual awareness, coherence and critical awareness (Mutch, 2007). We were conscious of the findings by Braxton and Lien (2000) that multi-institutional studies deliver different results to single-institution studies with the same research question. Consequently we followed the advice of Krause and Coates (2008) to use both quantitative and qualitative studies in this synthesis. This avoided 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 used multi-institutional and quantitative studies of large samples (37 studies), quantitative studies carried out in single institutions (19 studies), qualitative research from multiple-institution studies (7 items) and 18 studies carried out in single institutions. We also included work that was theoretical in intent but supportive of empirical studies (12 items).

Findings

The four research perspectives we identified are testimony to the complexity of engagement. To make sense of this complexity, we developed a conceptual organizer with two features. One identifies the main research perspectives in the engagement literature; the other identifies ten proposals for action that emerged from the synthesis of the literature (see Table 1).

Table 1. A conceptual organizer for student engagement

Research perspectives	Proposals for action
Motivation and agency (Engaged students are intrinsically motivated and want to exercise their agency)	1. Enhance students' self-belief 2. Enable students to work autonomously, enjoy learning relationships with others and feel they are competent to achieve their own objectives
Transactional engagement (Students and teachers engage with each other)	3. Recognize that teaching and teachers are central to engagement 4. Create learning that is active, collaborative and fosters learning relationships 5. Create educational experiences for students that are challenging, enriching and extend their academic abilities
Institutional support (Institutions provide an environment conducive to learning)	6. Ensure institutional cultures are welcoming to students from diverse backgrounds 7. Invest in a variety of support services 8. Adapt to changing student expectations
Active citizenship (Students and institutions work together to enable challenges to social beliefs and practices)	9. Enable students to become active citizens 10. Enable students to develop their social and cultural capital

In this section we present the findings from the literature that support each of the proposals for action.

1 Enhance students' self-belief

We found no unanimity about what motivates learners to engage. Dominant, however, is a constructivist view that education is about students constructing their own knowledge (Krause and Coates, 2008). This assumes that students are their own learning agents, able to achieve their goals (Ainley, 2006; Schuetz, 2008; Yorke and Knight, 2004). Self-belief is reported as a key attribute in motivation. Yorke and Knight (2004) found that the self-theories learners bring to their learning impact 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% and 30% of learners have fixed self-theories that could impact negatively on their engagement. Related to this work is what Llorens et al. (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. Fazey and Fazey (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. Given these findings, it is clear that institutions must both create and take opportunities to enhance students' self-belief.

2 Enable students to work autonomously, enjoy learning relationships with others and feel they are competent to achieve their own objectives

Schuetz (2008) attempted to construct a theoretical framework for motivating student engagement by testing the fit between selected survey results obtained in 2005/6 for the very large Community College Survey of Student Engagement (CCSSE) in the United States and various motivation theories. She found that Self-Determination Theory (SDT) (Deci and Ryan, 2000; Ryan and Deci, 2000a, 2000b) was an excellent fit for CCSSE data. Ryan and Deci recognize that motivation is not a unitary concept. They identify intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separate outcome. Intrinsic motivation assists self-determination but only some forms of extrinsic motivation do. Self-determination is enhanced where supportive social-contextual conditions exist to promote feelings of competence or self-efficacy. Such feelings in turn encourage the exercise of choice and self-direction, leading to a greater feeling of autonomy. Ryan and Deci (2000a, 2000b) refer to strong links between motivation and autonomy and competence. They also suggest that relatedness, at least in a distal sense, is important in motivation, particularly intrinsic motivation. This may be secure relations with others, a sense of social cultural belonging or identification with ideas. Self-determination enables individuals to meet such competence, autonomy and relational motivational needs. SDT is well supported by large-scale empirical studies and seems well suited to explain the motivation and agency needed for engagement. When institutions provide opportunities for students to learn both autonomously and with others, and to develop their sense of competence, students are more likely to be motivated, to engage and succeed.

3 Recognize that teaching and teachers are central to engagement

In their extensive literature review, Kuh et al. (2006) place teaching and teachers at the heart of engagement. A variety of engagement-encouraging attitudes and behaviours are identified in research. According to Mearns et al. (2007) if the teacher is perceived to be approachable, well prepared and sensitive to student needs, students are committed to work harder, get more out of the session and are more willing to express their own opinion. Bryson and Hand (2007) 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 discuss academic progress. Reason et al. (2006) found that improvement in academic performance was significantly more likely among first-year students who felt they had academic support from

teachers than those who did not. Kuh et al. (2006) found that teachers who provided deep learning experiences promoted student engagement. Hockings et al. (2008) support this view, finding that 'disengaged' students appear to take a 'surface' approach to learning – copying out notes, focusing on fragmented facts and right answers and accepting those. Similar teaching behaviours engage elearning. Laird and Kuh (2005), for example, found engagement with information technology is positively associated with academic challenge, active and collaborative learning, student–faculty interaction, and deep learning experiences. Clearly teaching and teachers are central to engagement and deserve to be valued and acknowledged within institutions for their contribution.

4 Create learning that is active, collaborative and fosters learning relationships

The importance of learning relationships is emphasized (Kuh et al., 2006). 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. Ahlfeldt et al. (2005) found that students' levels of cooperative learning, levels of cognitive challenge and the development of personal skills were highly correlated and statistically significant. Some researchers have extended the idea of group learning to working as part of learning communities. Zhao and Kuh (2004) found that 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 and Wilson, 2006). The last study found that risk and safety considerations could inhibit groups deciding to engage with development activities unless they had support from teachers and peers. While active and collaborative learning do have risks that need to be addressed, such learning activities also have benefits for engagement and warrant the investment of teacher time and institutional resources.

5 Create educational experiences for students that are challenging, enriching and extend their academic abilities

As noted above, the evidence is compelling that enriching experiences and academic challenge are successful in engaging students. Teachers can, for example, expect high academic standards, support students to achieve these standards, challenge students to 'stretch further than they think they can' (Kuh et al., 2005: 178). They use assessment as one way to challenge students. In their study of 20 leading colleges in the USA, Kuh et al. (2005) found that 'tough' assessment tasks enhance rather than hinder engagement as long as such challenges are associated with detailed, swift and focused feedback. A number of reports link engagement to deep learning. Coates et al. (2008) found that while students' attitudes to learning varied greatly, those who engaged in higher forms of learning such as analysing, synthesizing and evaluating tended to be most engaged. This finding is supported by Hockings et al. (2008), who suggest that students who reflect, question, conjecture, evaluate and make connections between ideas whilst drawing on the ideas, experiences and knowledge of others are most deeply engaged. Teachers need to create rich educational experiences that challenge students' ideas and stretch them as far as they can go.

6 Ensure institutional cultures are welcoming to students from diverse backgrounds

Institutional cultures are key to 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 socio-cultural contexts change, institutions need to change and do more to create cultures that welcome and adapt to diversity (Johnson et al., 2007). 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. Johnson 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 (Zepke and Leach, 2005). These findings are supported by Laird et al. (2007) and Harper et al. (2004), who found that 'non-traditional' students often feel uncomfortable in traditional institutions. Gavala and Flett (2005) found that, where Māori (New Zealand's indigenous people) 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. The message is clear: institutions need to be adaptable, developing a culture that is welcoming to all students.

7 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. But even more important than the money spent on support services is the institutional culture – it must emphasize the support of learning (Pike et al., 2006; Porter, 2006). A number of researchers investigated specific approaches to providing support for engagement. Pittaway and Moss (2006) found that orientation processes were important in helping students settle into academic life as they helped students to connect socially with peers, mentors and staff, to gain familiarity with the campus and to clarify expectations of academic study. Kiernan et al. (2006) found that special support in essay planning engaged students, while Dewart et al. (2006) found that matching inexperienced students with more senior students in a mentoring scheme helped the inexperienced students to engage. Kuh and Gonyea (2003) investigated the impact 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. Lewis and Middleton (2003) found that adequate childcare enhances engagement; Cook and King (2005) found that quiet work spaces, particularly for adult students, encouraged engagement. Even in difficult economic times it is important to invest in support services, to ensure they are available to those students who need them.

8 Adapt to changing student expectations

Institutions successful in engaging students are never satisfied with their own performance (Kuh et al., 2005). They do not hesitate to change practices if the evidence suggests they should. 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% to 55% in five years; 57% 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. McClenney (2003) reported similar statistics for American Community Colleges. 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. Yorke (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 socio-cultural 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.

9 Enable students to become active citizens

Some researchers consider the engagement discourse to be too focused on operational engagement, its purpose confined to helping learners become work ready. This research 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. While student-centred conceptions of engagement do recognize context, require engagement by teachers as well as learners and are nested in the relationships they share, this view too is 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, dialogic and leads not only to academic achievement but to 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 teachers offer and students seize opportunities to extend the boundaries of the curriculum. They see three curriculum projects in ontological engagement. The first is that students learn how to make legitimate claims in a world of uncertainty and to negotiate challenges to such claims. The second is how students can learn to act constructively in the world by using ethical political processes. The third involves students becoming aware of themselves and their potential to effect change in a world that is open, fluid and contested.

10 Enable students to develop their social and cultural capital

'Minority' students in particular need help to build the social and cultural capital necessary for engagement and success in and beyond the mainstream classroom. Social and cultural capital is won with a sense of belonging, with active relationships with others, with knowing how things work around here (Case, 2007; Gavala and Flett, 2005; Krause, 2005). Education can foster such feelings and offer learning that is useful beyond the workplace (Barnett and Coate, 2005; McMahon and Portelli, 2004). To help build social and cultural capital of 'minority' students institutions must adapt to the ways, knowledge and ontologies of other than mainstream groups (Berger, 2000; Zepke and Leach, 2005) and negotiate how students engage (McInnis, 2003; Yorke, 2006). Johnson et al. (2007) found that, rather than merely placing the burden on students to adapt to an unalterable context, institutions should respect the importance of understanding students' perceptions of their educational environments and experiences and include 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 findings indicating that a greater effort was needed to ask deep questions about the status quo.

Towards a more inclusive understanding of engagement

We have synthesized findings from four dominant research perspectives that illuminate student engagement in higher education, which is one indicator of student success. The synthesis has taken the form of ten proposals drawn from these research perspectives. Together the proposals identify actions that teachers and institutions can take to improve engagement.

However, we acknowledge that there are limitations to what we have done. First, the four perspectives focus on aspects of engagement that fall within institutions' ability to influence. They do not take into account a variety of non-institutional factors that impact on students' willingness and ability to engage, for example, health, childcare, family support and community responsibilities. Second, the propositions we have identified for each perspective are not the only ones; others could be added, particularly for specific, even unique institutional contexts. Third, research areas outside the engagement field could suggest actions to improve student engagement. The literature on transitions into higher education (Leach and Zepke, 2010) and the extensive retention literature (Zepke and Leach, 2005) are examples. Fourth, engagement is complex; it includes many factors that interact in multiple ways to enhance engagement or trigger disengagement. Such interactions need to be taken into account. For example, student engagement involves many actors: certainly students, teachers, administrators – but also locations, structures, cultures, technologies, buildings and equipment. The relationships between such varied actants (Edwards, 2003) will differ between jurisdictions, subjects, sites, buildings and student populations. Student engagement might usefully be reconsidered using such diverse actor networks as an alternative lens. Finally, while our synthesis offers a comprehensive and well-founded array of potentially useful actions to enhance engagement, it does not critique the literature. This critique, as well as an evaluation of the sustainability of these actions in today's climate, await future research.

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