What Works? Student Retention & Success









Building student engagement and belonging in Higher Education at a time of change:

final report from the What Works? Student Retention & Success programme



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Contents

Introduction	4
The changing higher education landscape	4
Student retention and success in England and the UK	5
The What Works? Student Retention & Success	
programme	8
Methods	8
Outputs from the programme	10
Building engagement and belonging	12
Belonging	12
Engagement	13
Nurturing belonging	14
The What Works? model: building student	
belonging, engagement, retention and success	16
Early engagement	17
Engagement in the academic sphere	17
Developing the capacity of students and staff to engage	18
Institutional management and co-ordination	19
Practical implications: lessons learned,	
case studies and recommendations	20
Engaging practice: Characteristics of effective interventions and approaches	20
Pre-entry	21
Pre-entry case studies of effective practice	23
Mature Students' Welcome Lunch, University of Hull	
Study Skills Summer School, University of Hull	
Induction	25
Induction case studies of effective practice	27
The t-shirt induction activity, School of Chemical Engineering and Advanced Materials, Newcastle University	

	Welcome Week, Nottingham Trent University	
	Peer Guides: students supporting students through transition and beyond, Bangor University	
Learnir	ng and teaching	31
	Staff/student relationships	
	Curriculum contents and pedagogy	
	Assessment and feedback	
Learnir	ng and teaching case studies of effective practice	39
	Engineering teams, School of Mechanical and Systems Engineering (MSE), Newcastle University	
	Problem-based learning in groups, Department of Psychology, University of Sunderland	
	Field trip during induction week, Department of Tourism, Hospitality and Events, University of Sunderland	
Acader	mic development and support	42
	Personal tutoring	
Acader	mic development and support case studies of effective practice	45
	PASS: Personal and Academic Support System: proactive support for students, Department of Biological and Medical Sciences, Oxford Brookes University	
	Writing mentors, Aston University, Liverpool Hope University and London Metropolitan University	
Friends	ship and peer support	48
	School, department or programme integration	
	Accommodation	
	Clubs, societies and social events	
	Peer mentoring	
Friends	ship and peer support case studies of effective practice	56
	Students supporting students, University of Sheffield	
	The Sandbox Studio: a course-specific social space, Department of Psychology, University of Sunderland	
	Curriculum-related fundraising activities, BA (Hons) Childhood Studies, Faculty of Education and Society, University of Sunderland	
Profess	sional services	60
Profess	sional services case studies of effective practice	62
	Student advisers, Anglia Ruskin University	

PASS Intervention: Mentoring poorly performing first-year students, Department of Biological and Medical Sciences, Oxford Brookes University	
Student capacity for participation and belonging	64
Staff capacity for involving students and nurturing a culture of belonging	65
Recognition	
Support and development	
Reward	
Using data	66
Modules, programmes and departments	
Monitoring student engagement	
Strategic implications and recommendations	69
Institutional reflective checklist	70
Conclusions	72
What to do now	73
Appendix 1: The What Works? projects	74
Project 1: A comparative evaluation of the roles of student adviser and personal tutor in relation to undergraduate student retention	74
Project 2: Pathways to success through peer mentoring	76
Project 3: 'Belonging' and 'intimacy' factors in the retention of students	80
Project 4: Dispositions to stay: the support and evaluation of retention strategies using the Effective Lifelong Learning Inventory (ELLI)	82
Project 5: HERE! Higher education retention and engagement	84
Project 6: Comparing and evaluating the impacts on student retention of different approaches to supporting students through study advice and personal development	88
Project 7: Good practice in student retention: an examination of the effects of student integration on non-completion	91
References	93

Introduction

This report is a synthesis of the key messages, findings, implications and recommendations emanating from the projects funded through the What Works? Student Retention & Success programme 2008-2011, and includes case studies of what works. Following this introductory section, the report provides:

- a summary of key messages based on a synthesis of the evidence from the seven projects;
- presentation of the What Works? model for improving student engagement, belonging, retention and success;
- a full discussion about the practical implications of the research programme, including illustrative examples of specific ways in which higher education institutions have improved student engagement, belonging, retention and success:
- consideration of the strategic implications of adopting the What Works? approach to improving student retention and success, including an institutional reflective checklist;
- conclusions from the research programme and some suggestions of how institutions can use the learning from the What Works? programme to enhance student engagement, belonging, retention and success.

The changing higher education landscape

This report is launched at a time of immense change in the higher education sector.

The review of higher education funding published by Lord Browne (2010) made recommendations for changes to the funding arrangements for HE in England, as well as the arrangements for student finance. The subsequent White Paper Students at the Heart of the System (Department for Business, Innovation & Skills, 2011) aims to use student choice (informed in by price and quality of the student experience) as a major driver in shaping HE provision. and puts the quality of the student experience centre stage. In order to do this, students will have greater information about universities, including data on retention, completion and employment outcomes (see Sutton Trust, 2010). The policy changes shift responsibility for funding higher education away from the taxpayer towards students directly: student fees are due to increase to a maximum of £9,000 per year from 2012-13 (Cable, 2010) and the HEFCE recurrent grant for teaching and research in financial year 2012-13 will be reduced by 12.8% from the previous year (BIS annual grant letter to HEFCE, 2011). There was also a cut in the recurrent teaching grant in the financial year 2011/12 by 6.1% in comparison to the financial year 2010-11 (BIS annual grant letter to HEFCE, 2010²).

¹ Annual grant letters from the Secretary of State to HEFCE are available from: http://www.hefce.ac.uk/whatwedo/invest/institns/annallocns/governmentgrantletter/.

² Recurrent grant for teaching excludes £132 million one-off funding provided for 2010-11 through the University Modernisation Fund. This is because the funding was allocated as a single sum in 2010-11 covering the full duration of the additional courses.

These and related changes have the potential to affect how students engage with the programme in which they are enrolled and with the wider institution. It has been speculated that when fees rise in 2012-13, students will develop a stronger consumer mindset and expectations will increase, changing the focus of their attention to what demonstrates 'value for money' including the number of contact hours with tutors (Docherty, 2011). Indeed, the NUS/HSBC survey (NUS Connect, 2010) found that 65% (n=2,511) of students surveyed said they would have 'even higher expectations of their experience at university' as a result of a rise in fees. Further possible consequences of increased student fees may include more students choosing to continue to live in the family home rather than with their student peers; more students combining part-time study with employment; and students postponing entering HE and thus studying as mature students. As the evidence from the What Works? projects shows all of these factors make it more difficult for student to fully participate, integrate and feel like they belong in HE, which can impact on their retention and success.

Student retention and success in England and the UK

In the UK two measures of student retention are commonly used in respect of full-time undergraduates:

The first is the 'completion rate' – the proportion of starters in a year who continue their studies until they obtain their qualification, with no more than one consecutive year out of higher education. As higher education courses take years to complete, an expected completion rate is calculated by the Higher Education Statistics Agency... A more immediate measure of retention is the proportion of an institution's intake which is enrolled in higher education in the year following their first entry to higher education. This is the 'continuation rate'.

(NAO, 2007, p. 5)

Data are collected from higher education institutions in the UK annually by the Higher Education Statistics Agency (HESA) on behalf of the four UK higher education funding bodies. This information has enabled the two measures described above to be published for each institution on an annual basis in the UK higher education performance indicators since 1999. Additionally, the performance indicators have included retention information relating to part-time first degree students since 2010³.

³ Further information on the retention measure for part-time students is available from: http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064<emid=141.

The performance indicators can be used to provide an overview of retention among full-time first degree⁴ students in England⁵:

- the average non-continuation rate was 8.4% for entrants to English higher education institutions in 2009-10;
- non-continuation rates varied between English institutions between 1.2% and 21.4% in 2009-10;
- the average completion rate for students entering institutions in England in 2009-10 was projected to be 78.4%;
- completion rates were projected to vary between institutions between 53.8% and 97.2% in 2009-10.

Additionally:

- the average non-continuation rate was 15.2% for full-time other undergraduate entrants to English higher education institutions in 2009-10;
- non-continuation rates for these students varied between English institutions between 1.7% and 32.6% in 2009-10.

It is recognised that the profile of students studying varies significantly between HEIs, and that the profile of an institution's students will be shaped by a range of factors including its mission, history, programmes offered, geographical location, reputation and demand – and potentially in the future the fees charged. The continuation and completion rates included within the performance indicators published by HESA are accompanied by benchmarks, which aid interpretation. The benchmarks take account of the students' entry qualifications, age and subject area of study, and give information about the sort of values that might be expected if no factors other than those allowed for were important⁶.

The UK is often cited as having high rates of student retention, progression and completion compared to international comparators. It is, however, very difficult to make such comparisons largely due to the non-standard definitions of these terms, and differing data collection practices (van Stolk *et al.*, 2007). Duty (2012) discusses the fact that when the comparatively late (December) data census point is taken into account, and given that more withdrawal happens early on in a students' HE career, the UK rates of retention are not significantly better than retention rates in the US *four*-year institutions. Weko (2004), however, indicates that the degree of flexibility available to students in the US seems to result in rates of retention and completion that are substantially lower than those in the UK.

⁴ The definition of a first degree includes Honours degrees, ordinary degrees and integrated Masters degrees, but it does not include foundation degrees. Note that the term 'first' in this context does not necessarily imply that it is an individual learner's first instance of study on a degree programme. The definition of an 'other undergraduate qualification' includes HNCs, HNDs and other certificates, foundation degrees, diplomas and credit-bearing courses at undergraduate level.

⁵ Data refer to all full-time entrants. Extracted from performance indicators table series T3 and T5, published by HESA and available from: http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=2064&Itemid=141.

⁶ The corollary of this is that where differences do exist, this may be due to the institution's performance, or it may be due to some other factor that is not included in the benchmark.

There is concern in the UK collectively and England in particular to ensure that student retention, progression and completion does not worsen as student numbers and diversity increase, and to make efforts to improve these rates – as there are often negative consequences for students and their families, institutions and society when students leave before completing their target award. Indeed, there are a range of economic and ethical arguments as to why institutions should be concerned about student retention and success.

In relation to economics, when a student leaves an institution before completion of their target award in England this represents lost income for the institution, which cannot easily be replaced. From 2012-13 a full-time, non-residential student who withdraws in the first semester from an institution charging £7,500 fees would be equivalent to at least £24,300 of lost income to the institution over the duration of a three-year course. A residential student would represent lost income in the region of £33,300 over the same period (if institutional accommodation fees are £3,000 per annum. There are also economic consequences for the student and for society in relation to debt, lower lifetime earnings and contributions to human capital. In addition, graduates bring wider benefits to society, such as increased community participation and being healthier, which are lost when students withdraw prematurely from their university career.

Regarding ethics and social responsibility it seems reasonable to argue that if an institution admits students to HE it has an obligation to take reasonable steps to enable them to be successful. In Europe, the Bologna Process designed to create a European Higher Education Area asserts that: "Access into higher education should be widened by fostering the potential of students from underrepresented groups and by providing adequate conditions for the completion of their studies" (Conference of European Ministers responsible for higher education, 2009). Bamber and Tett (2001) argue that: "Higher education must accept that the implications of offering access to nontraditional students do not end, but rather begin, at the point of entry" (p. 15). Furthermore, in the words of Vincent Tinto (2008), access without support is not opportunity. Thus, institutions recruiting students must put in place a strategy to support them to be successful.

The What Works? Student Retention & Success programme

In 2007 the National Audit Office undertook a review of retention in higher education institutions (HEIs) in England, and subsequently the topic was reviewed by the Public Accounts Committee (PAC) in the House of Commons (House of Commons Committee of the Public Accounts, 2008). The NAO report recognised England's good standing internationally, but urged the HE sector to find ways of further improving student retention and completion. The PAC felt that a significant barrier to further progress was the lack of evidence about what actually works to improve student retention and completion.

There is a wealth of research about student retention and success (see, for example, Jones, 2008; Troxel, 2010; Krause, forthcoming). It is, however, difficult to translate this knowledge into activities that impact on student persistence and success, and institutional outcomes:

Most institutions have not yet been able to translate what we know about student retention into forms of action that have led to substantial gains in student persistence and graduation.

(Tinto, 2006b)

The Paul Hamlyn Foundation (PHF), an independent charitable organisation responded to these challenges by initiating and supporting this programme of work. The programme was subsequently co-funded by PHF and the Higher Education Council for England (HEFCE), providing in excess of £1 million to fund the What Works? Student Retention & Success programme and the Support and Co-ordination team. The primary purpose of the programme was to generate evidence-based analysis and evaluation about the most effective practices to ensure high continuation and completion rates through seven projects involving 22 higher education institutions. Details and summary findings from the projects can be found in Appendix 1.

Methods

Each of the projects has undertaken extensive research using a range of methods to address their topics of investigation. Most studies combine student survey data, qualitative research with students and analysis of institutional data, as well as literature reviews and additional methods to triangulate the data. Some of the institutional surveys had large numbers of respondents and/or high response rates (see Table 1). For further details of the methods and number of survey respondents and other research participants please see the individual research reports.

Where statistics from the project reports are cited within this report, both percentages and numbers are given where possible. Where numbers are given, 'N' represents the total number of responses received for that survey or question, while 'n' represents the numerical equivalent of the preceding percentage.

Table 1: Survey responses across the projects

Project	Survey tool or similar	Number of students responding	Response rate
Project 1	Survey across HEI and two partner colleges: thoughts about leaving and sources of support	721 559 fully completed	10%
Project 2	Survey across three institutions: value of mentoring from the perspectives of the student peer mentors and mentees	1,950 responses	19%
Project 3	Survey of undergraduate students in English, Biological Sciences and medicine: university life questionnaire	496 students	Not reported
	Early leavers survey	113	Not reported
Project 4	Examination of student learning profiles in relation to different issues	2,737 student profiles	N/A
	In-class voting by undergraduate Business Studies students on expectations of relationships with academic staff	135	Not reported
Project 5	Doubters pilot survey	1,059	16%
	Survey of first-year students in three institutions: student transition survey 2009	873	From 3% to 9%
	Tracking students from the 2009 transition survey	433	Between 48% and 58%
	Online survey of first-year students in three institutions: student transition survey 2011	1,063	From 5.5% to 13.6%
Project 6	Three surveys of the first-year	171	6%
	students at one institution	240	8%
		95	4%
	Three surveys of first-year students at second institution	Not reported	Not reported
Project 7	Institutional surveys of the project's sample groups	142	Not reported
	Two online surveys with Engineering students in receipt of interventions	103 36	82% 35%
	In-class voting in Engineering about experience of interventions	59	57%
	Postal survey of 2009-10 leavers in one institution	32	13%

We are confident that the range of issues examined using mixed methods provides powerful evidence of the importance of student engagement and belonging to improve student retention and success. There are of course challenges associated with identifying cause and effect, but the projects utilised a range of data sources, including institutional and local retention data in an attempt to connect improvements in the student experience to enhanced retention. The second phase of the What Works? programme will build in robust statistical evaluation within and between institutions to further examine impact to address the question of 'what works' in relation to student engagement, belonging, retention and success.

The final reports were subject to three peer reviews, and significant revisions were made to the reports to ensure relevance, clarity and evidence-informed recommendations. We advise reading the individual reports for further information about methodology and specific findings; we have, however, shown all percentage figures in this report as actual numbers of respondents too wherever possible, to allow the reader to assess the strength of findings.

The Support and Co-ordination team have undertaken a careful reading of the reports to extract, combine and synthesise the findings. This has been supplemented by other learning from the UK sector and beyond that has taken place during this programme. For example, two discussions have taken place with groups of pro-vice-chancellors and other senior managers in HEIs to explore the strategic implications of the findings. Key messages, findings and implications have been tested through a range of informal dissemination and discussion opportunities. The findings from the What Works? programme are also linked to the wider research literature to some extent, both to indicate how the What Works? findings contribute to the wider body of knowledge in this field, or to indicate how wider literature can extend understanding beyond the evidence generated by the What Works? projects.

Outputs from the programme

This study has considered both student retention and success. During the course of this programme we have sharpened our understanding of success. It has become increasingly clear that 'success' means helping all students to become more engaged and more effective learners in higher education, thus improving their academic outcomes and their progression opportunities after graduation (or when they exit higher education). In line with this understanding of success and underpinned by the What Works? findings the study advocates a mainstream approach to improving the retention and success of all students. It can be difficult to know which students are most likely to withdraw on the basis of student entry characteristics alone; mainstream approaches reach all students, particularly those who are considering withdrawing, and enable each student to maximise their success. This can be supplemented by paying attention to the ways in which students integrate, behave and perform once they are in higher education through a range of engagement indicators, and then intervening if necessary.

The findings of this programme present a compelling case that in higher education, belonging is critical to student retention and success. Although other studies have pointed to this and many staff in universities would readily accept this contention, we argue that the implications are very often not addressed in institutional priorities, policies, processes and practices. Where

strategies are employed to boost student engagement, they are often focused on narrow groups of students, and situated outside of the academic domain, thus failing to meet the needs of the much larger number of students that the What Works? programme indicates may be at risk of withdrawal or underachievement.

This report draws together and synthesises these findings, identifying key principles and approaches to improving student retention and success, and providing illustrative examples of effective practice. Work continues to assist institutions to use the evidence available to improve retention and success within their own contexts. This report, and the summary report, are complemented by the seven project reports and associated tools, the *Compendium of effective practice: Proven ways to improve student retention and success* (Andrews *et al.*, 2012) (first edition published March 2012, second edition Autumn 2012), a two-day conference in March 2012 and a range of other workshops, seminars and briefings. In addition, a Change Programme will commence in 2012 to support institutional teams to implement the findings from the What Works? programme into their own institutional context.

Building engagement and belonging

Although in the UK only 1 in 12 students, or just over 8%, in the UK leave HE during their first year of study, surveys undertaken by What Works? project teams found that between 37% (1/3) (Project 5, n=873) and 42% (2/5) (Project 1, n=237) of students think about withdrawing from HE (see also Project 7 in which three small institutional surveys reported between 33% and 39% had considered withdrawing, N=142). This means that based on evidence from across seven higher education institutions of all types a significant minority of students consider withdrawing, and thus improving student belonging should be a priority for all programmes, departments and institutions. Project 5 finds that students who think about leaving are more likely to do so than those who have not considered withdrawing.

Students identify a range of reasons why they have thought about leaving HE (Projects 1, 5 and 7) and most students cite more than one reason; indeed, Project 5 found an average of 2.1 reasons per student. Survey data (Projects 1, 5 and 7) and qualitative research (Project 4) identify academic issues, feelings of isolation and/or not fitting in and concern about achieving future aspirations as the primary reasons why students think about leaving. Project 5 finds that students who think about leaving are less satisfied with their university experience and appear to be less engaged with their peers and their institution; students who did not think about leaving appeared to have a better understanding of the university processes and were more likely to report a positive relationship with staff and students. Students are particularly likely to consider leaving (a) after Christmas and (b) during the first semester (Project 5), which supports the wider evidence that the majority of students who leave do so during the first year. Students who withdrew had the lowest rates of satisfaction with their higher education experience in general, and their academic experience in particular (Project 5).

The projects examined alternative approaches to improving student retention and success using a range of methods. The evidence from across the seven What Works? projects firmly points to the importance of students having a strong **sense of belonging** in HE, which is the result of **engagement**, and that this is most effectively nurtured through mainstream activities with an overt academic purpose that all students participate in.

Belonging

'Belonging' has emerged as a key idea in this research programme, and is closely aligned with the concepts of academic and social engagement. We draw on both psychological and sociological traditions to inform our understanding of these issues: the psychological literature is used to define belonging at the individual level, while the sociological literature is used to explain how the potential mismatch between a student's background and that of the institution may result in students not feeling like they belong, and leaving early.

At the individual level 'belonging' recognises students' subjective feelings of relatedness or connectedness to the institution. This "involves feeling connected (or feeling that one belongs in a social milieu)" (Vallerand, 1997, p. 300). It may relate "the extent to which students feel personally accepted,

respected, included, and supported by others in the [school] social environment" (Goodenow, 1993a, p. 80). Belonging may be characterised by regular contact and the perception that interpersonal relationships have stability, affective concern, and are ongoing (Baumeister and Leary, 1995). Thus interpersonal relations are essential for satisfying the need to belong. Goodenow (1993b) described sense of belonging in educational environments as the following:

Students' sense of being accepted, valued, included, and encouraged by others (teacher and peers) in the academic classroom setting and of feeling oneself to be an important part of the life and activity of the class. More than simple perceived liking or warmth, it also involves support and respect for personal autonomy and for the student as an individual.

(Goodenow, 1993b, p. 25)

This approach to belonging can be seen to take an individualistic view of student retention and success, thus it is useful here to draw on the work of sociologists, such as Pierre Bourdieu to explore how this works in relation to student backgrounds and institutional cultures. Bourdieu and Passeron's (1977) theories of cultural capital and habitus view the problem structurally, as being embedded in the way that higher education institutions function. 'Cultural capital' incorporates ways of speaking, behaving and interacting, which are learned through interactions with family and social institutions such as home and schools (McLaren, 1989; Meadmore, 1999) and is, therefore, class-related. 'Habitus' is the disposition to act in certain ways determined by cultural capital and is the embodiment of cultural capital. Educational institutions have an identifiable habitus (Reay, David and Ball, 2001), which incorporates practices that mutually shape and reshape the institutions with their students, their communities and the wider socio-economic cultures of their catchment areas (Reay, David and Ball, 2001, para 1.3). Students whose habitus is at odds with that of their higher education institution may feel that they do not fit in, that their social and cultural practices are inappropriate and that their tacit knowledge is undervalued, and they may be more inclined to withdraw early (Thomas, 2002).

Engagement

Engagement develops relationships with others and promotes connectedness, but as Kelly (2001) points out, some people with a lower need to belong may be satisfied by few contacts, while others with greater need to belong may need many such contacts. Kuh (2009, p. 683) has defined student engagement as "the time and effort students devote to activities that are empirically linked to desired outcomes of college *and* what institutions do to induce students to participate in these activities". Trowler (2010) provides a more in-depth analysis of the term, drawing on international literature.

Based on an extensive review of the literature, Osterman (2000) indicates that satisfaction of the need for belonging in educational environments is significantly associated with students' academic engagement. This is supported by much literature from the US and Australia (Trowler and Trowler,

2010). Chickering and Gamson (1987) summarised the evidence into seven effective practices in undergraduate teaching and learning:

- student-staff contact;
- active learning;
- prompt feedback;
- time on task;
- high expectations;
- respect for diverse learning styles;
- co-operation among students.

Krause (2011) extends the notion of engagement in the academic sphere by arguing that "learning occurs in a range of settings, both within and beyond the formal curriculum. It involves developing connections within the university as well as building on prior learning, along with learning that takes place in the workplace and community settings". Academic engagement is related to 'effective learning', and may be synonymous with, or necessary for 'deep' (as opposed to surface) learning (Ramsden, 2003, p. 97).

Social engagement can be seen to create a sense of belonging and offer informal support through interaction with friends and peers. Social engagement takes place in the social sphere of the institution, including social spaces, clubs and societies, the students' union, in student accommodation and through shared living arrangements. Engagement in the professional service sphere includes participation in academic, pastoral and professional development services. These services often contribute to developing students' capacities to engage and belong in higher education and beyond.

As well as being engaged in different spheres of the institution (academic, social and professional service), students can be engaged at different levels, from engagement in their own learning to engagement in institutional and national policy making⁷.

Nurturing belonging

The What Works? projects have evaluated the impact of a range of interventions to improve student retention and success. Some specific interventions have been shown to improve retention rates by up to ten percentage points (see the case studies of effective practice in this report). While we don't recommend one intervention over another as differing contexts mean that outcomes may not be transferable, our analysis of effective approaches to improving retention and success demonstrates that student belonging is achieved through:

- supportive peer relations;
- meaningful interaction between staff and students;

⁷ See HEA work on Dimensions of Student Engagement: http://www.heacademy.ac.uk/resources/detail/studentengagement/Dimensions_student_engagement

- developing knowledge, confidence and identity as successful HE learners;
- an HE experience that is relevant to interests and future goals.

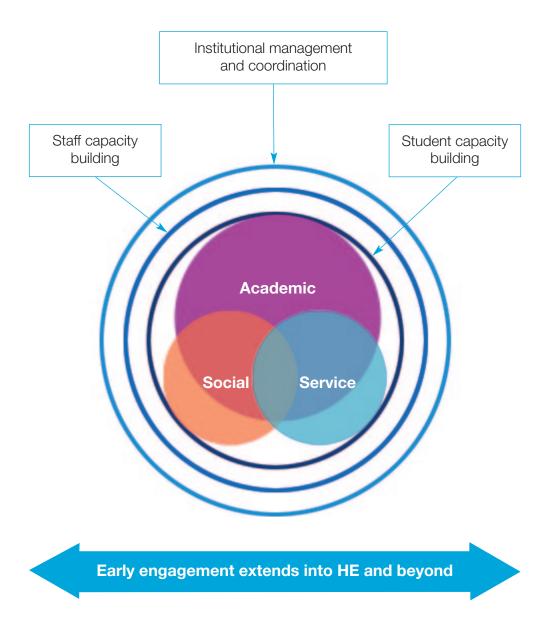
The What Works? projects have found that effective interventions are situated in the **academic sphere**. Project 7 found that the importance of the academic experience in making students feel part of the university community averaged 73% (n=103), while the importance of the social experience averaged 54% (n=76). Effective interventions start pre-entry, and have an emphasis on engagement and an overt academic purpose. They develop peer networks and friendships, create links with academic members of staff, provide key information, shape realistic expectations, improve academic skills, develop students' confidence, demonstrate future relevance and nurture belonging.

This complements Tinto's (1993) student integration model, which identifies academic and social integration and institutional and goal commitment as key variables contributing to students' decisions about withdrawing. Similarly, Astin's theory of student involvement (1984) found that student persistence is often related to levels of student activity and contact with the institution and peers.

The What Works? model: improving student engagement, belonging, retention and success

The What Works? model puts student engagement and belonging at the heart of improving student retention and success.

Figure 1: What Works? model of student retention and success



The model (Figure 1 above) embodies the following findings:

• **Early engagement:** engagement to promote belonging must begin early and continue across the student life cycle. (This is represented by the arrow underneath the diagram.)

- Engagement in the academic sphere: engagement and belonging can be nurtured throughout the institution (academic, social and professional services), but the academic sphere is of primary importance to ensure all students benefit. (This is represented by the overlapping coloured circles, the academic sphere being the largest.)
- Developing the capacity of staff and students to engage: the
 capacity of students to engage and staff to offer an engaging experience
 must be developed, thus a partnership approach in which everyone is
 responsible for improving student belonging, retention and success is
 required. (The capacity of students and staff are represented by the two
 blue rings, labelled respectively.)
- Institutional management and co-ordination: at the senior level the institution must take responsibility for nurturing a culture of belonging and creating the necessary infrastructure to promote student engagement, retention and success. This includes the use of data to underpin student retention and success. (This is represented by the largest blue ring, labelled institutional management and co-ordination.)

Early engagement

The process of engaging students should begin early and extend throughout the student life cycle. It is essential that engagement begins early with institutional outreach interventions and that it extends throughout the process of preparing for and entering HE. Pre-entry and induction activities should have a range of functions, but in particular they should facilitate students to build social relationships with current and new students and members of staff, and engage students with information that will enable them to assess whether the course is relevant to their current interests and future aspirations. A fuller discussion about early engagement through pre-entry interventions and induction is available in the 'Practical implications' section of this report. Engagement, however, must continue throughout the student life cycle to avoid increased rates of withdrawal and diminished success at subsequent phases of the student journey.

Engagement in the academic sphere

The evidence from the What Works? programme identifies the importance of engagement in activities with an overt academic purpose, through high quality student-centred learning and teaching strategies. Such approaches facilitate staff and student interaction, which enables students to develop academically and staff to develop a better understanding of their students. These learning approaches also promote peer interaction and the development of long-lasting friendships. A fuller discussion about nurturing belonging in the academic sphere through learning and teaching is presented in the 'Practical implications' section of this report.

Engagement, however, can take place beyond the academic domain, in other spheres of the institution, namely the social and professional services, and can have a positive impact on students' retention and success too. Vincent Tinto's influential work points to the importance not just of academic interaction, but also of social engagement (Tinto, 1993). This is strongly supported by the findings from the What Works? projects, and from other

institutional research in the UK (Thomas, 2002; Wilcox et al., 2005). The What Works? evidence reinforces the vital role of friendship to many students, especially when they face difficulties. It is clear, however, that the academic sphere can play a central role in facilitating students to develop these friendships, especially for those who spend less time on campus because they live at home and/or have work and family commitments. In addition technology has been successfully used to facilitate social networking between students, especially those who are not based on campus – both pre- and post-entry. The role of the school, department and programme in promoting social integration is discussed under 'Friendship and peer support', in the 'Practical implications' section.

UK universities provide a range of 'professional services'. These are designed to attract and recruit students to the institution, provide pastoral support and develop academic, personal and professional capacities. The evidence from the What Works? programme suggests that professional services make an important contribution to the development of some students' knowledge, confidence and identity as successful HE learners, both pre- and post-entry. This includes, for example, enabling students to make informed choices about institutions, subjects and courses, and to have realistic expectations of HE study. Many students, however, are not aware of the services and/or do not use them. Professional services can be particularly effective when they are delivered via the academic sphere, rather than relying on students accessing these services autonomously, due to constraints of time on campus. This is exemplified in relation to employability: increasingly institutions are embedding activities designed to increase graduate employability into the core curriculum in partnership with careers professionals, rather than delivering services separately through a central careers centre (see Thomas et al., 2010). In the pre-entry arena, we know that aspiration raising and the provision of information, advice and guidance about HE is most effective when it is aligned to students' school/college learning (Action on Access, 2008). The contributions of academic development and support and professional services are discussed in the 'Practical implications' section of this report.

Developing the capacity of students and staff to engage

The What Works? evidence demonstrates that students do not always recognise the value of engagement, or have the ability to engage. This suggests that institutions should work with students to develop their capacity to engage effectively in their HE experience. This includes developing students' knowledge and understanding about the benefits of engaging across the different institutional spheres, and expanding their skills to do so. What Works? project research with part-time, mature and local students found a highly instrumental approach to HE, which corresponds with a devaluing of social aspects of an HE experience, reflected in comments about 'not needing more friends' (Project 7). This implies that students need to be educated about the value of widespread engagement in their HE experience, and encouraged and facilitated to engage in appropriate opportunities, and given the necessary skills. This may, for example, include the provision of capacity-building modules in the core academic curriculum, or via the induction process. It should of course be recognised that individuals need different levels of engagement, and prefer to engage in different ways and in different spheres to achieve success on their own terms. This requires institutions to provide a range of opportunities for engagement across the

institution. This includes recognising that there are differing degrees of engagement students feel comfortable with, different levels within the institution where students may prefer to engage (e.g. module, course, department, faculty, institution) and a range of sites of engagement, as discussed above. A uniform approach to encouraging engagement may create pressure for conformity and result in alienation and disengagement (Mann, 2005).

Developing engagement opportunities throughout the institution and across the student life cycle requires all staff to be involved – it is not a task that can be left to a few committed individuals. The notion of engagement should be embedded into the institutional vision and reflected in key policy documents, and this must be actively endorsed by senior managers. Thus, the institution must consider how policies and procedures can ensure staff responsibility, through recognition, support and development and reward, to enable all staff to engage and be engaging. This may include reviewing staff recruitment (e.g. to ensure that responsibility for providing opportunities for engagement are embedded into job descriptions and selection processes); updating induction and training for new staff and continuing professional development; providing resources, guidance and other support; ensuring that institutional procedures require staff to engage with students (e.g. through validation processes) and that staff performance and impact are monitored and reviewed (e.g. through the annual review process); and providing mechanisms to recognise and reward staff who excel at engaging students and offer them appropriate progression opportunities. In the empirical research, some staff report that colleagues undertaking research resulting in publication receive much greater recognition and reward within the institution that those who make efforts to improve the student experience.

Developing student capacity to engage and staff capacity to be engaging is discussed in relation to evidence from the What Works? projects and the wider literature in the 'Practical implications' section. These are two key areas where further research and evidence is needed about what works.

Institutional management and co-ordination

At the senior level the institution must take responsibility for managing and promoting student engagement to enhance engagement, belonging, retention and success. This includes:

- building student engagement, belonging, retention and success into the corporate mission, vision and plan and aligning institutional policies towards this priority;
- providing leadership that explicitly values student engagement and belonging throughout the whole institution and across the student life cycle and promotes whole staff responsibility for engagement and nurturing a culture of belonging;
- the development of a co-ordinated, evidence-informed strategy, underpinned by the monitoring of programmes and of student behaviour and with explicit indicators and measures of success.

The use of data is considered at the end of the 'Practical implications' section. Management and strategic development of the institution is addressed more fully in the 'Strategic implications and recommendations' section of this report.

Practical implications: lessons learned, case studies and recommendations

The following sections consider practical implications for building engagement and belonging by drawing more extensively on the research evidence from the What Works? projects. It provides case studies of effective practice drawn from the What Works? projects that both illustrate the key points and provide real examples of how to make a difference.

Engaging practice: characteristics of effective interventions and approaches

The What Works? projects examined alternative interventions and approaches to improving student retention and success using a range of methods. Our analysis finds that the exact type of intervention or approach is less important than the way it is delivered and its intended outcomes. All interventions or activities should aim to nurture a culture of belonging through supportive peer relations, meaningful interaction between staff and students, developing students' knowledge, confidence and identity as successful HE learners and an HE experience that is relevant to interests and future goals. Specific interventions and approaches should be planned and informed by the following principles:

- i. Mainstream: interventions and approaches to improve student retention and success should as far as possible be embedded into mainstream provision to ensure all students participate and benefit from them⁸. This will improve the retention of some students and contribute to maximising the success of all students. An 'opt-out' rather than opt-in approach should be the norm, and particular attention should be paid to students who opt out, with additional support provided if necessary.
- ii. **Proactive:** activities should proactively seek to engage students, rather than waiting for a crisis to occur, or the more motivated students to take up opportunities. Students who most need support are the least likely to come forward voluntarily (Baumgart and Johnstone, 1977; Bentley and Allen, 2006; Chickering and Hannah, 1969; Eaton and Bean, 1995). If students have to opt in it is important to making it transparent how students can and should engage, and why.
- iii. Relevant: activities need to be informative, useful and relevant to students' current interests and future aspirations; the potential benefits of engaging should be explicit to students.
- iv. Well-timed and appropriate media: early engagement is essential, other information may be better delivered at a later date or via an alternative media as students needs will differ from each other and over time. Some activities benefit from taking place over time, rather than one-off opportunities.
- v. **Collaborative:** activities should encourage collaboration and engagement with fellow students and members of staff.

⁸ Tatum and Rasool (1996) argue that retention practice should be built into the normal operations of the institution.

vi. **Monitored:** the extent and quality of students' engagement should be monitored, and where there is evidence of low levels of engagement follow-up action should be taken.

Pre-entry

Effective pre-entry interventions include social interaction with peers and current students and engagement with staff from academic departments and professional services. They provide information, develop realistic expectations and hone academic skills.

Pre-entry interventions contribute to improving retention and success in HE in the following ways (Thomas, 2011):

- a) providing information, knowledge and skills to improve pre-entry decision making and retention;
- b) developing expectations and academic preparation pre-entry to enhance transition, retention and success;
- c) fostering early engagement to promote integration and social capital.

Poor institutional and course choice can impact on the extent to which a student develops a sense of belonging to their programme and institution. For example, Project 5 found that the most common reason for thinking about leaving was 'course-related issues' (43% in two institutional surveys and 24% in the third, N=365 reasons cited by 320 students thinking about leaving). UK and Australian research indicates that students have insufficient information to inform pre-entry decisions and this impacts negatively on retention and success (McInnis et al., 2000; Yorke, 2000; Krause et al., 2005; Harvey and Drew, 2006). Students have insufficient information about: HE in general; different institutions; disciplines and specific courses. Pre-entry information and preparation for higher education includes the provision of information to inform choice and shape expectations about higher education, the institution and the course to improve retention (Yorke and Thomas, 2003; Dodgson and Bolam, 2002).

Many students feel underprepared for higher education, and find that their academic experience is not as they expected it to be, and this may lead to early withdrawal (Richardson, 2003; Forrester *et al.*, 2004; Long and Tricker, 2004; Quinn *et al.*, 2005). At one institution (Project 7) between 65% (n=92) and 74% (n=105) of students reported feeling only partially or not at all prepared, and this contributed to feelings of dislocation on arrival. At another institution (Project 3) 34% (n=113) of survey respondents who had withdrawn reported being 'disappointed by the amount of teaching and contact hours with staff provided on my course', and this was at least of some influence in their decision to leave, and a major influence for 12% (n=40).

Project teams (Projects 1, 4, 5 and 7) found that students often have unrealistic expectations, and it is important for staff to make expectations explicit (Projects 4 and 6). Unrealistic expectations tend to relate to the academic experience, assuming it will be the same as school or college and being underprepared to be autonomous learners with responsibility for organising and structuring study. Challenges also relate to lecture format, size

of classes and the impersonal nature of HE study, and not knowing what is expected in assessments, especially as they receive less support and feedback with assessments than they were used to.

Students valued meeting staff and students from institutions to provide them with information about the institution and the learning experience prior to entry. Students at one university (Project 3) talked about the benefits of student ambassadors (existing HE students) as they were perceived to provide more genuine insights into the HE experience, having recently been new students themselves (see Austin and Hatt, 2005).

I found it helpful having one of the ambassadors take us round; she was very helpful and said to me if I wanted to go and chat to her about doing English here then I was more than welcome to. So it was really helpful that she was friendly and approachable. I think that was the main thing, that people do seem friendly. (Interview with first-year student, Project 3)

It is instructive to note, however, that Project 1 found that 43.8% (n=245) of survey respondents had not attended an open day or other pre-study event.

Analysis of the What Works? evidence suggests that the most effective preentry interventions combine the following roles:

- a) providing information;
- b) informing expectations;
- c) developing academic skills;
- d) building social capital (links with peers, current students and staff);
- e) nurturing a sense of belonging.

Pre-entry case studies of effective practice

Mature Students' Welcome Lunch, University of Hull

The intervention

This pre-entry event has taken place since 2005 on both the Hull and Scarborough campuses in the week prior to registration. Many mature students express that attending purely social events is difficult to justify so the lunch is a method to engage students socially through integrating the social with academic structures.

Full-time mature students are invited and the lunch offers "an opportunity to learn more about the University and a chance to meet other new, as well as existing, students" (University of Hull booking leaflet, 2010). Students are allocated places around circular tables according to the programme on which they will be studying. Interaction is encouraged through a quiz about the University for which prizes are awarded. The lunch provides a social space within which academic and/or informative content is bolstered by relationship-building exercises and opportunities to mix with other students beginning related courses. As one participant neatly described it, it is "a social event, but with a purpose".

The impact on retention and progression

The evaluation found that students valued the Welcome Lunch as the beginning of integrating and meeting other people:

... [it] was basically what has made it easier for me to integrate because people I met there based on the one table I was sat around, are now the people I'm now socialising with ... plus the people that they then knew, so kind of increased the people I know as well.

(Project 7, student)

Qualitative feedback from mature students indicated that:

- attendance at pre-entry events increased students' confidence when attending university for the first time after registration;
- pre-entry events were seen to successfully integrate the provision of practical and academic information with opportunities to socialise;
- initial social contact made at the Welcome Lunch often developed into deeper and longer-term friendships.

Welcome Lunch attendees who subsequently registered and began a programme of study were more likely to continue than the general mature student populace, with around 93% continuing beyond their first year.

Study Skills Summer School, University of Hull

The intervention

The Study Skills Summer School is a free, two-day, non-residential course held on the main Hull campus. It is open to both new and continuing part-time and mature full-time students and it focuses on academic and transferable study skills in tandem with social elements. The targeting of particular groups facilitates a sense of camaraderie as students form networks with peers on their course. Many mature and part-time students express that attending purely social events is difficult to justify so, as with the Mature Students' Welcome Lunch, the Summer School is a method to engage students socially through integrating the social with academic structures.

The Summer School includes a combination of lectures, seminars and practical tasks, and aims to deliver an authentic university experience with a focus on the development of academic study skills. These include sessions focused on critical and analytical thinking, note taking and essay writing, as well as referencing and plagiarism. A shared lunch punctuates each day and aims to provide an environment in which interaction between student peers, and with academic and support staff, can take place.

The impact on retention and success

(Project 7, mature student)

The evaluation indicated that the Study Skills Summer School helped students to feel part of their cohort and to realise that they were not alone in the experience of starting their course:

I felt much more able when I realised 'we all were learning this' and I wasn't the only one, and I now had people to share this with and keep me going ... and they did when I needed it.

Qualitative feedback from mature and part-time students indicated that:

- attendance at pre-entry events increased students' confidence when attending university for the first time after registration;
- pre-entry events were seen to successfully integrate the provision of practical and academic information with opportunities to socialise;
- initial social contact made at pre-entry often developed into deeper and longer-term friendships.

Retention rates for those who attended the Summer School were better than retention rates for those who did not. Over the past three years (2007-08 to 2009-10), between 4% and 6% of new Summer School attendees who subsequently registered and began a programme of study have since withdrawn from the University.

Induction

An effective induction actively engages students rather than being a passive process of providing information, and it extends over a longer time period than a few days. The activities should allow students to make friends, get to know the academic staff, understand the expectations of the institution, department and programme and develop academic skills.

Induction activities have an impact on retention and success through:

- a) socialisation and formation of friendship groups, which provide a support network and promote social integration;
- b) informing expectations of HE and helping students to be effective learners by developing their confidence and their academic skills;
- c) developing relationships with members of staff, allowing students to approach them subsequently when they need to.

According to three institutional surveys (Project 2), the majority of students (70%, n=262) felt confident that they had the ability to succeed in their chosen area of study, but most (75%, n=281) were worried about making friends when they started at university. This is supported by the qualitative evidence too, for example:

Anyone that says they're not scared is lying because there is that fear. Everyone has those giant fears of am I going to be liked, am I going to make friends, how am I going to feel living away from home ... you know... you're afraid of everything, but you've got to grow up some time.

(Project 2, first-year UK student, male, mentee)

For many students the 'academic shift' from studying at school or college level to studying at a higher level can be very challenging, indeed many experience a type of 'academic culture shock' (Quinn *et al.*, 2005). Students who did not feel that they understood the differences between learning at school/college and higher education were far more likely to think about leaving (62%) than those who felt they did understand (35%) (Project 5). Staff in HEIs agree that many students do not know what is expected of them when they arrive at university, and that they can play an important role to help students understand course and institutional expectations (Project 4):

My job is to make it very clear to the students – right on day one, week one – 'week zero – orientation' to say – 'this is what we are expecting of you, and this is how I can help you; this is how everybody else can help you'. So, my presentations are on study skills, on group learning, on how to succeed in Medical School. (Project 4, staff member)

Peer mentoring was also found to be beneficial in helping fellow students 'learn how to learn' at a higher level, and make expectations more explicit (Project 2):

The first thing she helped me about was when I had to start writing essays for my coursework during the first time in the first term. I had no clue how to search for the electronic journals or books in the library ... She showed me everything like how to do it electronically, how to look for different types of topics in the library where the sections are and everything, and it was so useful because after her advice I was able to actually do it myself and start preparing because otherwise I wouldn't have done anything. (Project 2, first-year EU student, female, mentee)

According to Harvey and Drew (2006) induction is regarded as a significant part of the package to promote good student retention. The What Works? projects found that effective induction programmes have the following elements:

- a) take place in the academic sphere with other students from the same programme;
- b) take place over an extended time period;
- c) use ice breakers to help students get to know each other;
- d) involve small group work;
- e) provide students with informal opportunities to get to know their teaching staff or tutors;
- f) provide information online and readily accessible to students;
- g) engage students in the process of understanding the academic expectations and procedures.

Induction case studies of effective practice

The t-shirt induction activity, School of Chemical Engineering and Advanced Materials, Newcastle University

The intervention

The School of Chemical Engineering and Advanced Materials (CEAM) at Newcastle has traditionally held a welcome reception for all new students in the first week of the first semester. In 2009-10, as a response to increasing numbers of students (in excess of 100), the focus of this event was changed to one that deliberately stimulated student interaction with peers and academic staff, with the aim of forming student teams that would subsequently work together on a group assignment. Each student is presented with a t-shirt, a marker pen and – most importantly – a clear set of instructions. Each person is required to draw representations of their interests onto their shirt and to then find others with similar interests and form groups. Participants were given explicit directions regarding the intended mix of gender and ethnicity for each group (here staff could intervene to steer students away from their 'comfort zones' and towards wider interaction). The resultant activity was nothing if not convivial, as was evinced by the laughter and general air of enjoyment in the venue. The underlying notion is that because groups are largely self-selecting – they will enjoy working together in the coming months when tackling a group design project.

The impact on retention and progression

The evaluation found that students had formed close social bonds with peers. This contributed to their sense of belonging in the department in particular, and the University more generally:

First year is bad because you don't know anyone here basically ... if you don't set up the design group you have got to make friends, where are you going to make friends kind of thing ... well you wouldn't usually ... and if it was all individual work. You have to stick around to do the work and obviously if it is group work you are forced to meet people.

(Project 7, student)

It cannot be proved that the t-shirt exercise had a direct causal impact on increased rates of progression, as rates could also have been affected by cohort diversity or other changes that may have taken place. However, evidence suggests groups are an important contributory factor. In summary:

- 81% of students (n=29) said they 'always' or 'mostly' felt they belonged in the School;
- all students either 'agreed' or 'strongly agreed' that they had formed close bonds with their peers;
- almost all students said their friendship groups had been an influence on their sense of belonging;
- one year on 28% (n=10) of respondents were still socialising with 'all' and a further 58% (n=21) with 'most' of the members of their teams;

- 32% (n=12) of students report that they 'spend time with friends (not team mates) working together on academic projects' and a further 44% (n=16) say that friends have been a source of help and support when they did not understand academic work;
- following the introduction of the t-shirt activity progression from Stage 1 to Stage 2 increased from below 90% (85%, n=79, in 2005-06 and 75%, n=63, in 2007-08) to in excess of 90% (94%, n=100), in 2009-10;
- retention and progression has improved significantly despite an increase in cohort size.

Welcome Week, Nottingham Trent University

The intervention

In the academic year 2005-06, Nottingham Trent University introduced Welcome Week to replace the traditional Freshers' Week. Welcome Week is jointly delivered by Nottingham Trent University and the Students' Union and is specifically designed to help students feel that they belong to the wider university community and to start building friendships and personal support networks, as well as to aid students' transition into the academic environment.

Welcome Week involves two related elements. The first element is a programme of over 350 academic, social, sporting and cultural activities, ranging from smaller-scale events such as reading groups and badminton games, to theatre trips and nightclub events, to an 'It's a Knockout'-type competition. Unlike traditional Freshers' Week activities, most of these events do not involve the consumption of alcohol. In addition, particular emphasis is placed upon creating opportunities for students not living in halls of residence and on the needs of mature, international and local students.

The second element of Welcome Week is an improved programme induction based on the evaluation of student feedback. As a result of this feedback, most induction programmes and timetables have now been placed online, together with information about enrolment and orientation. Programmes have also been encouraged to reduce the proportion of lectures and offer more activities in small groups. Programme teams have been provided with icebreaker resources and other sample activities to encourage higher levels of interaction at this early stage, and have also been encouraged to offer their students pre-induction activities.

The impact on retention and progression

I love the whole attitude in Welcome Week as it was just so easy to make friends at a time when you feel most vulnerable as you are away from all the people you know and trust.

(Andrews et al., 2012, p. 30)

Welcome Week appears to have made a positive impact upon retention in the first term at NTU. In 2004, the year before Welcome Week was developed, 132 first-year students had withdrawn by the end of the first term (week 10). In 2005, after the first Welcome Week, first-year withdrawals were down to 85

by the same point. In 2006, early withdrawals (measured to the end of week 9) had dropped to 59.

An online survey of first-year students immediately after Welcome Week each year shows increasingly high levels of satisfaction with their university experience. In 2005, 80% of students reported being 'satisfied' or 'very satisfied' with their experience so far; in 2011, 93% of students felt the same way.

The same survey asks students where they had made friends during their first few weeks at university. Prior studies tend to suggest that the most important location for making friends at university is accommodation. However, at NTU, the most frequently cited location for making friends is the academic programme. In 2010, 87% (n=863) of respondents stated that they had made friends there.

Programme induction timetables for full-time undergraduate programmes have become longer, are less lecture-based and include more varied activities. In 2005, the average induction programme lasted for 11 hours and students spent 62% of this time sitting in lectures. In 2009, the average induction programme lasted for 13 hours and only 39% of all time was spent in lectures. There was a far richer range of activities such as ice breakers, problem-based learning, off-campus visits and small group work.

Peer Guides: students supporting students through transition and beyond, Bangor University

The intervention

Bangor University has a well-established university-wide Peer Guiding Programme, in which second- and third-year undergraduates offer support to incoming freshers in all academic schools. The scheme has a broad coverage across the institution: all new undergraduates are allocated a Peer Guide unless they state otherwise.

During and following the transition period, Peer Guides maintain close contact with their group via small group or individual meetings. They are also expected to maintain a less demanding level of support for as long as needed. Peer Guides typically: aid social integration; organise/attend a range of social activities; encourage participation in Students' Union activities; accompany to and/or help with induction sessions including Blackboard sessions, Health & Safety talks, library visits; help with information sessions, module selections and registration; lead orientation tours across the University and in Bangor itself. In cases where new students need additional support, Peer Guides offer reassurance and facilitate swift access to professional support services.

The recruitment and training of Peer Guides is undertaken by a central coordinator based in Student Support Services and the practical implementation of the Peer Guiding Programme is undertaken within the academic schools. This ensures it is sufficiently flexible to meet academic needs and also creates a sense of community without which it would be difficult to recruit the numbers required. Academic school co-ordinators allocate about five new students to each Peer Guide; where possible, students are also matched with regard to demographic characteristics, e.g. mature students, Welsh speakers or international students.

In addition to providing a mentoring service to new students, Peer Guides also help with open days – conducting tours, answering questions and giving

a student's perspective of Bangor. For some that contact is the start of the Peer Guide cycle as the visitors remember those friendly faces and look out for them when they arrive as students.

The impact on retention and progression

During the evaluation, students made a range of positive comments about their Peer Guides and their impact:

My Peer Guide made sure I was comfortable from the moment my parents left.

(Project 2, student)

He made us felt as if we fitted in with the students of the second and third years.

(Project 2, student)

Both anecdotal evidence and formal evaluations indicate that the Peer Guiding Programme is highly effective and valued by staff and students alike. Key statistics from first year respondents to the electronic evaluation survey in 2011 showed:

- 85% had received general Peer Guide support with social integration, orientation and general induction activities;
- 79% rated that general help as good or very good;
- 71% had received support via small group or individual meetings;
- 62% had rated their individual Peer Guide as good or very good;
- 31% had been encouraged to seek help from staff;
- 45% had met Peer Guides at open day visits;
- 19% said the scheme had been important in their decision to choose Bangor.

In addition, 95% of Peer Guides thought the scheme was a positive experience. While they were largely motivated to volunteer for altruistic reasons they did recognise the benefits to themselves in skills development: 78% cited increased communication and interpersonal skills and 75% increased leadership skills.

Of the open comments received on the surveys 71% were wholly positive with a high level of praise for the commitment of many individuals.

Learning and teaching

High quality, student-centred learning and teaching is at the heart of improving the retention and success of all students. Academic programmes that have higher rates of retention and success make use of group-based learning and teaching, and varied learning opportunities including real-world learning and work placements. They provide guidance and support with assessment, useful feedback, a dedicated physical space, opt-out co-curricular activities and staff-organised social events.

The most frequently cited reason for thinking about leaving higher education is course-related factors by between 21% and 42% of students (based on 472 reasons from 339 students who had thought about leaving; Project 5). Although higher entry qualifications are correlated with high rates of retention and success (NAO, 2002, 2007), there are variations between programmes that demonstrate that academic teams can influence the retention and progression rates (Project 5; see also Braxton *et al.* (2000) and Rhodes and Neville (2004), both of which point to the importance of learning and teaching). Some specific interventions have been shown to improve retention rates by up to ten percentage points (Projects 2, 5, 6 and 7; see also the case studies of effective practice presented in this report). The academic department or programme to which a student belongs has a huge influence on the attitudes and expectations of its students and, crucially, on their overall sense of belonging (Project 3).

Crosling et al. (2008) take a broad and holistic view of 'curriculum' to engage students academically and socially. They consider: curriculum design and content, assessment, structure of teaching delivery, and interaction with academics. A similarly broad understanding to curriculum informs the What Works? programme. The projects found that the following factors contribute to belonging in the academic sphere:

- a) staff/student relationships: knowing staff and being able to ask for help (Projects 1, 3, 4, 5 and 7);
- b) curricular contents and related opportunities: providing real-world learning opportunities that are interesting and relevant to future aspirations (Projects 5);
- c) learning and teaching: group-based learning and teaching that allows students to interact with each other, share their own experiences and learn by doing (Projects 3, 4, 5 and 7). A variety of learning experiences, including work placements, and delivery by enthusiastic lectures were found to be important too (Projects 5 and 7);
- d) assessment and feedback: clear guidelines about assessment processes and transparency about criteria and feedback to assist students to perform better in the future (Projects 4, 5 and 6);
- e) personal tutoring: as a means of developing a close relationship with a member of staff who oversees individual progress and takes action if necessary, including directing students to appropriate academic development and pastoral support services (Projects 1, 3, and 6);
- f) peer relations and cohort identity: having friends to discuss academic and non-academic issues with, both during teaching time and outside of it, and a strong sense of cohort identity (Projects 2, 3, 5 and 7);

g) a sense of belonging to a particular place within the university, most usually a departmental building or a small campus (Project 3).

These key elements of belonging are discussed below. This section considers staff/student relationships, curriculum contents and pedagogy, and assessment and feedback. The 'Academic development and support' section specifically considers the role of personal tutoring, and the 'Friendship and peer support' section examines peer relations and how they are developed, including through academically oriented activities and the role of a dedicated social space.

The findings from the What Works? programme about how learning and teaching enhances retention and success reinforces and extends Graham Gibbs' work, *Dimensions of quality* (2010). His research confirms the importance of teaching and student engagement as the key valid predictors of educational gains. It is not resources but practice, who is teaching and how, and the manner/depth in which students approach their work, that best determines achievements in learning. The What Works? programme explicitly links this to student retention and wider success.

Staff/student relationships

Many students find it difficult to approach academic members of staff, but they value being able to ask staff for clarification, guidance and feedback. Students who feel that they have a less good relationship with academic members of staff are more likely to think about leaving. Good relationships are based on informal relationships that recognise students as individuals and value their contributions.

Students can find it difficult to approach members of staff for information, clarification and academic support:

In my experience ... you're in a lecture with like 400 students who they teach twice a week. They've not even seen your face before, let alone know anything about you. So there's no sort of personal element to it ... your lecturer you feel like it has to be quite a significant question for it to be worthy of going to ask him.

(Project 2, first-year UK student, male, mentee)

I think if you ask help for lecturers, you need to see them in office hours and you can only probably ask your lecturers about questions about your coursework or probably about the academic problems. They don't know you. They have so many students.

(Project 2, first-year international student, female, mentee)

What Works? survey evidence found that students who are thinking about leaving feel more distant from their teaching staff than those who have not considered withdrawal (Project 5). Projects 4 and 1 respectively found examples where high proportions of students (75% in Project 4, n=101) reported poor, very poor or no relationship with academic staff and where nearly a fifth of survey respondents were unaware that they had a personal tutor assigned to them (Project 1). The evidence suggests that a good relationship with staff motivates students and encourages them to work harder and achieve more, and vice versa:

It lessens your motivation for the subject, because you don't feel like you've got a full knowledge of it and you feel less motivated to learn the full extent of the module if you feel you won't get help from academic staff.

(Project 4, student)

Students value relationships that have the following characteristics:

a) staff know students, including their names, and view them as individuals (Projects 4 and 5):

I remember when I was going to India, two of my tutors asked to send them an email when I reached India to know that I arrived safe. This is something that I will cherish all my life. (Project 4, student);

b) staff appear interested in students and their progress, not just their problems (Projects 4 and 6):

So I think it's important that they are not only friendly and approachable but interested in your progress. I did ask my old personal tutor for help once and she was a bit dismissive so I just didn't want to approach her again, I just went to someone else who gave me the help that I needed.

(Project 4, student);

c) staff are available and respond to students contact in an appropriate and timely way (Project 4):

For some people it just doesn't seem legitimate. You know, like I say, they think you're a bit stupid for asking the question. (Project 4, student);

I e-mailed a member of staff saying I don't really understand this and he sent a really nasty horrible email saying you should understand it ... I thought it was a bit out of order.

(Project 4, student);

So I think being able to ask them about your subject and being able to talk to them if you're confused about something rather than just wanting to crack on and power through their lecture.

(Project 4, student);

- d) staff value the input of students and respect them, irrespective of diversity and difference (Projects 4 and 5);
- e) students are able to approach staff for support (Projects 3, 4 and 5):

They don't look like lecturers; they don't have that sort of appearance, if that makes sense. They are quite approachable, friendly people.

(Project 4, student);

Students recognise that the relationship they have with staff is different to a friendship (Project 4), but they are put off by staff who are unenthusiastic, or who only want to see them if they have a problem (Project 6):

I don't think it's a good thing if you see them too much as your mate. But just understanding them as people – that's where the gem is.

(Project 4, student);

f) students want relationships with staff that are 'less formal, like a mentor' (65%, n=87) rather than 'formal like a teacher' (14%, n=18) (Project 4).

Project 4 reported that students found it harder to have relationships with staff who:

- a) do not treat students with respect:
- b) do not respond to emails, or only very slowly;
- c) arrive late at lectures;
- d) do not accept criticism well:

You'd have to be quite careful not to be attacking the way an academic teaches; you'd have to be quite careful – they can feel quite vulnerable at times as if you're criticising them.

(Project 4, student);

- e) are not interested in teaching;
- f) are not easily available or always seem to be in a hurry.

Student-centred learning and teaching and personal tutoring are key ways in which students interact with staff, discussed in the subsequent sections. Curriculum-related activities, such as study trips, or social events organised and attended by staff were popular, and provided a useful additional way for students to get to know staff.

Curriculum contents and pedagogy

The curriculum contents and pedagogy can motivate students to engage and be successful in higher education. This should be based on active and collaborative learning, with enthusiastic lecturers, and offering a range of learning experiences.

The qualitative evidence from the What Works? projects shows that engaging students through the curricular contents and delivery methods are effective ways of motivating students and improving retention and success. For example, some students may be less intrinsically interested in the subject, but engaging learning and teaching strategies can ignite interest and improve engagement (Project 5).

I think the best things have been the programme, the contents of the programme and the approach to teaching, [this] is very engaging [for] students.

(Project 5, student who had thought about withdrawing)

Strategies to make learning and teaching more engaging include:

a) active learning: engaging students in problem- or practice-based learning drawing on the real world (Projects 4, 5 and 7):

Every year we have lots of our students being involved working with the National Trust, working with the RSPB doing practical conservation work that's related to research work that we're doing here so I think they can see how it all joins up and I think that's really important ... it's about preparing them for their life and that they can take control of how they build that degree and the surrounding experience to make it possible for them to live the career and the life they want to lead.

(Project 5, staff member);

b) collaborative learning and small group teaching, allowing students to share their own experiences, both in the classroom and beyond (Projects 3, 4, 5 and 7):

It's not teaching in a great big lecture hall for a long time but getting them into groups. It's getting them to discuss their own experiences, to value their experiences and what they bring to the learning ... so listening to that and getting them to bounce ideas off one another. (Project 5, staff member);

I like that you can work together and somebody can bring a piece of information that you've never heard of, and you can bring something that somebody else has never heard of, and then you can swap them and find out how they found it and what's in the research. I like that.

(Project 7, student);

In our block of flats we got some really good friends ... then moved in together in the second year ... It was a really supportive house ... we all had essays due in at the same time we would make each other cups of tea, we'd have discussions ... on a Wednesday we'd buy the Guardian we'd sit over cups of tea all afternoon discussing the things in it that were really important for the courses that we were studying.

(Project 4, student);

c) enthusiastic and knowledgeable lecturers (Projects 4 and 5):

I think I had two particularly fantastic professors – one in History and one in Social Policy – and I think what was good about them was that they really knew their stuff so they were quite respected within their field but they actually took time as well.

(Project 4, student);

Yorke and Longden (2008, p. 48) say that "those teaching first-year students should have a strong commitment to teaching and learning";

d) offering a range of learning experiences (Projects 4 and 5);

Lecturers are very inspiring, they try to make every lecture as memorable and interesting as they can. They use different activities and show various topic-related videos which help to understand the material better and maintain the interest in the subject. (Project 5, student);

e) having work placements and field trips (Projects 3, 4 and 7). For example, Tourism students in Project 7 participated in compulsory local field trips:

I met people during the day yeah. We did a little run around the city, getting into different things. I thought it was a bit tedious, but now when I actually look back it was just getting people to familiarise themselves with the city which was quite clever.

(Project 7, student);

I feel more part of the group than before, which makes my course easier because I can ask anyone in my course if I've got any difficulties.

(Project 7, student).

Much of the good practice we have identified in relation to learning and teaching reflects Chickering and Gamson's (1987) seven effective educational practices that impact on student learning and educational experiences. This can be understood as a learner-centred paradigm (Huba and Freed, 2000), which allows students to construct knowledge through a more active and authentic learning process facilitated by the academic member of staff, rather than relying on the transmission of knowledge from teacher to student. Such an approach utilises more active learning strategies, such as group learning, engaging activities, feedback and formative assessment (see below). Hockings (2010) defines this approach as inclusive learning and teaching:

Inclusive learning and teaching in higher education refers to the ways in which pedagogy, curricula and assessment are designed and delivered to engage students in learning that is meaningful, relevant and accessible to all. It embraces a view of the individual and individual difference as the source of diversity that can enrich the lives and learning of others.

(Hockings, 2010, p. 1, core definition)

Assessment and feedback

Students who have a clear understanding about the assessment process and expectations have higher confidence levels and are less likely to think about leaving early. What Works? evidence suggests that an understanding of assessment should be developed early, and students need to have positive relationships with staff so that they can ask for clarification. Feedback on assessment needs to be helpful to students, and they need to be guided how to use it to inform future assessment tasks.

Students' expectations and understanding of assessment seem to correlate with students' confidence as learners and thoughts about leaving HE:

I hadn't failed them [assignments] but it wasn't as good as I thought. So I was sort of going from school where I did A levels and got quite good marks and then I was like sort of confused as to why, why that had happened and I sort of expected a higher score and that knocked my confidence a bit.

(Project 4, student)

Project 5 found that 64.5% of students who had not thought about leaving reported that assessment was as they expected it to be; only 34.4% of students who had thought about leaving felt the same way (based on figures from the University of Bradford, N=128). Project 1 found that 35% (n=196) of survey respondents had considered withdrawing prior to or following assessment, or following a failure.

Answers to a Project 1 survey question 'Why did you think about leaving?' offer insight into the impact assessment and failure has on thinking about leaving:

Too many assessments due in too close together. I just don't have time to do them and I expect next year will be worse.

... because I was trying my best but it seemed it was not good enough I wasn't getting the grade to pass.

Lack of support with assignments – not being explained properly and not much help if you do need it.

Because I was finding my homework hard and not getting any support from my tutors.

Students who have lower confidence and are unsure about assessment expectations and practices benefit from feedback on their assessed work (Projects 1 and 5):

At the beginning of the course I was a bit overwhelmed by the amount of people who were clearly very smart and I found myself questioning my own academic abilities. After completing my first few assignments I convinced myself I hadn't done very well but I got good marks throughout the year as well as very detailed feedback so I was able to improve my work.

(Project 5, student)

However, students also need to be told how to use the feedback in future assessment activities (Projects 4, 5 and 6). For example PASS tutorials (Project 6) provide feedback and assist students to use it to improve future work.

Assessment and feedback were not examined in detail in the majority of projects. Project 4 found that good feedback was that which showed students how they could improve and avoid making mistakes in the future (Project 4). Criticisms were made of feedback that (Project 4):

- provided students with insufficient detail, for example with only a few written comments, or only single words, making it difficult for the students to be certain about the meaning of the feedback;
- was unclear to the student about what specifically needs to be done, or done differently, so for example a comment such as 'more analysis required' is unclear to some students about what is required;
- only identifies the positive, and therefore does not point out any weaknesses, does not help students to improve future assessed work:

I'd spent all that time writing the essay and I've got two sentences saying good structure, good argument, it doesn't go into much depth, they could have written a little bit more. It feels like he couldn't be a***d to write anything.

(Project 4, student)

The role of assessment and feedback in contributing to student engagement, belonging, retention and successful could usefully be researched further.

Learning and teaching case studies of effective practice

Engineering teams, School of Mechanical and Systems Engineering (MSE), Newcastle University

The intervention

In the academic year 2009-10 the School of Mechanical and Systems Engineering introduced a model of team working into the core curriculum for Level 1 students. The students were split into teams of five on the first day of Semester 1. Each team consisted of students with a range of previous academic performances; as far as possible, ex-foundation year and overseas students were distributed throughout the teams; and female students were in a team that contained another female. In preparation for working as Engineering teams, all students took part in a team-building exercise during Induction Week aimed at encouraging team participation and communication. They were required to build a Lego construction. Only part of the team was allowed to see the model, meaning the team had to focus on communication skills and their ability to follow instructions. A further aim of this activity was the fostering of trust between team members. A tutor was allocated to each team with the expectation to meet on an approximately fortnightly basis. The teams were encouraged to sit together during lectures and to work together on any exercises given by the lecturer. Formal project work, assigned within two Stage 1 modules, was to be completed as a team and students were encouraged to be independent in scheduling meetings and allocating the necessary work between team members. Formally, this was for the two modules mentioned above, but there was nothing to stop the students meeting in relation to other modules.

The impact on retention and progression

In the first hour ... you were sat in the introductory lecture thinking 'I don't know anyone', 'how am I going to make friends?' and they said 'we are going to put you in these teams' and instantly there was ... straight away there was like 10 or 11 other people you knew straight away.

(Project 7, student)

An online questionnaire survey showed that in both 2009-10 and 2010-11 the majority of students either 'very much' or 'somewhat' enjoyed working as part of an Engineering team (between 84%, n=57 and 92%, n=95). The majority of respondents in both 2009-10 and 2010-11 agreed that being part of an Engineering team had helped them to feel that they 'belong' in the School (72%, n=49 and 83%, n=85).

The survey and focus group data suggest that students largely enjoyed working in teams. They also made friends, gained academic support and felt more integrated into the institution. While some experienced frustrations, students' overall evaluation of teams is very positive.

In 2009-10 MSE saw 94% (n=100) of students remain on the same programme the following year. This was the highest percentage (and number) of students remaining on the same programme in the subsequent year for the five academic years for which data were available, and 9.3 percentage points

higher than the previous year. The causal impact of Engineering teams cannot be proven due to cohort diversity and other changes that may have taken place.

Problem-based learning in groups, Department of Psychology, University of Sunderland

The intervention

Problem-based learning is now fully incorporated from Level 1 of the Psychology degree programme, after being introduced seven years ago at Masters level initially. The aim of the intervention is to impose structures that encourage early group formation and thus to facilitate academic interaction while also helping students to form social bonds. A specific module has been designed for the first degree programme to ensure students maximise the benefit to be gained from problem-based learning. This requires students to work in groups of eight. They work collaboratively on problems and scenarios, receiving guidance and facilitation from academic staff only when necessary. This guidance can include discussing individual contributions to the task for assessment purposes, and in the early stages is more about coaching students through the process.

The impact on retention and success

The evaluation indicates that students saw the problem-based learning activities as a structured way to meet people and to begin working together on academic projects:

I made [friends] through my seminars, really. I got four really good friends, and I've just clicked with them straight away, and then we sit together in lectures and stuff. And now I'm working on this project with them and we've been meeting up outside of Uni and stuff.

(Project 7, student)

Although it cannot be proved that the introduction of problem-based learning had a direct causal impact on increased rates of progression, evidence from evaluation suggests that integration-focused activities are an important contributory factor. In summary:

- progression of Psychology students from Level 1 to Level 2 increased from 77% (n=79) in 2007-08 to 82% (n=116) in 2008-09 to 85% (n=74) in 2009-10;
- the benefits of integration-focused activities such as problem-based learning studio appear to have been particularly clear for students from Sunderland (who showed improved progression rates in 2008-09 and 2009-10). However, cohort size for Sunderland students was small so differences in progression rates cannot definitely be assumed to be representative.

Field trip during induction week, Department of Tourism, Hospitality and Events, University of Sunderland

The intervention

The Tourism, Hospitality and Events Management programme organises field trips in students' first year of study. These range from joint fact-finding expeditions around the local area to trips to major cities including London, Paris, Barcelona, Prague and New York. Most of the field trips are not compulsory because of the financial commitment required. Despite this, many students take part. Students who might miss out for financial reasons can apply for a grant from the Access Learning Fund. This is widely advertised as a potential means of support to take part in the Tourism trips and is widely utilised by the students.

However, local trips that occur during the induction period are a compulsory activity. These include field trips around Sunderland and to Whitby, which aim to integrate the academic and social spheres and to offer a structured opportunity for both learning and building social relations. The trips encourage students to develop a sense of belonging to their cohort and also help them to become familiar with their environment.

The impact on retention and success

Student feedback on the field trips shows that they could see the benefits of such activities, particularly in retrospect:

After the trip everyone seems more friendly. I feel more part of the group than before which makes my course easier because I can ask anyone in my course if I've got any difficulties.

(Project 7, student)

I met people during the day yeah. We did a little run around the city, getting into different things. I thought it was a bit tedious, but now when I actually look back it was just getting people to familiarise themselves with the city which was quite clever.

(Project 7, student)

The percentage of Tourism students retained from Level 1 to Level 2 remained relatively constant over the three years of this research (ranging between 82%, n=18 and 86%, n=18). This is perhaps unsurprising as field trips were an integration-focused activity established before the What Works? programme, not a new initiative. Interestingly, the percentage of students retained to Level 2 remained constant in 2009-10, although this year had twice as many students registered as in 2007-08 and 2008-09. This may suggest that activities such as field trips are successful in supporting retention even in larger cohorts.

Academic development and support

The transition to learning in higher education is challenging for the majority of students. Students benefit from being supported to develop their confidence and skills to be effective learners in higher education. Personal tutors were found to be a popular and effective way of providing academic development and support to students, and they offer other benefits too.

Two projects demonstrated that developing academic confidence facilitates student retention and success (Projects 5 and 6). A survey of leavers (Project 3) found that 43% felt that not being given 'helpful academic support by my department' was at least of some influence in their decision to leave (a major influence for 16%), and 25% of respondents regarded the fact that they did not know 'where to go to seek academic help or advice' was of some influence (a major influence for 6%). The findings suggest that some students (at least about 1 in 6 or 7 students) at some stage seek either academic or personal support from their department and, for whatever reason, do not receive this, and this may contribute to early withdrawal.

The What Works? evidence suggests the following effective approaches to providing academic development and support:

- a) students prefer to receive their academic development and support within their academic department (Project 3);
- b) sharing concerns allows students to realise that many of their worries about studying are normal and/or shared by others (Projects 2 and 6);
- c) investing time to enable students to understand academic development, to reflect on their learning and to undertake follow-up work (Project 4);
- d) personal tutors emerged as a popular and effective way of receiving academic development and support. In an institutional survey on sources of support personal tutors scored most highly as the preferred source of help and advice for study concerns (60%, n=335) (Project 1);
- e) peer mentoring can also provide students with access to useful academic development and support, especially as a mentor can appear more accessible to students than members of staff (Project 2).

Personal tutoring

Personal tutoring emerged as an important strategy to nurture belonging through relationships with staff, and it offers academic development and support. Effective personal tutoring is proactive, integrated, structured and nurtures relationships.

Personal tutors fulfil a number of roles (which may vary between institutions). The What Works? evidence together with the literature suggests that personal tutors can fulfil the following roles:

- a) first point of contact: being available for students very early when they arrive at their institution, and offering first point of contact throughout the year (Thomas *et al.*, 2010);
- b) academic support: discussing academic problems, helping with assignments and discussing feedback (Projects 1 and 3);

- c) academic development: supporting students to develop study skills (Projects 1 and 6);
- d) pastoral support: providing support with personal issues or signposting students on to further support (Projects 3 and 6);
- e) identifying another individual or service to provide appropriate information advice and guidance (Projects 1 and 6);
- f) identifying students at risk and/or working with students at risk (Project 6);
- g) providing support and access to information, advice and guidance for students who are thinking about leaving (Projects 1 and 3);
- h) integrating students into the wider university experience (Project 3).

Personal tutors were found to be a popular source of help for a range of problems, particularly of an academic nature (Project 1):

- a) study concerns, 60% (n=335);
- b) academic advice, 51.3% (n=286).

The support that I am receiving is what I would like: readily available to discuss both academic and personal issues.

(Project 1, student)

My tutor is available for any kind of support or advice and if he is unable to help; he either finds the information out or informs me of the relevant person to contact.

(Project 1, student)

More specifically, the What Works? evidence has shown that personal tutors can improve student retention and success in the following ways:

- a) enabling students to develop a relationship with an academic member of staff in their discipline or programme area, and feeling more 'connected';
- b) helping staff get to know students;
- c) providing students with reassurance, guidance and feedback about their academic studies in particular.

At one university (Project 6) 65% (n=111) of a survey sample found their personal tutoring encouraging and 58% (n=99) have received useful advice. At a second university (Project 1) students who had thought about leaving were less likely to think that their personal tutor was easily available and also were less likely to say that their personal tutor was easily approachable. There was no significant relationship, however, between the availability of personal tutors and thinking about leaving.

Drawing on evidence from Project 6 in particular, effective personal tutoring can be understood to have the following characteristics (Project 6):

a) proactive rather than relying on students finding and accessing tutors:

We were allocated a personal tutor in the first week and they emailed us and arranged a meeting ... he basically said it was there to check up, to make sure that everyone's doing okay ... Yeah I think that was really good.

(Project 6, student);

- b) early meetings with students (Thomas et al., 2010);
- c) students have a relationship with the tutor and the tutor gets to know the students:

I feel disappointed that I don't have a relationship with her [personal tutor] and if I had a problem I'd sort it out with family and friends. I'm disappointed about this because I'd like to have a more friendly informal relationship with staff in my department. (Project 6, student);

- d) structured support with an explicit purpose;
- e) embedded into the academic experience and based at school or faculty level;
- f) strong academic focus;
- g) identifying students at risk and providing support and development (Thomas *et al.*, 2010);
- h) linked to student services, students' union and peer mentoring or similar peer scheme to provide pastoral and social support and referring students for further support where appropriate.

Academic development and support case studies of effective practice

PASS: Personal and Academic Support System: proactive support for students, Department of Biological and Medical Sciences, Oxford Brookes University

The intervention

The PASS programme of group tutorials with personal tutors, developed in Life Sciences at Oxford Brookes University, teaches academic skills and builds good working relationships between staff and students. PASS tutorials are designed to bring academic staff and students together in a non-threatening environment so that working relationships develop naturally. Meetings between tutors and tutees take place every two to three weeks throughout the first year and this builds a sense of belonging for the students. They identify with their discipline through their tutor and build cohort identity with their peers, working together and supporting one another. PASS tutorials provide a small group (eight students) environment that promotes discussion and learning in a more informal context.

PASS tutorials are situated within a taught skills module that is compulsory for all students. There is assessed coursework set through PASS tutorials that contributes 30% of the module assessment. The tutorial programme covers academic skills including time/task management, referencing and academic standards (including University regulations on cheating), researching and writing an academic essay in science, recording practical work in a laboratory notebook, writing scientific reports, group-working skills, understanding feedback and using it to improve future work, preparing for examinations. There is a pocket-sized textbook and an in-house handbook that the students use for reference.

PASS tutorials develop good working relationships between staff and students that persist throughout the students' time at the University. Since they know a member of staff and are known by them, they feel more able to approach their personal tutor if they are experiencing problems with their studies or in their personal lives. For more specialised support with personal issues, personal tutors can refer their tutees, or students can self-refer, to a named academic with counselling-style listening skills who can help the student work out a way forward through their difficulties. Where appropriate, students are referred on to specialist help provided by professionals such as counsellors in Student Services. The academic member of staff keeps in touch with these students while they are having counselling, helping them to catch up academically as they address their personal issues with specialists.

The impact on retention and progression

Evaluations show that student satisfaction with staff support has improved and student retention from first to second year has risen:

PASS tutorials help...with the course... with scientific writing, note-taking, referencing, making module choices. (Project 6, student)

PASS Tutorials have contributed to improved student progression and retention statistics that have risen from 83% in 2004-05 to 92% in 2007-08, an improvement that has been sustained to date. This has been attributed to integrated and holistic student support through PASS and the tutorial system is key to this.

Staff tutorial delivery has risen from 62% of expected tutorials in 2005-06 (number of tutorials multiplied by number of staff) to 96% in 2009-10. Student participation began at 42% of possible attendances (number of tutorials multiplied by number of students) and has levelled out at 67%. This means that many students are not attending all their tutorials, not that a third of students are non-attenders.

Writing mentors, Aston University, Liverpool Hope University and London Metropolitan University

The intervention

Each of these universities employed a small number (between eight and ten) of student writing peer mentors within a Writing Centre. Drawn from the wider student body, the writing peer mentors were carefully selected and given appropriate training. Managed by a permanent member of staff, each peer writing mentor worked for between six and eight hours per week.

Writing peer mentoring represents a synthesis of peer tutoring and peer mentoring in that it is not discipline specific and is not offered in the classroom; it is, however, a type of peer learning and support that focuses on generic academic skills and is open to all students. The overall aim of writing peer mentoring is to provide an accessible, high quality service for students seeking advice about developing their own writing skills. Writing mentoring offers mentees the opportunity to engage in a supportive dialogue through which the mentee can discuss and enhance their academic writing skills. Sessions with mentors focus on attitudes and approaches to writing as well as writing style, format and other writing and study skills (from planning and organising writing, to writing in an analytical and critical manner). The emphasis is on employing students to help other students become independent learners by providing bespoke writing advice, which avoids a remedial deficit-model approach to academic writing support.

The impact on retention and progression

Student feedback suggests that students value the opportunity to receive academically focused support from peers:

It's just different when it's a student, because when you're talking to the lecturers you don't want to show that you're not confident doing something, or you don't open up as much. You don't feel like they can empathise because they're not a student themselves. It's better talking to other students.

(Project 2, student)

Qualitative research with both peer mentors and mentees reveals that peer mentoring fulfils a variety of functions for students hoping to improve their writing skills. These include:

- providing reassurance that students are 'on the right track';
- increasing marks;
- helping to improve structure;
- helping with referencing;
- providing 'last minute' advice and support;
- providing support to students for whom English is a second language.

While the main value of writing peer mentoring is writing support, the 'added' value of the writing peer mentoring is that by providing formal peer support outside the classroom an environment is created in which students feel able to discuss more than writing problems – they also feel able to talk about wider issues and concerns. This pastoral support may be offered on a one-off basis to mentees using the service, or on a longer-term basis when peer mentors and mentees develop friendships.

Evidence suggests that higher education institutions that adopt some form of peer mentoring experience lower attrition rates than the national average of 8.1%. Aston University, for example, has an attrition rate of just 3.9%. Although this cannot be directly or exclusively attributed to peer mentoring schemes, it is thought that such schemes are a factor in explaining these reduced rates.

Friendship and peer support

Friends and peer relations can have a range of positive impacts on student experience, but this is only recognised by some students and staff. Some groups find it harder to make friends. Facilitating social integration in the academic sphere is particularly important as it develops cohort identify and belonging to the programme; some students do not have opportunities to develop friendships in other spheres. Academic staff can promote social integration through induction activities, collaborative learning and teaching, field trips, opt-out peer mentoring and staff-organised social events.

As noted above, survey research conducted by Project 2 found that the significant majority of students were worried about making friends when they started at university (just under 75%, n=281), while the majority (70%, n=262) were confident they had the ability to succeed in their chosen area of study.

Project 5 found that 'support from family and friends' was the most often cited reason why students who had thought about leaving had decided to remain in HE (34-55% of students thinking of leaving, N=444). Project 1 also found that students valued friendships with each other, and these could help them to remain in HE, in line with other UK research in HEIs showing that friendship and peer support are critical to many students' decisions to stay in higher education (Thomas, 2002; Wilcox *et al.*, 2005). For example:

I enjoy university a lot more as I have a lot of close friends; I think I would have considered leaving more often if I did not make friends. (Project 1, student)

It has made staying at university much better. The social aspect of university is just as important as the education; you learn so much in both.

(Project 1, student)

It has made me feel supported; as I know I am not alone in my thoughts and stresses.

(Project 1, student)

... make friends, it's not what I came here to do and didn't really want to, but it was kind of part of the [weekly] work ... I kind of had to ... and, I wouldn't be here if I hadn't.

(Project 7, student)

Friendship groups have a positive influence on the student experience and students' sense of belonging. Indeed, two studies (Projects 1 and 5) found that students with more friends and better social integration are less likely to think about leaving HE. Conversely, students who found it harder to make friends had a more negative student experience, and students who think about leaving feel less like they fit into and belong in their academic programme (Projects 1 and 5).

For example:

I came to meet new people and have made very few new friends. It makes me feel more isolated ... I like being around people so I have found this isolation difficult.

(Project 1, student)

As a normally sociable individual; it has made being at Uni feel like more of a task than an enjoyable experience.

(Project 1, student)

Friends are one of the most important reasons students who are thinking about withdrawing decide to stay in HE (Project 5). Social integration appears a very powerful factor in helping students to remain (Projects 1, 3, 5 and 7). Furthermore, it also underpins 'developing a sense of belonging' and 'engagement with the curriculum', which were both found to contribute positively to improving retention and success (Projects 1, 5 and 7).

More specifically, the What Works? evidence shows that friendships and peer relations have the following benefits, that contribute to helping student to remain and be successful in HE:

- a) promote academic integration and belonging (Projects 2, 5 and 7);
- b) develop students' confidence as learners in HE (Projects 2 and 5);
- c) improve students' motivation to study and succeed (Project 4);
- d) offer a source of academic help and enable students to cope with their academic study (Projects 2, 3, 4, 5 and 7):

... me and a couple of the lads work really well together, even if we are doing the same assignment we all read each other's work and it's not to copy but to see how other people have structured it and you get the idea if yours is completely different you think well what have I done wrong.

(Project 4, student);

e) share tacit knowledge, such as module choice and how to prepare for assessments (Project 2):

The peer guides talked to us about the modules, helping us decide ... they were like, "Well do you want exams or do you want like assignments to do?" And if we said that, "Well like I'll do this one because ..." they helped us choose. And also they told us which lecturers are nice and stuff like that.

(Project 2, first-year UK student, male, mentee);

- f) provide emotional support (Projects 2 and 4);
- g) offer practical support (Project 2);
- h) allow students to compare themselves against others and gain reassurance (Projects 5 and 7).

In general students do not fully recognise the value of friends and social integration to their retention and success (Projects 5 and 7):

I think because I'm older I put my work, my house and things like that first, so I didn't really have time to do that type of thing [socialising] and it wasn't really why I came to university so I wasn't really too bothered.

(Project 7, student)

In one institutional survey (Project 5) students rated the importance of the factor 'My fellow students are supportive' lowly. Only 68% of all students thought that this factor was important placing it 13th of 17 student experience factors; however, 70% felt that they had experienced supportive peers (N=656). However, students who had thought about leaving were more likely to cite lack of social opportunities as a factor that led them to consider leaving (Project 5).

Two studies (Project 1 and 3) found that when students are thinking about leaving they often contact family and friends; this does raise the question of how institutions can prepare and support family and friends to provide appropriate information and to direct students to institutional services for specialist support. Data from one survey (Project 3) show the following groups are consulted by students when they are thinking about leaving:

- family 49% (n=55);
- friends 44% (n=50);
- other academic staff 30% (n=34);
- central support services 23% (n=26);
- department administrator/secretary 19% (n=21).

More specifically, one study (Project 1) found that family and friends were the most popular source of support for the following issues:

- a) disappointment with expectations 49.6% (n=277);
- b) financial concerns 57.9% (n=323);
- c) feeling low -81.4% (n=454);
- d) homesickness 65.9% (n=368);
- e) personal issues 76.2% (n=425);
- f) health concerns 70.4% (n=393).

Drawing on the What Works? evidence, it was found that students make friends through (see also Wilcox et al., 2005):

- a) course (Projects 3, 5 and 7);
- b) accommodation (Projects 4 and 5);
- c) clubs and societies (Projects 3 and 5);
- d) peer mentoring/learning (Projects 2 and 5).

Evidence from two What Works? projects suggested that the following groups of students find it harder to make friends:

a) students with family commitments (Projects 1 and 7);

- b) students who live at home and commute to participate in HE (Projects 1, 3 and 7);
- c) mature students (Projects 1 and 7);
- d) Nursing students (Project 1);
- e) part-time students (Projects 1 and 7);
- f) international students (Project 4).

The first five of these groups probably find it more difficult to make friends because they are not based in university or college accommodation, or living with other students, instead they are commuting to study. In addition they are likely to be juggling academic with family, work and other professional commitments (such as placements in the case of Nursing students). This is why efforts to integrate social engagement into the academic sphere are so important.

For many new students, the sheer size of university compared to school or college is difficult to cope with, and several described feeling anonymous (Project 2). The 'personal' nature of peer mentoring meant that they felt far more comfortable approaching their peer mentor for advice than they did their lecturers or tutors.

Two projects (3 and 7) identified the importance of social spaces for students to meet and spend time with each other; these were particularly valued by students who live at home. Project 3 found that virtual social spaces could also fulfil a useful function in facilitating students to get to know each other, again especially for students who do not live in student accommodations. Those students who participate in clubs and societies have an increased sense of belonging (Project 3), but many home-based students are not able to (Bozik, 2007; Bean and Metzner, 1985; Cabrera et al., 1992; Yorke and Longden, 2008; Quinn et al., 2005). When social opportunities are organised by departments, either as part of the curriculum, or adjacent to it, they are more likely to be participated in by students who live at home, and can improve their integration and belonging (Projects 3 and 7).

School, department or programme social integration

One institutional survey (Project 5) found that more students reported that they had made friends through their course (87%, n=863) than accommodation (74%, n=734) and clubs and societies (36%, n=357). Indeed, there is growing consensus that the focus of efforts to improve retention and success should be on the classroom (Kuh and Vesper, 1997; Tinto, 1993, 1997, 2000). Tinto sees the classroom as crucial to facilitating social interaction with staff and peers, and these extend into the social sphere:

If I hadn't been in a team I probably would have come to lectures and gone off again ... I would kind of feel like I have only come here for the education stuff but when you get to know a few people and you have group work together then you kind of ... just mix in ... you feel like the project is worthwhile doing because you work with people and feel more like you are in the School.

(Project 7, student)

Project 3 found that the department to which a student belongs has a huge influence on the attitudes and expectations of its students and, crucially, on their overall sense of belonging. An examination of the qualitative responses in the National Student Satisfaction (NSS) survey indicates that students in higher scoring departments emphasise and value 'community feel', small group teaching and the approachability of staff. Feeling included in one's department has a statistically significant relationship with overall sense of belonging. This suggests that many of the interventions designed to enhance the experience of students at the university, and by implication to increase their sense of belonging, need to be rooted at this level in order to have the greatest impact.

One study (Project 7) with a particular focus on students living at home and commuting to the university found that students placed an emphasis on the importance of the *academic experience* of university over the *social experience* of university. Local students were less likely to engage in activities aimed at developing social bonds unless it was a requirement of their course. UK and US research finds that local students are often less engaged socially than peers living on a university campus (UK: Quinn *et al.*, 2005; Yorke and Longden, 2008; US: Bean and Metzner, 1985; Bozik, 2007; Cabrera *et al.*, 1992). Both full-time mature and part-time students intimated that the social is often not a driving force behind either their decision to study or in their daily interactions with other students (Project 7). Participants regularly said that they 'didn't come to university to make friends', that they 'don't need new friends', and that they 'already have an active social life'.

Staff can play an important role in encouraging and facilitating the creation of positive peer relationships and creating a cohort identity or sense of belonging (Projects 3, 5 and 7). By integrating social elements into the academic programme students from various backgrounds and especially those with ongoing caring and/or work responsibilities find themselves able not only to justify their attendance, but with more opportunities to build social relations. Relationships fostered through teaching and academically oriented activities often lead to students socialising away from the classroom (Projects 3 and 7).

The What Works? studies identified a number of methods by which staff could nurture cohort identity and belonging:

- a) ice breakers and team building activities in class (Projects 4 and 7);
- b) assessed and non-assessed group work in the class and outside of formal teaching time (Projects 3, 4 and 7):

We had to do presentations in pairs and other kinds of activities ... I managed to make many friends and because we went out one or two times [it brought us] closer together. So it really helps.

(Project 3, first-year Biological Sciences student interviewee);

c) field trips, residential activities and course-related events (Projects 3, 4 and 7):

There was a Literary Leicester thing a couple of weeks ago and [the professor] gave a talk. The English Society all got together in the Scholar and asked [him] to come and have a drink with us. He came along after his talk to talk to us about what his opinions were on various things, and we could ask him questions. That was really nice because it was good for tutors to treat students as colleagues and not just as though it's a superior/inferior relationship. We're not little kids anymore and I feel that's really good.

(Project 3, third-year English student interviewee);

- d) pre-entry and induction activities (Projects 5 and 7);
- e) a space within the academic milieu where students spend time together (Projects 3 and 7);
- f) staff-organised social activities (Project 3):

They had a little social gathering after the first day so we all got to meet each other and the lecturers in a less formal setting, which was really nice. I think it's a format that works. It was great as there were 70 of us on the course so it was still quite a big course but I think that it really helped and everyone could be themselves. It was just relaxed and a good environment.

(Project 3, AccessAbility Centre interviewee);

g) peer mentoring (Project 2):

... in the first few weeks you don't have friends on your course. Your mentor is someone to talk with, you feel relaxed actually. You can share with someone. It's not only mentoring. It's friendship. (Project 2, first-year UK student, male, mentee).

For example, Project 7 found that field trips were viewed as providing excellent opportunities for students to develop friendships with their peers and with academic staff. Students were subsequently more comfortable approaching academic staff in more formal settings. Care, however, has to be taken to ensure that all students are facilitated to participate. This will include looking at practical arrangements and cost implications. Hybrid versions such as a series of day trips or local activities may have many of the benefits of field trips without the potentially negative consequences of some students not being able to participate, and thus being alienated rather than integrated.

University-wide 'opt-out' programmes (Project 2) in which peer mentoring is offered to all new students, are particularly successful because in capturing the whole population of new starters peer mentoring is not viewed by students as a 'deficit model of provision', but is instead seen and accepted as part of the university culture.

Accommodation

A significant number of students make friends by living in university accommodation (Projects 4 and 5), and the social advantages of living in halls of residence are recognised by students in at least two studies (Projects 4 and 7). Conversely, students not living in halls felt disadvantaged (Project 7). Yorke and Longden (2008) also note the importance of accommodation and living arrangements for the social integration and success of students:

... in halls there were a few people in my block who were on the same course as me so it was nice ... We used to go to the library together and chat there so I suppose that was quite helpful. I probably would have felt isolated if there wasn't anyone in my block that was doing my course.

(Project 4, student)

... a lot of the people in our class aren't from here. When they were going on nights out they were going out together because they all lived in Halls. They had already made friends.

(Project 7, student)

Mature and part-time students are unlikely to live in student accommodation, and so experience a potential disadvantage in relation to meeting and socialising with other students. This issue is likely to become of increasing significance if more students choose to study at local universities and colleges and live in the family home as a consequence of the increased tuition fees. This is why it is so crucial that social engagement is embedded into the academic sphere through learning and teaching approaches, as discussed above.

Clubs, societies and social events

Students in two studies (Projects 4 and 7) identified the value of social events that forced them to mix with others. Two studies (Projects 3 and 5) found that clubs and societies were an important way for some students to make friends, but there was very little consensus about what additional social activities the universities should be offering (Project 5). Students involved in clubs and societies were more likely to exhibit a high sense of belonging to the university (Project 3). Some students would have welcomed more social activities being organised by academic members of staff: "it'd be nice to do something, a dinner or dance or something ... not formal, or anything like that ... just something we kind of turn up to, kind of arranged" (Project 7). Where the university had taken the initiative to set up social networking groups they were very well received by the students:

It's good to know the University can adapt and use something like Facebook.

(Project 3, first-year English student interviewee)

Participation in clubs, societies and social events will be limited for some students due to their personal circumstances (especially for students who do not live near the university or college, or who have other commitments, such as employment and family responsibilities):

The only thing the English department organised was a trip to see King Lear this year, which a lot of people couldn't do. The timing of it was when we had loads of essays due; we had one due the following day so it was 'No, it's just not possible!'

(Project 3, first-year English student interviewee)

Again, this points to the need for social activities to be integrated into the academic sphere or aligned with the curriculum, to help students based away from the institution to recognise the contribution of these activities to academic and professional development, rather than just being socially oriented:

One of the things that we want to see in the fundraising activities, because most of the students aren't spending enough time at the University, they were coming in and going out and we want to encourage more social integration and more of a sense of community.

(Project 7, staff member)

They really do try and get you to do it. They do lots to get people involved. The lecturer who runs it stops you and questions us on why you're not doing it.

(Project 7, student)

Peer mentoring

Project 2 is an in-depth analysis of peer mentoring. In the short term, peer mentoring provides a semi-formal structure to enable students to make the transition to HE, make friends and take advantage of what is on offer academically, socially and from professional services. Just under 75% (n=281) of the students surveyed agreed that becoming involved in peer mentoring had helped them feel part of the university. In the longer term, reciprocal relationships are developed that have benefits to both mentors and mentees:

I think it helps more people to stay in university and not drop out because they don't feel as lonely when they first arrive ... They've always got someone to text or to talk to.

(Project 2, first-year UK student, female, mentee)

Friendship and peer support case studies of effective practice

Students supporting students, University of Sheffield

The intervention

Sheffield Mentors is regarded as one of the largest peer mentoring schemes in the country and holds the Approved Provider Standard from the Mentoring & Befriending Foundation – the UK's national mentoring organisation. The scheme's aims are to support the transition of students entering the University, reduce the likelihood of withdrawal in the first semester, enhance students' sense of belonging and community and contribute to an enhanced overall package of student support in the University.

Mentors help their mentees with a variety of issues ranging from managing time and workloads, being responsible for finances and learning to adapt to shared living/living away from home for the first time. Mentors receive ongoing training and development opportunities and many use the experience as part of their Sheffield Graduate Award (a prestigious award recognising the value of extra-curricular activities and supported by many top employers).

The scheme is managed centrally by the Student Services Department with a co-ordinator nominated in each department to support recruitment, vetting of mentors and awareness of the scheme. It is a university-wide project and operates in over 40 academic departments. It is available to all incoming undergraduate students within those departments and all mature students entering the University in any department. It is also now available for all care leavers and students who have been involved in the University's COMPACT scheme (an outreach scheme for local students).

Sheffield Mentors uses an online electronic hub resource to manage the whole process of the scheme, from application to selection. Both incoming students wishing to access a mentor and those students wishing to become a mentor apply via the hub. Upon application, mentees are matched to a mentor and the system automatically generates an email with relevant instructions to each party once a match has been made.

The impact on retention and success

In the 2011-12 academic year, 681 new undergraduate students applied for one of the 492 mentors.

A 2012 feedback survey of mentees and mentors provided the following information on the scheme:

- the majority of mentees would recommend having a student mentor to other new students and 605 of the mentees are likely to apply to become mentors themselves;
- at the time of writing 90% of those that had completed the survey had enjoyed their role as a mentor and 93% felt confident in their roles;
- 92% of those completing the survey felt they had made a positive contribution to their mentees start at the University;
- 84% of respondents claimed they wanted to become a mentor as they wanted to help another student.

The Sandbox Studio: a course-specific social space, Department of Psychology, University of Sunderland

The intervention

The Sandbox Studio integrates social interactions with an academically focused environment. It is a dedicated space within the Psychology Department where Psychology students are encouraged to spend time both socialising and exploring psychological concepts together. It was designed on the initiative of a Principal Lecturer in the Department and has a rationale of focusing students' attention on the campus, encouraging them to use time between structured sessions effectively. It is equipped with sofas and cushions, a whiteboard, a DVD player, films, novels, design and architecture magazines, video games and an Xbox plus other psychology-related materials.

The aim of providing this space is "to give students a space where they can explore psychology and work together and get more involved – to see the links between psychology and the real world" (Principal Lecturer, Psychology). Students were involved academically in the use of the space, via a module modelling how the room could be used, and this instigated a sense of purpose to the space that highlighted both academic and social elements and allowed students the opportunity to develop these further.

The impact on retention and progression

Feedback from students indicates that they value the Sandbox for providing a social space within the University:

... the Sandbox is really good for interaction and it does feel really homely rather than a place of study, which I think you do need rather than just some set place where you have to go and you feel as if you have to study.

(Project 7, student)

Although it cannot be proved that the introduction of the Sandbox Studio had a direct causal impact on increased rates of progression evidence from evaluation suggests that integration-focused activities are an important contributory factor. In summary:

- following the introduction of the Sandbox Studio (and ongoing problem-based learning activities) in 2008-09, progression of Psychology students from Level 1 to Level 2 increased from 77% (n=79) in 2007-08 to 82% (n=116) in 2008-09 to 85% (n=74) in 2009-10;
- the benefits of integration-focused activities such as the Sandbox Studio appear to have been particularly clear for students from Sunderland (who showed improved progression rates in 2008-09 and 2009-10). However, cohort size for Sunderland students was small so differences in progression rates cannot definitely be assumed to be representative.

Curriculum-related fundraising activities, BA (Hons) Childhood Studies, Faculty of Education and Society, University of Sunderland

The intervention

A number of charitable fundraising activities have been developed within the Childhood Studies degree programme since 2008-9, which have had a significant impact on cohort sense of identity. This was the overall aim of the addition to the student experience. The objectives were not only to raise funds for children's charities as relevant to the degree programme, but also to provide an environment that encourages the formation of strong peer bonds through collaboration and engagement in enjoyable activities. There is a strong emphasis on enhancing the student experience through promoting a climate that prioritises both fun and learning. This has resulted in the range of activities increasing and being organised by students rather than by the principle academic who developed the initiative, as was the case for the first years of this intervention.

Fundraising events were small in 2008-09, with students working in groups on a rota basis to hold weekly cake sales in class and donating proceeds to Barnado's and The Children's Society at the end of the year. This developed into activities outside of class time, such as sponsored walks, a 'spooky sleepover' at the Castle Keep in Newcastle, a zumba dance event, a skiathon, and a mini-Olympics in June 2011, which involved up to 200 students from all years of the Childhood Studies programme. The type of activities are deliberately chosen to allow as many students as possible to participate, given that the programme includes a large number of mature students with children, so the sponsored walk, for example, enabled parents to bring their children along so these students weren't excluded.

While this clearly provides a sense of continuity for students by linking the wider community with the process of academic and social involvement within the institution, it also serves to engage students through the input of academic staff. Information is provided to students about the events by email and during lectures and there is evidence that staff members put significant effort into encouraging students to attend.

The impact on retention and success

Student feedback suggests that fundraising activities have helped students to forge improved relationships with both staff and fellow students, and that they see the activities as course-related:

Sense of belonging has been increased and you can develop a better relationship with teachers as well as other students. It also shows that we generally care about children and that is why we do the Childhood Studies course.

(Project 7, student)

Qualitative evidence from the Childhood Studies Programme Leader shows how academic staff notice benefits to students involved in these activities, for their sense of identity, spending more time on campus studying, developing a sense of community, working with students at different stages of the programme, and improving attainment levels. Interviews and focus groups with students involved in these activities also provides evidence that the initiative has proved popular and has had an impact on their sense of belonging.

After the introduction of the fundraising activities, the proportion of Childhood Studies students retained to Level 2 increased (from 85%, n=84 in 2007-08 to 91%, n=107 in 2008-09 and 93%, n=112 in 2009-10). Although this increased retention cannot be directly or exclusively attributed to the introduction of fundraising activities, it seems likely that integration-focused activities have contributed to the improvements.

Professional services

The majority of students who think about leaving do not make use of institutional support and professional services, but rather they seek advice from friends and family, at least initially. Knowing professional services exist is reassuring, but many do not know what is available. Professional services are used more when they are easily accessible, build relationships with students, and take a holistic approach or signpost people to appropriate additional support. There is some evidence that those situated in the academic sphere are used the most. Professional services could consider how they can provide information to friends and family.

Support and professional services cover the wide range of academic and pastoral services provided by institutions to support students to succeed. Specific services include: library and learning centres, pre-entry information, advice and guidance, financial advice, counsellors, careers information and guidance, chaplains, disability services, writing skills and Maths centres.

One study (Project 1) found that when students experience problems the majority seek support and advice at least initially from friends and family. Another study (Project 5) found that accessing support from professional services was reported by relatively few students who had thought about leaving as a reason to stay. Projects 1 and 5 found that many students do not seek help when they are thinking of leaving. Furthermore, research from the UK and the US finds that students who need help the most are the least likely to seek it out (Baumgart and Johnstone, 1977; Bentley and Allen, 2006; Chickering and Hannah, 1969; Dodgson and Bolan, 2002; Eaton and Bean, 1995).

Three projects suggested that knowing who or where to go for help provides reassurance to students that their institution cares about them, their well-being and their success, and tends to strengthen their relationship with that institution and their sense of belonging (Projects 3, 5 and 6):

They are so supportive here at Leicester; you wouldn't find this back home, the University providing so much support to the students. [At Leicester] you find a person to help with every issue you have; it doesn't matter what it is, there is someone to help you ... I didn't know how good the support was before I came here, I'd heard that it had got some great feedback from its students, but I didn't know about the actual support they would provide so when I came here I was like 'Wow! This is really, really good!'

(Project 3, first-year undergraduate Biological Sciences student interviewee)

Many students, however, do not know what is available, and students who are thinking of leaving seem particularly unaware of professional services that might support them (Project 5). Research with first-year students at one of the universities revealed that many had not met their personal tutor and did not know who to go to if they were having difficulties (Project 6); Project 1 found that almost 18% (n=99) of survey respondents were unaware that they had a personal tutor.

Peer mentoring is an effective way of helping students to gain more knowledge of the services available, as just under 70% (n=262) of students reported that peer mentoring helped them to make use of the support offered by student services (Project 2).

Students in a number of studies that had used professional services were effusive about them (Projects 3, 5 and 6). Writing mentoring (provided by students rather than staff, see case study above) is perceived as non-threatening and provides a safe environment for students to bring up academic and pastoral concerns (Project 2).

Professional services can play a vital role for some students, although they are not used by the majority. The evidence from the What Works? programme suggests that effective professional services have the following characteristics:

- a) students are more likely to engage with the study support and personal development available from the institution if they are easily accessible and students feel there is a reason to engage (Project 6);
- b) there is some evidence that professional services are accessed more when they are situated in the academic sphere (e.g. personal tutors) (Project 1);
- c) holistic models of study advice and personal development are effective in making students feel they are supported towards success, whether these models are delivered across the university or locally in an academic school (Project 6);
- d) effective student support involves good communication between services (Projects 3 and 6).

Students place a strong reliance on friends and family to provide support and advice across a wide range of issues (as discussed above). This suggests that professional services have an important role to play in providing information, advice and guidance for family and friends. While this was not researched as part of the What Works? programme, it would be an important topic for future studies.

Professional services case studies of effective practice

Student advisers, Anglia Ruskin University

The intervention

The student adviser system was first piloted at Anglia Ruskin in 2004 and is now well established across all faculties at the University. The student adviser role complements the more established academic personal tutor role.

The student adviser role at ARU is a graduate-level appointment, but student advisers are not academics and do not contribute to teaching or research. Most vacancies are filled internally, often by senior administrative staff. At least one student adviser is assigned to each faculty, and where a faculty is located on more than one campus it will have a student adviser located at each site. The role is centrally managed to ensure consistency of practice.

The student advisers are available to students for more than 30 hours per week throughout the year including non-term times, and provide mutual cover for each other during periods of absence; any student can see any student adviser. Due to their extensive office hours, as well as their availability for email and telephone consultations, student advisers are more readily accessible to students than are academic members of staff. Student advisers work closely with academic staff, but it is the student adviser who acts as the first point of contact for a range of student queries such as timetabling issues, applications for mitigations, and extensions to submission deadlines. All student enquiries to student advisers are logged, providing an extensive dataset on how the service is used.

The impact on retention and success

There is some evidence (via informal feedback from students and academic staff) that the recent improvement in retention figures for Anglia Ruskin University is linked to the provision of the student adviser service. Retention rates have steadied, and then improved, over the period since the introduction of the student adviser service across all faculties in 2005.

60% (n=335) of all participants in a student survey could name their student adviser and thought that their student adviser was easy to contact. When asked what they would like to see their student adviser for, 60% of the answers were to do with areas that the student adviser role is currently responsible for, such as mitigation and extensions.

PASS Intervention: Mentoring poorly performing first-year students, Department of Biological and Medical Sciences, Oxford Brookes University

The intervention

Each year about 10% (20+) of first-year Bioscience students perform so badly in their first semester assessments that it is anticipated that they will be excluded from the University following the Summer assessments. PASS intervention was designed to investigate why individual students were performing so badly and to put in place measures to address this issue. As first semester results were released, individual letters were sent to students with multiple failed modules requiring them to attend an appointment at the

start of the new semester. The meetings were kept open and positive for the students, since often they were in shock about their poor performance, and this non-threatening approach allowed the student to open up about what was happening in their life.

On the first run of PASS Intervention it became clear that many of these failing students had been facing enormous personal difficulties that they had not disclosed to staff during the semester, such as bereavement, terminal illness of a parent, their own illness, financial difficulties, etc. They had struggled on against this background thinking they could cope. They were offered support for their personal issues and, where appropriate, referred to professional help such as counselling through Student Services. For severe cases there was a hotline to the Director of Student Services who would get students cancellation appointments with a counsellor at short notice, in the knowledge that students were being filtered and only the most vulnerable were being fast-tracked to support. Inevitably there were also students who had underachieved due to distraction and laziness, inability to organise their time and manage their deadlines.

Each failing student was offered mentoring support throughout their second semester, whatever the reason for their underperformance. The student signed up to say that they would attend mentoring meetings every four weeks, giving the students enough time between meetings to take responsibility for their work, but not so much time that if they failed to meet their targets they would be lost. As an academic, the mentor had access to student information, was able to assess students' academic problems and monitor their progress by liaising with colleagues.

The impact on retention and success

One student who graduated with a first class degree stated that had he not been sent the letter at the end of his first semester inviting him in for a meeting, he would not have returned to Oxford Brookes after Christmas in his first year.

Three cohorts' data for PASS Intervention show that the majority of students attended their initial interview and took advantage of the support on offer. Every student who did not respond to the invitation for mentoring support failed their second semester assessments and was excluded from the University.

87.5% of the students (N=56) who were mentored through PASS Intervention were retained the following year; 75.5% of these continued for a second year; 90% for a third year, when some graduated with their original cohort. Others continued for a fourth year to graduation. Of the 56 students mentored, 27 graduated with Honours degrees and three graduated with ordinary degrees. This is a 54% graduation rate for students who were expected to leave the University with no new qualifications.

Student retention in Life Sciences improved from 83% in 2004-05 to 92% by 2007-08 and this improvement has been maintained to date. PASS and PASS Intervention has thus made a significant contribution to better student progression and success.

Student capacity for participation and belonging

Students do not always recognise the value of engagement or have the skills to participate. Developing students' capacity for engaging should include making explicit the value of active participation and interaction with peers and staff, developing skills to participate and mainstreaming opportunities for engagement in the academic sphere to facilitate the engagement of those not living in student accommodation.

As discussed above in relation to friendship and peer support, some students do not recognise the value of engagement, particularly in activities that do not have an overt academic purpose. Other students may prioritise some forms of engagement at the expense of engagement in a more appropriate range of opportunities. It is therefore of value to make the purpose, expectations and benefits of engaging in their learning and participating in additional activities explicit (Projects 4 and 7). This may involve helping students to recognise the value of independent and group study, co-curricular activities and friendships within their programme or discipline of study.

In addition to making the purpose of and expectations about engagement explicit, students also benefit from the development of academic skills to enable them to maximise their success and to help them to engage (Projects 4 and 6). This may involve recognising different types of skills that students have, preferred learning styles and academic skills development. In addition it may include a range of skills associated with communication, negotiation and social engagement to facilitate working collaboratively. Furthermore, the use of social networks and friends should be actively promoted to help students integrate and belong within higher education (Projects 2, 3, 5 and 7).

The What Works? projects have not looked specifically at the issue of student capacity building. Induction is a vehicle used in many institutions to develop students' capacity, at least to some extent (see discussion and examples above about induction). In the US the idea of university experience seminars or courses have taken off as a significant way to develop the capacity of students to make the transition into higher education and be successful there. There is now a large body of evidence that points to the impact of these courses on student retention (Pascarella and Terenzini, 2005. For a specific example see Evenbeck and Ross (2011), who find a 9% improvement in retention for participating compared to non-participating students when background characteristics are controlled for). Project 2 found that peer mentoring works by helping students make the most of the academic and support opportunities available to them:

It is irritating but things in academia are like that – it presents barriers to students. But we can do a simple break down of what it is, and then students are saying to each other – 'if they only told us. If we'd only known!' What was a big secret? What I think my job is about is to just break those things down.

(Project 4, staff member)

If induction is viewed not so much as a time for giving students information, but rather focuses on developing their capacity to engage and belong this could be a useful way to review current induction provision, perhaps focusing on the capacity to develop: supportive peer relations; meaningful interaction with staff; knowledge/skills, confidence and identity as a successful HE

learner; and an HE experience that is relevant to interests and future goals. Such an approach would complement wider work in HEIs and the HE sector as a whole on student engagement. Developing the capacity of students to engage, and the subsequent impact on their retention and success would be a useful area for further study.

Staff capacity for involving students and nurturing a culture of belonging

Staff are crucial to students feeling like they belong. What Works? evidence suggests that staff need recognition, support and development, and reward to encourage and enable them to engage students and nurture their sense of belonging.

Staff are key to enabling students to participate and feel like they belong (Project 7), and to a high quality learning experience (Gibbs, 2010). Project 6 found that the introduction of an intervention designed to improve the student experience can bring with it an implicit criticism of existing practices, which in turn can put staff on the defensive, and disinclined to engage with new initiatives. This suggests that new approaches and interventions should be introduced sensitively, recognising the professionalism of staff and the time involved, providing support and development, and offering reward for their efforts. Clearly staff engagement is a crucial element of student engagement, belonging, retention and success, and one that needs further examination, drawing on the wider learning and teaching literature (such as Gibbs (2010) and D'Andrea and Gosling (2005)).

Recognition

The What Works? projects suggest that introducing new initiatives and approaches requires recognising the professionalism of staff and engaging them in the process. The following tips are offered:

- a) give staff permission and encouragement at levels throughout the institution to innovate and implement new ideas themselves (Project 7);
- b) provide timetabling allowances for additional work that staff undertake (Project 6);
- c) offer a balance between structure and personal choice: a lack of structure can leave staff feeling vulnerable and disincentivised; however, a very rigid structure can lead to disengagement, as staff value owning and contributing to developments (Project 6);
- d) provide access to resources, support and opportunities for further development to enable staff to take on new roles or responsibilities (Project 6).

Support and development

The What Works? projects that considered the staff perspective suggest that staff want to feel supported and enabled to implement change and take a more student-centred approach. The projects suggest that this involves:

a) providing information and resources to staff to support the process (Project
6). This support could be delivered through induction, initial training and ongoing professional development;

- b) facilitating exchange of practice between programme teams, departments, schools and across the institution and its partners (Projects 3 and 7); for example, bringing staff together from non-cognate areas of the university to exchange practice, explore common challenges from different perspectives and disseminate effective ideas and approaches more widely across the institution (Project 3). Often good practice is not recognised by individuals, or it is not shared more widely in the institution;
- c) offering opportunities for training and constructive feedback on progress for staff to develop as professional or 'scholarly' teachers (Boyer, 1990; Brookfield, 1995; Cross and Steadman, 1996; Shulman, 2000), in addition to being experts in their discipline or research area.

Reward

One project found that staff members who operate as personal tutors want to feel valued in the role and rewarded for it (Project 6):

Turning academics into social workers ... you see if you are a social worker you are assessed on how you do your social work. If you are an academic it doesn't matter a hill of beans. That's wrong. If you want people to do this sort of stuff [be a personal tutor or senior tutor] you have to acknowledge it.

(Project 6, staff member)

Similarly, in another study staff felt that teaching and student support was undervalued in relation to research and publication (Project 7). This suggests that institutions should consider pay and promotion structures if they want to fully embrace and embed student engagement and belonging and higher levels of retention and success. This is closely related to wider debates about enhancing the quality of learning and teaching in higher education. A specific example from the What Works? projects is the recognition of personal tutoring as learning and teaching through the allocation of two hours per tutee per annum to staff for their academic advising role (Project 6).

While staff capacity development was not central to the What Works? projects as they were conceived, it has emerged as an area of great significance. This is an area that should be developed in line with wider research on student engagement (Trowler and Trowler, 2010); quality learning and teaching (Gibbs, 2010; D'Andrea and Gosling, 2005) and reward and recognition (Gordon, 2004). This could build on Gibbs's suggestion that we move away from individual recognition and reward towards a focus on departments and programmes (Gibbs, 2010, p. 46).

Using data

A mainstream approach to improving student engagement, belonging, retention and success is more effective if it is underpinned by the use of data. Institutions need to monitor the retention, progression and completion performance of modules, programmes and departments, and specific student groups. Institutions can also monitor student engagement and identify at risk students through attendance, participation in formal and autonomous learning, assessment processes and outcomes and staff feedback. Action must be taken in relation to individual students, particular groups of students

and specific modules, programmes and departments that are at risk or have higher rates of withdrawal than expected. New interventions and approaches should be evaluated to maximise impact.

Institutions need to monitor the retention, progression and completion performance of modules, programmes and departments, and specific student groups to inform their retention strategy and interventions (Project 5; see also NAO (2007)).

Modules, programmes and departments

In developing an institutional approach to improving student retention and success, it is useful to identify modules, programmes and departments with lower rates of retention, progression and completion. Project 5 identified that some modules had higher than expected rates of retention, progression and completion, while others had lower rates than expected. Identifying high and learning performing academic units can take a range of approaches, including comparing rates to the institutional average rates or to cognate subjects within the institution or to national data for specific discipline areas⁹. It may also take an approach based on student characteristics, such as entry grades. The important issue, however, is that the identification of academic units with lower rates of retention, progression and completion must be accompanied by action to improve the situation.

Responsibility for responding to data about poor retention, progression and completion needs to be devolved to staff throughout the institutions¹⁰. Institutional data can be used to identify trends and areas of further investigation, and should be followed up by consultation and/or research with students and staff. Once a problem area has been identified and further explored, interventions or new approaches need to be developed and implemented as a partnership between staff and students (Project 3).

New interventions and approaches should be evaluated to examine their impact, and consider unintended consequences and how the work can be delivered more effectively. All interventions should be evaluated at key points to take stock of their implementation and impact (Project 2).

Learning from new interventions and approaches should be shared across the institution and consideration giving to mainstreaming and embedding more effective ways of engaging students, improving their sense of belonging and maximising their retention and success (Project 7).

Monitoring student engagement

One study (Project 5) found that academic programmes with higher rates of retention than might have been anticipated (based on entry grades), or who overcame retention issues, tended to have strategies for identifying those students more at risk of withdrawing early and implementing support for them¹¹.

Although the projects identified some student groups that are more likely to seriously consider leaving than others, or face particular challenges, the What Works? programme has also found that a significant minority of students

⁹ The Higher Education Academy will publish discipline-level data in Autumn 2012.

¹⁰See, for example, case studies from Glynd r University and Loughborough University in the *Compendium of Effective Practice* Andrews *et al.*, (2012).

¹¹Budig (1991) finds that students with higher attendance had higher performance and were more likely to persist, and Beggs and Smith (2002) note the importance of absence as an indicator of being at risk of withdrawal, and suggest a robust approach to attendance monitoring and intervention.

seriously think about leaving (between 1/3 and 2/5). It is therefore recommended to monitor student behaviour and achievement, rather than using student characteristics to identify 'at risk' students. Not all students with the same characteristics and entry profile leave, while others who are not identified at risk in this way, do leave.

This raises the question of what student behaviours should be monitored. The What Works? projects identified a number of activities that can be easily and usefully monitored:

- a) monitoring and reviewing institutional and programme level data as part of annual quality assurance processes to identify at risk students and plan strategies for improving retention (Project 5);
- b) monitoring student attendance in formal sessions (Projects 4 and 7);
- c) monitoring engagement in other activities, such as library usage, personal tutoring or co-curricular activities (Projects 4, 5 and 7);
- d) monitoring submission of coursework (Project 5):
- e) student performance, especially in early assessments (Project 6);
- f) monitoring students during 'at risk' times, particularly immediately before and after Christmas in the first year (Project 5);
- g) using informal contacts between staff and students to identify 'at risk' students (Project 5).

In light of the fact that students need to engage in different ways and to different degrees, it seems appropriate to use several approaches of monitoring student behaviour and outcomes.

Once students potentially at risk of withdrawing have been identified, they need to be followed up and offered support. Personal tutors appear to be a common way for institutions to respond to students who are identified to be at risk (Thomas *et al.*, 2010). For example:

Each student is assigned a personal tutor who is available to discuss both academic and non-academic issues with their tutees. A decision tree has been developed to identify students, at the earliest possible opportunity, who may be in need of additional support. This risk management based approach may be triggered by events such as poor attendance at College lectures or clinical placements, or poor grades. The personal tutor is the focal point of risk management activities for the student. Activities are aimed at assisting students in continuing their programme of study and at resolving the root cause of problems, such as family crises, financial problems, difficulty in completing academic work or clinical placement issues.

Strategic implications and recommendations

These projects focused primarily at the operational level – evaluating effective interventions and approaches to improving student retention and success. The central finding from this programme of work is not to identify one or two specific interventions that will significantly improve student retention and success, but rather to recognise the importance of nurturing a culture of belonging. Particularly important is engaging students in the academic sphere through student-centred learning and teaching and co-curricular opportunities, which enable all students to maximise their success.

This has a number of strategic implications for institutions:

- The **commitment** to a culture of belonging should be explicit through institutional **leadership** in internal and external discourses and **documentation** such as the strategic plan, website, prospectus and all policies.
- Nurturing belonging and improving retention and success should be a
 priority for all staff as a significant minority of students think about
 leaving, and changes need to be mainstreamed to maximise the success
 of all students.
- 3. **Staff capacity** to nurture a culture of belonging needs to be developed. Staff-related policies need to be developed to ensure:
 - staff **accountability** for retention and success in their areas;
 - recognition of staff professionalism and contributions to improve retention and success in relation to time and expertise;
 - access to support and development resources as necessary;
 - appropriate **reward** for engaging and retaining students in higher education and maximising the success of all students.
- 4. **Student capacity** to engage and belong must be developed early through:
 - clear expectations, purpose and value of engaging and belonging;
 - development of skills to engage;
 - providing opportunities for interaction and engagement that all can participate in.
- 5. High quality **institutional data** should be available and used to identify departments, programmes and modules with higher rates of withdrawal, non-progression and non-completion.
- 6. Systems need to be in place to **monitor student behaviour**, particularly participation and performance, to identify students at risk of withdrawing, rather than relying on entry qualifications or other student entry characteristics. Action must be taken when 'at risk' behaviour is observed.

7. There needs to be **partnership between staff and students** to review data and to understand the students' experiences of belonging, retention and success. Change across the student life cycle and throughout the institution at all levels should be agreed and implemented and the impact evaluated.

Institutional reflective checklist

The following reflective questions are intended to assist institutions to critically review their approach to nurturing a sense of belonging, and enhancing student engagement, retention and success.

- 1. To what extent does the institution actively nurture a culture of belonging to maximise the retention and success of all students? More specifically:
 - a) How would you define a culture of belonging in your institution? What are the strengths and weaknesses of your organisation?
 - b) Do senior institutional leaders and managers believe in and promote an organisation that all students and staff are likely to feel like they belong to?
 - c) To what extent do institutional policies, documents and publications promote the idea that all students belong?
- 2. To what extent do all staff feel responsible for student belonging, retention and success through accountability, recognition, support and development and reward structures?
 - a) How would you describe the attitudes of the majority of staff towards the issues of (i) improving student retention and (ii) maximising the success of all students?
 - b) Do human resource policies identify student retention and success, or student-centred learning, teaching and support as a priority at your institution?
 - c) Do institutional policies and procedures hold staff accountable, and provide recognition, support, development and reward for enhancing the student experience?
- 3. To what extent are student belonging, retention and success mainstreamed into pre-entry interventions, transition and induction, learning, teaching and assessment and professional services?
 - a) Does a commitment to student engagement, retention and success and belonging inform work in these key areas?
 - b) Is there a co-ordinated approach to improving student retention and success (e.g. through a strategy and a high level committee)?
 - c) To what extent is the access agreement used to promote the access and success of students from targeted groups?
- 4. To what extent is high quality, student-centred learning and teaching seen as integral to student belonging, retention and success?
 - a) What is the relationship between student engagement, retention and success and the learning and teaching strategy?

- b) Does academic staff development and training focus on promoting student engagement and belonging to maximise the success of all students?
- c) Are staff teams from programmes with lower rates of non-continuation and completion held accountable?
- 5. To what extent does the institution develop the capacity understanding, skills and opportunities for all students to engage, belong and be successful?
 - a) How is the induction process organised? Does it go beyond transmitting information to developing the capacity of students to engage?
 - b) To what extent is the expertise of the professional services embedded into the mainstream curriculum to develop all students?
 - c) Is student engagement encouraged and facilitated by staff?
- 6. To what extent does institutional data and monitoring support student belonging retention and success through identifying poorly performing departments, programmes and modules, and student behaviour that increases withdrawal?
 - a) Is there an accepted data source and process that is used to monitor withdrawal across departments, programmes and modules?
 - b) What follow-up is taken when areas are identified as having a poor continuation or completion rate, and does it involve a wide range of staff and further research?
 - c) Which indicators are used to monitor student behaviour and performance, and how are students at risk dealt with?
- 7. To what extent do all students feel like they belong at the university or college, and that they are supported to maximise their success?
 - a) How would you know if students feel like they belong?
 - b) Which groups of students may have the most difficulty in engaging in your institution?
 - c) In what ways could you make it easier for all students to feel like they belong?

Conclusions

This significant programme of evaluation and research reinforces and extends our knowledge about improving student retention and success. This is particularly important at a time like this when we stand on the precipice of radical change that has not been attempted in any other country. In the light of the higher student tuition fees, what will encourage students to participate in higher education, and reinforce their decision to stay and enable them to make the most of the opportunity they have selected? This study finds that *belonging* will go a long way to achieving these outcomes. Institutional approaches that promote belonging will have the following characteristics:

- supportive **peer relations**;
- meaningful interaction between staff and students;
- developing knowledge, confidence and identity as successful HE learners;
- an HE experience that is **relevant to interests and future goals**.

The study finds that student engagement and belonging are central to improving student retention and success. This challenges institutions to rethink their priorities, policies, processes and practices to enable a culture of belonging to be realised. The programme makes a significant contribution by recognising the importance of a mainstream approach to addressing student retention through a culture of belonging that maximises the success of all students, as opposed to interventions targeted at particular groups of students. This approach, which places the academic sphere at the heart of improving student retention and success, recognises the need for institutional transformation, as opposed to a student deficit approach that blames students and/or requires them to change in order to benefit from higher education. Such an approach tends towards reproduction, and continues to disadvantage non-traditional students and others who have not traditionally prospered in higher education. The What Works? approach puts **academic programmes** and high quality, **student-centred learning and teaching** at the heart of effective student retention and success.

Some of the key messages echo findings from the US and smaller studies in the UK. This, however, is a sizeable project that involved 22 higher education institutions and hundreds of students over a three-year period. The seven projects had different foci, and used a range of methods, but they all point to the overarching findings of this programme. The diversity of sites, methods and researchers extends the reliability and applicability of these findings, as the messages have high levels of consistency.

Challenges remain about relating research findings and evaluation of specific practices from particular contexts to improving practice within one's own institution. To further assist with the process of translating global findings to effective practices we have compiled a sister publication, *Compendium of effective practice: Proven ways of improving student retention and success* (Andrews *et al.*, 2012). The Paul Hamlyn Foundation is continuing to work with the Higher Education Academy and Action on Access to support institutional teams from 2012-2015 to review institutions' strengths and areas for development, implement changes at the strategic and academic programme levels and to evaluate the impact of changes on student retention.

What to do now

- i. Use this report, the summary report, the project reports, the *Compendium* of effective practice (Andrews et al., 2012), and research and practice from your own institution to engage colleagues in debate about student success. You might find the institutional reflective checklist a useful starting point for discussion.
- ii. Use your institutional data and data in the HE system to assess your strengths and weakness with regard to student retention. Supplement this with further institutional data and research, such as National Student Satisfaction survey results and local research with students and staff to extend your understanding.
- iii. Identify your priority areas for development, thinking about changes at the strategic and programme levels in particular.
- iv. Establish teams to further review priority areas and develop and implement an action plan.
- v. Consider joining the Higher Education Academy's Retention and Success Change Programme to facilitate the process.

Appendix 1: The What Works? projects

The following section provides a summary of each of the What Works? projects, extracted from their executive summaries. We recommend that readers read the complete project report for further details. Project reports are available from: http://www.heacademy.ac.uk/what-works-retention.

Project 1: A comparative evaluation of the roles of student adviser and personal tutor in relation to undergraduate student retention

Anglia Ruskin University, with Peterborough Regional College, College of West Anglia

The project led by Anglia Ruskin University was a study investigating the impact of the roles of non-academic student advisers (SA) and 'traditional' academic personal tutors (PT) in relation to undergraduate retention. Our research was prompted by concerns and issues raised by the 2007 National Audit Office report, *Staying the Course* (NAO, 2007) and the follow-up House of Commons Committee of Public Accounts report on student retention (2008). Both these reports identified that students feel that academic and pastoral support is limited and does not fully meet their needs.

Of the two roles (SA and PT), the personal tutor role is widespread, if variable in operation, across a range of HEIs (Wheeler and Birtle, 1993) and can have a positive impact on student retention (Davies and Elias, 2003). The provision of non-academic student advisers, however, is a recent development that has been thoroughly and positively evaluated at Anglia Ruskin (Wilson, 2006) and has been disseminated externally via conference papers, but has not yet been widely taken up across the sector.

The most recent HESA data (2009-10) show that Anglia Ruskin University's retention rates have steadily increased over the last three years and we are now better than our benchmark. However, our performance against HESA retention benchmarks prior to 2007 was a cause for concern. To address this, Anglia Ruskin established a working group in 2007 to consider all aspects of student retention. The working group's recommendations and a wide range of actions were instigated from September 2008 for the academic year 2008-09, and cover the period when this study was undertaken.

From the start of this project, we were keen to obtain insights from our joint venture (JV) partners in the further education sector. We regarded input from our JV students as particularly valuable, since our partner centres reflect a milieu often perceived as more supportive than mainstream university culture. Consistency of higher education (HE) experience across all of Anglia Ruskin, including the JV partners, is a key aspiration for us.

One of the main aims of our project was to identify the student's perspective on what help they require when they experience difficulties, who they require this help from, and when they require it. We also looked at the factors affecting a student's decision to consider leaving university, and the sources

and types of support within and outside our University that influenced their decision to stay.

Methodology

The main period of data collection and analysis was between January 2009 and September 2010. Using an online survey, we contacted nearly 6,000 first-and second-year undergraduate students at Anglia Ruskin University, including students at our two joint venture partnerships within the region. The project used a web-based embodied conversational agent (ECA¹²) approach (see, for example, De Carolis *et al.*, 2006) to gather data about the impact on retention of the SA and PT roles. This method of survey delivery has been shown to allow people to interact with technology at a social level (Reeves and Nass, 1996). It was employed as a motivator to improve response and completion rates. The ECA ensured that participants were presented with the minimum number of questions depending on their individual answers. As part of this methodology a cartoon bear interacted with participants encouraging them to continue and giving them information regarding the status of survey completion.

The online survey, entitled 'Staying the Course' consisted of 22 free-text questions and 29 multiple-choice questions. Questions covered a range of issues identified from the literature as being important in student retention, including thoughts about leaving, expectations, social integration, and sources of support (e.g. Tinto, 1993; Benn 1982; Johnes and Taylor, 1990; Pascarella and Terenzini, 1991; Berger and Braxton 1998).

Findings

The online methodology produced a rich quantitative and qualitative dataset, which was analysed using SPSS and Nvivo software. Overall, 722 students responded (just over 10% of students contacted), representing a wide range of backgrounds and modes of study.

A key finding was that 42% (n=237) of the participants in our study had thought about leaving on at least one occasion, and, of this group, 46.6% (n=110) has thought about leaving on more than one occasion. Of the students who had considered leaving, 59% (n=153) said that they had considered leaving due to a reason internal to themselves, such as personal circumstances, or self-doubt about their ability to succeed in higher education. Our survey also asked students to tell us about the occasions when they had thought about leaving, and 35% (n=196) of students told us that they had considered withdrawing prior to or following assessment, or following a failure.

Students who felt more socially integrated with the University, however, had a more positive experience of HE, and were less likely to think about leaving, but a number of demographic groups (students with family commitments, commuting students, mature students, Nursing students and part-time students) identified distinct reasons why they found social integration difficult. We also found that student resilience played a big part in students deciding to remain in higher education.

¹²An embodied conversational agent (ECA) is an online character that interacts with a computer user to facilitate a dialogue.

Both student advisers and personal tutors have an important part to play in student support and retention. The key finding from this aspect of the study is that, although the advice provided by SAs is important and valued by students, they do still want and require the slightly different advice provided by academic PTs. Personal tutors scored most highly, for example, as the preferred source of help and advice for study concerns, with significantly more students (60%, n=335 vs. 26.2%, n=146 for SAs) giving their PT as their preferred source of support for such issues. Nevertheless, it is also clear that the SA role complements the more established academic personal tutor role, and we would recommend that consideration is given to promoting this role across the sector.

What we had not anticipated, at the start of our study, however, was the very high reliance students place on advice and support from family and friends, across a wide range of issues relating to their studies. The implication of this finding is that we need to provide more information for friends and family to help guide the student to the right place to resolve these kinds of queries.

Retention levels have improved at Anglia Ruskin University over the past few years. We believe that, at least in part, this is due to the utilisation of data and insights from this project. Changes have included: actions designed to 'reinvigorate' the role of personal tutors; the placing of more emphasis on student engagement; building a sense of community; and improving the volume and quality of information provided to family and friends.

Project 2: Pathways to success through peer mentoring

Aston University, with Bangor University; Liverpool Hope University; London Metropolitan University; Oslo University College, Norway; Oxford Brookes University; University of Sheffield; and York University, Canada

This project is a detailed and in-depth analysis of the value of peer mentoring in promoting student success in higher education. The need for HEIs to put into place mechanisms to both support students and to address issues of retention has never been more important. Peer mentoring represents one such mechanism. It provides the means by which students can make friends, acclimatise to university life, and come to terms with their new student identity. In seeking to identify students' perceptions of the value of peer mentoring, this study provides evidence that, in today's ever-changing and increasingly challenging academic environment, students represent an institution's most valuable asset.

Methodological approach

Commencing with the hypothesis that 'peer support impacts positively on students' experiences by engendering a greater sense of belonging both socially and academically', the study set out to analyse pastoral peer mentoring and writing peer mentoring activities in six different HEIs.

The research approach involved a multiple case-study design, in which a mixed methodological approach was adopted. The research was conducted in four separate stages. The first stage took the form of a pilot survey administered across all partner HEIs in 2009-10. This resulted in a response rate of 302 completed questionnaires (just under 10% of the sample). This was followed by a follow-on survey that was administered in 2010-11 at three

of the partner institutions focusing on pastoral peer mentoring. This resulted in 374 completed questionnaires (just over 19% of the sample).

The third part of the study comprised in-depth qualitative interviews and focus groups, which were conducted at all institutions with a total of 97 student peer mentors and peer mentees. Of these 61 were involved in pastoral or transitional mentoring programmes (29 peer mentees and 32 peer mentors), and 36 were involved in writing peer mentoring (16 writing peer mentors and 20 peer mentees). The quantitative data were coded and analysed using SPSS. The qualitative data were analysed following a grounded theory approach, in which the main themes and sub-themes were coded then analysed in some depth.

The final part of the project involved non-participant, overt observations of peer mentoring activity undertaken during 'welcome' weekend in September 2010. Data were recorded and analysed using an observational framework specifically developed for the project out of the emergent findings of the quantitative and qualitative research.

The study findings: pastoral mentoring

The transition period

The first few days and weeks at university are widely acknowledged as being crucial to student success. In looking closely at 'transitional peer mentoring' this project identifies and analyses how reciprocal peer support can provide new students with a solid foundation to their university careers.

By looking at *what* students concerns are, and by showing *how* peer mentoring helps new students address such concerns, this study highlights the value of peer mentoring both during the transition period and also into the first year of their studies. Furthermore, by analysing the data collected, this report highlights the value of peer mentoring both during the transition period and also into the first year.

A significant majority of the students surveyed were particularly concerned about making friends once they started university. Indeed, it is the 'social' aspects of university life that concern students the most – particularly in relation to settling in and adjusting to university life. Conversely, despite such worries before starting university, most of the students were confident that they had the ability to succeed academically; as such they were committed to completing their university studies. The study shows that transitional peer mentoring works by providing the means by which new students quickly gain a sense of 'belonging'. Indeed, it is in the key transition phase that peer mentoring first begins to make a difference to new students' lives. University-wide 'opt-out' programmes in which peer mentoring is offered to all new students, are particularly successful because in capturing the whole population of new starters peer mentoring is not viewed by students as a 'deficit model of provision', but is instead seen and accepted as part of the university culture.

Another type of peer mentoring, longer-term pastoral mentoring is successful because it offers ongoing, long-term support to those students who need it. Both transitional and pastoral peer mentoring provide a valuable 'safety net' for students making those first few tenuous steps into university life. Transitional peer mentoring works best when the relationship does not simply end after a few weeks, but instead continues into the first term. Such

relationships are built on the success of the first few days and evolve to become mutually beneficial.

Following transition - Term 1 and beyond

In offering continual support in Term 1 and beyond, the study revealed that peer mentoring works by helping students make the most of the academic opportunities available at university. It affords new students the means by which they can make good use of the social support available at university by allowing them to build a one-to-one relationship within a semi-formal and supported environment. By meeting individual needs and assisting students in the development of positive learning relationships, peer mentoring engenders a reciprocal relationship in which students, both peer mentors and peer mentees, are able to grow as individuals and succeed at university.

Academic support - belonging and peer mentoring

Having made the initial transition into university from a social perspective, despite their previous confidence about their academic ability, many students find the 'academic transition' difficult. Indeed, the findings revealed that for many the 'academic shift' from studying at school or college level to studying at a higher level can be very challenging. One of the most valuable roles undertaken by peer mentors is that they can help fellow students 'learn how to learn' at a higher level. Indeed, the use of more experienced students to guide and advise newer students does much to promote independent learning; enriching the overall student experience by nurturing a sense of belonging through offering ongoing support and friendship.

Benefits for mentors

The study revealed that participation in peer mentoring results in some benefits that are experienced by peer mentors alone. In particular, student peer mentors are able to develop valuable transferable employability skills such as self-management, leadership and communication skills. Additional personal and social benefits experienced by individual peer mentors include personal satisfaction and the opportunity to 'give something back'.

The challenges of peer mentoring

In focusing primarily on the student experience, one of the weaknesses of the study is that it did not capture in-depth, the challenges of peer mentoring from an institutional perspective. From the students' perspectives the challenges generally focused on institutional issues and communication problems. Some additional difficulties were identified with some approaches to training.

Turning the challenges around

One unexpected finding of the study was raised by a few mentors who had experienced a negative time as a mentee. Determined to do things differently, such individuals identified the need to make things better for new students as a strong motivating factor.

Transition+ approach to peer mentoring

Based upon the study findings a new approach to peer mentoring has been developed and is recommended for use in the HE sector. This approach, **Transition+** peer mentoring, provides social support during the initial transition period and then evolves and develops to encompass academic and longer-term support needs.

The study findings: writing peer mentoring

Practicalities and pastoral support

The findings show that by providing advice and support in all aspects of writing, writing peer mentors provide a distinctive service that helps students improve their overall academic portfolio. While the focus of writing peer mentoring is by necessity practical in nature, it also provides a 'safe' environment in which students can find someone to listen to their problems and help them work through university life. Writing peer mentors, the majority of whom are undergraduates, provide bespoke support and advice for students irrespective of year of study or subject studied (indeed many of the mentees were postgraduates).

The challenges of writing peer mentoring

The study found that most of the challenges experienced by writing peer mentors and mentees centred around balancing the often differing expectations of both parties. Mentees would often expect mentors to proofread or comment on the content of their work – neither of which they are in a position to do. Furthermore, many of the writing peer mentors reported that students would often seek advice on a 'last minute' basis. For writing peer mentoring to work, mentees need to be counselled to seek advice about their writing in plenty of time.

The study findings: recommendations

One of the key aspects of the project is that the recommendations made prioritise the student perspective. In listening to higher education students, the report writers have developed recommendations for higher education institutions, policy makers, students and for colleagues wishing to pursue further research in this area.

Recommendations for HEIs

- 1. Consider embedding peer mentoring as part of an institutional retention strategy.
- 2. Decide on the form of mentoring programme to be introduced.
- 3. Design a robust and well-structured programme.
- 4. Appoint a dedicated person, or persons, to manage the programme.
- 5. Ensure effective marketing of the programme.
- 6. Introduce a rigorous mentor selection and training process.
- 7. Take care in pairing mentees and mentors to ensure a good match.
- 8. Make clear the availability of ongoing support (if needed).
- 9. Evaluate the programme at an appropriate point or points in the year.
- 10. Consider academic credit/recognition for mentors.

Concluding remarks

This report begins by reaffirming the belief that making the decision to attend university to embark on a course of study is a significant and often difficult step in a person's life, irrespective of social background or level of previous study. This study represents the most in-depth investigation of peer mentoring in higher education conducted within the UK to date. Over the course of three years the study has captured and recorded the perceptions and experiences of close to 800 students. For the majority of students who participated in this project the most difficult aspect of making the transition to university reflects fears about whether they will settle in and make friends. This study has shown that peer mentoring works by addressing such fears and by providing the means by which new students quickly feel as if they belong. In addressing both academic and social issues, this project provides evidence that the value of peer mentoring in higher education is not just reflective of the support given to new students in the first few days and weeks of university. Instead it is indicative of the longer-term reciprocal relationships made between peers in which both benefit and both succeed.

Project 3: 'Belonging' and 'intimacy' factors in the retention of students

University of Leicester

The University of Leicester is a member of the 1994 Group of universities engaging in high quality research and teaching. It has a high retention rate of students (95.4% remaining in higher education in 2007-08) and has repeatedly scored very high (joint highest or third) in the National Student Survey (NSS) for overall student satisfaction. Data from the NSS and previous surveys of firstyear undergraduates from all disciplines have indicated that a sense of 'belonging and intimacy' at the University plays a significant role in this. What makes this happen? How could it be better? The overall aim of this project was to answer these questions. This will enable the University to maintain and strengthen its good practice in this area and produce information for the sector in general. Several approaches have been taken, including questionnaire surveys, individual interviews and analysis of video diaries from first- and second-year students involved in a longitudinal student experience project being carried out by GENIE, our Centre for Excellence for Teaching and Learning. The cohorts of students included in this study have been current firstand third-year students from medical, Biological Science and English courses, as well as students that had withdrawn from their courses.

Six key themes/messages emerged from the quantitative and qualitative results from all of these approaches. These themes play a major role in students establishing confidence and a sense of 'belonging' throughout their course.

Key themes:

- personal tutors and other staff relationships;
- departmental culture and curriculum methods;
- managing expectations;
- · central services;
- social spaces:
- · clubs and societies.

Intuitively these would be the expected key messages, but our investigations have produced data giving evidence of their importance, and this is the starting point for acting strategically in these areas in order to improve the student experience. We have produced briefings for each of the key messages, and these will provide a resource for all institutions when planning policy and strategy. The questionnaires and focused interview plans also provide tools for institutions to gather their own data.

There have been some surprises, particularly relating to students living at home while studying. Social spaces, real and virtual are particularly important for these students and their sense of belonging was really helped by attendance at clubs and societies and also by the culture within departments. If social opportunities were provided by departments either separately or as part of the curriculum this had big impacts on this group of students. An obvious example would be fieldwork, but facilitating any group work increased opportunities for interactions with staff and other students.

We have already used this work to guide strategy within our own institution and within this report we use the theme of personal tutors as a case study to demonstrate how staff and students working together can change policy in order to enhance the student experience. The issues that we are dealing with here are central to the overall student experience and therefore we considered this partnership working as essential. Our investigations had demonstrated that students considered personal tutors as important, therefore we wanted to know whether or not students and staff felt that we had it right, if not what should be done. A research team comprising staff, students and members of the Students' Union used questionnaires and focus group discussions to gather and analyse this information. Responses from almost 2,000 students and 300 staff were obtained. The outcome was that a code of practice was drafted for all departments to follow in operating their personal tutor programmes (previously there were only guidelines). This draft code of practice has been presented to the University's Academic Policy Committee, agreed in principle, and after minor modification, will become University policy for 2012.

The personal tutor work is just one example of how the retention project findings are becoming embedded and sustained. There are University working groups that map onto the key themes identified by this retention project. For example:

- Personal tutor working group;
- Student/Staff Committee working group;
- Space working group;
- Feedback and assessment working group;
- Mentoring working group.

In addition, the Students' Union is working with staff on a variety of projects and initiatives that also map onto our key themes that relate to 'belonging' and 'intimacy'. These partnerships include:

- the personal tutor project: mapping directly onto personal tutors and relationships with other staff;
- development and expansion of a course representative programme: mapping onto departmental culture, curriculum development and clubs and societies:

- employability skills in the curriculum: mapping onto curriculum development;
- Teaching Partnership Awards for students to encourage student engagement in developing and enhancing the student experience: mapping onto all of the key themes.

In summary, we have identified key themes that help with students having a sense of belonging and intimacy. Working with students and University committees we are reviewing practice in the areas of these themes to maintain and enhance our good student experience. We have produced resources that will help inform strategic planning of both our own institution and others', and tools that will aid data collection in different situations. Collaborations between students and staff have proved particularly successful in moving towards new policies and embedding our findings. The longer-term aim is to increase these partnerships in order to improve the student experience.

Project 4: Dispositions to stay: the support and evaluation of retention strategies using the Effective Lifelong Learning Inventory (ELLI)

Northumbria University, with University of Bedfordshire and University of Manchester

The first two-thirds of this project explored the relationship between scores on the Effective Lifelong Learning Inventory (ELLI) and student retention and success and the experiences of students using ELLI.

Insufficient data were available from leavers who had completed an ELLI profile to be able to complete a significant statistical analysis, but the data that were gathered indicated that leavers are drawn from both more and less powerful learners across all the seven dimensions. However, there were two elements of the findings that suggested some relationship between dispositions to learn and academic outcomes:

- The qualitative data indicated that leavers are sometimes characterised by high levels of resilience, being willing to take the decision to leave an academic programme despite all the negative feelings associated with this step.
- A significant statistical relationship was found between student success (as measured by a grade point average) and two of the ELLI dimensions, critical curiosity and meaning making. Although significant, this relationship in fact only accounted for a very small percentage of the difference in students' marks.

This finding did not give the project sufficient leverage to design, deliver and evaluate interventions to improve outcomes against dimensions shown to be particularly relevant to student retention and success. However the use of the ELLI tool and the consequent engagement with staff and students generated rich qualitative data. These data were revisited and analysed and further focused qualitative data were gathered in the final phase of the project.

Analysis of these data has shown:

- students expect to change and develop as lifelong learners as part of their experience of higher education and are responsive to raising selfawareness about themselves as learners;
- however, many students quickly adopt an instrumental approach to their learning with a preoccupation with successfully negotiating assessment.

An important finding was that:

 strong learning relationships between students and with staff are a significant factor in promoting motivation, engagement, curiosity and success.

This indication of the significance of relationships in higher education is not new. However, the research has illuminated the nature of these strong relationships and illustrated inconsistency in how these relationships are supported and sustained by staff. Further it suggests ways in which higher education should encourage and sustain the development of effective learning relationships. The nature of learning relationships is complex, but a key finding was:

• staff and students describe good learning relationships as being founded on a strong platform of mutual respect, professionalism and care. Staff and students observe that not all relationships are of this nature.

Successful approaches to the delivery and sustenance of strong learning relationships include:

- well-designed and measured induction processes that engage with issues of motivation and student self-awareness.
- **early and sustained interventions** to encourage student engagement with each other (ice breakers, group projects, seminar design).

To achieve consistency and the best standards in learning relationships in higher education a two-fold strategy is indicated:

- strategies to **raise staff awareness** about the importance of learning relationships for student success and lifelong learning development;
- integration of learning relationships into the framework of all programmes – not simply as an enhanced process of delivery – but as a key objective in the preparation of students for life after university, for a world in which action is contingent on collaboration; collaboration is in turn dependent on the ability to initiate and sustain effective learning and working relationships.

However, the development of effective learning relationships is dependent on students being interested in their subject area. The data consistently suggested that student interest was critical to effective engagement with HE. Efforts by universities to ensure that students have the information they need to choose the course they will be most interested in are likely to bring substantial benefits.

These findings and the rich data described in the full report have provided the impetus and the raw material for a series of project outputs that are currently being produced and that will be useful strategic tools across the sector:

a guide for best practice in the use of ELLI in HE;

- a good practice guide for the promotion of learning relationships in HE;
- a manifesto for the development of critical lifelong learners in HE.

Project 5: HERE! Higher education retention and engagement

Nottingham Trent University, with Bournemouth University and University of Bradford

The HERE project research was conducted with first-year students and investigated two themes associated with student retention and success:

- Strand 1 the impact that doubting has on retention;
- Strand 2 the impact that individual programme teams can make upon retention.

The importance of doubting

Doubting is a perfectly natural response to a new set of circumstances. It would be a rare individual who did not express some form of doubt when faced with the challenges of being a new student. However, we are interested in more serious anxieties students may have about coping. We use the term 'doubter' to describe someone who has doubts that are sufficiently strong to have considered withdrawal. The term 'doubter' was drawn from Mackie (2001), who explored the differences between students who had doubted and withdrawn (leavers) and doubted and stayed (doubters). Our use is slightly different; it may be helpful for the reader to note that we identified two groups of students – non-doubters and doubters – and also monitored their retention¹³. Therefore, we refer to doubters who continued, doubters who withdrew, non-doubters who continued and non-doubters who withdrew. We therefore use the terms 'doubting' and 'considered withdrawing' interchangeably.

The study

The project team surveyed over 3,000 first-year students and staff at the partner institutions. Six large-scale student transition surveys of first-year students were completed (March-May 2009, Feb-May 2011), 17 interviews and three focus groups took place with respondents to these surveys, and ten audits of first-year programmes were conducted. The destinations of students who completed the 2009 transition surveys were analysed to identify those factors associated with early withdrawal and retention. Furthermore, the research was informed by literature from the UK, US and Australasia.

The HERE project team used the student transition surveys to identify key risk factors associated with early withdrawal and key factors associated with retention and engagement. A detailed question set was then developed from

¹³The measure of retention used was the 'continuation rate' (NAO, 2007). This does not take progression into account, that is moving from year 1 to year 2. It also ignores course changes within the institution and changes to mode of study. It simply looks at whether or not a student is still in HE (registered at an HEI) after a year. Therefore students who progressed to the second year, were repeating and who had transferred to a course within the same institution were recorded as 'continuing' or 'stayed' (both are used interchangeably in this report for readability and have the same meaning). Students who had left the institution or who had transferred to a different institution were recorded as 'withdrawn' or 'left' (again, we have used both terms for readability and they have the same meaning), although they may still be within the higher education sector at another institution.

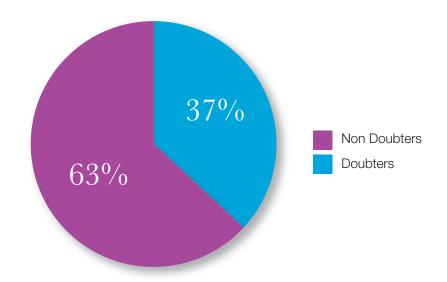
these findings and used to audit ten programmes at the three institutions. The programmes were selected as either programmes with excellent rates of retention, or because they were tackling particular issues such as a high numbers of students from higher risk backgrounds.

Using the evidence from the transition surveys and interviews, the team developed a toolkit with nine sets of recommendations for improving retention at programme level.

Key findings

a) Approximately one third of first-year students have experienced doubts sufficiently strong to make them consider withdrawing at some point during the first year

Figure 1: Student transition survey (2009) – all three institutions percentage of student doubters (n=873)



b) Doubters are more likely to leave than non-doubters

In the 2009 student transition survey, 483 students granted us permission to track their progress: 98.3% of non-doubters were still at university the following academic year, whereas only 92.2% of doubters were still at university the following academic year¹⁴. A small number of students withdrew, despite having no doubts, and they tended to report a positive experience of being at university. Doubting is an important factor when considering retention, but not the only one.

c) Doubters reported a poorer quality experience than students who have not doubted

Doubters who subsequently withdrew reported the poorest quality experience of all. In contrast, those students who did not doubt tended to report a more positive experience of being at university, they appear to be better engaged (Bryson, Cooper and Hardy, 2010). In particular, they appeared to have better understood the nature of higher education and adapted to it better than doubters. They also report a more interesting academic experience and better relationships with tutors and their peers.

¹⁴Student continuation aggregated from all three institutions. In total there were 301 non-doubters (296 continued) and 182 doubters (166 continued).

d) Students usually report more than one reason for doubting

For example, in the 2011 survey, the 280 student doubters across all three partners provided us with 685 reasons for doubting (2.1 per respondent).

e) The primary reasons for doubting are associated with students' experience of the programme

Confidence about coping with studies appears to be particularly important; in turn, student confidence appears to be influenced by feedback and whether assessment is as the students expected it to be. Other important reasons to doubt include student lifestyle and accommodation, doubts about the future benefits of the course and finance.

f) There were four main reasons cited by doubters for staying

There were, however, some institutional variations. The first factor was 'support from friends and family'. The second was 'adapting to the course/university', the third the student's 'personal commitment and drive' and the fourth was whether the students perceived the programme can help them achieve 'future goals, particularly employment'. 'Support from friends and family' was particularly complex and, at times, paradoxically, appeared to be undervalued by students.

g) The primary times for considering leaving are immediately before and after Christmas

As these are the times when most first-years encounter their first set of coursework deadlines and feedback, this appears to support the evidence that the primary reasons for doubting are academic related. Less than 5% (n=17) of our respondents indicated that they had considered withdrawing prior to starting university. It may be that students with strong early doubts had already withdrawn, but in our study, doubting pre-arrival was not a major factor.

h) Students reported different degrees of doubting

In the 2009 survey, if a student stated that they were a doubter, they were asked to state whether they had subsequently decided to stay, were not sure about staying or had decided to leave. Among student doubters, those who had doubted but decided to stay had the best rate of continuation. Even among the small number of students who had doubts and had decided to leave, not all students actually withdrew.

i) Some student groups appear more likely to doubt than others

There were variations between the three institutions¹⁵. Part-time students, students with disabilities and female students tended to be more likely to doubt. Female students were more likely to doubt, but less likely to withdraw. Students living in private halls and living independently for the first time were also more likely to have doubts. There was a mixed picture for students from different ethnic backgrounds and ages.

¹⁵This may be in part because the different sample sizes between the institutions led to some groups being small in size. See Appendix 8 of the HERE project report for further details.

Key recommendations

There are nine broad recommendations from the HERE project to improve student retention and success. The recommendations are primarily at programme level and are particularly focused on the first year. They are grouped into two areas: manage those factors that lead to doubting, and therefore leaving; and support students to stay.

Some of the nine recommendations, for example 'engagement', 'belonging' and 'social integration', are closely related. However, we believe that there are distinct points about each that mean there is value to keeping them separate. Further information can be found in Sections 13 and 14 and in the HERE project toolkit.

Manage those factors associated with doubting, and therefore leaving

1) Identify and respond to students at risk

Those programmes surveyed in the Strand 2 research had often identified those students more at risk of withdrawing early and had adopted strategies for supporting them. We recommend that all programmes review their retention data to focus on key groups or key times of the year and then consider strategies for targeting further support appropriately.

2) Help students to make the transition to being effective learners at university

Doubters appear less confident about coping with their studies and are less likely to understand the differences between post-16 and higher education. We therefore recommend developing and extending induction, more explicitly helping students to learn how to learn and very importantly, boosting students' confidence by supporting students to understand the expectations of assessment in HE, improving feedback mechanisms, and helping students to learn from feedback.

3) Improve the communication and relationship with staff

Doubters feel more distant from their teaching staff than their non-doubting peers. This appears to be connected to their confidence about coping. We recommend improving communication with first-year students by designing the curriculum with more contact points in the first year and actively discussing expectations with students.

4) Help students make more informed decisions about choosing the right course in the first place

One of the most common academic reasons cited by students for considering withdrawing was that they found the course was not as they expected. Those students who perceived the information about the course to be inaccurate were more likely to be doubters. In this light, we recommend that programme teams review their pre-arrival communication and activities such as open days.

Support students to stay

5) Improve social integration

Although, at times, undervalued by the student respondents, social integration appears a very powerful factor in helping students to remain at university.

Furthermore, it also underpins 'developing a sense of belonging' and 'engagement with the curriculum' factors. We recommend starting the process before students arrive with social networking, and creating social opportunities in the curriculum during induction and throughout the first year.

6) Improve a sense of belonging to the programme

Doubters felt less like they fitted in to their programme than non-doubters. We recommend developing a sense of belonging through increased social engagement within the curriculum (Yorke and Longden, 2008) and through lecturers being seen to know their students and demonstrably valuing their input.

7) Foster motivation and help students understand how the programme can help achieve their future goals

Doubters also reported that they were less likely to believe that completing their degree would help them achieve their future goals. We suggest that helping students to see future career destinations after the course and positive feedback on students' progress will help all students, particularly doubters.

8) Encourage students' active engagement with the curriculum

Doubters report lower levels of satisfaction with a wide range of factors associated with engagement. Our work suggests that doubters are less likely to find the subject intrinsically interesting, but more likely to be motivated by interesting learning and teaching activities.

9) Ensure that there is good communication and access to additional student support

A number of doubter interviewees reported the importance to them of access to additional support. We recommend that programme teams are even more explicit about what further support is available and that institutions ensure that there are clearly defined routes to additional support.

Project 6: Comparing and evaluating the impacts on student retention of different approaches to supporting students through study advice and personal development

University of Reading, with Oxford Brookes University

This project predominately examined two distinct approaches to supporting students at two different higher education institutions conducted over a three-year period between 2008 and 2011. The focus of the investigation was the experiences of first-year undergraduate students within the contexts of an academic school (Life Sciences at Oxford Brookes University) in the first instance and across an entire institution (University of Reading) in the second. The study looked at the Personal and Academic Support System (PASS) at Oxford Brookes that comprises three strands: the PASS tutorial, resit support provided through PASS and the systematic incidence of PASS interventions, all with an underpinning pastoral referral facility that provides integrated and holistic support to students. At Reading, the investigation concentrated on a holistic model of student support and development comprising two key elements: the newly configured one-stop shop for student services; and the university-wide system of personal tutoring. To enhance the contribution of

this project to the What Works? for students programme, we also established a Cluster Group network of nine higher education institutions to facilitate further research and dissemination of good practice.

Method

Given the nature of this project, the research methods used to generate data varied across the institutions. Reading focused on data gathered specifically for the purpose of this project, while Oxford Brookes focused on PASS as a particular and unique intervention in use since 2005 and therefore had access to additional data on student entry qualifications and preparedness for university. These data were used, together with information gathered via surveys, focus groups and interviews with students and staff, to evaluate the effectiveness of PASS in supporting students. In addition to issuing surveys to whole-year cohorts, Reading took a narrative approach and gathered longitudinal data from a small sample of students who agreed to provide more in-depth information regarding their student journeys and progress over the course of their programme of study. However, it is important to note that conclusions were predominantly drawn from a shared methodology including focus group and interview data from students and staff and survey data gathered from students at both universities.

Findings

Our findings indicate that support provided by the institution plays a key role in ensuring students' progress and a more positive student experience overall. Our key findings show that providing structured support, fostering engagement, managing expectations, enabling a sense of belonging are all central in helping institutions to retain their students. We have found that:

- students are more likely to engage with the study support and personal development available from the institution if they are easily accessible and students feel there is a reason to engage;
- the building of relationships, particularly between personal tutors and their tutees, helps retain students;
- staff members who operate as personal tutors want to feel valued in the role and rewarded for it:
- holistic models of study advice and personal development are effective in making students feel they are supported towards success, whether these models are delivered across the university (Reading) or locally in an academic school (Oxford Brookes).

Recommendations

- We recommend PASS as a holistic model of support that could be transferred to different contexts. We suggest colleagues look at the elements of PASS and consider which might work best within their context.
- We recommend that all support for students is easy for them to access in relation to physical access, ease of referral from others, ease of knowing who is available to help, transparent guidelines and boundaries and in relation to promotion and marketing information.

- We recommend contextualised study advice. The context could be schoolbased (as at Oxford Brookes) or centrally delivered but focused on the academic discipline (as at Reading).
- We recommend that personal tutors receive more support from their institutions in relation to training and guidance materials, but also reward and recognition.
- We recommend a one-stop shop approach to delivering student services on campus and via a physical and virtual helpdesk.
- We recommend access to support for new students begins before they enrol via a weblink, blogs and other virtual information/communication tools.
- We recommend that the identification of students 'at risk' be based on their engagement and performance after enrolment and especially over their first term/semester, rather than based on a pre-selected set of potential indicators.

Conclusions

Both institutions are committed to converting what we know about what works for students in relation to retention and progression into practical support. These commitments include:

- the Personal Tutors Handbook will be updated online and in print to include data and outputs from this project (Reading);
- additional staff development sessions tailored to personal tutoring and student support will be developed and offered. This will include a new drop-in session for the PG Certificate in Academic Practice for all new lecturers (Reading);
- the one-stop shop intends to collect and analyse more data for comparative purposes (Reading);
- if possible, a follow-on seminar on personal tutoring will be run in 2011-12 to build upon the work of the seminar held in 2010 (Reading and Oxford Brookes);
- the Cluster Group network will be maintained as far as is practicable, with the intention of ongoing collaboration looking at the areas of retention and success and student support and development (Reading and Oxford Brookes);
- papers have been requested, are being drafted, and will be submitted to the Sub-Committees for Student Development and Student Support at Reading at the start of academic session 2011-12. This will ensure that the findings of the project are disseminated widely and effectively;
- a paper is also being drafted for the Sub-Committee on the Delivery and Enhancement of Learning and Teaching at Reading. This paper will focus on how personal tutors perceive the role in relation to reward and recognition. It will contain a number of recommendations for further enhancement of practice at Reading, including developing a new, competitive award for personal tutors to recognise and reward excellence. This suggestion is supported by the PVC Learning and Teaching.

Project 7: Good practice in student retention: an examination of the effects of student integration on non-completion

University of Sunderland, with Newcastle University and University of Hull

This project was the product of a partnership between the University of Hull, Newcastle University, and the University of Sunderland. A primarily qualitative methodology was used to study the effects of nine distinct initiatives on students' sense of social and academic integration. Analyses of retention performance data supported our qualitative findings on the effect of integration on student retention.

The research question underpinning our collaborative study was: Does a student's sense of integration support their retention? The research focused on mature students, first-year students, part-time students and local students. Newcastle University focused on the subject area of Engineering, with students from a range of subject areas included in the University of Hull and the University of Sunderland's investigations.

To contextualise the issue of retention, in a cross-institution survey at the beginning of our research a third of respondents said they had considered withdrawing during the first year of their current course. Students placed an emphasis on the importance of the academic experience of university over the social experience of university. The overall message from our research was that: integrating social and academic elements of university life encourages students to build relations with each other and with staff, and to engage with the curriculum.

This integration of social and academic elements of university life is key to the integration of students into the school, and wider university, community. We found that supporting students to feel part of their school and wider university community, facilitates the development of both a sense of belonging and the relationships with staff and students that become a student's network of support. This shared experience reinforces their academic endeavour, bringing continuity and a sense of involvement and engagement both with fellow students and with the curriculum.

Analyses of HEFCE performance data show that fewer students withdrew in our evaluation years than in previous years, suggesting that the integration-focused activities in this research contributed to the retention of more students. Our interlinked key messages from this research on the effects of student integration on retention are:

- Key message A: integration of the social and academic elements of university life is key to the integration of students into the school and wider university community.
- Key message B: early imposition of structures upon students by staff appears effective in giving a sense of continuity and purpose.
- Key message C: teams and groups working collaboratively on academic tasks enhance their social opportunities.
- Key message D: integrating social and academic elements of university life encourages students to build relations with each other and with staff and to engage with the curriculum.

Taken together, our key messages demonstrate the need for a holistic approach to student engagement. This approach continues throughout a student's university career: from initial outreach and contact, through applications and pre-entry, during induction and initial stages, and beyond. The three key implications of these findings are:

- Acceptance of the concept that social and academic integration are reliant upon each other for their fullest effect offers the opportunity for comprehensive institutional strategies for retention.
- That the provision of school and institutional support and encouragement for the key role played by academic staff in student integration is essential.
 Academic staff have a key role to play in providing students with a sense of structure within an academic environment in which social interaction with students and staff is facilitated.
- Adoption of a student-centred, collaborative team or group approach to learning may require substantial reorganisation of the learning environment including changes in pedagogical practice, assessment and student supervision. This may also require school and institutional support.

We suggest that integration-focused activities can help students integrate with peers on their course, and with their school and university communities. We suggest that students who are both socially and academically integrated are more likely to persist with their courses and that this in turn may have a positive impact on their retention. We offer this report as our contribution to the national What Works? Student Retention & Success programme of research.

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