Student Retention and Engagement in Higher Education

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Abstract

This article reports on a systematic review of research into student retention and student engagement in higher education. It discusses the origins and meaning of these terms, their relation to each other, their application and practice, and the issues and critiques which have arisen. The two concepts are seen as alternative ways of seeing and researching the same underlying issue. While student engagement is a more recent focus for research, it has now overtaken student retention in importance. As the responsibility for the financing of higher education has shifted from the state to the student, so the understanding of student retention and engagement has shifted from being the student's responsibility to that of the higher education institution.

Introduction

Institutions of higher education, their component schools and departments, and individual academics have long been concerned with trying to ensure that students, once enrolled, remain and successfully complete their studies, and that they get as much out of them as they can. These two related concerns are encapsulated in the concepts of student retention and student engagement.

Student retention is the older of the two concerns, at least in research terms, and was formerly also known by other, more negative, synonyms, such as student withdrawal, attrition and dropout. Student engagement, through which the student is involved in the higher education experience as deeply as possible, though a more recent concern, represents an obvious positive response to the problem of student retention. In other words, the more engaged a student is – with their higher education and the institution from which they are receiving it - the less likely they are to voluntarily leave higher education before they have completed their studies.

This article forms part of a larger research project, which is tracing the origins, spread and development of particular theories, methodologies, research designs, concepts and ideas of influence within higher education research (see also Tight 2012, 2013a, 2014a, 2014b, 2014c, 2015a, 2015b, 2015c, 2016a, 2016b, 2018a, 2018b, forthcoming). In addition to charting where they come from, how popular they are and how they change over time, the project is considering why and how these theories, methodologies, research designs, concepts and ideas are being used, their relation to other frameworks, and the critiques of them that have been advanced.

The focus of this article is on the linked ideas of student retention and student engagement. These are amongst the most discussed and researched aspects of higher education in the last four decades. This article focuses on the origins and meaning of these concepts, their application and practice, and the issues and critiques arising, before reaching some conclusions.

The aim of the article is to provide a comprehensive account of how the ideas of student retention and student engagement have developed and been applied, and, in particular, how they have been researched. It does this by carrying out a systematic review of the literature on these topics that has been published in the English language (Jesson, Matheson and Lacey 2011, Torgerson 2003). Relevant articles, books and chapters were identified using databases and search engines, such as Google Scholar and Scopus; copies were then obtained for scrutiny and analysis.

Origins and Meaning

Tinto, one of the key (American, as most of them have been) researchers to have studied student retention, traces the research interest back to the 1960s, and notes how the underlying assumptions have changed since then:

When the issue of student retention first appeared on the higher educational radar screen, now some 40 years ago, student attrition was typically viewed through the lens of psychology. Student retention or the lack thereof was seen as the reflection of individual attributes, skills, and motivation... Students failed, not institutions. This is what we now refer to as blaming the victim. This view of retention began to change in the 1970s. As part of a broader change in how we understood the relationship between individuals and society, our view of student retention shifted to take account of the role of the environment, in particular the institution, in student decisions to stay or leave. (Tinto 2006, p. 2)

Indeed, in the 1960s, students who dropped out, or thought about doing so, might find themselves regarded as being mentally ill (Ryle 1969). The more nuanced interpretation recognised by Tinto, accepting that the university or college itself had a major role to play in ensuring high rates of student retention, reflected, of course, the recognition that - with funding increasingly coming directly from, or following, the student – it was financially desirable to keep dropout rates as low as possible (Astin 1975, Spady 1970, 1971, Tinto 1975).

Research into student engagement got underway about twenty years after the earliest student retention research, with early work undertaken by Pace (1984) and Astin in California, and then Kuh in Indiana (see Chen, Lattuca and Hamilton 2008, Gasiewski et al 2012).

Wolf-Wendel, Ward and Kinzie (2009) link the idea of engagement to the related terms involvement and integration. They argue that student engagement has two facets, reflecting the extent to which the student engages and the efforts made by the higher education institution to engage them:

the concept of student engagement represents two key components. The first is the amount of time and effort students put into their studies and other activities that lead to the experiences and outcomes that constitute student success. The second is how institutions of higher education allocate their human and other resources and organize learning opportunities and services to encourage students to participate in and benefit from such activities. (pp. 412-3)

This understanding makes the relationship between student engagement and student retention very clear. Of course, as Wolf-Wendel et al indicate – and as any discussion of key ideas (whether related to higher education or society more generally) soon makes clear – there are a range of cognate or related terms in use linked to student retention and engagement. These include, in the latter case, not only involvement and integration, but also community, experience and partnership; and, in the former case, not only withdrawal, attrition and dropout, but also performance, satisfaction and success. More generally, both terms are also linked together to ideas about student adjustment and transition, and, from the institution's perspective, concerns about diversity and mission. They each, therefore, relate to complex and multifaceted issues.

The focus on student retention and engagement in this article has been adopted in part because of their prevalence in the higher education research literature, and in part to give the discussion a clear direction. This is not to say that other, related, issues are of less importance, but an acknowledgement of the limitations of what can effectively be covered in a single journal article.

Application and Practice

Ideas around student retention and student engagement have developed at different rates and times. A bibliographic search using Scopus was carried out on 24/9/18, recording the numbers of times the exact words 'student retention' and 'student engagement' appeared in the titles of published English language articles (see Table 1). While not all of these articles relate to higher education, most do, and the trends give a good idea of the changing research interest in these topics.

[Table 1 about here]

As Table 1 shows, the words 'student retention' appeared in article titles 20-30 times a year during the 1990s, rising to 50-100 times a year by 2008, since when the numbers have again increased, reaching a maximum (to date) of 116 articles in 2017. 'Student engagement', by contrast, is a more recent interest, with no appearances in article titles before 1970, and only 16 articles before 1990, compared to 106 for student retention. Yet, 'student engagement' overtook 'student retention' in popularity in 2008, and has mushroomed since, with 409 articles identified in 2017.

Of course, articles without the words 'student retention' or 'student engagement' in their titles may also focus on these topics; these searches are reported as an indicative illustration rather than a systematic review. For the latter, to inform the analysis in the remainder of this article, broader searches – using combinations of the words 'student retention' or 'student engagement' and 'higher education', 'university' or 'college' – were undertaken of article keywords and abstracts as well as titles, using the Google Scholar and Scopus databases.

Student Retention

Nearly two-thirds, 65%, of the articles identified by Scopus with student retention in their titles were authored by people located in the USA, with a further 14% by authors in the UK, Australia or Canada. Despite this concentration, interest in the topic is also apparent in other, non-English speaking, nations, for example Columbia (Mendoza, Suarez and Bustamente 2016), France (Bodin and Orange 2018), Norway (Giannakos et al 2017, Hovdhaugen, Frolich and Aamodt 2013) and Portugal (Nunes, Reis and Seabra 2018). There is a specialist (US-based) journal, the *Journal of College Student Retention*, devoted to the field, and a number of literature reviews (e.g. Bowles and Brindle 2017, Cameron et al 2011, Zepke and Leach 2005) have been published. Several books have been produced summarising the research in this field (e.g. Crosling, Thomas and Heagney 2008; Seidman 2012), and special issues of journals have also been published (e.g. Holmegaard, Madsen and Ulriksen 2017).

Interest in student retention among higher education researchers dates back before the mid-1960s start date suggested by Tinto (e.g. Hanna 1930 (who also referred to it rather alarmingly as 'student elimination'), Scales 1960). Following the initial recognition of, in some cases, the relatively high proportions of students who were not successfully completing their courses, attention turned to understanding and explaining the phenomenon, and then working out what could be done to improve matters.

A great deal of work, particularly in the USA, has now been devoted to modelling and predicting student retention, on a course, institution and national level. Amongst the earlier researchers, Astin (1975), Tinto (1975, 1993, 2012) and Bean (1980; Bean and Metzner 1985) have been particularly influential. Interestingly, Tinto, following Spady (1970, 1971), based his model of student retention on Durkheim's theory of suicide (less this be thought odd, McLaughlin, Brozovsky and McLaughlin (1998) used research by Kubler-Ross on dying to analyse institutional responses to student retention), while Bean adapted a model of employee turnover in work organisations. Cabrera, Nora and Castenada (1993) sought to combine elements of both of these models.

Tinto's model appears to have had the greatest impact, and there have been many follow-up studies which have applied, modified or re-assessed it (e.g. Braxton, Milem and Sullivan 2000, Kerby 2015, Longwell-Grice and Longwell-Grice 2008, Pascarella and Chapman 1983, Pascarella and Terenzini 1980, Terenzini, Lorang and Pascarella 1981). There have also been similar studies following up Bean's work (e.g. Johnson et al 2014). Others have applied alternative multivariate models in analysing student retention (e.g. DeShields, Kara and Kaynak 2005, Dewberry and Jackson 2018, Dey and Astin 1993, Murtagh, Burns and Schuster 1999). Understanding what causes retention or dropout - or at least what these phenomena are related to - and hence being able to better predict which students are likely to persist and which may need additional support, remains a key interest (e.g. DeWitz, Woolsey and Walsh 2009; Forsman et al 2015, Reason 2009, Wetzel, O'Toole and Peterson 1999, Wild and Ebbers 2002).

Many studies have focused on the retention of particular kinds of students, including Black students (e.g. Kobrak 1992, Rodgers and Summers 2008, Xu and Webber 2018), Hispanic students (e.g. Montalvo 2012, Nora 1987, Oseguera, Locks and Vega 2009), American Indian students (e.g. Shotton, Oosahwe and Cintron 2007), Aboriginal and Torres Strait Islander students (Hutchings et al 2018), disabled students Kilpatrick et al 2016), non-traditional students low (e.a. (i.e. socioeconomic group, non-campus, part-time and mature students: e.g. Davidson and Wilson 2013, Roberts 2011, Sadowski, Stewart and Pediaditis 2018, Thomas 2011, Yorke and Thomas 2003), rural students (Hlinka 2017), distance/open/e students (e.g. Boyle et al 2010, Simpson 2013) and higher degree students (e.g. Pearson 2012).

Some studies have focused on particular disciplines or subject areas, such as computer science (Giannakos et al 2017) or STEM (science, technology, engineering and mathematics) subjects (Hilts, Part and Bernacki 2018). Others have examined the relation between student retention and aspects of higher education institutions, such as quality improvement (e.g. Peterson, Kovel-Jarboe and Schwartz 1997), institutional image (e.g. Angulo-Ruiz and Pergelova 2013, Nguyen and LeBlanc 2001) and the role of non-academic staff (Roberts 2018).

An over-riding concern of the research literature on student retention has, of course, been on what to do about it (e.g. Ackerman and Schibrowsky 2007, Campbell and Campbell 1997, Cotton, Nash and Kneale 2017, Holt and Fifer 2018, Kinnick and Ricks 1993, Oseguera and Rhee 2009, Singell Waddell 2010, Villano et al 2018). The suggestions and or recommendations made have been many and varied, from relationship marketing to mentoring to identifying at-risk students to encouraging greater resilience. A common theme that has been emerging, however, is that the response should not be about helping students to better adapt to the higher education institution they are studying at or with, but about the institution adapting to the students it admits:

Central to the emerging discourse is the idea that students should maintain their identity in their culture of origin, retain their social networks outside the institution, have their cultural capital valued by the institution and experience learning that fits with their preferences. Content, teaching methods and assessment, for example, should reflect the diversity of people enrolled in the course. This requires significant adaptation by institutional cultures. (Zepke and Leach 2005, p. 54) Hence the growing and more recent interest at the institutional level in student engagement.

Student Engagement

The research literature on student engagement appears less dominated by US-based authors than that on student retention, according to Scopus, with only 45% of articles with the term in their titles authored by researchers from the USA. However, Australian-based and UK-based authors account for another 12% and 11% respectively, with Canada chipping in 4% and New Zealand 2%, meaning that these five Anglophone nations together account for three-guarters, 74%, of the English language publications on the topic. Nevertheless, interest in student engagement is widespread globally, for example in China (Yin and Ke 2017, Zhang, Gan and Cham 2007), Denmark (Herrmann 2013), Ethiopia (Tadesse, Manathunga and Gillies 2018), Ghana (Asare, Nicholson and Stein 2017), Italy (Gilardi and Guglielmetti 2011), Korea (Choi and Ree 2014), Libya (Almarghani and Mijatovic 2017), Singapore (Wong and Kaur 2017), South Africa (Tlhoaele et al 2014, Wawrzynski, Heck and Remley 2012), Sweden (Bergmark and Westman 2018), Taiwan (Hsieh 2014) and Thailand (Hallinger and Lu 2013).

As with student retention, a number of literature reviews have been published (e.g. Trowler 2010, Trowler and Trowler 2010, Wimpenny and Savin-Baden 2013, Zepke and Leach 2010), as well as special issues of journals (e.g. Macfarlane and Tomlinson 2017).

Researchers have sought to categorise the literature and the approaches adopted. Thus, Zepke (2015) identifies:

a two-strand student engagement research programme that focuses both on identifying and measuring classroom engagement behaviours and on facilitating academic and social integration of students with study and the institution. The former is often associated with quantitative survey research; the latter with qualitative case studies, narratives and action research. Both strands research quality and successful learning (and teaching) in a constructivist, learning-focused framework. (p. 1314)

By comparison, Pittaway (2012) identifies five elements in an 'engagement framework' - personal, academic, intellectual, social and professional engagement – depending on which aspect of engagement is in focus. Kahu (2013), on the other hand, identifies:

four dominant research perspectives on student engagement: the behavioural perspective, which foregrounds student behaviour and institutional practice; the psychological perspective, which clearly defines engagement as an individual psycho-social process; the socio-cultural perspective, which highlights the critical role of the socio-political context; and, finally, the holistic perspective, which takes a broader view of engagement. (p. 758)

These clearly overlap, to an extent, with those identified by Pittaway, with the final, holistic, perspective having some similarities with the emancipatory approach favoured by Zepke.

As Zepke points out, one major focus for research into student engagement has been the development of instruments designed to measure it, thus allowing institutional performances to be compared and benchmarked nationally. The first such instrument to be developed was the National Survey of Student Engagement (NSSE: Kuh 2003; see also Zilvinskis, Masseria and Pike 2017) in the USA, which is also used in Canada. Australian researchers modified and added to the NSSE to create the Australian Survey of Student Engagement (AUSSE: Coates 2010, Krause and Coates 2008), which is also used in New Zealand. Other scales have also been developed (Zhoc et al 2018). In the UK, however, the National Student Survey (NSS) doesn't cover student engagement at present, though there have been separate developments in that direction recently (Yorke 2016).

As in the case of student retention, another direction for student engagement research has been to examine the experience of different student groups, including ethnic groups (e.g. Greene, Marti and McClenney 2008, Nelson Laird et al 2007), non-traditional students (e.g. Rabourn, BrckaLorenz and Shoup 2018, Thiele et al 2017, Wyatt 2011), international students (e.g. Glass et al 2017, Lee, Kim and Wu 2018, Zhao, Kuh and Carini 2005), online/distance learners (e.g. Bolliger and Halupa 2018, Robinson and Hullinger 2008) and students with disabilities (DuPaul et al 2017). Others have focused on variations in the institutional approach taken to engagement in terms of institutional missions (e.g. Kezar and Kinzie 2006, Pike and Kuh 2005), and on variation in student engagement by year of study (e.g. Soria and Stebleton 2012) or discipline (e.g. Leach 2016, Pike, Smart and Ethington 2012).

For example, in terms of discipline, Leach found that, using AUSSE data:

there were many significant differences between disciplines on the six student engagement scales. Some of these differences may result from assumptions within the AUSSE and ways of thinking and practising within disciplines. The article questions the wisdom of comparing disciplines within an institution and suggests that AUSSE results may be best used at discipline or programme level. (2016, p. 784)

A related research approach has been to examine how the student body as a whole varies in its engagement. Hu and McCormick (2012), for example, concluded that:

distinctive student groups exist on American campuses with respect to their patterns of engagement in educationally purposeful activities... [there are] seven distinctive patterns of engagement, each accounting for 10-17% of the student population... those distinct patterns of engagement correspond to different patterns of learning and development in the first year of college, and different rates of persistence to the second year. (p. 751)

The problem, then, for those wishing to use this information to change student engagement patterns towards those which are associated with greater levels of learning, development and persistence is how to do it? We know that a greater level of:

student engagement in educationally purposeful activities is positively related to academic outcomes as represented by firstyear student grades and by persistence between the first and second year of college... engagement has a compensatory effect on first-year grades and persistence to the second year of college at the same institution. (Kuh et al 2008, p. 555)

Conversely, however, the evidence also suggests that levels of student engagement have not been increasing:

The purpose of this study was to determine whether student engagement in three good educational practices (cooperation with peers, active learning, faculty-student interaction) increased between 1983 and 1997 in response to the calls to improve the quality of undergraduate education in the United States. The data source was 73,050 students who completed the College Student Experiences Questionnaire. The results from multiple regression and effect size analyses showed that the frequency of involvement in these good practices did not change over time. (Koljatic and Kuh 2001, p. 351)

Unsurprisingly, therefore – and, again, as with student retention – there is a growing literature on how to improve student engagement (e.g. Farr-Wharton et al 2018, Holmes 2018, Kearney 2013, Nelson et al 2012, Umbach and Wawrzynski 2005, Xerri, Radford and Shacklock 2018, Zhao and Kuh 2004), largely through better understanding of how it works. The suggestions range from using active and collaborative learning approaches, including self and peer assessment, to getting academic staff to interact more with students, to offering support programmes for those students deemed to be at-risk. As an example of this genre, Price and Tovar (2014) come up with four suggestions:

- Requiring students to work together on projects during class.
- Encouraging student to work with classmates outside of class to prepare class assignments.
- Creating opportunities for students to tutor each other, either voluntary or paid.

• Committing faculty time for students to discuss ideas from readings or classes with instructors outside of class. (p. 778)

Of course, in practice, the ability of institutions and academics to respond in these ways may be severely limited, particularly when existing workloads (for both staff and students) are borne in mind.

Issues and Critique

Currently, research into student retention appears to be the subject of less critique than that into student engagement, though this may be largely a function of the greater contemporary popularity of the latter area for research.

Student Retention

Student retention research has, of course, been subject to critique right from its inception. In the early days there was debate over which was the most appropriate model – Tinto, Bean or some combination or alternative – and whether their underlying theoretical frameworks were appropriate. Then there were the arguments that student retention might not always be a 'good thing'. In some cases, a student dropping out might be a positive decision, or at least the least worst decision in the circumstances; while in other cases what was classified as dropout might actually be a student transferring to a different, and hopefully more appropriate, institution or course (Hovdhaugen, Frolich and Aamodt 2013).

Other sorts of critique may also be advanced. For example, it is clear that – in a mass higher education system – students are an increasingly heterogenous population. Therefore, the idea that, rather than expecting students to prepare for and adapt to higher education institutions as they are, it is the responsibility of each institution to adapt and support each student on an individual basis (Zepke and Leach 2005) runs into major practical problems. With class sizes for many first-year undergraduate courses in the hundreds, it is simply not possible to give each student regular individual attention in any meaningful way, so a lower percentage retention rate is to be expected.

Then there is the, increasingly heard, neo-liberal critique that student retention has predominantly financial drivers. In other words, it is not so much about doing what is best for the student, but about ensuring that the institution receives the highest number and proportion of student fees possible.

Student Engagement

Research into student engagement has also been criticised from a variety of perspectives. For a start, there has been the criticism – common to many popular concepts – that the meaning of the term is unclear or varied: 'Despite... widespread enthusiasm for the concept of student engagement, there is very little consensus as to its meaning or how we might measure the success of student engagement initiatives' (Baron and Corbin 2012, p. 761). Then there is the argument, also regularly advanced, that student engagement is under-theorised (Kahn 2014).

A prolific writer on the topic, Zepke (2018), argues that our understanding of student engagement needs to be expanded:

student engagement is a complex construct used to identify what students do, think and feel when learning and how teachers can improve that doing, thinking and feeling in instructional settings. Despite its extensive coverage of learning and teaching... something is missing from student engagement... critique; learning agency/democracy; as well as purposes, knowledge and values that transcend powerful political discourses in neo-liberal times. (p. 433)

Balwant (2018) attempts to move forward here by using the organisational behaviour literature, and bringing in the related concept of disengagement:

student engagement is specified as being characterised by both high activation and pleasure, and this conceptualisation of engagement is identical to that in the organisational behaviour literature. This view needs to be adopted by educational researchers order to disentangle student engagement from meaning in affect, evervthing related to behaviour and coanition. Μv conceptualisation clarifies the meaning of student engagement, removing the ambiguity often accompanying the concept. In addition to engagement, the organisational behaviour literature recognises the related concept of disengagement – a low activation state. Following the recommendations proposed in this article, extant educational research needs to acknowledge that student disengagement includes not only withdrawal behaviours from the work role, but also the defence of one's preferred self in that role. (p. 398)

Wilson, Broughan and Marselle (2018) align student engagement with the behaviour change wheel, using this as a means to evaluate a higher education institution's student engagement activities.

Other researchers have argued that student engagement research is lacking in other ways. Thus, Carini, Kuh and Klein (2006) note that student engagement only explains a small part of learning outcomes, so focusing upon it risks ignoring the bigger picture:

learning outcomes stem from a variety of sources, of which student engagement is only one. Indeed, the positive relationships between engagement and outcomes described in this paper are relatively small in magnitude. A large portion - and in some cases a majority of the variance in key outcomes remains to be explained by yet undiscovered factors. (p. 23)

Hagel, Carr and Devlin (2012) argue that the instruments commonly used for measuring student engagement, in their case the AUSSE, are partial in their coverage:

by borrowing its student engagement scales from the USA, Australia has adopted a conception of student engagement and a measurement instrument that fails to capture some important aspects of engagement. There are contextual differences between the higher education systems of the two countries that raise questions about how well the scales apply to undergraduate students currently attending Australian universities. (p. 484)

In a similar vein, Gourlay (2015) reasons that, as with many initiatives that focus on measurement, it is the readily measurable that gets attention rather than the deeper, underlying elements:

mainstream conceptions of student engagement emphasise practices which are observable, verbal, communal and indicative of 'participation'... private, silent, unobserved and solitary practices may be pathologised or rendered invisible – or in a sense unknowable – as a result, despite being central to student engagement. (p. 410)

Others have given a name to some of these missing, and often less positive elements – adding to disengagement alienation and/or burnout (Case 2008, Mann 2001, Stoeber et al 2011), or, more positively, differently engaged (Payne 2017) – and urged for further research into them.

Vallee (2017) goes much further in criticising student engagement as, paradoxically, exclusionary:

I have critiqued the silently omitted paradigmatic stance of engagement and made the claim that it is founded upon a racialised, normative, Eurocentric, White individual as the archetype of the engaged human. This conception of the human – engaged in the institution of a mass mandatory public schooling – is by definition exclusionary to students of colour, and students who are labelled (dis)abled or English Language Learner. Put bluntly, engagement, as it is currently understood, is rather exclusionary. (p. 934)

As with student retention research, there has been critique of what is perceived as the underlying neoliberal agenda. Thus, Barnacle and Dall'Alba (2017) argue for an expansion of the notion of student engagement to include care. Buckley (2018), however, takes issue with

those who argue that student engagement research is aligned with neoliberalism, arguing that there is a substantive alternative engagement literature that is in opposition to this:

Both Zepke and Trowler attempt to be inclusive in their reading of the engagement literature. Nevertheless, they both focus on literature that addresses student engagement understood as students' participation in various forms of active learning. This literature is focused around the engagement construct expressed by NSSE, but also includes literature on very different topics such as transformational learning and belonging, radical pedagogies. However there is a substantial alternative body of literature on student engagement, that explores students' participation in decision-making. It is concerned with issues like feedback, representation, and involvement in curriculum design, and is closely related to the concepts of student voice and students-as-partners. (p. 729)

In other words, the interest in student engagement also includes those who seek to change the balance of power within the university, and thus the university itself, in addition to those who are simply seeking to make the existing system somewhat better.

Discussion and Conclusions

Student retention and student engagement are clearly closely related ideas or frameworks for research. But they are also what might be called succeeding frameworks, illustrative of the tendency for established frameworks for research to be overtaken and partially supplanted by more recent entrants to the research field.

They demonstrate how related, indeed competing, frameworks can occupy much the same research territory with relatively little overlap in terms of membership or enterprise. Researchers – in the field of higher education as elsewhere – show a strong tendency to remain wedded to particular research frameworks and designs, sharing their ideas and findings with a limited body of like-minded researchers, and effectively ignoring others researching the same topic, but from a slightly different perspective.

What is particularly interesting here, though, is how the research interest in student retention has been overtaken and at least partially supplanted by the latter-day interest in student engagement. Just as the responsibility for the funding of higher education has shifted remorselessly from the state to the student, so the responsibility for satisfying the student's needs has shifted from the student towards the institution (Tight 2013b).

What this review also suggests is, alongside what is being researched, what is not being researched – at least not much or as yet. It can, of course, be difficult to see what is not there, or it may be mis-perceived. However, what seems most lacking are more holistic approaches to researching the student experience. There are huge and growing research literatures on the student experience, but, just like the studies of student retention and student engagement reviewed here, they mostly take a particular focus, and thus obscure the overall picture.

We need a much better understanding of what it is like to be a student today, not just, for example, how well they are engaging with their studies and institution, and how likely they might be to discontinue or finish successfully. Contemporary student lives spread out much further than their course and institution, involving family, friends, social and leisure activities and employment. Critically, what is needed to research this inter-connected broader experience is not just the willingness of students to have their whole lives researched, but also their direct involvement – as those with the easiest access and greatest understanding – as researchers.

References

Ackerman, R, and Schibrowsky, J (2007) A Business Marketing Strategy applied to Student Retention: a higher education initiative. *Journal of College Student Retention*, 9, 3, pp. 307-336.

Almarghani, E, and Mijatovic, I (2017) Factors Affecting Student Engagement in HEIs: it is all about good teaching. *Teaching in Higher Education*, 22, 8, pp. 940-956.

Angulo-Ruiz, L, and Pergelova, A (2013) The Student Retention Puzzle Revisited: the role of institutional image. *Journal of Nonprofit and Public Sector Marketing*, 25, pp. 334-353.

Asare, S, Nicholson, H, and Stein, S (2017) You Can't Ignore Us: what role does family play in student engagement and alienation in a Ghanaian university? *Journal of Higher Education Policy and Management*, 39, 6, pp. 593-606.

Astin, A (1975) *Preventing Students from Dropping Out*. San Francisco, CA, Jossey-Bass.

Balwant, P (2018) The Meaning of Student Engagement and Disengagement in the Classroom Context: lessons from organisational behaviour. *Journal of Further and Higher Education*, 42, 3, pp. 389-401.

Barnacle, R, and Dall'Alba, G (2017) Committed to Learn: student engagement and care in higher education. *Higher Education Research and Development*, https://doi.org/10.1080/07294360.2017.1326879.

Baron, P, and Corbin, L (2012) Student Engagement: rhetoric and reality. *Higher Education Research and Development*, 31, 6, pp. 759-772.

Bean, J (1980) Dropouts and Turnover: the synthesis and test of a Causal Model of Student Attrition. *Research in Higher Education*, 12, 2, pp. 155-187.

Bean, J, and Metzner, B (1985) A Conceptual Model of Nontraditional Undergraduate Student Attrition. *Review of Educational Research*, 55, 4, pp. 485-540.

Bergmark, U, and Westman, S (2018) Student Participation within Teacher Education: emphasising democratic values, engagement and learning for a future profession. *Higher Education Research and Development*, DOI: 10.1080/07294360.2018.1484708.

Bodin, R, and Orange, S (2018) Access and Retention in French Higher Education: student drop-out as a form of regulation. *British Journal of Sociology of Education*, 39, 1, pp. 126-143.

Bolliger, D, and Halupa, C (2018) Online Student Perceptions of Engagement, Transactional Distance and Outcomes. *Distance Education*, DOI: 10.1080/01587919.2018.1476845.

Bowles, T, and Brindle, K (2017) Identifying Facilitating Factors and Barriers to improving Student Retention Rates in Tertiary Teaching Courses: a systematic review. *Higher Education Research and Development*, 36, 5, pp. 903-919.

Boyle, F, Kwon, J, Ross, C, and Simpson, O (2010) Student-Student Mentoring for Retention and Engagement in Distance Education. *Open Learning*, 25, 2, pp. 115-130.

Braxton, J, Milem, J, and Sullivan, A (2000) The Influence of Active Learning on the College Student Departure Process: toward a revision of Tinto's theory. *Journal of Higher Education*, 71, 5, pp. 569-590.

Buckley, A (2018) The Ideology of Student Engagement Research. *Teaching in Higher Education*, 23, 6, pp. 718-732.

Cabrera, A, Nora, A, and Castenada, M (1993) Colle0ge Persistence: structural equations modeling test of an integrated model of student retention. *Journal of Higher Education*, 64, 2, pp. 123-139.

Cameron, J, Roxburgh, M, Taylor, J, and Lauder, W (2011) An Integrative Literature Review of Student Retention in Programmes of Nursing and Midwifery Education: why do students stay? *Journal of Clinical Nursing*, 20, pp. 1372-1382.

Campbell, T, and Campbell, D (1997) Faculty/Student Mentor Program: effects on academic performance and retention. *Research in Higher Education*, 38, 6, pp. 727-742.

Carini, R, Kuh, G, and Klein, S (2006) Student Engagement and Student Learning: testing the linkages. *Research in Higher Education*, 47, 1, pp. 1-32.

Case, J (2008) Alienation and Engagement: development of an alternative theoretical framework for understanding student learning. *Higher Education*, 53, pp. 321-332.

Chen, H, Lattuca, L, and Hamilton, E (2008) Conceptualizing Engagement: contributions of faculty to student engagement in engineering. *Journal of Engineering Education*, pp. 339-353.

Choi, B, and Rhee, B (2014) The Influences of Student Engagement, Institutional Mission and Cooperative Learning Climate on the Generic Competency Development of Korean Undergraduate Students. *Higher Education*, 67, pp. 1-18.

Coates, H (2010) Development of the Australasian Survey of Student Engagement (AUSSE). *Higher Education*, 60, pp. 1-17.

Cotton, D, Nash, T, and Kneale, P (2017) Supporting the Retention of Non-Traditional Students in Higher Education using a Resilience Framework. *European Educational Research Journal*, 16, 1, pp. 62-79.

Crosling, G, Thomas, L, and Heagney, M (2008) *Improving Student Retention in Higher Education: the role of teaching and learning*. London, Routledge.

Davidson, C, and Wilson, K (2013) Reassessing Tinto's Concepts of Social and Academic Integration in Student Retention. *Journal of College Student Retention*, 15, 3, pp. 329-346.

DeShields, O, Kara, A, and Kaynak, E (2005) Determin0ants of Business Students' Satisfaction and Retention in Higher Education: applying Herzberg's two-factor theory. *International Journal of Educational Management*, 19, 2-3, pp. 128-139.

Dewberry, C, and Jackson, D (2018) An Application of the Theory of Planned Behavior to Student Retention. *Journal of Vocational Behavior*, 107, pp. 100-110.

DeWitz, J, Woolsey, L, and Walsh, B (2009) College StOudent Retention: an exploration of the relationship between self-efficacy beliefs and purpose in life among college students. *Journal of College Student Development*, 50, 1, pp. 19-34.

Dey, E, and Astin, A (1993) Statistical Alternatives for Studying College Student Retention: a comparative analysis of logit, probit and linear regression. *Research in Higher Education*, 34, 5, pp. 569-581.

DuPaul, G, Pinho, T, Pollack, B, Gormley, M, and Laracy, S (2017) First-Year College Students with ADHD or LD: differences in engagement, positive core self-evaluation, school preparation and college expectations. *Journal of Learning Disabilities*, 50, 3, pp. 238-251.

Farr-Wharton, B, Charles, M, Keast, R, Woolcott, G, and Chamberlain, D (2018) Why Lecturers Still Matter: the impact of lecturer-student exchange on student engagement and intention to leave university prematurely. *Higher Education*, 75, pp. 167-185.

Forsman, J, Linder, C, Moll, R, Fraser, D, and Andersson, S (2014) A New Approach to Modelling Student Retention through an application of Complexity Thinking. *Studies in Higher Education*, 39, 1, pp. 68-86.

Gasiewski, J, Eagan, K, Garcia, G, Hurtado, S, and Chang, M (2012) From Gatekeeping to Engagement: a multicontextual, mixed method study of student academic engagement in introductory STEM courses. *Higher Education*, 53, pp. 229-261.

Giannakos, M, Pappas, I, Jaccheri, L, and Sampson, D (2017) Understanding Student Retention in Computer Science Education: the role of environment, gains, barriers and usefulness. *Education and Information Technologies*, 22, pp. 2365-2382.

Gilardi, S, and Guglielmetti, C (2011) University Life of Non-traditional Students: engagement styles and impact on attrition. *Journal of Higher Education*, 82, 1, pp. 33-53.

Glass, C, Gesing, P, Hales, A, and Cong, C (2017) Faculty as Bridges to Co-Curricular Engagement and Community for First-Generation International Students. *Studies in Higher Education*, 42, 5, pp. 895-910.

Gourlay, L (2015) 'Student Engagement' and the Tyranny of Participation. *Teaching in Higher Education*, 20, 4, pp. 402-411.

Greene, T, Marti, N, and McClenney, K (2008) The Effort-Outcome Gap: differences for African American and Hispanic Community College Students in Student Engagement and Academic Achievement. *Journal of Higher Education*, 79, 5, pp. 513-539.

Hagel, P, Carr, R, and Devlin, M (2012) Conceptualising and Measuring Student Engagement through the Australasian Survey of Student Engagement (AUSSE): a critique. *Assessment and Evaluation in Higher Education*, 37, 4, pp. 475-486.

Hallinger, P, and Lu, J (2013) Learner Centred Higher Education in East Asia: assessing the effects on student engagement. *International Journal of Educational Management*, 27, 6, pp. 594-612.

Hanna, J (1930) Student Retention in Junior Colleges. *Journal of Educational Research*, 22, 1, pp. 1-8.

Herrmann, K (2013) The Impact of Cooperative Learning on Student Engagement: results from an intervention. *Active Learning in Higher Education*, 14, 3, pp. 175-187.

Hilts, A, Part, R, and Bernacki, M (2018) The Roles of Social Influence on Student Competence, Relatedness, Achievement and Retention in STEM. *Science Education*, 102, pp. 744-770.

Hlinka, K (2017) Tailoring Retention Theories to Meet the Needs of Rural Appalachian Community College Students. *Community College Review*, 45, 2, pp. 144-164.

Holmegaard, H, Madsen, L, and Ulriksen, L (2018) Why Should European Higher Education care about the Retention of Non-Traditional Students? *European Educational Research Journal*, 16, 1, pp. 3-11.

Holmes, N (2018) Engaging with Assessment: increasing student engagement through continuous assessment. *Active Learning in Higher Education*, 19, 1, pp. 23-34.

Holt, L, and Fifer, J (2018) Peer Mentor Characteristics that Predict Supportive Relationships with First-Year Students: implications for peer

mentor programming and first-year student retention. *Journal of College Student Retention*, 20, 1, pp. 67-91.

Hovdhaugen, E, Frolich, N, and Aamodt, P (2013) Informing Institutional Management: institutional strategies and student retention. *European Journal of Education*, 48, 1, pp. 165-177.

Hsieh, T-L (2014) Motivation matters? The relationship among different types of learning motivation, engagement behaviors and learning outcomes of undergraduate students in Taiwan. *Higher Education*, 68, pp. 417-433.

Hu, S, and McCormick, A (2012) An Engagement-based Student Typology and its Relationship to College Outcomes. *Research in Higher Education*, 53, pp. 738-754.

Hutchings, K, Bainbridge, R, Bodle, K, and Miller, A (2018) Determinants of Attraction, Retention and Completion for Aboriginal and Torres Strait Islander Higher Degree Research Students: a systematic review to inform future research directions. *Research in Higher Education*, https://doi.org/10.1007/s11162-018-9511-5.

Jesson, J, Matheson, L, and Lacey, F (2011) *Doing Your Literature Review: traditional and systematic techniques*. London, Sage.

Johnson, D, Wasserman, T, Yildirim, N, and Yonia, B (2014) Examining the Effects of Stress and Campus Climate on the Persistence of Students of Color and White Students: an application of Bean and Eaton's psychological model of retention. *Research in Higher Education*, 55,0 pp. 75-100.

Kahn, P (2014) Theorising Student Engagement in Higher Education. *British Educational Research Journal*, 40, 6, pp. 1005-1018.

Kahu, E (2013) Framing Student Engagement in Higher Education. *Studies in Higher Education*, 38, 5, pp. 758-773.

Kearney, S (2013) Improving Engagement: the use of `authentic self- and peer-assessment for learning' to enhance the student learning experience. *Assessment and Evaluation in Higher Education*, 38, 7, pp. 875-891.

Kerby, M (2015) Toward a New Predictive Model of Retention in Higher Education: an application of classical sociological theory. *Journal of College Student Retention*, 17, 2, pp. 138-161.

Kezar, A, and Kinzie, J (2006) Examining the Ways Institutions Create Student Engagement: the role of mission. *Journal of College Student Development*, 47, 2, pp. 149-172.

Kilpatrick, S, Johns, S, Barnes, R, Fischer, S, McLennan, D, and Magnusson, K (2016) Exploring the Retention and Success of Students with Disability in Australian Higher Education. *International Journal of Inclusive Education*, 21, 7, pp. 747-762.

Kinnick, M, and Ricks, M (1993) Student Retention: moving from numbers to action. *Research in Higher Education*, 34, 1, pp. 55-69.

Kobrak, P (1992) Black Student Retention in Predominantly White Regional Universities: the politics of faculty involvement. *Journal of Negro Education*, 61, 4, pp. 509-530.

Koljatic, M, and Kuh, G (2001) A Longitudinal Assessment of College Student Engagement in Good Practices in Undergraduate Education. *Higher Education*, 42, pp. 351-371.

Krause, K-L. and Coates, H (2008) Students' Engagement in First-year University. *Assessment and Evaluation in Higher Education*, 33, 5, pp. 493-505.

Kuh, G (2003) What We're Learning about Student Engagement from NSSE: benchmarks for effective educational practices. *Change*, 35, 2, pp. 24-32.

Kuh, G, Cruce, T, Shoup, R, Kinzie, J, and Gonyea, R (2008) Unmasking the Effects of Student Engagement on First-year College Grades and Persistence. *Journal of Higher Education*, 79, 5, pp. 540-563.

Leach, L (2016) Exploring Discipline Differences in Student Engagement in One Institution. *Higher Education Research and Development*, 35, 4, pp. 772-786.

Lee, J, Kim, N, and Wu, Y (2018) College Readiness and Engagement Gaps between Domestic and International Students: re-envisioning educational diversity and equity for global campus. *Higher Education*, https://doi.org/10.1007/s10734-018-0284-8

Longwell-Grice, R, and Longwell-Grice, H (2008) Testing Tinto: how do retention theories work for first-generation, working-class students? *Journal of College Student Retention*, 9, 4, pp. 407-420.

Macfarlane, B, and Tomlinson, M (2017) Critical and Alternative Perspectives on Student Engagement. *Higher Education Policy*, 30, 1, pp. 1-4.

Mann, S (2001) Alternative Perspectives on the Student Experience: alienation and engagement. *Studies in Higher Education*, 26, 1, pp. 7-19.

McLaughlin, G, Brozovsky, P, and McLaughlin, J (1998) Changing Perspectives on Student Retention: a role for institutional research. *Research in Higher Education*, 39, 1, pp. 1-17.

Mendoza, P, Suarez, J, and Bustamente, E (2016) Sense of Community in Student Retention at a Tertiary Technical Institution in Bogota: an ecological approach. *Community College Review*, 44, 4, pp. 286-314.

Montalvo, E (2012) The Recruitment and Retention of Hispanic Undergraduate Students in Public Universities in the United States, 2000-2006. *Journal of Hispanic Higher Education*, 12, 3, pp. 237-255.

Murtagh, P, Burns, L, and Schuster, J (1999) Predicting the Retention of University Students. *Research in Higher Education*, 40, 3, pp. 355-371.

Nelson, K, Quinn, C, Marrington, A, and Clarke, J (2012) Good Practice for Enhancing the Engagement and Success of Commencing Students. *Higher Education*, 63, pp. 83-96.

Nelson Laird, T, Bridges, B, Morelon-Quainoo, C, Williams, J, and Holmes, M (2007) African American and Hispanic Student Engagement at Minority Serving and Predominantly White Institutions. *Journal of College Student Development*, 48, 1, pp. 39-56.

Nguyen, N, and LeBlanc, G (2001) Image and Reputation of Higher Education Institutions in Students' Retention Decisions. *International Journal of Educational Management*, 15, 6-7, pp. 303-311.

Nora, A (1987) Determinants of Retention among Chicano College Students: a structural model. *Research in Higher Education*, 26, 1, pp. 31-59.

Nunes, L, Reis, A, and Seabra, C (2018) Is Retention Beneficial to Low-Achieving Students? Evidence from Portugal. *Applied Economics*, 50, 40, pp. 4306-4317.

Oseguera, L, and Rhee, B (2009) The Influence of Institutional Retention Climates on Student Persistence to Degree Completion: a multilevel approach. *Research in Higher Education*, 50, pp. 546-569.

Oseguera, L, Locks, A, and Vega, I (2009) Increasing Latina/o Students' Baccalaureate Attainment: a focus on retention. *Journal of Hispanic Higher Education*, 8, 1, pp. 23-53.

Pace, R (1984) *Measuring the Quality of College Student Experiences: an account of the development and use of the College OStudent Experiences Questionnaire*. Los Angeles, CA: Higher Education Research Institute, University of California, Los Angeles.

Pascarella, E, and Chapman, D (1983) A Multiinstitutional, Path Analytic Validation of Tinto's Model of College Withdrawal. *American Educational Research Journal*, 20, 1, pp. 87-102.

Pascarella, E, and Terenzini, P (1980) Predicting Freshmen Persistence and Voluntary Dropout from a Theoretical Model. *Journal of Higher Education*, 51, 1, pp. 60-75.

Payne, J (2017) Student Engagement: three models for its investigation. Journal of Further and Higher Education, DOI: 10.1080/0309877X.2017.1391186. Pearson, M (2012) Building Bridges: higher degree student retention and counselling support. *Journal of Higher Education Policy and Management*, 34, 2, pp. 187-199.

Peterson, S, Kovel-Jarboe, P, and Schwartz, S (1997) Quality Improvement in Higher Education: implications for student retention. *Quality in Higher Education*, 3, 2, pp. 131-141.

Pike, G, and Kuh, G (2005) A Typology of Student Engagement for American Colleges and Universities. *Research in Higher Education*, 46, 2, pp. 185-209.

Pike, G, Smart, J, and Ethington, C (2012) The Mediating Effects of Student Engagement on the Relationships between Academic Disciplines and Learning Outcomes: an extension of Holland's theory. *Research in Higher Education*, 53, pp. 550-575.

Pittaway, S (2012) Staff and Student Engagement: developing an engagement framework in a Faculty of Education. *Australian Journal of Teacher Education*, 37, 4.

Price, D, and Tovar, E (2014) Student Engagement and Institutional Graduation Rates: identifying high-impact educational practices for community colleges. *Community College Journal of Research and Practice*, 38, 9, pp. 766-782.

Rabourn, K, BrckaLorenz, A, and Shoup, R (2018) Reimagining Student Engagement: how non-traditional adult learners engage traditional postsecondary environments. *Journal of Continuing Higher Education*, 66, 1, pp. 22-33.

Reason, R (2009) Student Variables that predict Retention: recent research and new developments. *NASPA Journal*, 46, 3, pp. 482-501.

Roberts, J (2018) Professional Staff Contributions to Student Retention and Success in Higher Education. *Journal of Higher Education Policy and Management*, 40, 2, pp. 140-153.

Roberts, S (2011) Traditional Practice for Non-traditional Students? Examining the role of pedagogy in higher education retention. *Journal of Further and Higher Education*, 35, 2, pp. 183-199.

Robinson, C, and Hullinger, H (2008) New Benchmarks in Higher Education: student engagement in online learning. *Journal of Education for Business*, 84, 2, pp. 101-109.

Rodgers, K, and Summers, J (2008) African American Students at Predominantly White Institutions: a motivational and self-systems approach to understanding retention. *Educational Psychology Review*, 20, pp. 171-190.

Ryle, A (1969) *Student Casualties*. London: Allen Lane/The Penguin Press.

Sadowski, C, Stewart, M, and Pediaditis, M (2018) Pathway to Success: using students' insights and perspectives to improve retention and success for university students from low socioeconomic backgrounds. *International Journal of Inclusive Education*, 22, 2, pp. 158-175.

Scales, E (1960) A Study of College Student Retention and Withdrawal. *Journal of Negro Education*, 29, 4, pp. 438-444.

Seidman, A (ed) (2012) *College Student Retention: formula for student success*. New York, Rowman and Littlefield, second edition.

Shotton, H, Oosahwe, S, and Cintron, R (2007) Stories of Success: experiences of American Indian students in a peer-mentoring retention program. *Review of Higher Education*, 31, 1, pp. 81-107.

Simpson, O (2013) Student Retention in Distance Education: are we failing our students? *Open Learning*, 28, 2, pp. 105-119.

Singell, L, and Waddell, G (2010) Modeling Retention at a Large Public University: can at-risk students be identified early enough to treat? *Research in Higher Education*, 51, pp. 546-572.

Soria, K, and Stebleton, M (2012) First-generation Students' Academic Engagement and Retention. *Teaching in Higher Education*, 17, 6, pp. 673-685.

Spady, W (1970) Dropouts from Higher Education: an interdisciplinary review and synthesis. *Interchange*, 1, pp. 64-85.

Spady, W (1971) Dropouts from Higher Education: toward an empirical model. *Interchange*, 2, 3, pp. 38-62.

Stoeber, J, Childs, J, Hayward, J, and Feast, A (2011) Passion and Motivation for Studying: predicting academic engagement and burnout in university students. *Educational Psychology*, 31, 4, pp. 513-528.

Tadesse, T, Manathunga, C, and Gillies, R (2018) The Development and Validation of the Student Engagement Scale in an Ethiopian University Context. *Higher Education Research and Development*, 37, 1, pp. 188-205.

Terenzini, P, Lorang, W, and Pascarella, E (1981) Predicting Freshman Persistence and Voluntary Dropout Decisions: a replication. *Research in Higher Education*, 15, 2, pp. 109-127.

Thiele, T, Pope, D, Singleton, A, Snape, D, and Stanistreet, D (2017) Experience of Disadvantage: the influence of identity in engagement in working class students' educational trajectories to an elite university. *British Educational Research Journal*, 43, 1, pp. 49-67.

Thomas, L (2011) Do Pre-entry Interventions such as 'Aimhigher' impact on Student Retention and Success? A review of the literature. *Higher Education Quarterly*, 65, 3, pp. 230-250. Tight, M (2012) *Researching Higher Education*. Maidenhead, Open University Press, second edition.

Tight, M (2013a) Discipline and Methodology in Higher Education Research. *Higher Education Research and Development*, 32, 1, pp. 136-151.

Tight, M (2013b) Students: customers, clients or pawns? *Higher Education Policy*, 26, 3, pp. 291-307.

Tight, M (2014a) Discipline and Theory in Higher Education Research. *Research Papers in Education*, 29, 1, pp. 93-110.

Tight, M (2014b) Theory Development and Application in Higher Education Research: the case of threshold concepts. pp. 249-267 in J Huisman and M Tight (eds), *Theory and Method in Higher Education Research II*. Bingley, Emerald.

Tight, M (2014c) Collegiality and Managerialism: a false dichotomy? Evidence from the higher education research literature. *Tertiary Education and Management*, 20, 4, pp. 294-306.

Tight, M (2015a) Theory Development and Application in Higher Education Research: the case of academic drift. *Journal of Educational Administration and History*, 47, 1, pp. 84-99.

Tight, M (2015b) Theory Development and Application in Higher Education Research: tribes and territories. *Higher Education Policy*, 28, 4, pp. 277-293.

Tight, M (2015c) Theory Development and Application in Higher Education: the case of communities of practice. *European Journal of Higher Education*, 5, 2, pp. 111-126.

Tight, M (2016a) Phenomenography: the development and application of an innovative research design in higher education research. *International Journal of Social Research Methodology*, 19, 3, pp. 319-338.

Tight, M (2016b) Examining the Research/Teaching Nexus. *European Journal of Higher Education*, 6, 4, pp. 293-311.

Tight, M (2018a) Tracking the Scholarship of Teaching and Learning. *Policy Reviews in Higher Education*, 2, 1, pp. 61-78.

Tight, M (2018b) *Higher Education Research: the developing field*. London, Bloomsbury.

Tight, M (forthcoming) Mass Higher Education and Massification. *Higher Education Policy*.

Tinto, V (1975) Dropout from Higher Education: a theoretical synthesis of recent research. *Review of Educational Research*, 45, 1, pp. 89-125.

Tinto, V (1993) *Leaving College: rethinking the causes and cures of student attrition*. Chicago, IL; University of Chicago Press, second edition.

Tinto, V (2006) Research and Practice of Student Retention: what next? *Journal of College Student Retention*, 8, 1, pp. 1-19.

Tinto, V (2012) *Completing College: rethinking institutional action*. Chicago, IL, University of Chicago Press.

Thoaele, M, Hofman, A, Winnips, K, and Beetsma, Y (2014) The Impact of Interactive Engagement Methods on Students' Academic Achievement. *Higher Education Research and Development*, 33, 5, pp. 1020-1034.

Torgerson, C (2003) *Systematic Reviews*. London, Continuum.

Trowler, V (2010) *Student Engagement Literature Review*. York, Higher Education Academy.

Trowler, V, and Trowler, P (2010) *Student Engagement Evidence Summary*. York, Higher Education Academy.

Umbach, P, and Wawrzynski, M (2005) Faculty do Matter: the role of college faculty in student learning and engagement. *Research in Higher Education*, 46, 2, pp. 153-184.

Vallee, D (2017) Student Engagement and Inclusive Education: reframing *student engagement*. *International Journal of Inclusive Education*, 21, 9, pp. 920-937.

Villano, R, Harrison, S, Lynch, G, and Chen, G (2018) Linking Early Alert Systems and Student Retention: a survival analysis approach. *Higher Education*, https://doi.org/10.1007/s10734-018-0249-y.

Wawrzynski, M, Heck, A, and Remley, C (2012) Student Engagement in South African Higher Education. *Journal of College Student Development*, 53, 1, pp. 106-123.

Wetzel, J, O'Toole, D, and Peterson, S (1999) Factors affecting Student Retention Probabilities: a case study. *Journal of Economics and Finance*, 23, 1, pp. 45-55.

Wild, L, and Ebbers, L (2002) Rethinking Student Retention in Community Colleges. *Community College Journal of Research and Practice*, 26, pp. 503-519.

Wilson, C, Broughan, C, and Marselle, M (2018) A New Framework for the Design and Evaluation of an Institution's Student Engagement Activities. *Studies in Higher Education*, DOI: 10.1080/03075079.2018.1469123.

Wimpenny, K, and Savin-Baden, M (2013) Alienation, Agency and Authenticity: a synthesis of the literature on student engagement. *Teaching in Higher Education*, 18, 3, pp. 311-326.

Wolf-Wendel, L, Ward, K, and Kinzie, J (2009) A Tangled Web of Terms: the overlap and unique contribution of involvement, engagement and integration to understanding college student success. *Journal of College Student Development*, 50, 4, pp. 407-428.

Wong, Z, and Kaur, D (2017) The Role of Vocational Identity Development and Motivational Beliefs in Undergraduates' Student Engagement. *Counselling Psychology Quarterly*, DOI: 10.1080/09515070.2017.1314249.

Wyatt, L (2011) Nontraditional Student Engagement: increasing adult student success and retention. *Journal of Continuing Higher Education*, 59, 1, pp. 10-20.

Xerri, M, Radford, K, and Shacklock, K (2018) Student Engagement in Academic Activities: a social support perspective. *Higher Education*, 75, pp. 589-605.

Xu, Y, and Webber, K (2018) College Student Retention on a Racially Diverse Campus: a theoretically guided reality check. *Journal of College Student Retention*, 20, 1, pp. 2-28.

Yin, H, and Ke, Z (2017) Students' Course Experience and Engagement: an attempt to bridge two lines of research on the quality of undergraduate education. *Assessment and Evaluation in Higher Education*, 42, 7, pp. 1145-1158.

Yorke, M (2016) The Development and Initial Use of a Survey of Student 'Belongingness', Engagement and Self-confidence in UK Higher Education. *Assessment and Evaluation in Higher Education*, 41, 1, pp. 154-166.

Yorke, M, and Thomas, L (2003) Improving the Retention of Students from Lower Socio-economic Groups. *Journal of Higher Education Policy and Management*, 25, 1, pp. 63-74.

Zepke, N (2015) Student Engagement Research: thinking beyond the mainstream. *Higher Education Research and Development*, 34, 6, pp. 1311-1323.

Zepke, N (2018) Student Engagement in Neo-Liberal Times: what is missing? *Higher Education Research and Development*, 37, 2, pp. 433-446.

Zepke, N, and Leach, L (2005) Integration and Adaptation: approaches to the student retention and achievement puzzle. *Active Learning in Higher Education*, 6, 1, pp. 46-59.

Zepke, N, and Leach, L (2010) Improving Student Engagement: ten proposals for action. *Active Learning in Higher Education*, 11, 3, pp. 167-177.

Zhang, Y, Gan, Y, and Cham, H (2007) Perfectionism, Academic Burnout and Engagement among Chinese College Students: a structural equation modeling analysis. *Personality and Individual Differences*, 43, pp. 1529-1540.

Zhao, C-M, and Kuh, G (2004) Adding Value: learning communities and student engagement. *Research in Higher Education*, 45, 2, pp. 115-138.

Zhao, C-M, Kuh, G, and Carini, R (2005) A Comparison of International Student and American Student Engagement in Effective Educational Practices. *Journal of Higher Education*, 76, 2, pp. 209-231.

Zhoc, K, Webster, B, King, R, Li, J, and Chung, T (2018) Higher Education Student Engagement Scale (HESES): development and psychometric evidence. *Research in Higher Education*, <u>https://doi.org/10.1007/s11162-018-9510-6</u>.

Zilvinskis, J, Masseria, A, and Pike, G (2017) Student Engagement and Student Learning: examining the convergent and discriminant validity of the revised National Survey of Student Engagement. *Research in Higher Education*, 58, pp. 880-903.

Date	Student	Student
	Retention	Engagement
2018	92	404
2017	116	409
2016	88	351
2015	77	311
2014	97	272
2013	95	238
2012	75	210
2011	83	160
2010	69	132
2009	63	109
2008	47	83
2007	66	65
2006	51	40
2005	32	39
2004	22	18
2003	19	20
2002	19	12
2001	19	11
2000	16	7
1999	15	7
1998	17	3
1997	19	2
1996	17	2
1995	18	2
1994	11	1
1993	18	4
1992	18	4
1991	9	4
1990	9	1
1980-1989	59	15
1970-1979	36	1
1960-1969	8	-
Pre 1960	3	-
Totals	1403	2941

Table 1: Numbers of Articles with the words 'Student Retention' and 'Student Engagement' in their Titles

Notes: searches carried out Scopus on 24/9/18