What Works? Student Retention & Success

Paul Hamlyn Foundation

Higher Education Academy

Action on Access

Supporting student success: strategies for institutional change

What Works? Student Retention & Success programme

Final Report

By Professor Liz Thomas
Michael Hill
Dr Joan O' Mahony
Professor Mantz Yorke

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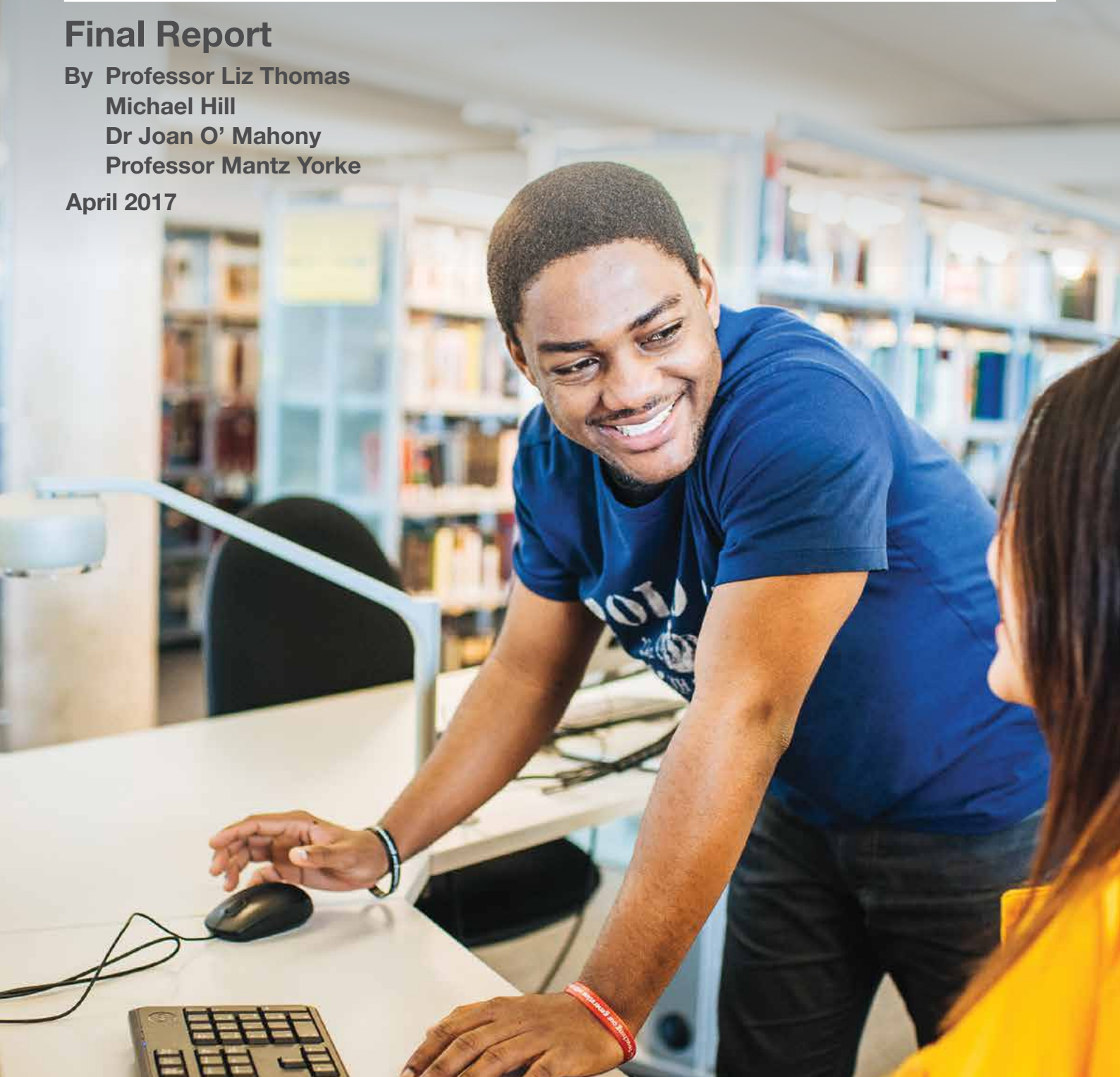

Dedication

This report is dedicated to the memory of Lord Moser, KCB, CBE (1922–2015). As a trustee of Paul Hamlyn Foundation, Claus Moser championed the need to support all students to benefit fully from university life. He was an advocate for the *What Works?* programme and, as a member of its Advisory Group, his incisive questions and intellectual challenge helped to bring clarity to this complex area.

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Institutions and project leads

Birmingham City University, led by Luke Millard

Glasgow Caledonian University, led by Nicola Andrew

Newman University, Birmingham, led by Sarah Parkes and Helen Cousins

Staffordshire University, led by Mike Hamlyn

St Mary's University, Twickenham, London, led by Lesley Haig and subsequently Jane Chambers

Ulster University, led by Roisín Curran

University of Brighton, led by Rachel Bowden

University of Chester, led by Kate Irving and subsequently Paul Yates and Karen Willis

University of Glasgow, led by Alison Browitt and David Ballance

University of Salford, led by Gill Molyneaux

University of South Wales, led by Karen Fitzgibbon

University of Wolverhampton, led by Debra Cureton

York St John University, led by Michelle Jones and Robert Wilsmore

Advisory Group members

Denise Barrows (to 2014), Paul Hamlyn Foundation

Patricia Broadfoot (chair), University of Bristol

Robert Dufton (to 2013), Paul Hamlyn Foundation

Christine Hockings (to 2013), University of Wolverhampton

Helen James, Canterbury Christ Church University

Claus Moser (to 2015), Paul Hamlyn Foundation

Andrew Rawson, Action on Access

Jane Steele (from 2014), Paul Hamlyn Foundation

John Storan, Action on Access

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Foreword

Every student that drops out of their higher education course is a loss: a loss to their university or college, a loss to the future economy and, above all, a loss to that individual. Equally, students who don't actually drop out but who fail to achieve their full potential also represent a significant loss to both themselves and society. The issue of student retention and success in higher education is, therefore, an issue that is becoming more important in the sector day by day. Maximising student success is not simply a 'nice thing to do'. It is a key element of institutional competitiveness in a higher education world that is increasingly characterised by business principles, in which teaching quality, student satisfaction and the achievement of graduates are core to institutional success. If helping students to 'be the best they can be' has always been a moral imperative for every university/college, being the best it can be is now also a concern that sits at the very heart of the institution as a whole.

It is, therefore, not surprising that the *What Works?* research has attracted a great deal of attention from all those who have an interest in promoting students' success, from policy makers to vice-chancellors, and from practitioners to students themselves. The findings of the first stage of the *What Works?* research published in 2012 were widely disseminated and discussed. They have become part of the established wisdom about how to help students remain committed to their studies and to be successful. But, important as these first-phase findings were, they were not designed to provide *specific* pointers for institutions concerning what kinds of interventions might be most effective in this respect, nor insights into the range of other factors that might need to be taken into account for a project seeking to build on the *What Works?* principles.

The generation of such insights was the focus of the work reported here. The report gives practical examples of a wide range of institutional approaches and specific interventions that have made a genuine difference to students' retention and success. Moreover, as a result of the sustained hard work of the 13 universities involved in phase two of the *What Works?* project, this report is able to offer a series of evidence-based principles to guide institutions across the sector as to how they might best engage with this vital agenda.

Research is a central element of university endeavour, so it is proper that the efforts higher education providers make to enhance the success of their students should be based on careful data collection and analysis. This final report of the What Works? project is based on evidence generated across a wide variety of institutions and subjects, interventions and approaches. Its rich range of insights and ideas offers a powerful platform on which to build a higher education sector that puts student success at its very heart.

Professor Patricia Broadfoot, CBE
University of Bristol
Chair, What Works? Advisory Group

Chapter 1: Introduction to and overview of the programme

Summary

The purpose of the *What Works?* Student retention and success programme (*What Works?2*) was to examine how higher education (HE) providers can improve student retention and success. 'Retention' in the UK is about students completing their programme of study within a specific timeframe. 'Success' is a broader concept but includes students' cumulative achievements in higher education, level of degree-class award, and progression in and beyond higher education to further study or employment[1] (although this study has not considered progression beyond higher education). The findings of the *What Works?2* programme are the chief focus of this report. This first chapter provides an introduction to and overview of:

1. Learning from the *What Works? Student retention and success programme (What Works?1)*, which was the starting point for this programme;
2. The extended change programme model that was developed and used to implement *What Works?2*;
3. The institutions and discipline teams participating in *What Works?2* and the areas of intervention;
4. The policy context in the UK and beyond.

1.1 Introduction: About this report

This is the full report from the *What Works?2* programme, and it draws together evidence from 13 institutions, 43 discipline areas, and many interventions and changes over more than three years. Readers are advised to select the chapters and sections of greatest relevance to their role and interests; summaries and cross-references are used throughout this report to assist with this. Those who are particularly short of time may find it useful to read the summary report; in addition, Chapter 2 provides an overview of the impact of and learning from *What Works?2*. This includes identifying outcomes, effective interventions and learning on how to implement change in complex contexts.

[1] HEFCE (2013) *Higher education and beyond: Outcomes from full-time first degree study.* 2013/15. Bristol: HEFCE; Higher Education Academy (2015) *Framework for access, retention, attainment and progression.* York: Higher Education Academy. Available at: https://www.heacademy.ac.uk/enhancement/frameworks/framework-student-access-retention-attainment-and-progression-higher

Improving retention and success is a policy priority across the UK for both moral and economic reasons.[2] In the current context, the student experience (or satisfaction), retention and success (particularly employment) are placed at the heart of teaching excellence.[3] This includes consideration of the experiences and outcomes of students from diverse groups – particularly those from disadvantaged groups compared to the norm within a particular institution and nationally. In due course, the focus is likely to home in on the experiences and outcomes of students studying specific disciplines and courses.

What Works?2 is a Paul Hamlyn Foundation initiative working with the HEA, Action on Access and 13 UK universities across 43 discipline areas to implement changes to improve student retention and success, and to evaluate the outcomes and research the process of change. This was informed by previous work undertaken between 2008 and 2012, when the Paul Hamlyn Foundation and the Higher Education Funding Council for England (HEFCE) co-funded a £1 million programme comprising seven projects and involving 22 higher education providers to identify, evaluate and disseminate effective practice to improve student retention. This became known as the *What Works? Student retention and success programme (Thomas 2012),*[4] *henceforth What Works?1*. What Works?1 identified the importance of a student's engagement and belonging for their retention and success: 'It is the human side of higher education that comes first – finding friends, feeling confident and above all, feeling a part of your course of study and the institution – that is the necessary starting point for academic success'. The subsequent three-year programme of action research has further extended our knowledge of what works to improve student engagement, belonging, retention and success, and has, crucially, developed understanding about how to implement change in large and complex organisations.

This report is the final report from *What Works?2*, drawing on the extensive findings and outputs from the participating institutions and the programme-level evaluation. However, it is recommended that readers consult the institutional reports and case studies for further details about issues of particular interest. This chapter of the report provides a summary of the learning from *What Works?1* and further details of *What Works?2*. The second chapter discusses the evaluation methodology applied at the programme level. The subsequent chapters discuss the learning from *What Works?2* about implementing effective change in relation to: understanding the local contexts; identifying evidence-informed interventions to address the issues of concern; reviewing the institutional context; designing a process of change; using monitoring and formative evaluation; and drawing on organisational learning to embed, sustain and enhance the student experience and outcomes. The final chapter provides recommendations for institutions, policy makers and sector-wide bodies.

[2] Thomas, L. (2011) Engaging students so as to improve retention and success. In L. Thomas and M. Tight (eds) *Institutional transformation to engage a diverse student body.* Bingley: Emerald Books, pp. 43–44.

[3] Department for Education (2016) *Teaching Excellence Framework: Year 2 specification.* London: Department for Education. Available at: https://www.gov.uk/government/publications/teaching-excellence-framework-year-2-specification

[4] Thomas, L. (2012) *Building student engagement and belonging in higher education at a time of change: Final report from the 'What Works? Student Retention & Success' programme.* London: Paul Hamlyn Foundation.

1.2 About the *What works?* programmes

1.2.1 Learning from *What Works?1*

The *What Works?1* projects examined various interventions and approaches to improving student retention and success. It emerged that the exact type of intervention or approach was less important than the way it was delivered and/or its intended outcomes. It was concluded from the projects that improved continuation rates and, from the qualitative and survey data about students' experiences, effective interventions or activities can be facilitated by enhancing students' engagement and belonging. In particular, engagement and belonging were found to be developed and enhanced through interventions that enabled students to develop supportive peer relations; allowed meaningful interactions between staff and students; developed students' capacity, confidence and identity as successful higher education learners; and offered a higher education experience that was relevant to students' current interests and future (career) goals. In addition to these intermediate outcomes, effective interventions were found to have the following characteristics:

- **Mainstream:** Interventions and approaches to improve student retention and success should, as far as possible, be embedded into mainstream provision.
- **Proactive and developmental:** Activities should proactively seek to engage students and develop their capacity to do so.
- **Relevant:** Activities need to be informative, useful and relevant to students' current academic interests and future aspirations.
- **Well-timed and appropriate media:** Early engagement is essential to student retention and success, and a variety of media should be used to convey information.
- **Collaborative:** Activities should encourage collaboration and engagement with fellow students and members of staff.
- **Monitored:** The extent and quality of students' engagement should be monitored, and followed up where necessary.

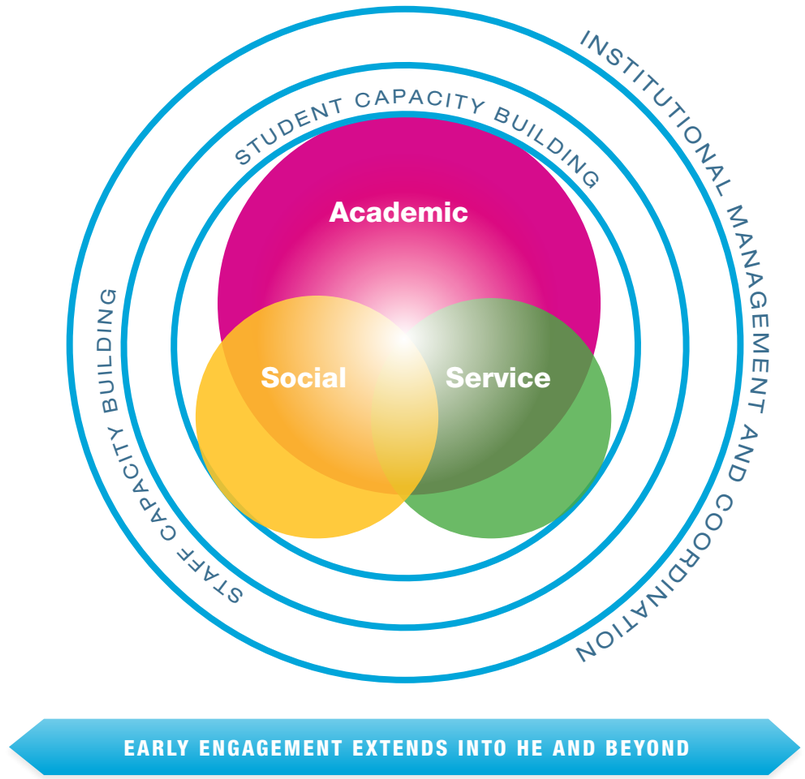
What Works?1 found that, although the focus of efforts to improve student retention and success needs to be on academic programmes, it surmised that these should be promoted and facilitated at the institutional level, with all that this implies about leadership, management, and the making and implementation of relevant policies. In particular, *What Works?1* pointed to the need for institution-level commitment with respect to the following:

- The **commitment** to a culture of belonging should be made explicit through institutional **leadership** in internal and external discourses and **documentation** such as the strategic plan, the website, the 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.

- **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 terms of time and expertise;
  - Access to **support and development** resources as necessary;
  - Appropriate **rewards** for staff who improve learning and teaching to engage and retain more students in higher education and maximise the success of all students. This should be recognised through progression and promotion frameworks.
- **Student capacity** to engage and belong (particularly in the academic sphere) must be developed early through:
  - The setting of **clear expectations** and an emphasis on the **purpose and value** of engaging and belonging;
  - The development of **skills** to engage;
  - The provision of **opportunities** for interaction and engagement that all can participate in.
- 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.
- Systems need to be in place to **monitor student behaviour**, particularly participation and performance, to identify students at risk of withdrawing, rather than only relying on entry qualifications or other student entry characteristics. Action must be taken when at-risk behaviour is observed.
- Work should be undertaken in **partnership with staff and students** to review data about and experiences of student belonging, retention and success. Change should be implemented across the student lifecycle and throughout the institution at all levels, and its impact evaluated.

The key findings from *What Works?1* are summarised in Figure 1:

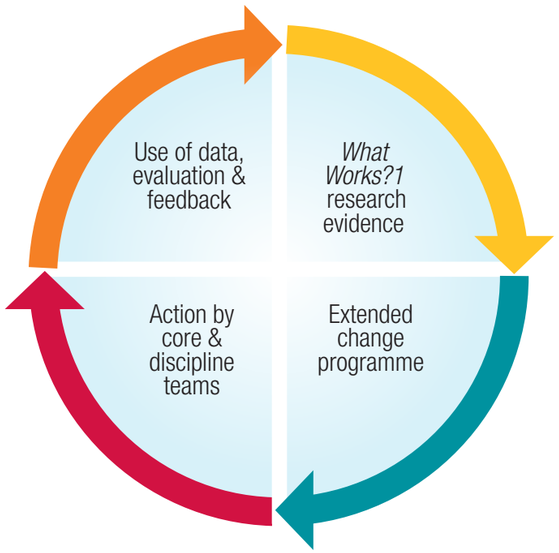
Figure 1: Model of student retention and success from 'What Works?1'



1.2.2 Extended change programme

What Works?2 worked with 13 institutions and 43 discipline teams (listed below) to help them put the learning from *What Works?1* into practice, evaluate the impact and expand understanding about what works and how to implement change. This was facilitated through an extended change programme led by the Higher Education Academy (HEA), process evaluation led by Action on Access, and impact evaluation commissioned by the Paul Hamlyn Foundation. This is represented in Figure 2.

Figure 2: *'What Works?2'* model of working



The extended change programme built on 'Change Academy' and previous change programmes facilitated by the HEA, and a similar programme delivered by Action on Access for HEFCE in 2007/08. The aim of the extended change programme was to work with higher education institutions to implement changes to improve student engagement, belonging, retention and success over a longer timeframe (three plus years) using a structured programme, and to evaluate processes and outcomes across the programme, as well as within institutions. More specifically, the *What Works? Student retention and success programme* had the following objectives:

- Use the learning from *What Works?1*, institutional data and institutional review to identify strengths, challenges and priorities for change at the strategic and course/programme levels (2012/13).
- Improve the strategic approach to improving the engagement, belonging, retention and success of students (2012/13 onwards).
- Implement or enhance specific interventions in the areas of induction, active learning and co-curricular activities in three selected discipline areas (2013/14 onwards).
- Evaluate the impact of the changes in both formative and summative ways, drawing on naturally occurring institutional data, bespoke student surveys and qualitative methods such as telephone or face-to-face interviews with staff and students (ongoing).

The extended change programme process was designed to support institutions through the following activities:

- Information meetings for the sector, followed by the application and selection process;
- Start-up meetings for institutional leads;
- Thematic workshops led by sector experts on induction, active learning and co-curricular activities;
- Institutional site visits engaging the full cross-institutional team and exploring the programme, including data and evaluation issues;
- A programme of residentials for discipline teams to reflect on and develop their work, in collaboration with colleagues from across the sector;
- Structured annual reporting and feedback;
- Annual progress meetings to develop interventions and evaluation, and to promote cross-institutional learning and collaboration;
- A second institutional site visit to explore outcomes and dissemination strategies;
- Collation and standardisation of institutional data in relation to continuation and achievement in each participating discipline;
- A student engagement and belonging survey, which was administered on seven occasions – feedback was sent to teams after each of the survey administrations;
- A contextual evaluation process working with institutions to understand the process of change and to implement qualitative research within institutions and disciplines;
- Peer-reviewed institutional reports, case studies and lessons learnt;
- Policy maker lunches to debate the implications of emerging findings.

1.3 About *What Works?2*

Institutions were provided with details about *What Works?2* at the beginning of the academic year 2012/13 through an information event at the Paul Hamlyn Foundation offices in London, and a list of frequently asked questions was generated to supplement the guidance about what was required and how to apply. The requirements included the formation of a cross-institutional team, including a project manager, senior manager, data expert, student and academic member of staff; and the identification of three discipline areas in which to develop interventions.

There were no requirements about specific interventions, but they had to fall into at least one of three categories (induction, active learning and co-curricular), all of which had been identified as areas of significant impact in What Works?1 (see sections 1.3.2–1.3.4 below). In addition, interventions had to aim to improve engagement and belonging through: facilitating supportive peer relations; enabling meaningful interaction between staff and students; developing students' capacity, confidence and identity to be successful higher education learners; and offering a higher education experience that is relevant to students' current interests and future (career) goals. In addition, specific interventions were to be informed by the characteristics of the effective interventions identified in *What Works?1* (see section 1.2.1 above and sections 1.3.2–1.3.4 below).

1.3.1 Participating institutions and disciplines

The *What Works?2* programme ran with 13 participating institutions and 43 discipline teams, which are listed below:

- Birmingham City University (BCU): Built Environment, Media and Radiography;
- Glasgow Caledonian University (GCU): Business, Engineering and Life Sciences;
- Newman University Birmingham (NUB): Initial Teacher Education (ITE), Joint Honours with Education and Multi Professional Practice (EMPP) and Working with Children, Young People and Families (WCYPF);
- Staffordshire University (SU): Business, Engineering and Music Technology;
- St Mary's University, Twickenham (SMU): Business Management, Drama and Sport Science;
- University of Brighton (UOB): Applied Social Science, Business Management and Digital Media;
- University of Chester (UOC): Criminology, Computer Science and Psychology;
- University of Glasgow (UOG): Education/Interdisciplinary Studies, Engineering and Life Sciences;
- University of Salford (UOS): Aeronautical Engineering, Music and Performance and Sports Science;
- University of South Wales (USW): Business Management, Computing and Music Technology;
- Ulster University (UU): Accounting, Built Environment, Computing, Creative Technologies, Law, Mental Health Nursing and Textile Art, Design and Fashion;
- University of Wolverhampton (UOW): Art and Design, Biomedical Science and Sport Science;
- York St John University (YSJ): Occupational Therapy, Sport Science and Theatre.

At the start of the programme, discipline teams were asked to identify which thematic area they would be focusing on, and this is indicated in Table 1 below. The thematic areas (induction, active learning and co-curricular activities) are discussed further in subsequent sections (1.3.2–1.3.4).

Table 1: Discipline teams' choices of thematic areas

Induction	Active learning and teaching	Co-curricular
Accountancy (UU)	Built Environment (BCU)	Business (GCU, SU)
Built Environment (BCU, UU)	Business Management (UOB)	Combined (NUB)
Business Management (USW)	Computer Science (UOC)	Computing (UU)
Criminology (UOC)	Creative Technologies (UU)	Education/Interdisciplinary Studies (UOG)
Drama (SMU)	Engineering (UOG)	Engineering (GCU, SU, UOS)
Education (NUB)	Life Sciences (UOG, UOW)	Life Sciences (GCU)
Law (UU)	Media (BCU)	Media (BCU)
Life Sciences (UOG)	Nursing (UU)	Music (UOS)
Management (SMU)	Psychology (NUC)	Music Technology (SU, USW)
Media (BCU, UOB)	Sport Science (UOW)	Occupational Therapy (YSJ)
Nursing (UU)	Textiles and Design (UOW)	Performance (UOS)
Radiography (BCU)	WCYPF (NUB)	Psychology (UOC)
Social Science (UOB)		Radiography (BCU)
Sports Science (SMU, UOS)		Sport Science (YSJ)
		Textile Art, Design and Fashion (UU)
		Theatre (YSJ)
		WCYPF (NUB)

In summary, there were institutions participating from all parts of the UK, and a wide range of disciplinary areas. There were, however, no colleges involved, although one did participate in the early part of the programme. It may be that a different format for the extended change programme would be more appropriate for colleges and other smaller institutions.

1.3.2 Induction activities

The aim was to develop pre-entry and induction activities that move away from simply providing information, towards a more engaging approach with an explicit academic purpose. The emphasis was on interventions designed and delivered by course teams rather than central units to ensure an academic focus, starting earlier and lasting longer. The activities were intended to enable students to get to know each other and members of the academic team, and to develop an understanding of the programme they were joining. This is explicitly informed by the findings from *What Works?1* about pre-entry and induction activities.

From *What Works?1*

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 academic staff, understand the expectations of the institution, department and programme, and develop academic skills (Thomas 2012, p. 25).

Pre-entry interventions contribute to improving retention and success in higher education by:

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.

(Thomas 2012, p. 21)[5]

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 higher education and helping students to be effective learners by developing their confidence and academic skills;

c) Developing relationships with members of staff, and allowing students to approach them when they need to.

(Thomas 2012, p. 25)

[5] See also Thomas, L. (2011) Do pre-entry interventions such as 'Aimhigher' impact on student retention and success? A review of the literature. *Higher Education Quarterly,* 65(3), pp. 230–250.

1.3.3 Active learning

Active learning approaches and interventions are intended to involve students directly in the learning process (rather than treating them as passive recipients). They promote more student-centred, collaborative learning, with real-world relevance, encouraging students to engage with staff, peers and the subject. In addition, the learning should incorporate the development of skills and capacities to be an effective learner in the discipline, and be relevant to the current interests and future aspirations of students. A greater focus on student-centred active learning is a central finding of *What Works?1*.

From *What Works?1*

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, which is cited by between 21% and 42% of students. Some specific interventions have been shown to improve retention rates by up to 10 percentage points. The following factors contribute to belonging in the academic sphere:

a) Staff–student relationships: knowing staff and being able to ask for help;

b) Curricular contents and related opportunities: providing real-world learning opportunities that are interesting and relevant to future aspirations;

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. Offering a variety of learning experiences, including work placements and delivery by enthusiastic lecturers, was also found to be important;

d) Assessment and feedback: clear guidelines about assessment processes and transparency about criteria and feedback to assist students to perform better in the future;

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;

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;

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

(Thomas 2012, pp. 31–32)

1.3.4 Co-curricular activities: Personal tutoring and peer mentoring

Finally, there were two types of co-curricular activities – personal tutoring (or academic advising) and peer mentoring – which were being embedded in or aligned with specific academic programmes. The emphasis was on these activities taking place within the discipline context, rather than separately as extra-curricular activities, and being opt-out rather than opt-in, making them more proactive and engaging. Both personal tutoring and peer mentoring were the focus of specific projects in *What Works?1* and were found to make a significant contribution to improving retention and success.

From *What Works?1*

a) First point of contact: being available for students very early on when they arrive at their institution, and offering a first point of contact throughout the year;

b) Academic support: discussing academic problems, helping with assignments and discussing feedback;

c) Academic development: supporting students to develop study skills;

d) Pastoral support: providing support with personal issues or signposting students on to further support;

e) Identifying another individual or service to provide appropriate information advice and guidance;

f) Identifying students at risk and/or working with students at risk;

g) Providing support and access to information, advice and guidance for students who are thinking about leaving;

h) Integrating students into the wider university experience.

The *What Works?* evidence has shown that personal tutors can improve student retention and success by:

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.

Effective personal tutoring can be understood to have the following characteristics:

a) Proactive rather than relying on students finding and accessing tutors;

b) Early meetings with students;

c) Students have a relationship with the tutor and the tutor gets to know the students;

d) Structured support with an explicit purpose;

e) Embedded into the academic experience and based at the school or faculty level;

f) Strong academic focus;

g) Identifying students at risk and providing support and development;

h) Linked to student services, the students' union and peer mentoring, or a similar peer scheme to provide pastoral and social support and refer students to further support where appropriate.

(pp. 42–44)

The *What Works?* evidence shows that friendships and peer relations have the following benefits, which contribute to helping students remain and be successful in higher education:

a) Promote academic integration and belonging;

b) Develop students' confidence as learners in higher education;

c) Improve students' motivation to study and succeed;

d) Offer a source of academic help and enable students to cope with their academic study;

e) Share tacit knowledge, such as module choices and information on how to prepare for assessments;

f) Provide emotional support;

g) Offer practical support;

h) Allow students to compare themselves against others and gain reassurance.

In short, peer mentoring provides a semi-formal structure to enable students to make the transition to higher education, 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 like part of the university. In the longer term, reciprocal relationships are developed that have benefits for both mentors and mentees.[6]

[6] For further details about peer mentoring, see Andrews, J. and Clark, R. (2011) *Peer Mentoring Works! How Peer Mentoring Enhances Student Success in Higher Education.* York: Higher Education Academy.

1.3.5 Changes at the institutional level

In addition to interventions implemented by discipline teams, each of the cross-institutional core teams was expected to review its institutional context and implement changes to facilitate and enable discipline teams to directly intervene to improve retention and success. In *What Works?2* these interventions were not prescribed, but rather institutions were encouraged to review the findings from *What Works?1* (see section 1.2.1 above) and engage with discipline teams to explore and identify the changes required. The changes made are discussed in Chapter 6 below.

1.4 Policy context with respect to student retention and success

1.4.1 The four UK nations

There are different higher education policy contexts across the four UK nations, which inform and influence the work of higher education providers in each jurisdiction. The English policy context is particularly dynamic and during *What Works?2* we have witnessed substantial changes, including the increase in student fees to £9,000 in 2012 and £9,250 (in some institutions) in 2016. This has been accompanied by the removal of the student numbers control from 2015/16 onwards, and an increase in student numbers in HEFCE-funded institutions in 2014/15. For many of our institutions, and more specifically discipline teams, this resulted in larger cohorts entering some programmes from 2014/15 onwards. Although it is not possible to track a causal relationship between this and either the fee increases or the student number increases, the most recent Higher Education Statistics Agency (HESA) data indicated a slight worsening in continuation rates across the higher education sector.

Scottish institutions have also experienced similar changes brought about by different policy instruments. In particular, since 2013/14 the Scottish Funding Council has provided additional funded places for 'SIMD40 students' – residents from the poorest two quintiles identified by the Scottish Index of Multiple Deprivation – at higher education institutions to meet its individual outcome agreements.

In Wales, the Welsh Government introduced a fee grant for Welsh and EU-domiciled students studying in Wales, and for Welsh-domiciled students studying in other parts of the UK. This arrangement caps the amount eligible students pay to the pre-fee regime amount (increased by inflation). While this is positive for Welsh students, it has substantially reduced the Higher Education Funding Council for Wales' resource base, meaning project-based funding, as well as learning, teaching and widening access institutional support, ceased. Further changes have recently been recommended by the 'Diamond Review' (Welsh Government, 2016).

In Northern Ireland, the NI Executive chose not to raise student fees in line with England and student numbers continue to be capped. This has led to a significant loss of funding for higher education in Northern Ireland, which has experienced a decrease in funding of around 20%.

1.4.2 Beyond the UK

There is concern in all parts of the UK with improving student outcomes, and this is increasingly the case across Europe, Australia and the United States (Vossensteyn et al. 2015). In Europe, the higher education modernisation agenda has promoted greater student diversity, but also greater recognition of the fact that access is insufficient and institutions should be looking to improve their graduation outcomes (European Commission 2011). Indeed, a comparative analysis across Europe (Vossensteyn et al. 2015) found that the majority of European countries consider study success to be a priority (see also European Commission 2014). About two thirds of European countries have study success policies, and about half are trying to improve retention and graduation rates.

Australia has both expanded and diversified its student population through a demand-driven system, which has resulted in some concerns about attrition, due in particular to lower entry qualifications. The Australian regulatory framework requires higher education providers 'to demonstrate appropriate progression and completion rates and that students who complete the course of study have attained key graduate attributes, including an appropriate level of English language proficiency' (Higher Education Standards Framework 2011). Annual data is reviewed, and a high (although undisclosed) attrition rate indicates a potential risk to students, and triggers a negative risk rating and further investigation.

In the United States, a number of public policies have been implemented at both the federal level and the national level to increase access and student success. The US education system is one of the most expensive in the world, and the high costs borne by students have a significant impact on completion rates, particularly among lower-income groups. A number of measures have been put in place to mitigate these differential effects, including the introduction of tax credits for students and free community colleges. Institutions have also seen a movement towards better quality control with the introduction of the Common Core State Standards and regulation by accreditation agencies. These standards are aimed at ensuring that high school graduates are prepared for both higher education and the workforce. Likewise, colleges are required to satisfy a set of rules that encourage them to prepare their students for gainful employment.

Chapter 2: Overview of the impact of and learning from *What Works?2**

Summary

This chapter provides an initial overview of the impact of and learning from *What Works?2*. In particular, it focuses on:

1. Student outcomes;
2. Institutional outcomes;
3. Effective interventions;
4. Learning about complexity and change.

2.1 Introduction

The evaluation strategy (see Chapter 3) has generated a great deal of evidence, which has been analysed and is drawn upon throughout this report. In this chapter the evidence about impact on both students and institutions is summarised, as well as an overview of the model of change that has emerged from this study. The overall experience and outcome of the programme has been very positive, although, of course, not everything has worked and there have been frustrations along the way. Examples of particularly effective interventions have been identified and analysed to better understand effective practice. Further discussion about how to implement change and effective interventions is presented in Chapters 4–8, and Chapter 9 examines the sustainable impact of the work undertaken as part of *What Works?2*.

2.2 Student outcomes

The *What Works?2* programme had the overall aim of improving student continuation, completion and attainment, but teams were encouraged to identify the intermediate outcomes they anticipated as they moved towards these longer-term goals, context-specific outcomes, and unintended consequences (this is explained in section 3.4). For example, one of the foci of UOW was reducing the attainment gap of black and minority ethnic (BME) students. Section 2.4 focuses on the learning from interventions that have had a measurable impact on student retention and success, but this section considers the wider range of positive outputs that have been evidenced across the institutions. This is an impressive list, and in general there is confidence that these will gradually lead to improvements in the institutional data (for example, UU was able to draw on more recent data than other institutions and has evidenced greater impact). The institutional reports identify many positive student outcomes, including:

*Footnotes 7–113 can be found at the end of chapter 2 on page 60

- **First-year continuation rates improved:** Media and Communication BCU,[7] Computer Science UOC,[8] Business GCU, Engineering UOG,[9] Life Sciences UOG,[10] Music and Performance UOS,[11] Aeronautical Engineering UOS,[12] Business Management USW,[13] Built Environment UU,[14] Creative Technologies UU,[15] Mental Health Nursing UU,[16] Textile Art, Design and Fashion UU;[17]
- **First-year attainment levels improved:** Media and Communication BCU,[18] Psychology UOC,[19] Business GCU, Engineering UOG,[20] Interdisciplinary Studies UOG,[21] Aeronautical Engineering UOS,[22] Music and Performance UOS,[23] Business Management USW,[24] Theatre YSJ,[25] UOW,[26] Textile Art, Design and Fashion UU;[27]
- **Engagement in online activities increased,** and more active rather than passive engagement correlates with higher student marks: EMPP NUB,[28] Business Management USW,[29] Life Sciences UOG;[30]
- **Increased number of assessments completed:** ITE NUB,[31] UOW;[32]
- **Increased success at first attempt** (in assessment) and first-year failure rates reduced: EMPP NUB,[33] Creative Technologies UU;[34]
- **Increased levels of engagement, belonging and confidence:** Business Management SU,[35] Music Technology SU,[36] Business Management, Digital Media and Applied Social Science UOB,[37] Music and Performance UOS,[38] Aeronautical Engineering UOS,[39] Business Management USW,[40] Computing USW,[41] UOW,[42] Interdisciplinary Studies UOG;[43]
- **Increased internal transfers** (rather than withdrawal): Aeronautical Engineering UOS,[44] Built Environment UU,[45] Engineering UOG;[46]
- **Fewer one-to-one tutorials to discuss assessments:** UOW;[47]
- **Reduced attainment differentials between BME and white students:** NUB,[48] UOW;[49]
- **Fewer student complaints:** Music and Performance UOS;[50]
- **More satisfied students:** Music Technology USW,[51] Accounting UU,[52] Mental Health Nursing UU;[53]
- **Enhanced employability and positive feedback from employers:** Music Technology USW,[54] Textile Art, Design and Fashion UU.[55]

Some of these outcomes were intended, and others were unintended but captured via the institutional evaluation strategies (see section 8.3 for further details of these approaches).

2.3 Institutional outcomes

While the overarching goal of *What Works?2* was most frequently articulated by institutions in relation to student outcomes, there were many benefits for other stakeholders, described here as 'institutional outcomes'. These include:

- **Greater understanding of the issues impacting on retention and success:** UOB,[56] UOG,[57] UOS,[58] UU,[59] UU,[60] UOW,[61] USW;[62]
- **Improved student data made available and used by staff to inform their decision making:** UOB,[63] UOG,[64] UOS,[65] UU,[66] USW;[67]
- **Increased staff capacity to work across the institution and bring about change:** UOB,[68] UOS,[69] UOW;[70]
- **Greater student voice integrated into work across the institution, and improved capacity of staff and students to work together:** BCU,[71] UOB,[72] UOS,[73] UU,[74] UOW,[75] USW;[76]
- **Wider policy developments informed by learning from the programme:** BCU,[77] UOB,[78] UOS,[79] UU,[80] UOW;[81]
- **Effective initiatives rolled out across the institution:** BCU,[82] UU,[83] UOW,[84] USW;[85]
- **Other discipline teams joining the process of implementing and researching change to improve students' experiences and outcomes:** BCU,[86] UOW;[87]
- **Pedagogical research outputs:** UOB,[88] UU,[89] UOW;[90]
- **HEA Fellowships awarded:** BCU,[91] UU,[92] UOW,[93] USW.[94]

Many of these outcomes are showcased in the vignettes in 2.6, and are discussed in the institutional reports and case studies. They have contributed significantly to the wider developments discussed in section 9.3.

> *'What Works?' has been pivotal in achieving a much richer, nuanced understanding of the factors that impact retention within the institution. Ongoing implementation of structured, supportive working with the programme teams that have the poorest retention rates, combined with improved data reporting and analysis, has given rise to important learning points.* (UOS)

2.4 Instructive interventions

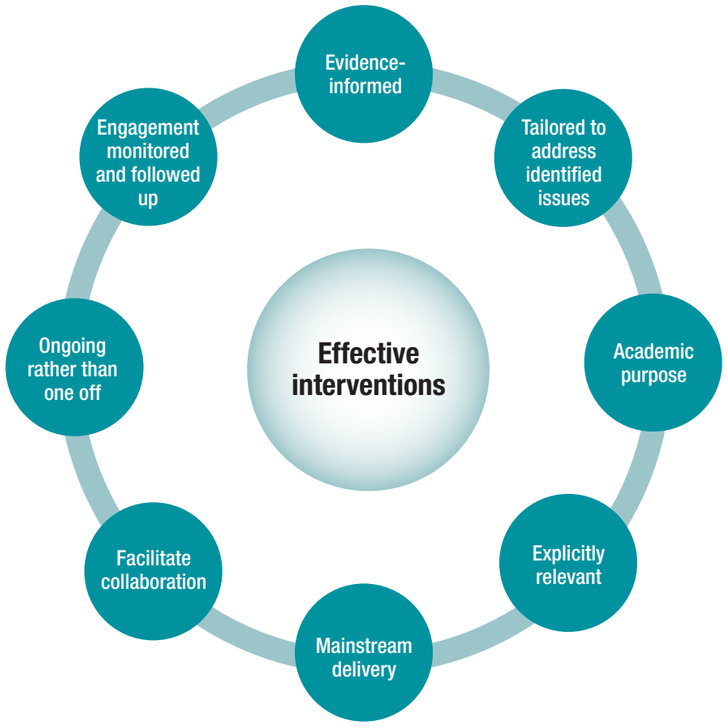
While institutions identified many positive outcomes from their *What Works?2* work, the impact evaluation sought to compare interventions' contributions to continuation and attainment based on the methods described in section 3.2 and Technical Appendix 2. The results are displayed in Technical Appendix 1. Drawing on this institutional data in particular, and also the survey data and local evaluation evidence, a set of particularly instructive interventions has been identified. However, it should be noted that many other interventions are also making very positive contributions to the student experience (as noted in section 2.2).

1. Building engagement and belonging through pre-entry webinars, student profiling and interactive induction, Business Management, USW
2. Developing interventions to support undergraduate trainee-teachers, ITE, NUB
3. Are you ready for Drama at St Mary's? Preparing students for vocational training programmes in higher education institutions, Drama, SMU
4. Enhancing induction to promote the belonging and professional identity of Mental Health Nursing students, Mental Health Nursing, UU
5. Active learning elements in a common first-year engineering curriculum, Engineering, UOG
6. Introducing E-tivities to improve student engagement and success, Education Studies (part of the EMPP course), NUB
7. Inclusive assessment approaches: Giving students control in assignment unpacking, UOW
8. Cloth, colour and communities of practice: Embedding co-curricular learning in Textile Art, Design and Fashion, Textile Art, Design and Fashion, UU
9. A changed culture through personal tutoring, Music and Performance, UOS
10. Student Success Advisors – A hybrid role starting in the School of Media…., Media, BCU
11. Academic advising and employability awareness, GCU
12. CLANs – Peer mentoring on a rural campus, Inter-disciplinary Studies, UOG
13. Building the environment: academic mentors and enhanced communication supporting transition and building belonging, Built Environment, UU
14. A student-led peer mentoring matrix to support retention and success, Music Technology, SU
15. What Works? Induction activities for sport science students: Nothing works for everyone…., SMU
16. The project as an enabler of change, USW
17. Benefits of embedding a project team within existing university structures, UOG
18. Building capacity for student engagement through a staff-student partnership approach, UU
19. Data which informs strategic development, USW

Summaries of these interventions and their impacts are presented in the vignettes in section 2.7.

Analysis of these interventions has further developed understanding about effective interventions; this has reinforced and extended learning from *What Works?1*. **Relevant** and **mainstream** interventions that promote **collaboration**, have an explicit **academic** purpose, and **monitor individual student engagement** stand out as particularly important, but were sometimes overlooked in early efforts to introduce new interventions. Individual student engagement needs to be monitored and those students who are absent or not engaging must be followed up. In addition: **one size does not fit all**. Rather, interventions ought to be **tailored** to address the issues experienced in specific disciplines and in relation to the characteristics of the student cohort. Furthermore, **one-off activities are insufficient:** improving engagement and belonging should extend throughout the (first year) student experience, either through **ongoing interventions** (e.g. active learning, personal tutoring or peer mentoring) or through a **programme of linked engagement activities** (often starting pre-entry and including a focus on potential future employment outcomes). The revised features of effective practice are summarised in Figure 3, and discussed further in Chapter 5.

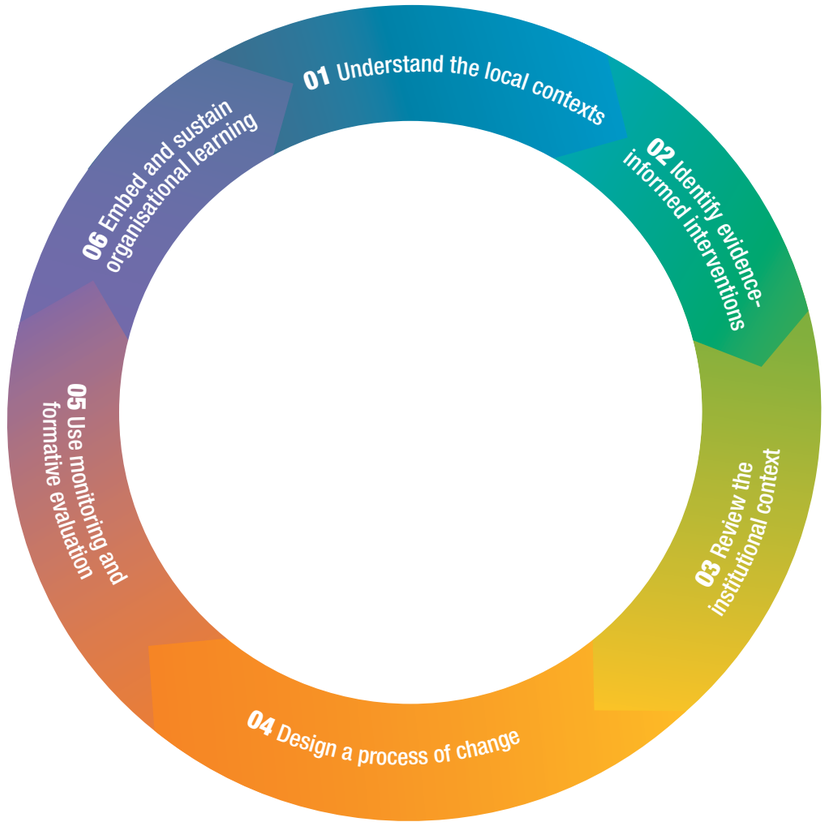
Figure 3: Features of effective practice



2.5 Learning about complexity and change

Not only was the evaluation designed to examine the impact of interventions, but also to examine the process of change (see section 3.1). A significant contribution of this study is the insight gained into how to implement change in large, complex organisations to improve students' experiences and outcomes. Complexity relates to both the issue and the organisation. Student success is a multi-dimensional concept, incorporating continuation, completion, attainment and potentially much more (as noted in section 3.2). There are multiple factors contributing to why students withdraw, and these vary over time, between disciplines and institutions, according to student characteristics, and depending on individual students' experiences and their responses to them. In addition, higher education institutions are complex organisations consisting of multiple units, roles and individuals; and are frequently characterised by high levels of autonomy at the level of both individuals and units.

Figure 4: Overview of the learning from *'What Works?2'* about implementing change



Throughout the *What Works?2* programme the evaluation has been interested in this complexity: examining what teams were aiming to do, and how they were operating within their local and institutional contexts and cultures, including the challenges experienced and how they overcame them. Drawing on the experiences of the 13 institutional and 43 discipline teams, an overall process has been distilled. These findings are presented under the following headings, which are intended as stages that others wishing to improve student retention and success might find useful to be guided by. This is represented visually in Figure 4.

- Understand the local contexts.
- Identify evidence-informed interventions to address the issues of concern.
- Review the institutional context.
- Design a process of change.
- Use monitoring and formative evaluation.
- Draw on organisational learning to embed, sustain and enhance the student experience and outcomes.

These stages are evidenced and discussed in the following chapters of this report.

2.6 Implications and recommendations

The *What Works?2* model of working – combining research evidence from *What Works?1*, an extended change programme, a cross-institutional team taking action, and the use of data, evaluation and feedback – helped institutions to meet existing and emerging challenges to improve student retention and success, and generated many other benefits for students and institutions. It is recommended that other institutions seeking to develop excellence in learning and teaching and improve the student experience and outcomes adopt a similar evidence-informed, whole-institution approach to implement change in complex contexts.

2.7 Summaries of instructive interventions and their impact

1. University of South Wales

***Building engagement and belonging through pre-entry webinars, student profiling and interactive induction,* Business Management[94]**

> *The fact that the cohort is largely a commuting cohort of students means that informal interaction does not occur as it might in a cohort resident on campus. This belonging engendered early in the year led to a wider engagement of learners with each other, the academic team and the discipline.*

The University of South Wales' Business Management course undertook three interventions. A weekly pre-entry webinar was established for all prospective Business Management undergraduate students, including potential and confirmed applicants. Prospective students were able to raise a wide range of queries and concerns and receive an immediate response. A review of student induction resulted in a reinvention of first-year induction to focus on induction as an experience of belonging, over induction as the provision of information. Opportunities for socialisation and staff–student collaboration were created through events and tourist visits related to students' academic courses, with discussions then extended into classes. An online student profiler for business students was redesigned to include measures on engagement, self-confidence and belonging, along with opportunities to identify their skills and development needs. The data was used to inform personal tutor sessions in order to enable them to have conversations with students that were meaningful and informed by the individual context of the student.

Managing change

> *Staff attitudes moved from a 'Why are they leaving?' perspective to one which saw the staff role as crucial to engaging students in a sense of belonging and community.* (Karen Fitzgibbon et al.)

Effective cross-team working was crucial for the roll out of interventions – for example, with Marketing and Recruitment in relation to the pre-entry webinar. Whole-team ownership of a project, rather than reliance on one or two individuals, was perceived as an important factor in sustaining existing initiatives and progressing new ones.

Indicators of success

- Reported sense of community and confidence for pre-entry students;
- Increase in students' sense of belonging, engagement and self-confidence;
- Improved student feedback on personal tutor sessions;
- Greater understanding of the complexity of the student experience reported by staff;

- Continuation rates improved from 93 to 97%;
- Attainment (mean marks) improved from 57.6 to 59.2;
- A move to data-driven strategic planning and data-driven practice noted.

Lessons learnt

- Having a reliable single source of high-quality data that can inform decision making at multiple levels within an institution is a critical factor in driving and managing change.
- Students from disparate backgrounds, who often do not live near the institution, need a way of socialising that is not traditionally adopted in higher education.
- The effective use of technology can aid interaction between staff and pre-entry students and develop an early sense of engagement and belonging.
- The team culture within specific departments/disciplines can either enable or mitigate against the transferability of evidence-based good practice, and this factor should be considered early on.

2. Newman University

***Developing interventions to support undergraduate trainee-teachers,* Initial Teacher Education (ITE)[96]**

Newman University's Initial Teacher Education (Primary) programme sought to improve its preparation of students for their school placement, enabling students to better make the transition from level 4 study into teaching practice. Those not successfully making this transition were faced with re-sits and an interruption to their studies. Colleagues from ITE Primary, therefore, chose to focus their work on induction to reduce the number of students needing re-sits and to improve the progression of those students re-joining their programme. A new approach to student induction and enrolment as a whole was taken in 2013/14, alongside the introduction of a new 15-credit module in semester one. This module was planned to begin in Induction Week in order to develop a whole cohort and programme identity. It aimed to provide opportunities to:

- Develop skills in reflective practice;
- Develop independent academic study skills in a range of contexts;
- Develop the use of virtual learning environments (VLEs) and online reflective journals, so that students would develop strategies for planning, learning and progress evaluation;
- Recognise the importance of effective communication, team working and relationships with mentors.

Managing change

> *Don't give up even when the structures appear to be against you! Some of the changes (e.g. re-balancing the workload and assessment opportunities for students who have to undertake school experiences) took several years to suggest as an improvement, prove and then implement.*

The change in induction processes occurred at the same time as some significant structural changes to the programme, which were intended to improve the balance of workloads across the semesters. A revalidation of the whole programme was carried out during 2013/14, and from 2014 onwards the 'Professional Studies Academic Learning' module became embedded into two modules: 'Ground Rules for Membership of a Scholarly Community' and 'Introduction to Professional Development and Practice within a School Setting'.

Indicators of success

- 95% of students passed the module first time (cohort average: 75%). 85% of the 2013/14 students successfully completed all their second-year modules and could progress into the third year.
- Good levels of belongingness, confidence in completing the course, and engagement with the programme overall were reported.
- Second-year school experience resits were down from 13.8% in 2012/13 to 11.9% in 2014/15.
- There was a 95% retention rate.

Lessons learnt

- The earlier students' interests and goals are embedded in HE, the better.
- By developing a bespoke re-induction programme for returners – via a personal interview, a focused action plan and a meeting with a group of peers in similar circumstances in a structured, dedicated setting – success (though not guaranteed) is more likely.

3. St Mary's University, Twickenham

***Are you ready for Drama at St Mary's? Preparing students for vocational training programmes in higher education institutions,* Drama[97]**

In response to a general decrease in demand for Drama courses, and continuation data showing that Drama students on joint-honours courses were consistently less likely to complete the course than those on a single-honours course, St Mary's Drama department chose to offer only single-honours courses and to make the vocational aspect central to the programme, with a larger number of practical sessions and, therefore, higher than normal contact hours (30 per week).

Drama has a very good completion rate overall (93% average). Most students who left did so in the first semester. Upon looking into this, a trend was identified: students hadn't completely understood before enrolling on the programme what the demands of the programme would be, or how different the nature of their course would be to the courses of other students within the university studying different fields. There was also a pattern of students moving from Drama programmes to other courses within the institution, suggesting that the students were satisfied with other aspects of their university experience.

To address this issue, St Mary's Drama department prepared two interventions:

- The 'Are You Ready?' pre-induction website. This website was made available from the time students accepted their university offer, being signposted by emails sent directly from the department to the potential student. The website brought together all the information the students needed to begin their programme of study: staff contacts and profiles, indicative and suggested reading, links to student services, and advice around academic work. Throughout the summer, this website was updated with induction week information and Drama at St Mary's theatre listings, encouraging students to return to the site.

- Interview information leaflets. These print materials were given to students at open days and audition sessions, outlining an indicative timetable with 30 hours, all the modules in the first year, information about assessment and the number of contact hours, graduate comments about the programme, and accompanying images. The leaflets also gave out staff information so that students could contact staff members directly with programme-related questions.

Managing change

Implementing a project such as this one has had its challenges. In the first year of its introduction, it was discovered, when collecting student questionnaire data, that the students had not received the link to the website. Less than 5% of the incoming cohort had managed to find the site through search engines prior to their arrival. As a result, the data collected about the site's effectiveness was not useful. This did lead to some very positive exchanges, particularly in improving the communication between departments in the university to make sure that the students' experience of pre-induction was holistic and consistent.

The website was quickly embedded into the university's main online site, incorporating space for Business Management and Sport Science, as well as additional information for the Students' Union and Student Services. Information sent to students before their arrival was also streamlined, with everything they needed being sent in small, manageable packages. These have been very positive steps in improving the induction process for students.

Indicators of success

- A questionnaire of new students gathered data about the effectiveness of these interventions. The 'Are You Ready?' site was consistently rated higher than the university website, and 93% of respondents said that they felt prepared for their programme of study.

- Qualitative responses showed that students had been made aware of the practical ethos of the department and the high number of contact hours.

Lessons learnt

- Students' sense of identity lies with their programme rather than the whole university.

- Advance information is important; for example, induction information can help students plan their involvement ahead of their arrival and early timetabling information can help students plan their external work commitments.

- Transition support can begin early by sending manageable amounts of information throughout the summer to students who have accepted an offer.

4. Ulster University

Enhancing induction to promote the belonging and professional identity of Mental Health Nursing students[98]

The attrition rate in year one of the Mental Health Nursing course at Ulster in 2011 was 8.9%. While this was around a third of the national attrition rate, it raised some concerns in light of public investment and was high in comparison to other courses within the Faculty of Life and Health Sciences. It was also noted that National Student Survey (NSS) scores on student satisfaction were consistently higher than 90% each year. Ulster University's Mental Health Nursing department found itself, therefore, in a paradoxical situation, where a high proportion of students in year one left the programme but those that stayed reported high levels of satisfaction with the course. It was appropriate, therefore, to examine the experiences students had in the first year of the programme.

To address this, they introduced a bespoke induction package throughout the first year to improve student retention figures and develop a sense of belonging and professional identity in a group of Mental Health Nursing students.

In consultation with the student representatives, the induction period was lengthened to cover the full academic semester. Previously, induction had only been for a single week, and was primarily focused on providing information to students about all aspects of their course. The ethos was changed to focus more actively on the development of self-awareness and to promote a sense of academic community and relationship building. Information technologies were used to provide the designated information that students had to receive, freeing time for interactions between staff and students, between lower level and higher level students, and between peers. Specific sessions around the students' hopes and aspirations for the course and meetings with more experienced students and local mental health organisations were included in the revised timetable. Mental Health Nursing students were also taken as a single cohort in contrast to previous years, where they were incorporated into the larger field of adult nursing students. Social events aimed at bringing students from across all three years together were encouraged in the induction week.

The department adopted a sustainable student-led approach to the development of the induction programme. The ideas for the sessions came from the student partnerships, with the discipline lead acting as a facilitator for these. Individual staff members of the Mental Health Nursing team and students met and led the induction sessions. The discipline lead, through the steering group, addressed any institutional issues arising from the project.

Managing change

The model of sustainable student partner involvement also contributed greatly to the success of the programme as well as the academic achievement of the individual students involved.

The course structure of the Mental Health Nursing programme means that students have only 10 hours as a separate cohort during year one. In other classes they are integrated with the larger adult nursing programme. The issues associated with this were partly overcome by the mental health-specific sessions held throughout the semester. The additional support from peers was also apparent for students as a result of the extra time they had together during the induction week.

The success of the project was dependent on the buy-in from staff and students. Mental Health Nursing staff were extremely supportive and facilitative of any interventions proposed by the steering group. Likewise, students engaged fully in the dialogue of planning and the delivery of the interventions.

Indicators of success

The induction model has worked well. Our current year three student representative has adopted a more supportive role to help her colleague in year two. This has allowed our year two representative to become more active in engaging with the student body across all three years. There has been a noticeable impact, primarily for the individuals involved.

- Quantitative and qualitative data gathered during the evaluation of the induction indicated that it was a positive experience for students.
- Students reported increased levels of belonging and engagement in comparison to their starting point.
- Students also reported increased satisfaction with the induction period, indicating that they enjoyed and valued contact with their peers in years two and three.
- The attrition rate decreased to 7.5% in 2014/15, which is one of the lowest in the sector.
- The overall satisfaction score in the NSS was 100%.

Lessons learnt

- Discipline-specific induction is effective in building identity and a sense of belonging. Mental Health Nursing students reported finding great value in spending time with their peers in the Mental Health Nursing programme. They reported developing relationships and a sense of identity as a mental health professional as a result of their time together during the induction period.

- Ongoing contact with students throughout the first semester fosters a sense of belonging. Transforming the induction into a semester-long 'event' increased student contact with mental health staff, in contrast to previous years. Engagement with mental health staff facilitated the delivery of field-specific information in relation to their upcoming placements. This allowed discussion of their fears and hopes about their placement experiences.
- The needs of students will vary annually, hence an ongoing dialogue with students is required in the planning of future induction programmes.

5. University of Glasgow

Active learning elements in a common first-year Engineering curriculum[99]

Changes to the early years of the Engineering degree programmes in Glasgow resulted in larger class sizes. The *What Works?* project team wanted to ensure that the larger class sizes would not result in a loss of identity or a reduction in feelings of belongingness. To alleviate this, a 10-credit 'Engineering Skills' course was created with the aim of developing generic and engineering-specific career skills at an early stage, with the students working together in small groups to foster a sense of belonging. For this compulsory course, all students were organised into groups with other students on their degree programme. The key component of this was a lecture series including:

- An introduction to graduate attributes, the need to develop transferrable skills and the importance of building a CV;
- An introduction to university services, including careers services, student learning services and the library;
- Communication skills, including report writing, presentation delivery and poster creation;
- Students working on an 'Engineering Disasters' project in groups of four or five, with peers assessing, as well as being assessed on, their group deliverables;
- An extended induction delivered over the course of the first three to four weeks, with small items covered at the beginning of each lecture;
- Computer-aided design classes taught though video lectures and with online submission of design tasks;
- Skills classes in electronics and mechanical workshops;
- Design, build and test activities focused on the discipline area of the student's degree programme;
- Staff understand the purpose of the skills course as a major focus for student engagement combining active learning approaches and opportunities for extended induction.

Managing change

- Extended and repeated consultations were held with both academic and support staff.
- The changes to the degree programme (larger class sizes and the move towards a common core curriculum, for example) carried risks and a number of principles were agreed upon to mitigate these:
- All degree programmes should share a common core of between 90 and 100 credits and have between 30 and 20 credits of material specifically focused on the discipline chosen by the student.
- The large classes (>350 students) should be dual taught, with some students having morning lecture and afternoon labs, and others having morning labs and afternoon lectures.
- No member of staff should teach more than half a large common course, and they will be provided with admin support from the teaching office as well as additional resources for tutorials and laboratories.

Indicators of success

- Positive feedback was received from students about the small group activities, acknowledging the importance of making friends at an early stage of their university career.
- An improvement in student continuation was noted from year one to year two for 2014/15 into 2015/16.
- Greater collaboration was observed between the disciplines within the School of Engineering.
- The work is now embedded in the ongoing activities of the School of Engineering, with no requirement for additional resources.

Lessons learnt

- It is important to engage with all stakeholders (students, employers, administrative staff and particularly academic staff) from the beginning and to have support for change from management in the School. Ensuring that everyone has had an input into the proposal takes time, but is worthwhile in the end.
- A major change needs to be led by someone who is committed to the change and is prepared to convince others of the requirement for the change.
- Major changes are not complete when initially implemented but require continual revision for two or three years to fully achieve the goals.
- Significant changes are required when moving from large to very large classes and changing assessments from examinations with more choice to compulsory questions. Lessons are still being learnt in this area and outstanding issues include the use of assessment teams rather than individuals and the use of multiple-choice questions to alleviate the assessment burden.

6. Newman University

***Introducing E-tivities to improve student engagement and success,* Education Studies**[100]

The university introduced a new mandatory module for first-year students in their second semester. Named 'Doing Theory on Education', this second semester module is intended to support students making the transition into and through university, fostering a sense of belonging in students in the Education and Multi-Professional Practice Studies subject area. Specifically, it engages students in reflection on their semester one work to understand their own learning in relation to both their own experiences and also to the literature around student success in HE, generating a sense of identity as an HE learner. To operationalise this, the pedagogical approach and assessment design employed in this module included a greater emphasis on group discussion and collaboration to promote effective peer-to-peer and staff-to-student relationships.

The module uses 'E-tivities' (online activities) to achieve this objective. These activities, which took place in a VLE, encouraged group interaction and discussion in online forums focused upon specific tasks. Three activities were built into the module:

1. Reflection on group roles, which asked students to think about how they work in groups and how it affected their learning.
2. A preparatory directed learning task, which asked students to post responses to reading a chapter entitled *Doing Theory on Education*, prompted by a series of questions.
3. The final task, which subsequently became part of the assessment for the module (10%), was to ask students to identify an educational concept that had helped them to improve their studies, to identify a journal article related to this concept, and to write a post on the forum explaining the concept and its personal significance. Students were also required to respond to contributions from others in the forum.

Taught sessions within the module running alongside the E-tivities were designed to provide many opportunities for students to discuss and debate ideas around making sense of education theory, complementing the initial mandatory level 4/ semester one Education Studies module.

Managing change

- Designing for group discussion and interaction, over individual standalone posts, helped to mitigate anxiety about online identity.
- Tutors provided feedback on the group interactions, which helped to move the learning and understanding on while also encouraging the development of dialogue between the participants.

Indicators of success

Rewarding students for engaging with online discussion forums [is] a good idea, as [is] incorporating what was posted onto the forums in teaching sessions as a starting point for discussions: this both validated and encouraged the students. (External examiner)

- Students' use of the forum (both viewing posts and posting them) correlated with their final module grade.
- Early evidence suggests a correlation between success in the module and progression (passing first time). Further data and analysis in subsequent years, however, is needed to understand the role the module plays in enhancing progression.
- While students have not explicitly discussed whether and how the forum interactions might have deepened their learning, they have commented on the value of the forum posts, even when outside of assessment.

Lessons learnt

It is never enough to simply provide opportunities for students to use VLEs in their learning; there is substantial scope to the practice of learning through VLEs, and the manner and depth in which they are used are key.

7. University of Wolverhampton

Inclusive assessment approaches: Giving students control in assignment unpacking[101]

I was going to jack it in [the course] but … afterwards I thought I can do this, so I decided I'd stay and try to do the assignment. (Male, level 4 student)

It felt like we were in control, we were taking the lead in finding out what we needed to know to do the assignment. I left feeling that I knew what I needed to do to complete the assignment and that I could do it. (Female, level 4 student)

Academic assignments and feedback mechanisms are an important way to engage students and progress their learning. If managed poorly, they can create unnecessary anxiety, cause confusion and become tipping points for student withdrawal. The inclusive assessment intervention at Wolverhampton aimed to a) make assignment briefs transparent; and b) ensure students understood what was being asked of them.

The key elements of the improved process were:

- Reviewing the quality of assignment briefs against evidence-based criteria;
- Ensuring briefs were concise and clearly written, including information on processes, marking criteria and learning outcomes;
- Institutionalising opportunities for students to unpack and discuss assignment briefs together, with students discussing and forming shared understandings and then feeding these back to the lecturer;
- Providing opportunities to ask anonymous questions. Information was provided and misconceptions were addressed by lecturers in class and included in an FAQ on the university's VLE.

Managing change

There were questions that surprised me, I thought they'd know about that by now, but quite a few didn't seem to know. … and I have reflected on what was asked and what changes I need to make to the assignment brief. (Female lecturer)

Lecturers were provided with clear guidelines and a structure. However, the structure was flexible and ensured that staff could deliver the intervention in different ways. A number of delivery approaches were developed and observed, including the use of voting systems and the implementation of the Socrative app, roleplay-based peer groups incorporating marking/feedback and 'mocked up work', to name but a few examples.

Indicators of success

- Increased levels of student engagement;
- Increased levels of student confidence in themselves and their ability to complete the course;
- A marked decrease in the number of students requesting one-to-one tutorials to discuss assignment briefs;
- A significant reduction in the number of students who failed to submit;
- Improvement in the numbers of students who gained 50% or more, with a marked difference to those students who gained 70% and above;
- A significant reduction in the attainment gap between Black and Minority Ethnic (BME) and white students.

Example:

50%+	12/13	13/14	14/15	Impact
BME	37%	72%	74%	+37%
White	53%	61%	70%	+17%

Lessons learnt

- Promoting a single initiative can be a powerful way to instigate broader change.
- Support from senior leaders and management at both the university level and the faculty level is critical to the success of interventions.
- Discipline-level advocates can champion buy-in, refine design, and ensure initiatives are 'fit for discipline'.
- Location is important: situating project management and control within academic and pedagogical areas will provide legitimacy and access to a community of practice.

8. Ulster University

Cloth, colour and communities of practice: Embedding co-curricular learning in Textile Art, Design and Fashion[102]

Three years ago, Ulster University's Textile Art, Design and Fashion department began to work with the student cohort, graduate artists and designers-in-residence, along with technical and academic colleagues, to build a community of practice, a greater sense of belonging, and personal confidence in both students and staff.

The creation of a new course amalgamating textile art and fashion design brought with it a new ethos and approach to previous courses. At the same time, changes in the use of spaces meant that studios and workshops were spread across two buildings. These changes required radical responses, and the team decided to work on improving identity and belonging among large cohorts, with an emphasis on the effective use of space and place. Retention was not a cause for concern, but student confidence and belonging did require attention, which was partly historical and partly because of the recent significant change in approach.

A year-long programme was created specifically to encourage staff–student partnerships bringing about shared responsibility through positive student experiences in a supportive learning environment. A series of collaborative learning events was devised. In the first year, 12 student partners were recruited to mentor new students throughout the year. Artists-in-residence, a number of final-year students, and technical and academic staff were all involved in the process.

- **Pre-entry activities:** This encompassed a two-day summer school with induction events and a foundation workshop supported by artists-in-residence, student partners and technical staff.
- **Work-based placements in workshops:** Academic staff, technical staff, and student partners supported year one students in practical workshops as part of a professional practice module.

- **Interviewing of prospective students:** Student partners and residents organised a collage workshop for interviewees and worked as ambassadors for the course, answering questions and calming nerves.
- **Cloth, colour and community practice:** The 'Big Day of Colour' workshop was the main event of the programme: a workshop with 50 students learning about colour theory (an integral part of textiles and fashion), facilitated by year one and student partners, third years, technicians and academic staff working together.

Managing change

Finding the time to devise, organise and facilitate the programme was challenging, as was reporting, organising the questionnaires to be completed, briefing everyone on new approaches, attending events and writing papers. A core team of four undertook most of the work with the support of technicians, and the collective workload increased accordingly.

Some elements of the programme have been streamlined, and several elements of the project have been embedded into core teaching, reducing the amount of time given to additional activities, but with no visible detrimental effect on the overall modus operandi.

Indicators of success

> *We have embedded so many approaches from this project that perhaps the current first-year students are the real beneficiaries of the work. Across the course, it feels like there is greater confidence, collegiality and student independence. The group of students who were our first 'student partners' took the role very seriously and benefited greatly.*

- Better and more confident use has been made of workshops and studio spaces.
- Success has been noted in the New Designers (UK) show.
- 88% of students indicated that they felt a strong degree of positivity towards collaborative work.
- Attrition, while under 5% in 2013, has improved, with no student withdrawals in the first year and no fails in the first semester 'Studio Practice' module – this is a fantastic outcome and represents a reduction in attrition to 3.5%.
- Very positive feedback has been received from students.
- There have been improved mark profiles.
- In general, attendance at lectures is in excess of 90%, which is an improvement on previous years.
- Students in all three years volunteer readily for extracurricular events and respond to requests for help.
- Second-year students are actively involved in assisting final-year students in the organisation of their end-of-year fashion show.

Lessons learnt

The second group of student partners was distinctly different from the initial group. Students didn't volunteer in the same numbers and their personalities were different. They appeared to be less social and more introspective. There was less enthusiasm for and engagement in the project, even though they had benefited from working with the original group of student partners.

The differing identities changed the working relationship staff had with the first and second groups of partners, although the changing nature of the student partners did not impede the continued collaborations and roles actively, as they saw this as being part of the community.

As a result, more time will be allocated to describing the project and encouraging participation from a group of partners with different personalities and attributes; approaches will be addressed more efficiently through 'catch-up' sessions; and the progress of not only the first-year group but also the student partners will be mapped.

9. University of Salford

A changed culture through personal tutoring, Music and Performance[103]

> *It helped immensely with the students' transition into university and helps to foster belonging on the programme.* (Personal tutor report form, Performance tutor 3)

A systematic personal tutoring system was implemented in Music and Performance programmes with the aim of facilitating students' academic and social integration to improve student retention and success.

It was agreed that all academic staff would act as personal tutors. Staff's workload allocation was reconfigured to ensure they had allocated time for personal tutoring. Tutorial groups were based on academic programmes. Record-keeping was made a core feature of the tutoring system, and staff kept attendance records and completed personal tutor reports. Tutorial meetings were timetabled. Staff were required to follow up on non-attendance and monitor effectiveness. Iterative feedback was designed into the system to ensure ongoing refinements.

Managing change

> *There was unbelievable resistance. ... [Implementing the intervention was certainly] one of the most difficult things I've ever had to achieve as a manager and leader.* (Discipline lead)

A process of 'gradual negotiation and robust dialogue' with staff and students ensured buy-in over time. An externally facilitated discipline-team residential was key to building understanding and bought valuable time for staff to work together on the personal tutoring system. The discipline lead spent time with students, building awareness of the benefits of personal tutoring. Personal tutoring had been perceived as an intervention for weak students. Students came to understand that personal tutoring was for successful students and was strongly related to successful outcomes.

Indicators of success

> *I felt like I was genuinely cared about and recognised as an individual rather than just another student.* (Level 4, Performance student)

- Improvements in the extent to which students felt they belonged at Salford, were engaged with their studies and were confident about successfully completing their course;
- Transformation in and enhancement of positive attitudes and positive working relationships;
- A significant drop in problems and complaints raised at Staff-Student Committee Meetings (SSCM) and a commensurate increase in the number of issues resolved and closed;
- Continuation rates improved in both disciplines: in Music from 77 to 85%, and in Performance from 81 to 89%;
- Attainment (mean mark) improved in both disciplines: in Music from 53.3 to 54.2, and in Performance from 53.1 to 57.7.

Lessons learnt

- Change requires dedicated time to build understanding with staff and students and to refine the proposed interventions.
- Increased staff responsibilities need to be formally reflected in staff workload allocations.
- One size does not fit all. Whole institutional systematic interventions must have flexibility so that programmes can refine systems depending on their disciplinary needs.

10. Birmingham City University

***Student success advisors – A hybrid role starting in the School of Media….,* Media[104]**

> *The key element which acts as a supportive framework for all of [the work] takes the form of student success advisors.*

The demands of a growing student cohort in the Birmingham School of Media, along with concerns around learning support, reflected in the NSS, led to the development of the role of student success advisor (SSA). The role focuses upon transition and the first-year student experience. It aims to enhance student progression and retention through collaboration with staff in the delivery of five key services: pre-induction, induction, extended induction, attendance monitoring and personal tutoring.

The SSAs played a very key role in delivering these areas. Their role included the design of a 'Personal Tutor Record' sheet to collect information from and disseminate information to students (for example, the number of hours a student is working, early academic successes or opportunities within the university). The sheet also served as a feedback mechanism to identify any issues with university services. The SSAs' role was then to contact the student and seek to resolve the issue. SSAs worked closely with student representatives and the Students' Union to promote feedback mechanisms to students; this was very different from older systems, which were traditionally organised and led by staff. As part of their work around the transition into university, the SSAs also recruited student mentors, and met regularly with students to update and lead innovative changes to the pre-induction and the online 'Level-up' scheme, which functions on three interrelated platforms: social media, the website, and the external VLE of Xoodle. The SSAs predominantly handled the monitoring of student attendance, collating and printing out data and contacting students. SSAs restructured Welcome Week, replacing information-heavy sessions with active, technologically facilitated ones. Information was then drip fed during the first semester, following a 'right information at the right time' approach. On top of this, SSAs and their mentors acquired a whole host of skills alongside developing their own employability

Managing change

- Financial and staff buy-in was key to developing the role of SSAs. At its initial conception, the role was funded jointly by the School of Media and the Centre for Excellence in Learning and Teaching (CELT). This support saw the role implemented in 2014/15. There was also buy-in from key members of staff: the Head of School, lecturers, administrative staff and CELT. It is now funded by the faculty, as its value has been demonstrated.
- An important function of the student mentors was that they created a bridge between key departments, such as Student Services, the Centre for Academic Success and the faculty programmes.
- Managing expectations of the students' role was important to ensuring that the SSAs did not end up doing too much work. Senior managers were explicit with students and with staff about the core responsibilities of the SSAs, about what the role involved and what it did not involve.
- The SSAs met regularly as a collective to share problems and good practice. This strong, supportive network has impacted on the culture within the School; it has been key in changing initially negative staff attitudes around the 'extra' work that student engagement initiatives can bring, and has generated a very positive attitude towards change.
- The significant increase in student retention in the first year, while impossible to attribute directly to the SSAs, was key in promoting university-wide buy-in for the role.
- A key challenge in broadening out the scheme was ensuring that the design of the SSA role was adaptable to the needs of different subject areas and that suitable subject-specific graduates were available.

Indicators of success

> *During my time as a second-year undergraduate I got involved with the 'What Works?' project … The project has had a huge impact on me, ultimately shaping who I am today as a professional.*

- The number of SSAs has grown to 13, with representatives in all four faculties.
- The SSA role is firmly embedded across the university, and continues to evolve dependent on the local context.
- The success of the approach has led to an institutional top-down initiative to implement SSAs in every school/course.
- There has been significant improvement in student retention in Media (an increase of 7% in the first year), which has been retained.
- The first SSA has now been appointed a lecturer at the university.

Lessons learnt

- Students can make an enormous contribution as co-creators of the learning experience.
- Managing expectations regarding the role of Student Success Advisers key to successful change.
- Student roles are an important bridge, operating as links between key departments.
- Demonstrable impact is important, as it justifies further investment by universities.
- Schemes designed within one school need to be flexible so they can be adopted and adapted by other areas.
- The importance of the role requires the SSA to undergo training around university processes and the support available for students.

11. Glasgow Caledonian University

***Academic advising and employability awareness,* Business[105]**

Student graduates in the UK are expected to have acquired a range of attributes that will prepare them for work in different contexts and cultures. Glasgow Caledonian University (GCU) has a strong commitment to graduate attributes, as expressed in the university's Student Experience Framework (2013–2017). To support the development of these attributes, GCU designed a university-wide standard approach to academic advising. The new model for academic advising, the GCU PPACT (Personal, Professional, Academically-informed, Consolidated, Transitional) standard, focuses on employability, with the aim of developing students' confidence in their ability to manage their academic, personal and professional growth.

The model was tested in three disciplines: Business, Engineering and Life Sciences. The teams in each of these disciplines used a range of advising approaches in year one, and each discipline adopted and adapted the model to fit with their student needs. Early in the planning process, the teams took the decision to explore group advising in the first year as a positive pedagogical choice, rather than as a last resort. This approach was used, in particular, with 250 Business students, who had large group meetings and also meetings in smaller seminar groups of 20. In all three discipline groups, academic advising sessions were offered to students as one-to-one and online meetings, and as drop-in sessions, as well as larger group meetings.

Managing change

- The academic advising model was developed in consultation with staff and students and tested in three disciplines.
- Principles were shared but there was flexibility in implementation; the introduction of academic advising varied across the discipline groups, but all groups adhered to the GCU PPACT standard to encourage student involvement in the process and to encourage students to take responsibility for their own learning early on in their studies.
- Early impact evaluations were carried out, which created an early opportunity for reflection and revisions in advance of the main evaluation.

Indicators of success

- Students reported an increased sense of belonging.
- Students highly rated interventions that built peer networking.
- Students reported being more confident about approaching a named advisor, and they valued having a named advisor.
- One-to-one meetings promoted forward planning.
- Staff and students reported improved communication.

Lessons learnt

- A range of qualitative data can evidence the impact of academic advising and student engagement initiatives.
- Academic and support staff at the discipline level have specific and extensive knowledge that can be harnessed to aid the development of advisory and engagement models.
- Standardised policies and guidance on academic advising must have flexibility if they are to be successfully embedded. Policies on academic advising need to be adaptable at the discipline level.
- Embedding the process into a module or portfolio promotes sustainability, increases relevance and clarifies the purpose of advising.
- It is important to raise awareness more generally of the value of academic advising.

12. University of Glasgow

***CLANs – Peer mentoring on a rural campus,* Interdisciplinary Studies[106]**

When it was developing a peer-mentoring scheme for its Dumfries campus, the University of Glasgow recognised that the traditional family-based support structure would not be the norm for many first-year students; they therefore developed an alternative scheme, which they called CLAN: the Campus Life Advice Network. As there are three undergraduate programmes on offer at the campus, it was decided that the CLANs should incorporate students from across all three programmes. Each CLAN would be made up of smaller mentoring groups known as SEPTs (Student Experience Peer Teams), each of which would be programme-specific. This structure was decided on after feedback from the initial pilot scheme showed that students found it useful to meet with students from the same programme for academic discussions, but also wanted to meet with students from across the campus for social events. There have also been CLAN gatherings designed for all the students on the campus to attend, such as the Burns' ceilidh launch evening.

The concept of the CLAN structure was developed as it was felt that this would give the campus a peer-mentoring structure that was Scottish-themed and therefore relevant to the campus. The pilot scheme was developed with the help of senior students and evaluated to inform the full structure design.

Managing change

- Getting staff buy-in was problematic due to the many competing priorities and time pressures for colleagues at all levels.
- The scheme had a slower start than was hoped for because many mentors were on school placements; it only really took off once assignments were due.
- Another CLAN gathering was organised at the start of semester two; this was well attended. By then, the scheme was becoming embedded and SEPTs were beginning to meet more regularly.

Indicators of success

> *[My group] agreed that the clan meeting and the ceilidh was a good thing and they would certainly like more of these events to take place so they can get to know more people.*

- There was a 9.8% improvement in first-year student continuation in 2013/14.
- Survey data shows that the belongingness factor has improved.
- The feeling of belongingness is consistently stronger on the Dumfries campus than at the university as a whole.
- Positive qualitative feedback has been received from mentors.
- The increase in regular student attendance at the Staff Student Liaison Committee (SSLC) meetings is very noticeable: more meetings are held, and the average attendance has increased from eight to twenty for each event.

Lessons learnt

- Comprehensive mentor training is essential to give students the confidence and skills they need to be effective in their peer support roles.
- Timing is key – structures need to be in place at the start of the year so they can be launched no later than the first-year student inductions.

13. Ulster University

Building the environment: Academic mentors and enhanced communication supporting transition and building belonging[107]

The School of the Built Environment experienced significant levels of first-year student attrition, which were in excess of 20%. Recognising that students interacted across different programmes, a School-wide approach was designed with the intention of improving the first-year student experience by building belonging and supporting transition while improving retention. In doing so, a School-wide retention and success plan was developed that included:

- The introduction of academic mentors;
- Pre-induction contact;
- Focused week 0 induction;
- Transition modules;
- Active attendance monitoring;
- The use of 'at risk' indicators.

Managing change

When the Built Environment discipline team began work, they initially considered how to improve induction as a means of improving retention within three of the thirteen undergraduate programmes.

However, the discipline team quickly realised that they needed a whole-School approach because students across the School frequently:

- Shared accommodation;
- Shared transportation to/from campus;
- Shared learning, modules and team exercises/assessments;
- Interacted on a social basis both on and off campus.

In brief, students communicated across programmes, both on a planned module and assessment basis and outside the classroom. Therefore, to be effective a consistent message needed to be given to all first-year students and the student experience had to be considered throughout the first year, including pre-entry, and not solely during the formal three-day induction.

Indicators of success

> *The project has achieved significant improvements in retention … bringing about increased student success, including an increase in the number of students passing their modules at the first attempt. The project has also provided enhanced management data, which has allowed us to understand the reasons why our students decide to withdraw from their studies.*

Evidence for the combined impact of these measures was gathered from focus group interviews with staff and students, a post-induction questionnaire, and institutional data, including data relating to attrition and student success.

Successes included:

- A reduction in early leavers across programmes;
- The early transfer of students onto more appropriate courses of study;
- Stronger relationships with students;

- Better understanding of the issues affecting individual students and working to signpost and support students in a timely manner;
- Enhanced working with university departments;
- A reduction in School-wide attrition, from 24% in 2013/14 to 15.6% in 2015/16.

Lessons learnt

- The role of academics in supporting the first-year experience is critical. Separating the functions of attendance monitoring from, for example, academics may lead to a fracturing of the relationships that could potentially be developed between staff and students.
- Effective induction cannot be carried out alongside a normal teaching schedule; it needs to be standalone.
- It is critical to have an alternative plan in relation to the integration of students who did not or could not attend induction.

14. Staffordshire University

***A student-led peer mentoring matrix to support retention and success,* Music Technology**[108]

The Music Technology department at Staffordshire University introduced a peer-mentoring system based around a matrix cataloguing the skills of the student mentors. The system was designed for first-year students and used second- and final-year students as mentors offering pastoral, social and academic tutoring. Students were appointed from those who responded to a general callout for second- and final-year students at the beginning of the term, leading to the establishment of a team of eight mentors. The mentoring activities offered were pastoral, social and academic, and the mentors each volunteered in the capacity that they were best suited to. The mentoring matrix was also made available on the university's VLE (Blackboard), and was also presented in personal tutoring sessions.

The intention was that the peer mentoring system should evolve during the course of the project and that the academics should retreat from its daily running to allow it to develop organically according to the needs of the mentees and the capabilities of the mentors.

Managing change

- The second year of operation benefited from an earlier introduction of the mentors, with new ones having been recruited where necessary. There were plans to introduce an 'opt-out' approach to mentoring in the third year, but this proved difficult to make workable.
- Mentoring would ease off in the second semester because of the commitments of final-year students to completing their final-year project, the most important part of their final year. Clearly, this is a time when the mentees need more assistance, but it is not possible for the mentors to provide this, as it may affect their own progress.
- Engagement in the mentoring scheme proved to be hard to measure accurately because only attendance in class could be monitored by the academics. Mentoring also took place outside of the classroom, but this was difficult to monitor.

Indicators of success

- Belongingness, engagement and self-confidence have improved on the Music Technology course. The results for Music Technology students are higher than those for both the wider university and the project as a whole.
- The scheme provided a safety net for weaker students and for students transferring onto the course; a number of students have definitely been retained because of the mentoring scheme.
- The initial activities organised by the mentors and academic team were invaluable and engagement in these certainly changed attitudes.
- Mentors clearly increased their confidence. Two of the mentors subsequently undertook some part-time teaching at a local college, and several mentors achieved first-class honours degrees, which may in part be attributable to their involvement in the scheme.

Lessons learnt

- Mentors should be formally recognised for their work in their achievement records.
- Any peer mentoring system should evolve and be allowed to grow without academic input or interference.
- Sessions should not last longer than an hour and should not take place more than once a week.
- It is important to get the right students to act as mentors. There is a potential problem if weaker students put themselves forward as mentors.
- It is important to introduce mentors early on, and to involve them in any level 4 away-day activities, as this helps to foster an improved sense of belonging.
- The use of a lead mentor would be beneficial. The student could coordinate the scheme, be involved in resolving any difficulties that may arise, suggest solutions and record all the activities.

[108] A summary chiefly of Newman, D (2017) *A student-led peer mentoring matrix to support retention and success.* Read the Institutional Report from Staffordshire University for additional context.

15. St Mary's University, Twickenham

What Works? Induction activities for Sport Science students: Nothing works for everyone....[109]

> *Almost all students found the meetings with their tutor helpful and enjoyable, they liked getting to know their tutor and making friends in a small group.*

The Sport Science programme at St Mary's University takes in around 200 students each year; of these, three quarters are single honours students, while one quarter combine Sport Science with another programme. St Mary's What Works? project team aimed to review and enhance existing student induction and to introduce an evaluation of the induction process.

The Sport Science team introduced pre-induction information, including video clips of current students describing what they liked about Sport Science at St Mary's and what they wished they had known before arriving. Another initiative was a 'settled score' – students were contacted each month and asked to send the programme director a score from 1–9 that represented how settled they felt at St Mary's. If a student's score fell below five, they were contacted by the programme director. Alongside this, a new research methods and study skills module was introduced that ran every week for three hours during the first semester. This was run in small group settings and involved interactive elements – for example, a formative assessment where students completed five small tasks over the period during class time. These were peer assessed in class, with students then having the option to revise before submitting for final assessment. One of the module sessions involved students interviewing each other and conducting focus groups about the induction activities. The team also created an opportunity to socialise and meet staff and other students at the end of the induction sports afternoon. Evaluation was used to establish likes and dislikes about induction and to plan changes in response to the evaluation outcomes.

Managing change

Setting up a Virtual Learning Environment (VLE) for the pre-induction activity proved to be challenging. A significant amount of time was spent communicating between various departments of the university in order for it to become live. The interviews and focus groups established that, due to poor publicity, few students accessed it. Many students who lived off campus did not attend the social event, some students did not enjoy the sports afternoon (expressing a desire to start on academic work sooner), and commuter students felt that activities could have taken place over one day, thus saving on travel. Evaluation has helped to inform how the change interventions could have been better. For example, although students received individual timetables at induction, they said they would have liked timetables prior to arriving and, while the social event followed team-building activities in tutor groups, some academic content could have been included.

Indicators of success

> *Many students indicated in the interviews that they liked the settled score because it made them feel that someone cared.*

- The 'settled score' proved to be a quick and effective way of touching base regularly with a large group of students.
- Students who engaged with the 'settled score' activity each month were more likely to continue their studies.
- Student continuation data (for both single and joint honours cohorts) improved over the duration of the What Works? project, although it is not possible to say whether this was due to a direct causal relationship.
- Students reported favourably on the research methods and study skills module, and particularly valued the small group size, seeing their tutor every week, and having the opportunity to support one another with learning.
- The quality of work and marks for laboratory reports in physiology and biomechanics improved.

Lessons learnt

- It is important that opportunities are publicised effectively, so that students can access them.
- Student engagement initiatives need to recognise that students have different needs (for example, commuter students).
- Evaluation of initiatives is important in order to introduce improvements, and to amend or adjust aspects of interventions that are not working.
- Students value interacting with each other in class, learning through collaboration, and getting to know staff.

16. University of South Wales

The project as an enabler of change[110]

> *The project had the helpful effect of bringing teams together around a shared aim benefiting the whole institution rather than its component parts.*

In 2013, the University of Wales, Newport and the University of Glamorgan merged to form the University of South Wales. The *What Works?* project had only recently begun and the project team chose to use the project as a driver of whole-institutional change. The project was used to establish a unifying vision for belonging, retention and student success at the institutional level. It provided a forward-looking approach, ensuring that the merger did not become a barrier to change as new roles and structures became embedded, but instead helped the institution move forward with an initiative that everyone could mobilise around.

Managing change

Two elements were key to driving successful change. The project team ensured that the disciplines that were part of the project were represented in both institutions so that the work and teams spanned the whole institution. It was also important to ensure that the Students' Union, which also merged, would be a key part of the team. Both these elements helped staff in the project team to weather change from an early stage.

Indicators of success

- Innovative practices introduced as part of the project have become normal practice.
- A community of practice emerged between the core team and the discipline teams.
- Improved student attainment and increased student progression were noted.

Lessons learnt

- A project-based approach to enabling change is useful in a higher education institution.
- It is important to bring teams out of their day-to-day work to take a broader institutional view.
- The regular reporting and feedback required as part of the project were important, as these helped staff to prioritise the work over other demands and pressures.

17. University of Glasgow

Benefits of embedding a project team within existing university structures[111]

- A long-term change project, such as the *What Works? Retention and success programme*, faces specific challenges in a large institution that has practices historically embedded in different areas, and where there are many competing and ever-changing priorities. The University of Glasgow delivered the aims of the *What Works?* project by concentrating on embedding the project team within existing university structures.
- Coordination for the project was managed through the pre-existing Retention Working Group on the main campus. This group reports to the Learning and Teaching Committee, and the programme has been supported by senior management. Initial members of the core project team, covering roles prescribed by *What Works?*, were drawn from the working group, and suggestions were gathered there for suitable disciplines to be involved, all under the strategic overview of the Vice-Principal with responsibility for learning and teaching. The convenor of the working group was the project lead, and the Retention Officer responsible for providing research and data support to the group became the Project Manager.
- Three disciplinary areas were identified that encapsulated the major challenges for improving student success that had emerged from the university's own institutional research. The disciplines chose to be involved in order to put into practice – with the support of the programme – their ideas for interventions that fitted with the *What Works?* themes.
- Student input into the programme was crucial, providing support in terms of representation but also assisting in the discipline evaluations, such as co-facilitating focus groups, and also in providing invaluable input and advice on developing interventions.
- The first action of the core team was to suggest renaming the working group 'Retention and Success' to emphasise more positive messages about student success. With updates from the change programme team as a standing item on the meeting agenda, the group acted as a broader consultation team as the project progressed. Further opinions were gathered through staff consultations and workshops. For example, Deans of Learning and Teaching and their nominees were consulted on data use and reporting, and workshops were held with academic and service staff involved in supporting student retention and success to consider what the priorities are and what staff needed to know.

Managing change

- A long-term project inevitably sees changes in personnel and priorities that it needs to engage with. Embedding the project within existing structures and initiatives mitigates the impact of these changes.
- The discipline leads were already involved in retention work, and this enthusiasm and ownership within the discipline areas was crucial to its success.
- The pace of change in such an institution can be slow. Workshops advertised to all staff did not garner much interest and other ways of engaging more broadly with staff, such as presenting to established networks, had to be found. Presenting outcomes of the programme in this way provides a narrative to engage staff more with the importance of student engagement and belonging for retention and success.

Indicators of success

- Members of the team reported high levels of support from the core team and participation from Schools in three of the University of Glasgow's four Colleges.
- The students involved reported their appreciation of being able to contribute to the development of their programmes of study, and their involvement in the programme has been recognised on their HEAR (Higher Education Achievement Record).

- The staff involved have gained benefits beyond the original aims of enhancing belonging and engagement and contributing to the success of their own students. These include, for example, working with colleagues across the institution and across the other institutions involved in the change programme, publication opportunities and professional development that could be used for HEA Fellowship applications.

Lessons learnt

Essential requirements for a successful project team to implement a change programme are:

- A fully engaged team who feel ownership of the project;
- Student involvement wherever appropriate;
- Dedicated administration and project management support so at least one person has a good overview of all activities to keep the project on track;
- Support from senior management and existing committee structures;
- Continuity of team membership;
- Time to embed changes to see the longer-term impact on student engagement, belonging, retention and success.

18. Ulster University

Building capacity for student engagement through a staff–student partnership approach[112]

Ulster University wished to adopt and evaluate a staff–student partnership approach to this change programme. Seven discipline areas were selected, some with a record of high attrition rates, and others with low attrition rates as a result of effective interventions. Each area was represented by course staff and student volunteers who worked together to identify areas for improvement and devise and implement solutions. The seven teams were supported by a core institutional team of academic staff, a data analyst, and a Students' Union representative.

A wide range of interventions were introduced over two years, including: enhanced peer and academic mentoring; pre-entry activities and a more socially-focused induction; a 'drop-in, don't drop out' campaign; a more interactive lecture style; more independent learning; a common themed project involving different year groups; and industry-led projects.

Staff on the team introduced these interventions and supported their implementation and evaluation. Student partners on the team took a variety of active roles, such as: coaching of first-year students by final-year students; organising events to promote belongingness; leading activities with prospective students and during the induction of new students; collecting and evaluating data about issues in the first year; and co-developing ideas for interventions to address these issues.

Managing change

> *If you are thinking of adopting a student partnership ethos, then start small – situate it within a module and make sure that all students are aware of what you are trying to do.*

Three challenges to staff–student partnership were time, resistance and capacity for change (for both staff and students). Fostering a staff–student ethos requires, in particular, students to put themselves forward and to encourage others to get involved. Starting off small provides a foundation of involvement that can be built upon as students and staff see the benefits of these partnerships.

Indicators of success

> *I feel more comfortable speaking with staff if there are issues. In the past, I would have shirked away from that. I find that staff are a lot more open to asking about what students think and feel.*

The impact of the approach was evaluated using individual semi-structured interviews with staff and students that aimed to capture the lived experience of the individuals involved. The key themes in the responses were:

- New ways of thinking and new skills: Encouraging dialogue, mutual respect, and shared insights into what it's like to be a student or a member of staff. For students, this included improvements in methods such as note-taking, being reflective and group work; for staff, the focus was on how to elicit ideas from students and facilitate learning.
- Relationship building and 'ripple effects': Partnerships break down barriers, reduce students' anxieties, and allow staff to provide more personalised guidance.
- Encourages active learning: This promotes active engagement, makes students more likely to take responsibility for their learning, and encourages staff to innovate and take more risks in the classroom.

Lessons learnt

- Partnership should be an ethos or a process of engagement.
- It works best when it becomes a mindset, not just at the individual level but also at the module, course, discipline and institutional levels.
- It is predicated on relationship-building, which breaks down the 'them and us' status quo.
- It also enhances student belonging, self-confidence and engagement, which is critical to addressing the issue of early leavers and enabling student success.

19. University of South Wales

Data which informs strategic development[113]

The University of South Wales introduced changes to make more effective use of its data on progression, retention and student success, with the aim of better informing institutional decision making.

Previously, reports to senior management and the Academic Board had concentrated on raw data rather than analysis of what has an impact on engagement and retention. The project reviewed the data provided, developed a shared understanding of the impact of belonging on retention, and recognised the need for clearer and more consistent use of the data provided to appropriate staff at key moments in the academic year to inform strategic decision making.

A retention and success review led by a data expert identified key information needed to inform action at the course, subject, school, faculty and institutional levels. This resulted in the development of a data visualisation tool that enhanced the clarity and understanding of retention and success data within the institution. The data reports include explicit references to belonging, engagement and self-confidence, which are key themes that emerged from the first phase of the What Works? initiative. This has led to positive action being undertaken in an evidence-based approach, rather than an assumptive position being used to inform decision making.

Managing change

Without senior management buy-in it would not have been possible to develop the quality and availability of the data in a timely manner.

Ensuring the consistency and validity of data across the institution proved to be challenging. The data was held in multiple sources as there was no single agreed-upon authoritative source. The data expert engaged with multiple stakeholders to provide a common source of data and agreed on reporting approaches that would benefit first the project and then the institution.

Support from a senior member of the executive, the Deputy Vice Chancellor (DVC), for improving data on belonging, engagement and self-confidence provided a mandate to the data expert, overcoming some of the resistance to change identified in pockets of the institution.

Indicators of success

The quality of the debate around issues of retention, progression and success has been significantly improved since the new data reporting structure was introduced.

- The intervention changed attitudes through better data reporting, awareness and understanding.
- The minutes of the Academic Board and faculty-based committees have been reviewed to identify the increased engagement with retention, success, belonging and self-confidence at the meetings.
- The data quality has directly impacted on the confidence with which discussions at such meetings takes place, so they have become a more regular feature of academic life.
- Belonging has become a key theme of the Academic Plan and ensuring that all undergraduate courses have a six-week immersive learning period at the beginning of the first and final years. It has also been adopted by the Students' Union in their 'Students as Change Agents' programme, which uses the data when making decisions on which areas to focus their efforts.

Lessons learnt

Having a reliable single source of high-quality data that can inform decision making at multiple levels within an institution is a critical success factor when managing change in the student's experience of belonging and success.

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Chapter 3: Evaluation methodology

Summary

This chapter provides summary details of the evaluation methodology employed to evaluate the programme, research the process of change, and inform the interventions implemented by the institutional and discipline teams. It considers:

1. Evaluating programme-level impact: survey and institutional data;
2. Programme-level qualitative evaluation;
3. The framework for institution/discipline-level evaluation;
4. The ways in which the evidence was used throughout the programme.

Further details about the methodology are provided in Technical Appendix 2.

3.1 Introduction

Research and data are at the heart of *What Works?2*, both in the design of the programme and in its findings and key messages. This section provides an overview of the programme evaluation methodology and the methods used to measure impact at the programme level; the contextual qualitative evaluation approach used by the programme team; and the framework for the evaluations undertaken by institutions and discipline teams. Meanwhile, details of the methods used by institutions are discussed in Chapter 8.

The aim of the evaluation was threefold, to:

- Evaluate the effectiveness and impact of the programme of change (including identifying specific practices);
- Research the process of change;
- Use the emerging evidence to improve interventions and effectiveness in participating institutions.

To achieve these diverse objectives, the programme developed a mixed methodology to evaluate the impact of the changes in both formative and summative ways, drawing on naturally occurring institutional data, bespoke student surveys and qualitative methods such as telephone or face-to-face interviews with staff and students. In summary, the evaluation design comprises three distinct parts, which have been combined through the programme to inform ongoing improvements to interventions and outcomes. The three parts are programme-level impact; programme-level qualitative evidence about the process of change; and institution/discipline-level evaluation of specific interventions and approaches. This evidence has been applied within an action research paradigm.

Ideally, intervention studies would conduct randomised controlled trials to achieve sufficient power to make inferences based upon effect sizes. However, in this highly complex and dynamic environment, such studies are not possible without severely limiting their scope. Therefore, the *What Works?2* evaluation builds an argument based on evidence from as many strands of activity as possible: some quantitative and some qualitative. These data sources are then combined to make an informed judgement about the interaction of approaches and contexts that bring about effective change and improve student engagement, belonging, retention and success.

3.2 Programme-level impact evaluation

With 13 universities in *What Works?*, and each conducting interventions on three or more academic programmes, there are 43 potential strands of data. The impact of the 13 universities' interventions has been tracked in two ways:

1. Through a specially designed survey covering 'belongingness', engagement and self-confidence, administered at various times during the 'student lifecycle' of cohorts entering in the academic years 2013/14 and 2014/15;
2. By drawing on anonymised student records for data relating to achievement, progression and retention.

3.2.1 The survey

A survey that can act as an index over time and across academic disciplines in higher education has necessarily to be generic in nature (see Technical Appendix 2 for a justification).

The instrument developed for the What Works?2 programme deals with student attitudes towards, and perceptions of, academic engagement, as well as incorporating short scales relating to 'belongingness' and self-confidence. For practical reasons relating to its administration, the survey also had to be short (students in the UK seem more resistant to completing long surveys than their counterparts in the United States and Australia), thereby trading off length (desirable on psychometric grounds) for practicability. Nevertheless, the survey instrument has been sufficiently robust for the purposes to which it has been put (see Technical Appendix 2 for details).

3.2.2 Administration of the survey

The survey was administered to the cohorts of students involved in *What Works?2* according to the schedule below, to which the number of valid responses has been added.

Table 2: Schedule for the administration of the survey by academic year and year (level) of study, and number of valid responses

Year of study	Year 1	Year 1	Year 2	Year 3
2013/14 cohorts	Autumn 2,841	Spring 2,696	Spring 2,200	Spring 1,368
2014/15 cohorts	Autumn 3,718	Spring 2,652	Spring 1,767	

The survey was not administered to the third-year students from the 2014/15 entry since *What Works?* had concluded by that time. One university did not administer the survey to its first-year cohorts in spring 2014, and another university did not administer the survey to either its second- or third-year students in spring 2016. The lower number of responses for the third-year students from the 2013/14 cohort is probably attributable to the running of the National Student Survey at roughly the same time.

For each of the administrations of the survey, the participating universities received a statistical digest that included individual item means and mean scores for each of the three survey scales:

- For the overall dataset (with a note that the overall scores are affected by variation in cohort sizes);
- For their own overall data;
- For the universities' disciplinary cohorts separately (and, in some instances, for sub-cohorts, such as the various aspects of engineering or the built environment).

They also received breakdowns of the scale scores according to selected demographic variables, where numbers in analytical cells justified this. Teams were encouraged to use this evidence to review and develop their interventions, as part of the programme's commitment to ongoing improvement in the tradition of action research (see section 3.5 below).

3.2.3 Institutional data

The performance of cohorts (not of individual students) over time has drawn upon institutions' own (anonymised) records of student achievement. The institutions participating in *What Works?2* were asked to provide student achievement data for the cohorts involved in the programme, for both autumn 2013 and 2014 entry. They were also invited to provide, where possible, comparable data for the autumn 2012 entry – i.e. for the year preceding What Works?2 – which would provide a baseline against which the achievements of the *What Works?2* cohorts could be compared. In the event, nine of the thirteen universities were able to provide data for the relevant cohorts. The comparisons reported in Chapter 4 juxtapose the 2012 and 2014 entries: the 2013 entry has been omitted since not all the universities had implemented *What Works?* activities with their 2013 cohorts.

The data analysed in this report encompasses the students' mean mark for the year and details of their progression. Some detail is inevitably lost in analysing aggregated marks, since there is considerable variation between students in respect of parameters such as:

- The particular module choices within a defined programme (in which variation in module mark profile plays a part);
- Studying at different academic levels within an academic year due to circumstances such as the need to re-take a failed module;
- Switching to a programme outside *What Works?2*;
- Shifting between full-time and part-time study;
- Intercalation.

In a few cases, students were following joint or combined programmes of study

Whereas the mark data was analysed as provided[114] (there being no way in which the variations noted above could readily be accommodated), the progression data was fitted into an analytical frame. 'Success' was defined across all the universities, ***for What Works? purposes***, as gaining at least 96 credits at the relevant level, thereby accommodating module credit weights of multiples of both 10 and 12. This definition does not necessarily align with the universities' own views of 'success', and helps to account for some differences between the data reported here by the *What Works?2* programme and that presented within the institutional reports and case studies. However, data relating to progression from one level to the next (not necessarily the same as 'success' defined here) was taken directly from universities' own records. Of these measures of achievement, the progression outcomes are likely to have higher reliability than those based on students' actual marks. The results are presented in Technical Appendix 1.

3.3 Programme-level qualitative evaluation

The programme-level qualitative evaluation was intended to provide a descriptive account of the process of change and the institutional and disciplinary context in which changes and interventions occurred. The aim of this part of the evaluation was, therefore, two-fold:

1. To explore the process of implementing multi-level institutional change to improve student retention and success;
2. To contribute to understanding the impact of interventions and changes in different institutional and disciplinary contexts.

The evaluation used information generated through the programme, and evidence collected specifically. Information created as part of the programme included the

[114] Zero marks were excluded from the analysis. It was not possible to identify whether they were true marks, signals of absence, or signals of a misdemeanour such as plagiarism or cheating.

institutional applications to participate in the *What Works?* programme, which set out contextual information, institutional objectives, and why the work was important to them; end-of-year reports from the first and second years, which evidenced progress, reflected on the process and progress, and identified plans for future work; and institutional reports and case studies at the end of the programme, which provided a wide range of descriptive and evaluative information, as well as reflection on eff ective practices and approaches. Additional evidence and understanding was generated through digitally recorded semi-structured interviews conducted with the core teams (usually the project leader), focusing on the process of change and changes at the institutional level; and a primarily qualitative survey administered to the discipline teams (usually the team leaders) towards the end of the first year, focusing on both the process of change and the nature of the changes implemented at the discipline level. In addition, the two institutional visits to each institution, the annual progress meetings and the residential events provided further opportunities to learn about institutional work, including the challenges and successes experienced along the way.

3.4 Institution/discipline-level evaluation

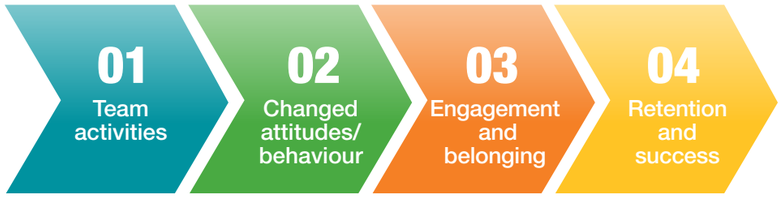
Although the broad aim of each institution and discipline team was to improve student retention and success, the exact nature of their objectives was informed by their context, including student characteristics, discipline-specific challenges and institutional objectives. Thus, each institution and discipline team was encouraged to create its own evaluation strategy to evaluate its success within its own context.

An evaluation logic chain[115] approach was utilised. This approach aims to articulate the relationship between interventions and improved retention and success by making assumptions explicit, which allows both progress towards outcomes to be measured, and gaps in the logic chain to be identified and addressed. It thus operates as a critical tool to aid the development of interventions and to structure the evaluation process. Teams developed their own evaluation logic chain, indicators and associated data collection methods – and used this to improve their outcomes.

The whole programme was underpinned by the hypothesis from *What Works?1*, which held that if interventions are implemented in line with the characteristics identified they will increase engagement and belonging, which will in turn improve retention and success. However, it was necessary to articulate how specific interventions and approaches were anticipated to work – based on a theory of change model – to help develop ongoing insight into whether or not they were working. The logic chain was formulated at a generic level, as depicted in Figure 5 below. If (specified) activities were implemented, then they would result in (specified) changes in the attitudes or behaviours of students and/or staff, which would promote increased engagement and belonging, thus contributing to improved retention and success.

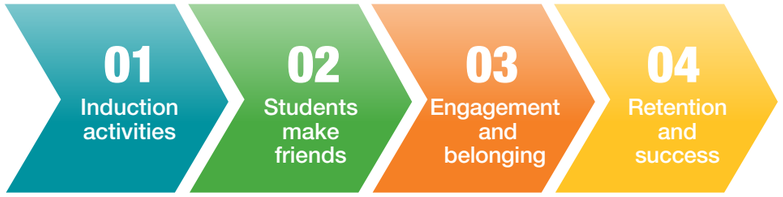
[115] Drawing on programme theory evaluation, theories of change and logical framework planning. See, for example: Vogel, I. (2012) *Development Review of the Use of 'Theory of Change' in International Development*. London: UK Department of International Development. Available at: https://assets.publishing.service.gov.uk/media/57a08a5ded915d3cfd00071a/DFID_ToC_Review_VogelV7.pdf

Figure 5: Generic *'What Works?2'* logic chain



The activities could be interventions by discipline teams (e.g. in relation to induction, active learning or co-curricular changes – sections 1.3.2–1.3.4 above) or changes made at the institutional level to facilitate greater engagement, belonging, retention and success – for example, making better data available or providing staff development (see Chapter 6). So, more specifically, an induction activity might be designed to enable students to make friends, which is anticipated to improve engagement and belonging, which is in turn predicted to improve continuation. Or, making institutional data available assumes that it will be used by staff in some way – which has to be specified – to improve student engagement and belonging, and subsequently student retention and success. A worked example using the *What Works?* logic chain is provided in section 3.4.1.

Figure 6: Induction logic chain



Once the logic chain is spelt out, it is possible to identify both suitable indicators of success at each stage and appropriate methods for checking progress towards these outcomes.

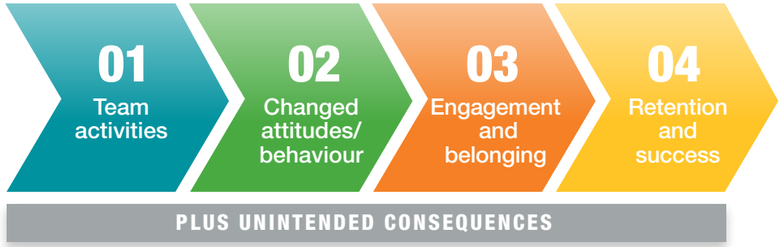
It is relatively easy to identity and measure whether activities have been implemented or delivered – these are the immediate outputs of the work, and can be measured using monitoring or observation, for example. But it is more difficult to create indicators for and measure changes in attitudes or behaviours. Indicators might be both quantitative and/or qualitative, so students might have more friends or see their friends more often, or they might have better friendships (e.g. they are friends with people on their course, or have deeper friendships and discuss their academic and pastoral progress with them). Staff may use better institutional data in various ways to improve engagement – for example, by following up students who do not attend taught sessions, or by changing the content of sessions that have had low rates of attendance. Once the anticipated changes are articulated it is easier to identify suitable indicators – and then select methods. Changes in attitudes and behaviours can often be evidenced more effectively through qualitative methods – for example, through individual or group interviews with staff or students, or through feedback via formal mechanisms such as module evaluations or staff–student liaison committees, or informally through discussions with students or course team meetings, etc.

Engagement and belonging could be measured by the engagement and belonging survey, or through other methods, including qualitative data collection and feedback. Retention and success need to be specified, but can be measured using institutional data – this may be continuation and attainment data, but a vast array of other data is also available to course teams, and, indeed, as is demonstrated in sections 2.2 and 2.3, they have selected a range of indicators to articulate their success.

As noted above, using institutional data is challenging as it cannot be assumed that cohort characteristics will remain the same. For example, during the course of the *What Works?2* programme some courses experienced considerable expansion in numbers, or re-structuring of the curriculum, which exerted an influence – potentially either positive or negative – on the effectiveness of the changes made as part of *What Works?2*.

In addition to these planned or anticipated changes, there were often unintended consequences – both positive and negative – for the student experience. Institutions and disciplinary teams were encouraged to be alert to these changes: both to record them, and to use them to inform the development of interventions. This was reflected in the final diagrammatic overview of the *What Works?2* evaluation logic chain.

Figure 7: *'What Works?2'* evaluation logic chain acknowledging unintended consequences



3.4.1 Worked example using the *What Works?2* logic chain

In this example the discipline team developed an activity to embed induction activities into a core introductory discipline module, with the aim of improving students' expectations of the programme and relevant academic skills, which was anticipated to develop their confidence, capacity and engagement as effective learners within their discipline. This was, in turn, expected to improve students' attainment and progression within their first year of study. Indicators of each of these steps in the evaluation chain and the associated methods were as follows:

- Embedded sessions covering expectations and skills were delivered: the indicator is the number of sessions and contents delivered, and the evidence is from the module handbook.
- Students' expectations and skills improve: the indicator is the improvements reported by staff and students, and the evidence is from staff feedback and module evaluation.

- Students' engagement increases: the indicator is attendance increases, and the evidence is from attendance records.
- Improved retention and success: the indicators are improvements in students' attainment and continuation rate increases, and the evidence is from institutional data (assessment results and continuation rates).

This information, together with the results, is summarised in the table below.

Table 3: Example of how the *'What Works?2'* logic chain can be used

Logic chain	Activities	Attitude/ behaviour	Engagement and belonging	Retention and success
Description	Embed induction into core module	Students' expectations and skills improve	Students' engagement increases	Attainment and continuation improve
Indicator	Contents of sessions	Improved understanding and skill reported by staff and students	Attendance and submission increases	Students' attainment improves and continuation rates increase
Methods	Module handbook	Staff feedback and module evaluation	Attendance and assessment submission records	Assessment results and continuation data
Results	Induction information and academic literacy delivered through a core module	The module was really effective – based on feedback from staff and module evaluations from students. They said that it was very useful	Attendance was excellent because there were five formative tasks that had to be handed in during the sessions	The pass rate was pleasing (only 30 out of the 278 registered on the module failed = 10.8%).

In addition, some unintended consequences were identified. Firstly, smaller groups worked well but a few students complained about inconsistency between groups; this resulted in changes to the delivery of the intervention in the next year. Secondly, staff reported improved standards of work in other modules, but some students didn't transfer what they had learnt to other modules. This raises questions about how all students can be supported to utilise understanding and skills from one module in other modules in order to develop their capacity as effective learners more fully.

3.5 Working in the tradition of action research

In relation to all the strands of the evaluation, the programme has been working in the tradition of action research – in other words, emerging findings have been shared and discussed with institutional teams, as well as more widely, to contribute towards ongoing improvements. For example, at a formal level a briefing document was produced in the first year for the participating teams, and for the wider higher education sector, which sought to describe different approaches to organising and implementing change. A significant issue arising was the role of the core team, especially in relation to the discipline teams. This, as well as other emerging issues, has been discussed with project leads, academic staff and students on institutional visits and at residential events and progress meetings. In addition to providing information to the participating teams, such discussions have proved invaluable in teasing out greater detail and developing understanding of the issues arising:

> *The project team reviewed the outcomes of the first phase and a number of amendments and improvements based on the findings of the evaluations to the 'retention interventions' were then introduced for the 2014/15 entry cohort. (UOB)*

The survey findings that the universities have received have helped them to identify issues that might have significance for the success of their students. UOW, for example, noted the persistent tendency for students from ethnic minorities to record a sense of 'belongingness' lower than that of its white British students. This set in motion a study of 'belongingness' extending to cohorts other than those involved in *What Works?*, with a view to enhancing understanding of the issue and, ultimately, improving the experiences of students.[116]

3.6 Implications and recommendations

A mixed-methodology evaluation, informed by a logic chain to map the relationship between interventions and intended outcomes, while recognising both positive and negative unintended consequences, contributed to achieving the three *What Works?2* evaluation objectives. It is recommended that a logic chain and mixed methods, including naturally occurring data, are used by others wishing to use evidence to understand and improve student retention and success.

[116] See Debra Cureton's University of Wolverhampton case study: *Understanding the role of students' belonging in their success.*

Chapter 4: Understand the local contexts

Summary

The evidence from the *What Works?2* programme demonstrates that one size does not fit all, and thus there is no single intervention that will be able to address the complexity of student success.[117] However, greater effectiveness is achieved by understanding the local contexts (institution, discipline, module, cohort, etc.) and then intervening appropriately. This chapter explores the dimensions of this process:

1. Identifying disciplines, courses and modules with lower than expected rates of success (e.g. continuation, progression, completion, attainment);
2. Looking at student characteristics or groups with study success issues;
3. Understanding the specific success challenges in each discipline, programme or module in relation to student characteristics.

4.1 Introduction

A key learning point from the institutions is that one size does not fit all. This is reiterated directly and implicitly in many of the institutional reports, primarily in relation to different subjects and programmes, but also different student groups and institutions. UOS was explicit in that it felt it was necessary to develop research and insight into 'what works at Salford', and concluded that even this was insufficient, as the university and its disciplines are not homogeneous:

> *One of our original aims in participating in the change programme was to take the findings of phase one of 'What Works?' and discover what works in the Salford context. On reflection, perhaps we should have referred to Salford contexts since the differences between the disciplines, and between different areas of the university, meant that multiple, nuanced approaches and strategies were adopted to deliver change.* (UOS)

[117] There is potential to undertake further analysis of this programme of work to explore whether there are significant similarities within disciplines, or whether other factors are equally or more influential.

Understanding the contexts involves a number of dimensions, which are discussed in more detail below.

4.2 Identifying disciplines, courses and modules with lower than expected rates of success

Institutions were required to make their own decisions about which academic disciplines (and courses) were to participate in *What Works?2*, and to provide a rationale for their selection. In summary, disciplines usually participated, or were selected, because they had a retention or success issue to be addressed, and there was a willing staff team. Other considerations included representation from different faculties to help with wider adoption:

> *Looking at the data… a number of areas where the data was showing there'd been some challenges in the non-continuation data... Also, we've got a really diverse portfolio…. So we wanted to make sure that we involved a range of subject areas that we could then go out to the different other schools that weren't involved to say, 'We've tried this, in this area, it's worked or it seems to have worked, or we've got some hard evidence and this is something to think about in your area as well.'* (Project leader interview)

Using the available institutional data to identify academic areas (disciplines and courses) with significant 'success challenges' provides plenty of scope for improvement, and a diverse range of subjects helps to generate wider learning for the institution. The Teaching Excellence Framework – if it is extended to the subject level in a subsequent phase – will provide a strong incentive to improve retention and success in disciplines that are performing comparatively poorly.

4.3 Looking at the student characteristics or groups with retention and success issues

In addition to looking at disciplines, courses and modules with study success issues, some institutions also looked at specific student groups or characteristics. Indeed, across the higher education sector, institutions and disciplines, there are student characteristics and groups with comparatively low rates of retention and success[118] (this point was made in the National Audit Office report 2007, p. 20). A HEFECE analysis of student characteristics (based on the 2006/07 cohort)[119] found that lower rates of success (continuation, completion and degree attainment) are associated with students from low participation neighbourhoods, male students, certain BME groups (especially black students), disabled students who do not receive the Disabled Students' Allowance, those with low entry grades and those studying part-time. More recently, Woodfield (2014)[120] noted that

[118] National Audit Office (2007) *Staying the course: The retention of students in higher education.* Report by the Comptroller and Auditor General, HC 616 Session 2006–2007. London: The Stationery Office, p. 20.
[119] HEFCE (2013) *Higher education and beyond: Outcomes from full-time first degree study.* 2013/15. Bristol: HEFCE.
[120] Woodfield, R. (2014) *Undergraduate retention and attainment across the disciplines.* York: Higher Education Academy.

certain background characteristics, such as age and distance between pre-higher education address and higher education provider, intersect in ways that are linked to higher non-continuation rates and variation in student attainment in individual disciplines.

The *What Works?2* engagement and belonging survey (see section 3.2.1 and the Technical Appendices for further details) found that some groups of students, across the institutions, have lower levels of engagement, belonging and/or confidence than the majority – suggesting that they might have poorer success outcomes. When synthesising the information from across the surveys and across the institutions – and taking four statistically significant outcomes pointing in the same direction as a criterion – the following issues become apparent:

- Male students tend to be less engaged than their female peers.
- Older students (aged 20 and above) tend to be more engaged than younger students.
- White British students tend to exhibit a stronger sense of 'belongingness' than other respondents.
- Students who are not relatively disadvantaged by their circumstances (including travelling to study, care responsibilities and limited access to a quiet place where they can do academic work) tend to exhibit a stronger sense of 'belongingness' than those whose circumstances are more disadvantageous.

This broadly reflects the data analysed by HEFCE (2013) and Woodfield (2014) (both cited above), with the exception of mature students, who tend to be more engaged but overall have higher rates of withdrawal. It is also interesting to note that comparatively high levels of self-confidence (for males, non-white students and students who have not declared a disability compared to their comparator groups) are broadly correlated with lower rates of success (continuation, completion and attainment).

4.3.1 A closer look at disadvantage

Five items on the survey deal with disadvantage in one way or another:

- Having a part-time job while studying;
- Travel time to/from the university;
- Caring for dependants;
- Having a quiet place in which to do academic work;
- Declaring a disability.

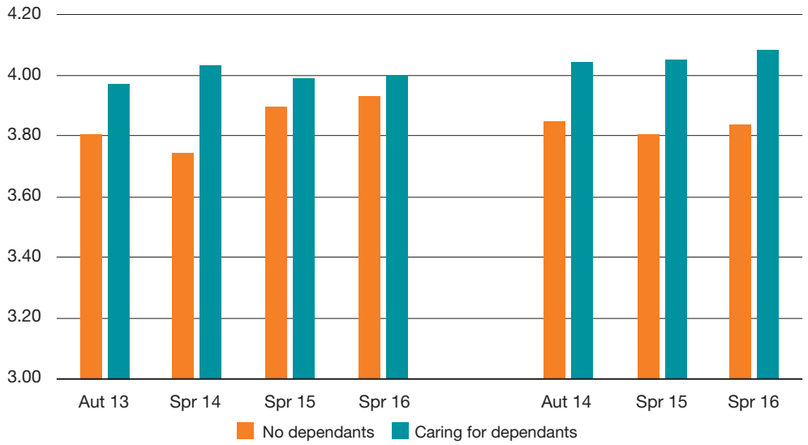
Having a part-time job while studying makes no difference overall to engagement or belonging. Across the surveys, 44 to 69% of respondents claimed to have a part-time job. The percentages tended to be higher for the 2013 cohort.

[121] It should be noted that the 'quiet space' question was changed following the first two surveys, from originally offering 'yes'/'no' responses to a more nuanced 'yes, often', 'yes, sometimes' and 'no' trio of responses. Of these, the two 'yes'-related responses have been combined. In looking at the 'quiet space' charts, it needs to be kept in mind that the two left-most points relate to 'yes'/'no' responses, and the remainder to a binary 'yes, often' plus 'yes, sometimes' *versus* 'no' split. Some may have responded 'yes' in the first two surveys: had they been responding to later surveys, they might have chosen 'yes, sometimes'.

Travel time to/from university seems to have a modest adverse influence on belonging, but not on engagement or self-confidence. Around one in three respondents had, at least 'frequently', a one-way travel time of more than 45 minutes.[121]

Caring for dependants has a ***positive*** effect on engagement (Figure 8: in this and subsequent charts, the first four data points refer to the 2013 cohort and the last three to the 2014 cohort, hence the gap in the charts). This effect may be a consequence of carers tending to be mature entrants. Caring responsibilities are associated with a slightly negative effect on self-confidence, and no real effect on belongingness. The percentage of students with caring responsibilities ranged between 9 and 11%.

Figure 8



Having difficulty in finding a quiet space in which to do academic work has an adverse effect on belongingness, engagement and self-confidence – see the three figures (9, 10 and 11) below, all of which have the same scale on the y-axis. The percentage of those having difficulty is fairly low, ranging between 9 and 20% over the final five surveys. Of the above indicators of adverse circumstances for students, lengthy travel time seems to exert the strongest influence.

Figure 9

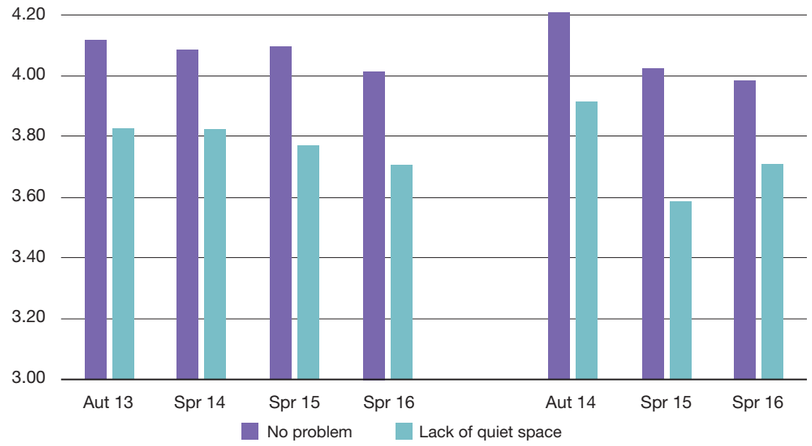


Figure 10

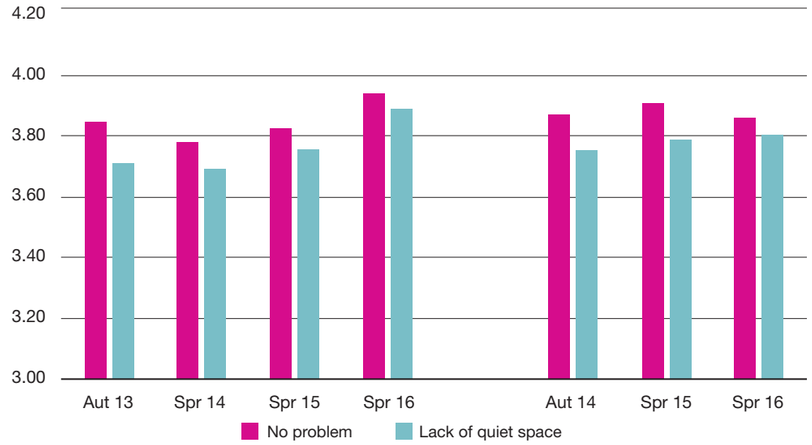
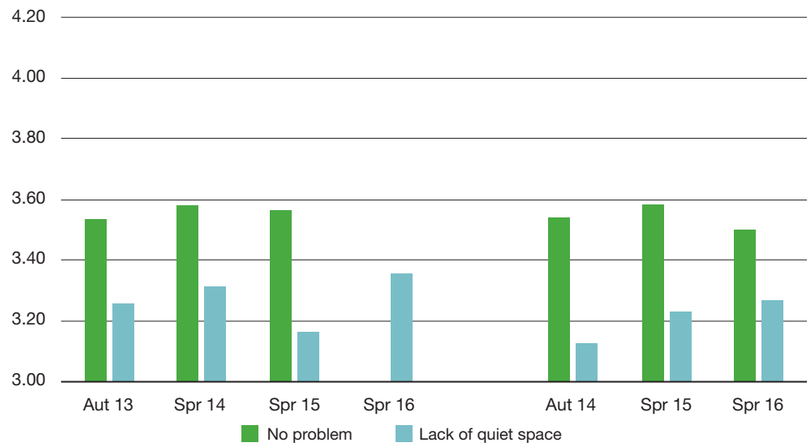
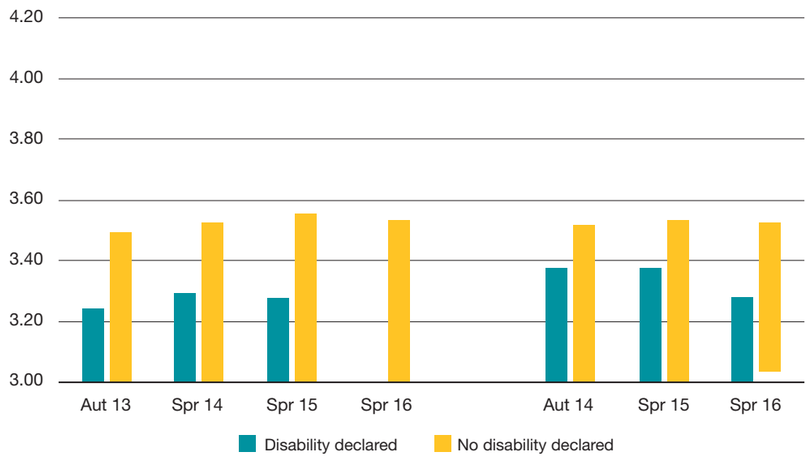


Figure 11



Declaring a disability is associated with a lower level of self-confidence but a mild elevation in engagement (Figure 12). 'Belongingness' seems to be unaffected. The percentage of respondents declaring a disability was consistently 7 to 8%.

Figure 12



4.3.2 Implications for practice

The lower rates of engagement, belonging, retention and success of some groups of students, or associated with particular student characteristics, need to be taken into consideration when designing interventions. This is not to suggest that these students should be singled out and targeted, but that their experiences or challenges should inform mainstream provision (see, for example, research on commuter student engagement)[122] Furthermore, monitoring and evaluation should pay particular attention to the experiences and outcomes of these groups. First, what are the experiences of these students – how do they contrast with the majority and how can these students be enabled to be successful? And, second, what is the engagement and success of these students in the new interventions? If specific efforts are not made to engage those with a lower propensity to engage and belong, the overall effect of retention and success interventions is likely to be reduced.

UOG was particularly concerned with improving the retention and success of its widening access students (from SIMD 40), while both NUB and UOW identified lower rates of success for BME students as a matter of concern. This allowed each of these institutions to identify issues related to these specific groups – and fix them. For example, NUB identified that male BME students were over-represented among enforced withdrawals due to poor academic profiles. Focused action resulted in:

[122] Thomas, L. and Jones, R. (2017) Student engagement in the context of commuter students. London: The Student Engagement Partnership, National Union of Students.

> *A significant increase in the proportion of ethnic minority students at level 4 passing first time: 47% (n=136) in 2014/15 compared to 35% (n=104) in 2013/14… [and] passing after re-sits compared to the previous year: 67% (n=193) in 2014/15 compared to 54% (n=157) in 2013/14… In 2014/15 there was a 20 percentage point increase in the proportion of ethnic minority year one students passing after re-sits (i.e. from 47% to 67%)… Over the course of Newman's involvement in 'What Works?' there has been a 37.5% reduction in final-stage appeals, and an overall 16% reduction achieved in review stage appeals, with over a 50% reduction in final-stage appeals from students in black and minority ethnic (BME) groups.* (NUB)

4.4 Understanding the specific retention and success challenges in each discipline, programme or module in relation to student characteristics

Analysis of institutional data can provide insight into disciplines, courses and modules, and student groups/characteristics associated with lower rates of success. It is, however, necessary to understand the retention and success issues within a specific context (or contexts). UU began by identifying specific discipline areas, and then detailing the differing retention and success challenges across their seven participating disciplines. For example:

> *Built Environment has traditionally had high attrition rates and whilst the rates have improved over the years they still remain high in comparison to other areas. Courses in this School traditionally have shared modules with large student numbers in the first year of study. Students from different disciplines come together in shared modules, creating difficulties for the students in seeing the relevance of some of the content to their programme and in creating a strong programme identity and sense of belonging, resulting in poor student engagement, retention and success.* (UU)

Discipline teams often recognised the local challenges – and the potential solutions:

> *So then they said, 'Oh, well our big problem area is,' you know, and so they were able to identify locally what were the areas that needed an intervention.* (Project leader interview)

It is, however, valuable to explore the evidence substantiating these views. YSJ thought it understood the reasons for lower rates of retention in two of its subject areas compared to the third. The research undertaken as part of the *What Works?2* programme allowed it to revise its understanding – and its approach to improving outcomes in these disciplines:

> *Programme retention data shows tendencies in the areas of Sport and Theatre to have first-year withdrawal rates that are higher than the university averages. Our perception (or at least our hypothesis) was that these areas also tended to attract students that preferred doing to studying and hence were more challenged by the academic study in their first year and more likely to withdraw as a result. Through the course of this study, and through our own internal evaluation, this does not appear to be substantiated. The evidence from our Student Engagement Survey (SES) and its successor (UKES) suggests that students are not put off by the academic challenge; if anything, the surveys are showing that they do not feel academically challenged enough and potentially we might consider an approach that increases the academic challenge as a way to increase retention.* (YSJ)

Another university – UOS – also used the programme to disprove strongly held views and to develop a better understanding of the issues and interventions at hand:

> *As a result of participating in 'What Works?', the university has been able to dispel several myths about student retention and success. For example, quantitative and qualitative data have shown that the issues underpinning the external measures of NSS and retention are, for the most part, different in nature and location. This is highlighted most clearly by the fact that only one programme is common to lists of 'red' retention teams and 'red' NSS teams (approximately 15 programmes in each list). The large majority of programmes with retention issues have no issues with satisfaction, with some red retention programmes achieving above average scores for overall satisfaction. The data for these programmes indicates that the students desire to continue and progress in their studies, but are failing the assessment at first attempt. We have also discovered that the timing and nature of assessment in year one are problematic for some students, and realised the importance of a strategic, coordinated approach to supporting the transition from school/college to university.* (UOS)

It is, therefore, useful to use institutional data together with qualitative evidence to understand which students leave, when and why, or which students have lower rates of attainment and why. This is exemplified here:

> *The 13 students who did not complete the QTS course all had their expected progress on the course 'interrupted' in order to repeat a school experience module. The majority of these students had to re-sit their second school experience and join a different cohort at some point during the course. Statistically significant features of students within this group included: most were mature; most were male; they had non-traditional level 3 qualifications; they were a mixture of BME and white students. Their exit interviews indicated: a lack of self-confidence in their ability to meet the professional demands of the role; and the expressed opinion that they had not enjoyed returning to new or different groups.* (ITE, NUB)

There are, however, other examples where teams did not fully understand the issues in their local context, and thus their interventions were less effective than they had hoped for:

> *Across the disciplines, staff participants explained that although their practices and interventions were beneficial in helping to engage some students, others were still not motivated, were not attending sessions or events and were difficult to communicate with.*

Identifying issues of concern so that they can be addressed by interventions is central to improving the impact of interventions and is followed up in the next chapter.

4.5 Implications and recommendations

In order to maximise the impact of efforts to improve student retention and success, it is valuable to understand the local contexts, including the disciplines, courses and modules with lower than expected rates of success; the characteristics of students or groups with success issues; and the specific issues contributing to these outcomes, drawing on a range of evidence sources. It is recommended that institutional data and qualitative research are used to understand which students leave, when and why, or which students have lower rates of attainment and why, before specific interventions are designed.

Chapter 5: Identify evidence-informed interventions to address the issues of concern

Summary

This chapter considers the selection and revision of interventions to improve student engagement, belonging, retention and success. This includes:

1. Identifying interventions that effectively address the issues of concern and that are evidence informed;
2. Tailoring interventions to the local disciplinary and student context, as one size does not fit all;
3. Developing a suite of interventions to promote engagement and belonging across the student lifecycle, and including an employability focus;
4. Revisiting existing evidence, e.g. from *What Works?1* and *What Works?2*, and emerging evaluative evidence when things are not working.

5.1 Introduction

Chapter 2 has discussed the outcomes from the *What Works?2* programme and identified effective interventions. This chapter develops this theme further, exploring what effective interventions are, and how evidence from programmes such as *What Works?* can be used. While the context is highly important, it was too easy for some teams to ignore the previous learning as they moved towards certain interventions, and subsequently some interventions were not effective and had to be amended or scrapped.

5.2 Identify evidence-informed interventions to address the issues of concern

Interventions are more effective if they both address the issues of concern (as discussed in Chapter 4) and are research informed, drawing on both national and local evidence (including from this programme, as presented in Chapter 2). Once the issues of concern have been identified, it becomes easier to tailor a suitable programme of interventions – but this also needs to be research informed, drawing on both national and local evidence. Evidence is very useful in exploring hunches and avoiding whims.

For example, UOW made excellent use of internal and national research to understand the issues contributing to the differential attainment of BME students, and to develop interventions:

> *The Disparities in Student Attainment project (DiSA, Cousin and Cureton 2012) explored the student experience at assessment points. These pieces of work highlighted that students spend more time attempting to understand the assignment brief than writing and researching their assessment. When assessment briefs are unclear, those students who do not have strong learning relationships with their course tutors turn to their peers for advice, which often leads to the circulation of misunderstandings… The 'What Works?' initiative implemented at the University of Wolverhampton builds on the research above and that of McGinty (2011), who proposes that assignment feedback is crucial to level 4 students' sense of developing belonging in higher education, as it provides confirmation that they are on the right course and have the potential to be successful. The University of Wolverhampton's inclusive assessment initiative uses criteria derived from the DiSA project to provide a framework for accessible and comprehendible assignment briefs. It is also mindful of Dhillon and Oldham's (2012) findings that students circulate misunderstandings and Howell-Richardson's (2012) warning about the perceived hidden golden key. Therefore, the initiative advocates a set of principles that encourages students to work in groups, take the lead in unpacking the requirements of the assignment brief, and discuss this with their peers and lecturers. This aims to develop students' confidence in interpreting the assignment brief while also promoting the transparency of the brief to students.* (UoW)

As is demonstrated in the vignette, section 8.5 of this report and the UOW institutional report, this approach was highly effective. It had an impact on the attainment of all students and an even greater impact on BME students, thus helping to address the attainment differential.

NUB also utilised internal research to inform its interventions, which reflected many of the findings from *What Works?1*:

> *This Academic Practice Fellowship into transition and induction investigated how student belonging was nurtured through student-centred learning, teaching and assessment delivered through timetabled sessions in the academic curriculum during the first year. Such sessions should start in induction week rather than being left until after teaching begins. Historically, the distinctions between enrolment activities and induction activities at Newman were not clear. The presentation of enrolment activities as 'induction' obscured the need for subject areas to be fully integrated into the processes of settling in their students. This project suggested interventions that encouraged all subject areas to spend more substantial and meaningful time with students during induction doing activities that started to develop cohort identity and student belonging and allowed students to develop academic and personal confidence as independent, self-regulating learners. It placed equal importance on proposing activities within the first year of undergraduate study as well as during induction, and offering guidance for ongoing work with students at key transition points throughout their studies.* (NUB)

The GCU academic advising intervention was similarly informed by institutional research, which was also aligned with *What Works?1*:

> *The academic advising standard builds on the previous work undertaken by the GCU team (Andrew et al. 2007a, b; Andrew et al. 2009; McKendry, McKay, Boyd, and Andrew 2010; McKendry, Boyd and Andrew et al. 2011; Andrew et al. 2013; Andrew and Whittaker 2013; Andrew et al. 2015). The standard is grounded in and was designed to incorporate the proven characteristics and criteria of success described by Thomas (2012). The key areas identified are: supportive peer relations, meaningful interaction between staff and students, and practice development around student confidence and identity. These characteristics of success support the design of an educational experience that is relevant to the future goals of both the individual and the institution.* (GCU)

In the early days of the *What Works?2* programme there was a temptation to design activities based on good intentions rather than learning from What Works?1 or institutional research.

5.3 Tailor interventions to the context as one size does not fit all

Institutions have reported that one size does not fit all, and greater account needs to be taken of disciplinary cultures and differences. UU – summarising effective practice from across seven disciplines – makes this point:

> *We have found that the characteristics of effective practice across the discipline areas have included: building of trust relationships between staff member and student and student–student; engagement through partnership; and the building of communities of practice which incorporate ongoing formative feedback. We believe that the individual interventions chosen within each discipline area, in the main, work well in that discipline, but it has become evident that 'one size does not fit all' and future implementation of enhanced practice needs to take account of disciplinary differences.* (UU)

A more specific example comes from Music and Performance at UOS, who altered their tutorials between the two disciplines to address the needs of different academic communities:

> *The frequency of tutorials was reviewed since it was apparent that a 'one size fits all' pattern was not appropriate across all year groups. In addition, flex was introduced to enable meetings to take place on a smaller group or one-to-one basis according to the needs of the specific discipline area, thus acknowledging that studio, performance and theory learning require different approaches to personal tutoring… this reflected an increased understanding that the format of the personal tutoring sessions did not have to be standardised but should in fact follow a dynamic pattern of theming in concert with the academic year.* (Music and Performance, UOS)

5.4 One-off activities are insufficient and engagement is required across the lifecycle

Analysis of the effective interventions (section 2.4) points to the need for opportunities for engagement to be offered across the student lifecycle, rather than relying on a single time-bounded intervention. For example, discipline teams that only offered pre-entry or induction activities tended to have less impact than those that also included other engagement opportunities. Engagement across the student lifecycle can be achieved through an ongoing intervention, such as an academic or personal tutoring scheme, or a peer mentoring initiative. Alternatively, it can take the form of a programme of integrated or connected activities spanning: pre-induction induction, active learning and teaching, assessment, and ongoing co-curricular activities, with a particular focus on future goals and employability outcomes. *What Works?2* encouraged discipline teams to select a single intervention to implement and evaluate, but many teams chose to implement multiple interventions, which has proved to be effective. Working across the student lifecycle through a joined-up approach – or through interventions that extend beyond, for example, the induction period – to improving student retention success is more effective than single interventions. This is illustrated by the work of the Built Environment team at UU, who developed a retention and success plan that included activities and attendance monitoring across the first year:

> *The Built Environment discipline team's aim was to improve the first-year student experience through building (early) belonging and supporting transition while improving retention. In doing so, a School Retention and Success Plan was developed that included the introduction of: academic mentors; pre-induction contact; focused week 0 induction; transition modules; active attendance monitoring; and the use of 'at risk' indicators. These interventions were developed by taking cognisance of and applying the learning that was derived from the stage one findings of the 'What Works? Student retention and success' project (2012).* (Built Environment, UU)

A similar point is made in the UOS report, which identifies the importance of 'a holistic view' of the first-year experience, and 'organising retention-related activities around the different stages of the student journey'.

Reflecting on experiences and the impact of the interventions introduced by the three discipline teams at UOG, the report identifies the need for 'multiple, joined-up activities making more of an impact in combination' rather than in isolation:

> *We found there may be a case for multiple, joined-up activities making more of an impact in combination. This was the main lesson learnt in Life Sciences – stand-alone activities appear to be perceived by students as one off and therefore quickly ignored or forgotten, while a combination of face-to-face approaches with innovative use of online resources in the VLE can help to foster a sense of belonging. In Engineering, the impact of the active learning course may have benefited by being part of the other changes made in the redesign of the first-year curriculum. The CLAN system on Dumfries campus was designed to provide both academic and social support for new students in smaller groups but also at large CLAN gatherings.* (UOG)

In taking a whole lifecycle approach to student retention and success, it also seems to be valuable to build in an early focus on employment outcomes:

> *The GCU approach to academic advising is distinctive because it takes account of employability and graduateness from the beginning of the student journey rather than only focusing on graduate attributes towards the end of the degree programme. Questions exploring extra and co-curricular student activity, as well as feedback/feedforward opportunities, are standard practice within all advising meetings. The standard integrates with the university's Feedback for Future Learning (FFL) initiative. The aim was to join up delivery, promote student engagement with FFL activities, and facilitate dialogue between academics and students around feedback issues at all advising meetings.* (GCU)

Increasingly, institutions are successfully linking interventions to improve retention and completion with efforts to improve employment success. This, for example, is at the heart of the work developed in Business Management at SU to integrate graduate attributes into level 4 modules and improve employment outcomes. Their data shows improvement across all the scales of the survey (belongingness, engagement and self-confidence) and positive outcomes in the destinations of leavers from higher education. YSJ has also moved to combine efforts to improve student belonging with the development of graduate attributes throughout the student journey:

> *This has recently emerged as a draft framework at our university Enhancement and Student Experience Committee (ESEC) as a document entitled 'Curriculum for Student Success'. The main development here has been to combine aspects of the Belonging Project with a move towards identifying graduate attributes for university programmes and drawing on other established retention and success activities. In this way, the 'end' of the student journey (achieving the attributes and the award) is tied to the start of their journey through the support mechanisms developed from projects such as this.* (YSJ)

5.5 Revisit existing and emerging evidence when things are not working

Throughout the programme, institutions and disciplines were encouraged to use the existing and emerging evidence to inform and refine their interventions (see section 3.5 above). When the discipline teams were stumped, referring back to and using the findings and principles from *What Works?1* helped them to improve the effectiveness of interventions:

> *An initial absence of student buy-in was also an enormous challenge. It was anticipated that students would welcome the intervention; however, it soon became evident that they didn't want to engage with personal tutoring. For a period of time the student body almost unanimously did not see the purpose in attending group meetings because they did not gain academic credit. Attendance was also problematic during the first year of operation because tutorial meetings were not included in any timetable. Crucially, although the personal tutoring system had been designed to be mainstream; proactive; well-timed; delivered via appropriate means; collaborative; and monitored (Thomas, 2012), the fact that the students could not identify with any relevance of the intervention to their experience contributed to a negative impact on student engagement with, and the overall effectiveness of, the personal tutoring system*. (Music and Performance, UOS)

This intervention was subsequently revised based on feedback from staff and students to make the tutoring more relevant, and a positive impact was identified in staff and student attitudes (akin to a culture change); also observed were fewer student complaints, higher student engagement, and improved continuation rates.

UOB undertook a thorough qualitative evaluation of its interventions, and used this new evidence to improve them in each discipline area between 2013/14 and 2015/16. In each case the emphasis was on making the interventions more relevant to students' academic learning and future career aspirations:

> *The findings from 2013/14 corroborated Mantz Yorke and Liz Thomas' conceptual argument that a sense of belonging is central to student success (Thomas 2012; Yorke 2013); and highlighted ways in which interventions and teaching and support practices were beneficial in terms of enhancing students' sense of belonging, engagement and confidence. However, ways in which the discipline-specific interventions and pedagogic practices could be developed to further enhance student engagement and success were also identified. As a result, the 'retention interventions' and teaching and support practices in Business Management, Digital Media and Applied Social Science (Hastings) were further developed in 2014/15 to better support student belonging, confidence and engagement, with a greater emphasis on encouraging the development of peer community learning through group activities and assignments, employability and induction that was relevant to the course.* (UOB)

For example:

> *In Business Management, based on the first cohort of students' feedback, My Uni Course (Studentfolio) was simplified, requiring students to make just three learning journal entries rather than 10 milestones; and these were related more fully to academic course content, which students in the focus groups had reported as being seen to be key and more relevant. Students had to work towards one publishable webpage which would be submitted for assessment. There was a greater emphasis on students' employability, since the webpage could be made available to potential placements/future employers.* (UOB)

Institutions revisited evidence from *What Works?1* when interventions were not working, and new research conducted by the programme and institutions was used to make continual improvements to the interventions. Throughout the *What Works?2* programme, however, there were examples of institutional and discipline teams implementing interventions that were at odds with the *What Works?1* findings. In particular, there were examples of activities that lacked an explicit academic purpose – either by design, or because they were perceived to be lacking academic relevance by students and even staff. For example, some of the pilot interventions were primarily social in nature, and they were not delivered as part of the mainstream academic curriculum. Participation in these activities was comparatively low, and they largely failed to reach the students at greatest risk of disengaging and ultimately withdrawing.

Other discipline teams experienced similar problems early on, but subsequently adapted their interventions to make them more relevant to students and embed them into the academic experience through explicit links with the curriculum. For example:

> *We have found with activities held later in the year that it is best to associate them with a particular module. The project and trip formed part of a common module studied by all Computer Science students, and the attendance on it was good. The academic content complemented the work undertaken previously on the module, and gave students the chance to work in teams on a real project designed and evaluated by staff at the zoo. It included time for the students to have an informal chat about their experiences. We felt that this was a particularly rewarding activity, as it gave the students a real context for their study and the opportunity to talk with employers informally.* (Computer Science, UOC)

Research at UOB reinforced the findings from *What Works?1* about the need for interventions to have academic relevance:

> *Participants expressed mixed feelings regarding the interventions that had been designed to help support their transition into university, where positive experiences generally related to activities which were directly relevant to academic content, such as sample lectures; and less positive experiences related to activities considered irrelevant to their course. Many participants across groups talked about being overwhelmed by information, the pace of work, and life when starting university.* (UOB)

5.6 Implications and recommendations

The most effective interventions were informed by the issues of concern in a specific context on the one hand, and a tailored programme of interventions informed by research evidence about what works on the other. A review of effective interventions in *What Works?2* resulted in a renewed list of features of effective practice. Effective interventions had an academic purpose that was explicitly relevant to students and were delivered in the mainstream to all students, facilitating collaboration between students and with staff. Effective interventions were ongoing or part of a programme of interventions, and individual student engagement was monitored and followed up as necessary. It is recommended that an evidence-informed programme of interventions is designed to address the issues of concern, drawing on the features of effective practice identified here.

Chapter 6: Review the institutional context

Summary

What Works?2 teams operated at least two levels: the discipline and the institution. While success could be achieved locally, some institution-level factors were found to be valuable in supporting and facilitating student retention and success. This chapter discusses the institution-level factors that contribute to effective change:

1. Leadership and management support at all levels;
2. Alignment of institutional policies and procedures to enable student retention and success;
3. Staff engagement facilitated through recognition, development and reward;
4. Provision of data that can be used to improve student engagement, belonging, retention and success.

A review of the institutional context based on these factors can be useful in helping to assess institutional readiness for change.

6.1 Introduction

In *What Works?1* it was recognised that institutional enablers were necessary to support and facilitate change to improve student retention and success, and the following focus areas were suggested: commitment from institutional leaders; retention and success to be viewed as priorities for all staff; staff capacity to be developed; student capacity to be developed; institutional data to be accessible and used; student behaviour and performance to be monitored; and a partnership approach between staff and students to be adopted. Some of these issues were built into the programme design, while others are better understood as part of the process of change. In this section, the key learning from *What Works?2* about the institutional context and enablers is discussed. These are viewed as both prerequisites for and enablers of effective change. In summary, leadership, resources and support are necessary if student engagement, belonging, retention and success are to be valued, prioritised and become a reality. Academic staff cannot improve retention and success alone, and there needs to be a combination of bottom-up and top-down approaches to support and enable change.

The need for an enabling environment is summarised here:

> *A major finding was just how much work the institution needed to do to improve student retention and success, particularly around infrastructure and strategic enablers. In many ways a significant part of the last three years has been spent reaching a baseline from which we can go on to realise significant changes in the retention and success of our students in the next three to five years.* (UOS)

Looking across the 13 institutional experiences, the following issues have been identified as institutional enablers:

- Leadership and management support at all levels for retention and success;
- Alignment of institutional policies and procedures to enable student retention and success;
- An organisation that enables staff engagement through recognition, development and reward;
- The provision of data that can be used to improve student engagement, belonging, retention and success.

These issues are discussed in the subsequent sections.

6.2 Leadership at all levels

A leadership culture that prioritises, values and supports change to improve student engagement, belonging, retention and success in activities to improve student retention and success was found to be very valuable. It demonstrated the importance of the issue, which in turn promoted wider staff engagement and helped to overcome institutional blockages:

> *The major lesson learnt from this work within the university was that senior management support is crucial. Having support from senior university leaders who advocate the benefits of the programme provides extra kudos to the work and encourages people to listen. Senior management support within the faculties is also crucial. Having Associate Deans and Principal Lecturers act as champions for the programme was also very important to the success of the project; they not only advocated the benefits of the initiative to support the rollout, they provided the project with a voice within faculties, as well as instantly troubleshooting problems or barriers to rollout and embedding.* (UOW)

As this comment indicates, leadership and management support are required at all levels within the institution, not just from the senior level (although this is vital):

> *The initial challenge of instilling a culture of team working was overcome by securing 'buy-in' from all the relevant stakeholders (heads of school, discipline leads, first-year tutors, etc.) in each discipline area.* (UU)

Staff engagement was challenging (see sections 6.4 and 7.5), but securing the support of line managers helped to ensure the participation of other staff members – both academic staff and other staff:

> *Senior management support was an important factor in enabling change to happen. For example, the Director of the Music and Performance Directorate was the discipline lead and therefore had direct line management of the staff involved in the intervention. Although it was challenging to combine the two roles, leadership by a senior manager within the school was a crucial part of the success of the personal tutoring intervention.* (UOS)

Management support helped to overcome institutional blockages, as these comments illustrate:

> *… Buy-in to improved data on belonging, engagement and self-confidence by a senior member of the executive (the DVC) provided a mandate to the data expert to overcome some of the resistance to change identified in pockets of the institution. Without senior management buy-in it would not have been possible to develop the quality and availability of the data in a timely manner.* (USW)

> *The main change that was made as a result of the project was that we were able to provide pre-induction information to the students by means of giving them access to a site on Blackboard prior to them arriving and registering. This was extremely difficult to set up… In the end it was facilitated by the Director of Teaching and Learning…. This represented a considerable breakthrough and may not have been possible without the backing of senior staff for the project.* (Sport Science, SMU)

Discipline team members embraced the challenge of pedagogical development, and became champions in their areas and beyond, enthusing other staff to do likewise. Furthermore, having champions and supporters at different levels helped to overcome resistance to top-down change:

> *The layered implementation approach, which was discipline led and driven but supported by faculty management and institutional leadership, led to the initiative not being viewed as a wholly top-down process and being more readily accepted by teaching staff.* (UOW)

Moving beyond the *What Works?2* programme, it is noted that the challenge will be to continue to keep retention and success at the top of the institutional agenda, although the external policy environment is contributing to overcoming this.

> *One of the challenges going forward was to be how to continue to keep this issue at the top of the institutional agenda, alongside other key areas of institutional priority. However the imminent arrival of the Teaching Excellence Framework (TEF) and its focus on teaching quality, the learning environment and student outcomes, will ensure that student retention and success for all students will continue to be critically important and a strong focus of attention.* (UOB)

6.3 Alignment of institutional policies and practices

Leadership and management support need to be reflected in institutional policies and procedures. In some cases this was achieved by using evidence from *What Works?2* to inform institutional policies and processes, and in other cases to align retention and success goals with other institutional priorities. Conversely, institutional procedures and regulations could create unnecessary barriers to colleagues seeking to implement student-centred interventions. Aligning policies was one of the aims of the UOS team:

The project team's aim to raise the profile of student retention and success across the institution has been realised. The profile of retention as an institutional focus has been embedded within strategic documents, language and key performance indicators for the university. Similarly, a wider notion of student success, as espoused by the project literature, has been embraced in the institution's longer-term education vision and strategy. Following reviews of executive and senate structures there is clear, coordinated oversight of the student experience – including both student retention and attainment – across the university's management and governance functions. This will ensure appropriate accountability is maintained and the impact of improvement activities closely monitored. (UOS)

More specifically, UOS provides details of how its policies have been aligned to support and facilitate improving student retention and success:

A student engagement, participation and attendance policy has replaced the student participation policy. The new policy sets out the university's approach to supporting the development of students to become confident HE learners who successfully complete their chosen programme of study. The policy foregrounds engagement through supportive structures and the interplay of engagement, participation and attendance in creating student success.

The student voice policy has been replaced by a new document – 'Always listening: connecting with our students'. This represents a paradigm shift in how we communicate with our students and emphasises the importance of regular engagement between students and staff to create agile and effective channels of communication, which in turn help to improve the student experience. The new policy has been directly influenced by the personal tutoring intervention delivered by the Music and Performance team. Further details are provided in the discipline and institutional case studies.

A revised Student Interruptions and Withdrawals Policy and Procedure standardises the requirement for students to seek advice and support from nominated academic or professional services sources before making an application to interrupt or withdraw. Students on interruption now have access to enhanced learning resources during the period spent away from the university. In addition, communications have been formalised to maintain contact, signpost points of assistance and facilitate interrupting students' return to study. (UOS)

Other institutions also provided examples of how institutional policies have been shaped and influenced by participating in the What Works?2 programme, helping to ensure greater policy alignment. For example:

All work and activity undertaken at GCU as part of the HEA 'What Works?' programme aligned with major internal drivers (GCU Strategy 2020, the Student Experience Framework (SEF) and the Strategy for Learning (SfL)) and external drivers (QAA (Quality Assurance Agency), SFC (Scottish Funding Council), and sparqs (Student Partnership in Quality Scotland)). (GCU)

Other examples of the wider impact of *What Works?2* on participating institutions are given in section 9.4.3.

It should also be noted that policy alignment needs to extend beyond some of the more obvious lines (such as learning and teaching). Throughout the process of implementation, colleagues ran into 'institutional blockages' caused by regulations that seemed to hinder the process of engaging students. For example, there were many challenges and blockages associated with communication with students prior to their entry to the academic course, including difficulties with sharing contact details, limits on the number of communications, lack of access to the Virtual Learning Environment (VLE) or other institutional resources, and delays in communications being sent out. These kinds of issues reduced the impact of interventions and frustrated colleagues. Other institutional blocks included a restriction on using external catering to provide pizzas at an event. These barriers were generated through the application of well-intended institutional policies, and serve to demonstrate the challenge of ensuring that all policies are aligned to support student engagement, belonging, retention and success.

It was found that opportunities to align policies and procedures could be enhanced by ensuring the project team was embedded within and reported to the institutional committee structure. Being integrated into the formal reporting structure raised the profile of student retention and success, and promoted understanding of the local issues and what could be done at the institutional level. It also allowed the findings from *What Works?2* to be adopted more widely, influencing the strategic direction and implementation in some cases. This is discussed more fully in section 7.3.

6.4 Staff engagement

Challenges were experienced in wider staff engagement across all participating teams (see section 7.5). Too often, fundamental and important changes to improve student learning experiences and outcomes are reliant on the good will of staff champions, who often undertake additional work in their own time. This section of the report considers the ways in which institution-level policies and procedures could be used to promote and facilitate staff engagement:

- Work allocation model;
- Staff development and support;
- Opportunities for pedagogical research and development;
- Routes for recognition and promotion based on engagement in student success activities.

Each of these has relevance for both the team members implementing change and the wider staff body.

6.4.1 Work allocation model

Providing staff with time to undertake the work associated with managing, planning, implementing and evaluating change was widely recognised as a challenge across the institutions, which was, at least in part, alleviated by a work allocation model. For example, GCU made use of an institutional work allocation model, allocating time for an enhanced advising role, and thus enhanced staff engagement:

Hours have been allocated to academic advising within the GCU work allocation model (WAM)… staff buy-in to the new academic advising process is evidenced throughout the QAA GCU ELIR Technical Report. (GCU)

A similar approach was taken at UOS, where three hours were allocated to each student, plus an additional 12 hours for complex issues. The nominal time allocation did not automatically ensure staff engagement, but it was an important starting point for engaging staff across the institution, and provided some recognition for team members. For other universities, such as SMU, the need to make time available for staff to undertake developmental work designed to improve student retention and success was recognised as a learning outcome from What Works?2. They note the implications for wider staff beyond the implementation team:

Making resources and releasing time for colleagues to innovate and develop ways of working to enhance retention and student success is essential for the sustainable generation of new ways of working. For a university to gain a thorough understanding and appreciation of the impact that important engagement and retention activities can have on a student's sense of belonging requires time for project management and initiative roll-out. Moreover, to set in motion practices that require information systems to work in different ways from the norm there is a requirement for additional time from professional services and commitment of financial resources. (SMU)

6.4.2 Staff development and support

Some teams made a concerted effort to provide development opportunities for staff across the institution to understand and develop skills to contribute to new ways of working; this ranged from one-off events to institution-wide programmes. Early on in the programme, the Students' Union at USW contributed to staff development:

We've got this little programme going of student-led staff development… they put a panel together of five students who had considered dropping out of uni. Each student went through… why they were thinking of dropping out, and then they turned to the audience and said, 'Can you just debate for five minutes, in little groups, what would you have done if you'd heard this from a student? What do you think the university should have done?'… It was incredibly powerful. (USW, team leader interview)

At NUB, implementing an institution-wide approach to staff development to support student retention and success was a primary aim of participating in *What Works?2*:

The construction of an Academic Practice Unit (APU) was one of the aims of the 'What Works?' phase two project… The APU was established in early 2014 to support staff formation, particularly as this acts to support the formation of students. (NUB)

Subsequently, a range of interventions and opportunities was developed to promote and facilitate staff engagement and development:

The APU can be seen to have had a positive effect on building staff capacity that works to enable connections between staff and students to promote a sense of belonging. (NUB)

Other institutions developed staff development materials and modules as an outcome of their participation in *What Works?2*. For example, some institutions introduced new materials into their postgraduate programmes for staff:

CELT offers an MEd in Academic Practice for faculty and professional services staff. It seemed a logical development for the project lead to develop a module within the MEd that would enable the faculty to be enthralled by the possibilities that they could employ to improve the first-year student experience. The first iteration of the module was delivered as a week-long block to 21 staff in July 2015 and will be repeated in the same week in 2016, resulting in the university creating over 50 staff champions for the first-year experience. (BCU)

6.4.3 Opportunities for pedagogical research and development

Team members, especially those in the disciplines, benefited from support with their role as change agents. This included practical assistance and developmental opportunities from the core team and the extended change programme. Viewing their evaluation work as pedagogical research helped them to develop expertise and capacity, and to gain recognition as experts. A significant number of pedagogical research conference presentations and publications was produced, and these are of great value in and of themselves, but also contributed to the development – and reward – of the individual members of staff involved (see Appendix 3).

6.4.4 Routes to recognition and promotion based on engagement in student success activities

Staff engagement was also enhanced through greater recognition of the value of the work being undertaken to improve student retention and success. UOS was successful in creating new opportunities to recognise and reward staff engagement in student success activities through honorary titles and promotion routes:

Staff recognition and reward in learning and teaching have taken a major step forward with the introduction of a new promotion route to Reader and Professor in Learning and Teaching/Student Success. It is important to note the inclusion of wider definitions of 'success' within this promotion route. From 2014/15 eligible academic members of staff are able to submit a case for promotion based on their achievements in teaching and learning/student success in the areas of: innovation and impact, leadership, recognition of excellence, and evidence of future plans for further development. These promotion criteria are closely informed by the areas of activity, the core knowledge and the professional values that form the dimensions of the UK Professional Standards Framework (UKPSF). Since it was introduced, two academic members of staff have been awarded Professor or Reader status via this new route. (UOS)

Another way in which the contribution and development of the staff involved in *What Works?2* has been recognised has been through HEA Fellowships[123] (see Appendix 3).

[123] https://www.heacademy.ac.uk/ukpsf

6.5 Data provision

The provision of data is an important example of an institutional enabler required to improve student engagement, belonging, retention and success – and was addressed by all participating institutions. Data was required at all stages of the process of planning, implementing, monitoring and evaluating change (and is discussed in Chapters 4 and 8). It is, therefore, essential that staff across the institution have ready access to meaningful data and evidence to inform process and outcomes. This data needs to be available at different levels of detail to inform colleagues' work. Without exception, the participating institutions worked to make their data more useful to the process of improving student retention and success. For example, USW describes how raw data was available but was not analysed and used:

> *First look continuation and progression data is now available mid-year through our work with the Planning and Business Intelligence team. Management summary reports have been agreed by the RSWG after consultation with Deans (L&T) and nominated representatives across the four Colleges. Consultation identified ideal data requirements (that vary in different areas of the university) and also the process for reporting. We have considered additional data as indicators of student engagement, such as VLE logins and on-campus card swipes, and how this could be incorporated to inform student support.* (UOG)

The institutional reports indicate that the improved presentation and subsequent use of data had positive outcomes:

> *The Academic Board has noted in its minutes that the quality of debate around issues of retention, progression and success has been significantly improved since the new data reporting structure was introduced.* (USW)

This is discussed further in the USW case study: *Data which informs strategic development,* Professor Jo Smedley, Professor Karen Fitzgibbon and Haydn Blackey, University of South Wales.

UOG also improved the quality of retention data, and this is discussed in its case study: *Use of student retention data: Developing datasets and reports.* An extensive consultation investigated the data available, the optimal management information report format, the types and granularity of the data required in different areas of the university, and structures for the dissemination of data. It is noted that, as in the USW example, different data and levels of analysis were required across the institution.

6.6 Implications and recommendations

While the primary interventions were located in the academic sphere, they were facilitated and enabled by the following institution-level factors: leadership and management at all levels including discipline champions; alignment of institutional policies and procedures; recognition, development and reward for staff engagement; and the provision of data to be used to improve student engagement, belonging, retention and success. It is recommended that where these enabling conditions are not fully in place appropriate institution-level changes are implemented. Without these in place, success at the discipline level may be impeded. These factors should, therefore, be reviewed to assess institutional readiness for change, and subsequently be addressed.

Chapter 7: Design a process of change

Summary

Through *What Works?2*, different models for and approaches to implementing change were uncovered and made explicit. The experience of institutions suggests that it is necessary to have in place the following elements, which are discussed more fully in this chapter:

1. A structured approach to organising and managing change is useful, and sufficient time is required to research, plan, implement and evaluate change.
2. A cross-institutional team, with clear roles and operating at different levels within the institution, is vital.
3. Engaging students in the process is highly beneficial.
4. Ensuring staff engagement is essential but can be challenging.
5. Senior management support and leadership are crucial.

7.1 Introduction

This programme has explored not only 'what works', but also how to implement change. This chapter draws on the institutional experiences and learning about the process of realising change to improve student retention and success in a complex context. Knowing what the issues are and what to implement and ensuring a facilitative institutional context was only part of what was required. A key aspect of success was translating knowledge, plans, commitment and support into practices and 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 2006)[124]

As is noted in section 2.5, complexity relates to both the issue of student success and higher education institutions. Student success is a multi-dimensional concept, incorporating, for example, continuation, completion, attainment and more (see, for example, HEFCE 2013).[125] There are multiple factors contributing to why students withdraw,[126] and these vary over time, between disciplines and institutions, according to student characteristics, and depending on individual students' experiences and their responses to them. In addition, higher education institutions are complex organisations consisting of multiple units, roles and individuals; and frequently characterised by high levels of autonomy, at the level of both individuals and units.

By working alongside the institutions, the *What Works?2* team has explored different models and approaches to managing change, and collected information on people's experiences, as well as the effectiveness of different approaches. This will enable other institutions that wish to address issues to enhance the student learning experience and associated outcomes with suggestions about how they could engage discipline staff and others in bringing about sustainable change. For example, University of Glasgow usefully concluded[127]:

> *We consider essential requirements for a successful project team to be:*
>
> - *Support from senior management and existing committee structures;*
> - *A fully engaged team who feel ownership of the project;*
> - *Student involvement wherever and whenever appropriate;*
> - *Dedicated administration/project management support so at least one person has a good overview of all activities and deadlines to keep the project on track;*
> - *Continuity of team membership;*
> - *Time to embed changes to see the longer-term impact on student engagement and belonging, retention and success.*

These things are broadly covered in the following sections.

[124] Tinto, V. (2006) Research and practice of student retention: *What next? Paper presented at the Higher Education Conference: Innovations in Student Success,* 9 February 2006, Great George Street, London.

[125] HEFCE (2013) *Higher education and beyond: Outcomes from full-time first degree study.* 2013/15. Bristol: HEFCE.

[126] Jones, R. (2008) *Student retention and success: A synthesis of research.* York: Higher Education Academy. Available at: https://www.heacademy.ac.uk/resources/detail/inclusion/wprs/WPRS_retention_synthesis. Webb, O., Wyness, L. and Cotton, D. (2017) *Enhancing access, retention, attainment and progression in higher education: A review of the literature showing demonstrable impact.* York: Higher Education Academy. Available at: https://www.heacademy.ac.uk/resource/enhancing-access-retention-attainment-and-progression-higher-education

[127] Browitt, A and Balance, D (2017) Benefits of embedding a project team within existing University structures Alison Browitt and Donald Ballance, University of Glasgow

7.2 Organising and managing change: Structure and timeframe

The three-year extended change programme developed and employed by *What Works?2* provided a structured approach to implementing and managing change, along with a level of external support and scrutiny. The programme was valuable in helping to keep teams on track, providing external expertise, and pushing for evidence and consideration of the implications of the emerging findings. The timeframe of three years was important, as new evidence emerged, which led to ongoing improvements to the work being done – and ongoing work is reaping further rewards (see, for example, the UU institutional report). In other words, implementing change and experiencing the impact takes time, and benefits from a structured approach:

> *The support of the national 'What Works? Student retention and success programme' facilitation team and the other participating institutions over the life of the three-year project has kept up momentum and provided a platform for sharing ideas, an essential part of the process. Meetings provided time and space for the team to focus on the project away from the institution.* (UOG)

The extended change programme (described in section 1.2.2) and, in particular, the following elements of it were commented upon favourably by institutions:

- Dedicated induction session for institutional leads;
- Thematic workshops led by sector experts on induction, active learning and co-curricular activities;
- Institutional site visits engaging the full cross-institutional team to explore the programme, including data and evaluation issues;
- A programme of residentials for discipline teams to reflect on and develop their work, in collaboration with colleagues from across the sector;
- Structured annual reporting and feedback;
- Annual progress meetings to develop interventions and evaluation, and to promote cross-institutional learning and collaboration;
- A second institutional site visit to explore outcomes and dissemination strategies;
- Collation and standardisation of institutional data in relation to continuation and achievement in each participating discipline;
- Student engagement and belonging survey, which was administered on seven occasions. Feedback was sent to teams after each of the survey's administrations;
- A contextual evaluation process working with institutions to understand the process of change and to implement qualitative research within institutions and disciplines;
- Peer-reviewed institutional reports, case studies and lessons learnt.

7.3 A cross-institutional team to lead, manage and deliver change

A cross-institutional team with clear roles, drawn from different functions and operating at different levels within the institution, is vital. *What Works?2* involved discipline teams working with a core, cross-institutional team. This recognised that there is a range of expertise and spheres of influence that need to work collaboratively to plan, manage, implement and evaluate complex change.

Clear roles assisted the effective implementation of change. The role of the discipline teams is relatively straightforward to conceptualise: to implement activities and changes for students registered on their programmes that are designed to improve engagement, belonging, retention and success – and to contribute to the evaluation process. The function of the core team was not immediately obvious, but can now be seen to straddle three areas:

1. Coordinating and supporting the work of discipline teams;
2. Data and evaluation roles;
3. Engaging with the wider institution.

7.3.1 Coordinating and supporting the discipline teams

Through the interviews with core team leaders, five approaches to coordinating change and working with the discipline teams were identified:

- **Managing change:** Implementing local change based on existing institutional policy (GCU, UOW, YSJ);
- **Leading change:** Developing policy and influencing practice (UOS);
- **Facilitating change:** Setting up the infrastructure to facilitate local practice (SMU, UOB, UOC, UOG, UU, USW);
- **Influencing change:** Seeking to influence policy and practice (BCU, NUB, SMU, UOG);
- **Bottom-up change:** Discipline teams developing practices that will influence institutional policy (SU).

These models could be characterised as tending to be: 'top down', 'dispersed' to the disciplines, and 'integrated and collaborative'. The evidence suggests no clear prescription for an effective model of managing change, but there is a strong need for 'ownership' by discipline teams, making a wholly top-down approach less effective. Nonetheless, central intervention from a senior member of staff to overcome institutional blocks (see section 6.2) was very valuable, making a wholly dispersed model challenging; and wider staff engagement was an ongoing challenge requiring support and collaboration. Thus, integrated and collaborative approaches tended to achieve better results overall.

The issues of coordination and support were explored through interviews with core team leaders and a survey of discipline leads (32 responses from 11 disciplines). All discipline leads indicated that they received support from the core team leader, but the levels of reported support varied (however, it should be recognised that discipline teams from the same institution reported different types of support). The core team provided support to the discipline teams in a number of ways, but the most frequently cited form of support was organising meetings between the discipline teams (see Table 4 below).

Table 4: Support provided by the core team to the discipline teams

Support	Number	Percentage
Met with other discipline teams	29	91%
Met with core team to review progress	27	84%
Provision of institution-level data	27	84%
Reviewed our plans and kept us on track	25	78%
Shared research and resources on effective practice	22	69%
Provided funding for our interventions	15	47%
Provided administrative support	14	44%
Facilitated research and evaluation about the implementation and impact of our work	10	31%
Provided a blueprint of what we needed to do	8	25%
Provided staff development	6	19%
Other	3	9%

One university commented:

> *The model adopted of core and discipline team meetings and updates worked well and one of the project's case studies focused on some of the unintended consequences that arose as a result of this cross-institutional working group.*

Indeed, regular team meetings were seen as valuable, bringing everyone together, rather than just meeting when required, or meeting discipline teams separately, because of the wider benefits that were developed.

One institution reflected generally on the challenges involved with a cross-institutional team working with discipline teams:

> *If we were to undertake a similar project in the future we would try to ensure that all members of the core team were committed to the objectives to be delivered; and that roles and responsibilities were clear and agreed. We would also provide opportunities for these roles and responsibilities to be reviewed periodically throughout the programme. We would also engage permanent staff in the Students' Union from the beginning to provide stability and continuity as and when student members moved on from the project. Finally, we would address the non-engagement of any team member at an earlier stage.* (Lessons learnt)

7.3.2 Data and evaluation roles

The core team members, including but not limited to the data expert, usually played roles related to data and evaluation, although this is not reflected in the responses shown in Table 4 above, which may reflect when this survey was completed. The different roles and ways in which the core team coordinated and supported evaluation are discussed in section 8.3.

7.3.3 Engaging with the wider institution

In addition to contributing to the work to improve student retention and success, the majority of the core teams played a role in disseminating findings and translating the outcomes to the wider institution by influencing policy and practice. The survey shows how the work undertaken by discipline teams is anticipated to intersect with institutional policy; the responses are presented below.

Table 5: How does your work intersect with institutional policy? Choose the one statement that best describes the situation at your institution

Intersection with policy	Number	Percentage
Discipline teams are implementing institutional policy at the local levels as part of this programme	7	22%
The core team is developing institutional policy as part of this programme	2	6%
Work by the discipline team is expected to inform institutional policy	9	27%
Positive outcomes at the discipline level may influence policy within the institution	15	45%
Our work is not influenced by institutional policy and is not expected to influence institutional policy	0	0%
Other	0	0%

This demonstrated that the majority of respondents thought that their work could influence wider institutional policy if there were positive outcomes.

Influencing policy was facilitated by utilising the existing structures (committees, networks, meetings, etc.) at the institutional, faculty and departmental levels within the institution. In its lessons learnt, one university summarised in its advice to other institutions:

> *Utilising existing structures within a large and diverse institution to embed the work of a short-term project team can promote the success of the project as well as building in sustainability from the start.*

For example, UOG utilised a pre-existing Retention Working Group (which was subsequently renamed the 'Retention and Success Group'), which reports to the Learning and Teaching Committee, which in turn reports to the Senior Management Group. This raised the profile of student retention and success, and promoted understanding of local issues and what could be done in the context of UOG. This is discussed further in the institutional case study: *Benefits of embedding a project team within existing university structures.*

Other institutions also noted the benefits of being integrated into the organisational structure to promote ongoing learning from the work, and the wider reach and influence to be achieved:

> *At the institutional level, the project reported initially to the university's Student Experience Committee, then more recently (after a committee restructure) to the Retention and Attainment Subcommittee, which in turn reported to the Learning, Teaching and Assessment Committee and from there to the Academic Board… Through the committee structure, the institution was able to review progress on the individual projects, but more importantly to gain the benefit of exposure to the principles behind 'What Works?'. This in turn has helped to inform the strategies being adopted across the institution for the next academic year to support retention.* (SU)

> *This change programme has created numerous opportunities for debate on the student experience at Ulster informed by the growing body of evidence generated by the projects. This has contributed to the development of Student Experience Principles, which will provide a much-needed framework for the design and delivery of a more student-centred curriculum. The roll-out and dissemination of the Principles began in 2015/16.* (UU)

7.4 Student engagement

The *What Works?2* programme aimed to ensure that students were actively involved in the process of change, and that there was an expectation that at least one student would be a member of the core team. Some institutions and discipline teams found it difficult to involve students in the work, both in terms of identifying suitable or willing students (especially with the extended timeframe and regular changes to students in representative roles), and in terms of finding them suitable roles. Others reported that student engagement was high and their involvement very valuable:

> *We found that student involvement and discussion is essential in ensuring activities are fit for purpose. Student involvement is invaluable in informing the initial design of any change or intervention, but constant feedback is also required for the iterative process of continual development in ever-changing contexts.* (UOG)

It appears useful: to engage students at the discipline level as well as the institutional level; to consider whether students will have the opportunity to engage for more than one year; to identify areas where students have knowledge and experience over and above that of the staff team; and to use students to support wider student and staff engagement.

7.4.1 Creating a meaningful role for students

A number of institutions were committed to involving students actively in the process of change, and identified innovative and effective roles for them. UOW described the different roles students played:

> *Students have been engaged with the 'What Works?' programme in a number of ways. As previously mentioned, students were engaged in the evaluation and the further development of the inclusive assessment initiative. However, the most prolific form of student engagement has been through student and Students' Union engagement in the Attainment Summits… the University of Wolverhampton's Students' Union has worked in collaboration [with the UOW 'What Works?2' team] to deliver annual Student Attainment Summits, which aim to raise awareness of the attainment gap and provide staff with an evidence base to make positive changes to their practice.* (UOW)

At UU students fulfilled different roles in each of the seven discipline teams (detailed in the UU report), based on staff–student partnerships:[128]

> *Using staff–student partnerships to improve engagement, belonging, retention and success by introducing interventions for first-year students. Student partners were involved both in identifying areas for improvement and in devising and implementing solutions… Student partners on the team took a variety of active roles such as: coaching of first-year students by final-year students; organising events to promote belongingness; leading activities with prospective students and during induction of new students; collecting and evaluating data about issues in the first year, and co-developing ideas for interventions to address these.* (UU)

In summary, across the institutions students were involved in the process of change in a variety of ways, including:

- Redesigning the curriculum contents or delivery, drawing on their own experiences, including from placements;
- Supporting, mentoring and coaching first years;
- Organising academically relevant social events and connecting with professional bodies;
- Delivering outreach, recruitment and induction activities;
- Conducting data collection to inform the development of interventions and for the evaluation;

[128] See Appendix 3 in the UU report *Staff and student guide to engagement through partnership*, which is an excellent summary of good practice, and the related journal article: Curran, R. and Millard, L. (2015) Engagement through partnership: The realities for staff and students and implications for academic development. *International Journal of Academic Development – Student Engagement Special Issue*, 156.

- Campaigning about and raising awareness of student retention and success issues with other students and ensuring that students have a voice in the development of policy and practice;
- Arranging staff development events drawing on students' experiences and expertise.

7.4.2 Recruiting students as change agents

Some institutions, however, struggled to recruit students and engage them in the process of change. The survey explored which types of students were involved, and the results are presented in Table 6 below:

Table 6: Which students have been involved in the work you have undertaken as part of this programme, and what has their involvement been?

Type of student	Very involved, or involved to some extent		Not very involved or not involved at all		Total number of respondents
Student course reps	26	84%	5	16%	31
Elected students' union officer	8	57%	6	43%	14
Students' union member of staff	18	64%	10	36%	28
A committed student from course	20	77%	6	23%	26
A group of students from target programme(s)	29	94%	2	6%	31

It can be seen that the most popular group of students to involve was students from the courses involved in the *What Works?2* programme; course reps were also widely used. Elected students' union officers appear to have been the least widely used, which may be due to the difficulties associated with elected representatives usually only being in these posts for one year, and the programme duration being three years. For example:

> *The Students' Union was heavily involved from the outset and this continued for the first two years despite a change in President. However, it proved difficult to maintain this level of participation as the project went on over such an extended period of time.* (UOB)

Another institution experienced this frustration too, and developed an induction process:

> *The student representative also changed three times within the lifetime of the project. This movement, although not a significant issue, meant that induction had to be built in at the start of each academic year to ensure continued student involvement and engagement with the project.* (Anonymous)

Through the survey, discipline teams were asked to report on strategies they had found to be successful in encouraging students to participate:

1. Building on existing relationships, including explaining what is required, why it is important, and valuing their contribution.

   Good staff–student relations generally. Where there is respect and trust, students are usually happy to help.

   Asking them, via email and their Facebook group, providing guidance for them, thanking them.

2. Using existing structures for engaging with students, including the student representation scheme.

   The interventions were discussed at staff–student liaison meetings, and in year one course evaluation questionnaires.

   As part of regular student–staff award-level liaison meetings. Getting student feedback on modules through module feedback forms, which inform module monitoring forms, which lead to specific module-level changes.

3. Involving students through taught sessions:

   Focus groups and general discussion in the seminars which support the intervention/degree programme.

   Use of tutor groups based around the new 10-credit module. Allowed students to voice opinions and experiences.

4. Informing students at an early stage and inviting them all to participate:

   Involving students from the start. The research is discussed during the pre-university course and continues to be a point of discussion throughout the first year.

   Inviting all students to be involved in the projects (students self-nominated and all were included in the work moving forwards); arranging away days (quality time for discussion); students discussing with students and seeing changes being made as a result, encouraging more students to be involved.

5. Developing understanding and ownership:

   Working collaboratively with students, encouraging them to actively contribute to developments so that they have a sense of ownership; using students to disseminate plans and findings.

UU assisted students to use their experiences as change agents positively to contribute to their own employability, arguably contributing to the high level of student engagement evident across the work at UU:

> *Students have been encouraged to reflect on their experiences within the programme as part of the Student Edge Award. (This award has been designed to enhance the employability of Ulster students by providing official recognition and evidence of activities outside their programme of study.)* (UU)

7.5 Staff engagement

Ensuring wider staff engagement was reported to be the biggest implementation challenge:

> *Engaging staff remains a significant challenge and reaching a wider group of staff, beyond those immediately involved, remains difficult. None of the strategies tried have so far has achieved significant involvement from a wide range of staff.* (Project leader interview)

This issue has major implications, not just in terms of delivering a successful intervention in the short term but also in terms of sustaining its long-term impact. Wider staff engagement was at the heart of the implications of *What Works?1*, and our teams usually began by engaging 'champions'. However, they often reported challenges around wider staff engagement.

Staff engagement was addressed in the discipline lead survey, which explored the strategies used and those that were most effective. While staff engagement can be facilitated by institutional structures and processes (discussed in section 6.4), discipline teams also reverted to a range of local tactics to engage their colleagues, which centred around constantly referring to the work they were doing, and the emerging evidence about the benefits to individual students, the wider student experience and outcomes, and their own personal growth and development. Sometimes this was through formal channels within academic areas and the wider institution (discussing at team meetings and presenting at learning and teaching events, for example), but often it was directly to friends and colleagues through informal networks.

A selection of responses to the question *'Which have been the most effective strategies for engaging staff?'* provides further insight:

1. Informal engagement:

   Face-to-face pleading! We need to look at hours' provision in the workload, but this is very tight for senior staff.

   Two members of staff have become engaged because they are in the discipline team. Others are involved in various activities, without particularly realising it is part of the project. I have been able simply to ask them.

2. Formal engagement:

   Through academic group team meetings and presentations at the annual learning and teaching development conference. Also, informal discussions with staff members on an individual, face-to-face basis.

   We are a small teaching team, who are naturally 'student focused'. There was no need to 'persuade' colleagues to become involved. Most development/ discussion emanated from the Programme Team and Programme Board (includes student reps) meetings.

3. Promoting staff ownership:

   Giving all member of the discipline team a voice in determining retention activities, including input into the Retention Proposal. Engaging staff from the discipline team on a regular basis, for example, regular updates on success, dissemination of information, and reflecting on activities including appreciation of their feedback, which is incorporated into the various reports.

4. Evidence of the impact of the interventions:

   The data that indicates interventions have had an impact. Certainly retention has been better on the programme but it is difficult to create a concrete causal link between the intervention and retention – far too early.

   Discussion with all staff, to involve them in the project and the decisions on interventions; obvious input of our students, to be able to provide evidence for the strategies we are proposing, as being of benefit to the students; trying interventions that some staff were reserved about, finding it to have a positive effect on students has led to improved engagement for ongoing work.

   Discussion with individuals, although time-consuming, does seem to provide the best results in regards to staff engagement and interest in the project. The recent TLC conference also gave a good opportunity to show evidence that the work we're creating is having an impact and how it works as well as present the project to other staff so they can see what we've been doing.

Engagement was encouraged by promoting staff ownership of the issues and the solutions, and the power of 'evidence' could not be underestimated. As colleagues witnessed positive outcomes there was greater interest in participation, and in some institutions this resulted in discipline teams joining the programme.

Some of these tactics were put into practice by one of the UOS discipline teams as they worked together to encourage staff buy-in:

> *The Music and Performance team were particularly effective in changing the culture within the Directorate to positive effect among both staff and student groups. These changes were created within a relatively short period of time and stem largely from the focused efforts of the discipline team and their belief that students would not buy into the personal tutoring system unless the staff did. The team undertook a 'hearts and minds' strategy to engage staff across the Directorate: they appealed to their colleagues' moral and social responsibility to provide a duty of care to students, backed up by a deliberately generous workload allocation to facilitate the fulfilment of tutoring duties.* (UOS)

This resulted in a 'culture change', with a near 100% completion rate for personal tutor reports, coupled with great discussion among staff about the student experience, and matters of concern being addressed quickly through regular opportunities for discussion rather than being 'saved up' for staff–student committee meetings.

Having learnt from the experience, institutions were keen to share their experiences of and lessons about staff engagement. UOW reflected on the experience of rolling out the inclusive assessment initiative to other disciplines:

> *Having discipline leads that helped develop the inclusive assessment initiative, has led to it being viewed positively by faculty colleagues… Selecting members of the discipline teams who were respected by their colleagues as excellent teachers facilitated the process of influencing and engaging the wider faculty staff in the rollout and embedding of the work. The rollout process was further enhanced by giving the discipline teams the freedom to choose the methods of rollout within their faculty… Faculty senior management support was also crucial to the rollout and embedding of the project… Having a faculty-level voice for the project was, in turn, facilitative of the rollout… The bottom-up approach that resulted from the discipline teams driving the piloting and rollout of their initiative, coupled with the top-down support and championing provided at both faculty and institutional level, encouraged a positive view of the project.* (UOW)

While another institution reflected more generally in its lessons learnt document for the sector:

> *Our advice to other institutions is two-fold: firstly, secure an institutional advocate with sufficient seniority to influence cross-university change, whilst ensuring the supporting team is sufficiently robust to withstand leadership changes; and, secondly, employ a range of tactics to make the case for change and be prepared to do so over a period of time.* (Lessons learnt)

7.6 Senior management support

Most institutions reported good senior leadership support for their work, but where this was not the case, significant effort was deployed to sell the vision and promote the benefits of engagement:

> *That's why we've had to make sure that it's a commitment that's brought in at an institutional level. You know, to me it's an absolute prerequisite for making sure that the project outcomes become positive. It was very hard, I think, where we were as an institution, to do one without the other. We were trying to bring change in but the climate really wasn't conducive to it at all. We were having to do something about the climate… It takes time and takes energy and takes a lot of thought, and I think you, kind of, get one chance, you know, to get your language right and get the tone of what you're saying, just to get people brought in in the right way. Otherwise they pooh-pooh it and then they just become disengaged… you've got to sell the vision. Basically that's what we've spent a lot of time doing.* (Project leader interview)

The survey investigated how discipline leads engaged senior staff. A variety of approaches was evident:

1. Formal meetings at the discipline level:

   Provision of information from survey outcomes to School management has shown that the cohort progression and retention is higher for the discipline against other institutions and other disciplines.

   Discipline lead is now Associate Head of School, so no issues. Head of School very supportive, project is a rolling agenda item for management and school meetings.

2. 'Retention and Success' meetings at the discipline level:

   The existing Retention and Success working party contains the members involved in 'What Works?'. This reports directly to Senior Management. Within our discipline, we have the Head of School as one of our team.

   Information on the project at the Senior Management Group and the faculty's Learning and Teaching Committee. This has given the Dean and Heads of School involvement in the project.

3. Informal meetings at the discipline level:

   Senior manager – Associate Dean – is the discipline lead, meaning decisions can be made quickly and budget discussions can be held openly.

   One-to-one meetings. Explaining the expectations of employers and customers and also raising any associated issues that come directly from our students.

4. Through the project core team:

   Core team meetings with Head of School.

   Meetings with Dean of Students via the core team.

5. Conference presentations:

   Presentations at relevant conferences, e.g. Learning and Teaching and Student Retention and Success annual conferences.

6. Institutional Learning and Teaching Committee (or likewise):

   LTQS – senior leadership teaching quality group – is kept informed of the project's progress.

   The existing Retention and Success working party contains the members involved in 'What Works?'. This reports directly to Senior Management. Within our discipline, we have the Head of School as one of our team.

It has become clear that leadership support is necessary at all levels – for example, within academic areas as well as at the top/centre of the institution. Discipline leads operated as effective champions on the disciplines, and worked to enlist local leadership support. Core and discipline teams used a range of strategies to engage managers who could encourage and facilitate, or discourage and block, change. This included formal channels to raise awareness, as well as informal meetings and links to wider institutional priorities and agendas.

7.7 Implications and recommendations

A process to implement and manage change contributes to effectiveness. This requires that explicit goals and timelines be enforced and a cross-institutional team with clear roles be involved; effective working is facilitated by an integrated and collaborative approach. Wider staff engagement is essential, and involves the use of both institutional structures and local encouragement, promoting staff ownership of the issues/solutions and drawing on emerging evidence of impact. Student involvement in the process of change is beneficial, and can usefully draw on students studying the discipline in question, e.g. through the representation system or taught sessions. Managers at all levels also need to understand and support the process, and enthuse others to engage – ideally leading by example. While suitable data needs to be available, staff need to be supported to use it to improve student retention and success. It is recommended that a process of change is deliberately designed, taking account of structures, roles and ways of working, and proactively engaging staff, students and managers at all levels, drawing on the enthusiasm of champions

Chapter 8: Use monitoring and formative evaluation

Summary

Ensuring access to high-quality data and undertaking evaluation were ongoing priorities throughout the *What Works?2* programme, and such evidence needs to be used to improve student experiences and outcomes. This chapter discusses how evidence can be collected and used, and covers the following topics:

1. Monitoring and following up on individual students' engagement and success;
2. Institutions' approaches and models of evaluation;
3. Using evaluative information formatively to evaluate and develop interventions and approaches;
4. Evaluating the impact of interventions on specific groups of students who have lower rates of engagement, belonging, retention or success.

8.1 Introduction

As noted in section 6.5 above, it was essential for institutions to provide accessible and meaningful data, and that this information was used by staff – and students – to improve student engagement, belonging, retention and success in order to contribute towards better student experiences and outcomes. This chapter considers how this information was collected and used, both through the interventions (monitoring) and through the evaluation process. It pays particular attention to the models of evaluation developed by institutional teams, and efforts to improve the outcomes of groups with lower rates of engagement and belonging.

8.2 Monitoring student engagement

While interventions may be well received by the participants, some discipline teams identified challenges with regards to individual students who did not engage and thus did not benefit. Comments along the lines of 'the intervention had a positive impact on those students who participated' were commonplace in early reporting. This led to the conclusion, as presented here by one UOS discipline team, that efforts are needed to both identify and engage these students:

> *There is a need to have a plan in place to engage students who choose not to attend welcome and induction activities. These are likely to be the students most at risk of leaving.* (Sports Science, UOS)

This comment points to a key issue: that those students who do not participate, even when activities are embedded into the core curriculum, are vulnerable and at risk of withdrawing. To combat this, it is vital to monitor individual participation, engagement and performance – and to follow up students who do not attend or who have low rates of attainment or other poor ratings against alternative indicators of engagement.

Monitoring individual participation, engagement and performance, and following up students, emerged as essential to efforts to improve retention and success. This was implemented in different ways across the institutions, sometimes combining data from different sources:

- Attendance data;
- Participation in co-curricular activities;
- Interaction with the VLE;
- Institutional survey data;
- Module or course evaluations.

In some cases attendance and participation monitoring was done electronically and in other instances manually. Irrespectively, personal tutors were the preferred way of communicating with students who appeared to have low levels of engagement based on this type of data, and evidence from UOG found that students were comfortable with being monitored and felt that it encouraged them to attend.

NUB reports that some of its interventions appeared to have had no impact on continuation rates. Further exploration showed a correlation between students who had not engaged with the online learning and resources and withdrawal. This observation encouraged NUB towards greater use of learner analytics to identify students who were not engaging, and to use this information to intervene:

> *Some early work investigating the relationship between little or no interaction with university virtual systems (such as the virtual learning environment and institutional portal) within the first six weeks of study and academic withdrawal has highlighted a correlation between the two. Moving forwards, Newman aims to utilise learner analytics to identify such students much earlier in the academic year, enabling more proactive intervention.* (NUB)

Indeed, in their final report the NUB *What Works?2* team conclude:

> *The greatest impact is perhaps yet to be realised as the university moves towards utilising learner analytics through piloting this in three discipline areas… viewed as facilitating proactive monitoring of students, thus enabling earlier intervention by a range of academic and support staff. This, in and of itself, is a huge undertaking for the university, and proposes a further transformation in institutional behaviour. However, the confidence to effectively coordinate and contribute to this is derived from the lessons learnt through involvement in phase two of 'What Works?'. Thus, a will to develop and implement learner analytics has been fed by the university's involvement in the project.* (NUB)

Monitoring students and identifying those who were not engaging were handled in different ways in institutions, but strategies combining data from different sources and using this intelligently to intervene were found to be most effective. For example, UOG combined data from a number of sources:

> *Student engagement was measured in terms of student attendance at classes or co-curricular activities, and interaction with the VLE. Student satisfaction was also monitored through survey results and course evaluation forms.* (UOG)

Monitoring the attendance of all students at all taught sessions can be costly – for example, SU is considering installing a commercial attendance monitoring system to provide better data and enable personal tutors to follow up students with low rates of participation:

> *We are also investing in better attendance monitoring systems, to provide the base information needed to ensure that students are engaging with study, and so that personal tutors can intervene and provide guidance as necessary. Through the summer of 2016 we will be installing hardware and software to enable us to use a commercial attendance monitoring system, which will ultimately provide data that can be used in conjunction with measurement of other student engagements (such as VLE and library usage) to make better datasets available to personal tutors and students.* (SU)

The cost, however, may be offset by reducing the number of students who withdraw. UOG notes that is has been effective but costly, and is reviewing the costs versus the benefits:

> *The attendance monitoring pilot in 2014/15 (attendance taken at all prerequisite lectures, as well as the usual compulsory labs) has been useful for the Life Sciences advising team to identify students at risk but has proved to be expensive. The analysis incorporating VLE usage and additional electronic data will help to inform whether this exercise is worth continuing or if alternative data already available can be used as a measure of engagement.* (UOG)

At UOS the Music and Performance discipline team involved personal tutors in both recording attendance and contacting students who did not attend. This was much more cost effective and resulted in direct follow-up of students who were not attending, but is obviously restricted to attendance at personal tutoring sessions:

> *Personal tutors are required to monitor attendance and follow up students who miss meetings to check if individual support is required. Staff also complete periodic personal tutor reports which are used to monitor the effectiveness of the intervention and inform enhancements.* (Music and Performance, UOS)

Monitoring does, however, need to involve subsequent communication with students exhibiting low levels of attendance and other forms of engagement. Personal tutors, as several of the above quotes demonstrate, are clearly the preferred way of communicating with students who appear to have low levels of engagement based on their attendance record.

It is pleasing to note that, as part of the evaluation of the interventions delivered by the Life Sciences discipline team at UOG, students were comfortable with being monitored and felt that it encouraged them to attend:

> *Students have generally been positive about having their attendance monitored, with focus group participants showing an understanding that the aim is to identify students who need support and commenting that 'it really motivates you to go to the lectures'. The level of support provided by staff in Biology was agreed to be exemplary.* (UOG)

8.3 Institutions' models of evaluation

Monitoring student engagement emerged as a priority during the implementation of *What Works?2*, but evaluating the effectiveness of interventions was built explicitly into the *What Works?2* process. Although a shared conceptual approach to evaluation was utilised, based on the logic chains (discussed in section 3.4), institutions developed different approaches to managing and implementing their evaluation responsibilities. Two broad approaches were identified: centrally-led models and locally-led models. This section of the report describes these broad approaches to assist other institutions to develop their thinking and approaches to evaluating learning and teaching interventions. These approaches were influenced by the nature of the relationship between the central project team and the discipline teams, and in particular the composition and role of each (see section 7.2 on managing change).

The evaluators were interested in the extent to which each approach provided a robust model of evaluation, which was able to identify whether an initiative contributed to improving student retention and success. In addition, the alternative models contribute differentially to the extent to which discipline staff developed their knowledge of and experiences in the evaluation of pedagogical interventions, in contrast to their already recognised expertise in discipline-based research.

8.3.1 Centrally-led approaches to evaluation

Four universities adopted a centrally-led approach to evaluation. Typically, these approaches were designed and managed by staff in the central project team who had an institutional role and responsibilities connected to educational development or institutional research. The majority of these approaches provided a well-thought-through evaluation model that was effective in identifying evidence of impact, which was subsequently communicated to discipline teams and utilised. In all cases this data was a combination of qualitative data pertaining to impact on attitude and behavioural changes in students and staff and quantitative data relating to improved retention and success, through measures such as progression and improved attendance, submission and pass rates. This approach reflected the mixed-methods logic chain model of evaluation suggested by the *What Works?2* team, which was introduced as part of the extended change programme and is described above.

At UOW this was a natural model to adopt, as all the disciplines adopted the same intervention concerned with inclusive assessment. It was noticeable that the central project team and the discipline team worked very effectively together, which had wider benefits as the central team guided the process and fed information to other parts of the institution:

> *The close working relationship between the two groups allowed the core team to support the development of the discipline team, as well as support the evaluation of the initiative and its rollout. A consequence of this approach was that it allowed the core team to be fully aware of the strengths and limitations of the inclusive assessment approach and to work with the discipline teams to maximise strengths and rework the initiative to eliminate limitations.* (UOW)

Similarly, GCU had a single intervention based around an institution-wide academic advising strategy. It also adopted a centralised model of evaluation, and the findings were shared with the discipline teams and used to refine local activities.

Not all universities adopting a centralised approach to evaluation had a single initiative: two others employed a centralised evaluation strategy across discipline teams, implementing a wide range of interventions. They used a shared methodological approach – coincidentally, both adopted appreciative inquiry (AI) to inform their model of evaluation:

> *AI… allows space for the student voice to be heard. As a result, a rich understanding of participants' experiences and perceptions can emerge. This enables different groups of stakeholders within the university, including student participants, researchers, course leaders, university managers, and the wider research community, to explore and identify the value of educational development interventions by building on success and focusing on overcoming challenges in order to enhance educational practice and policy in its wider organisational context. Moreover, by allowing the shadow of perceived challenges and issues to emerge, AI can throw into sharp relief the obstacles to achieving future visions for universities and other organisations.* (UOB)

At UU a centralised evaluation model based on AI was adopted in the second year of the project (after discipline-led approaches in the previous year). This approach was also characterised by an effective working relationship between the central and discipline teams, and in this case the evaluation was designed jointly:

> *In November 2014, an evaluation workshop was facilitated by an external facilitator. This allowed the core and discipline teams to discuss, refine and agree on a project-wide evaluation strategy using the Appreciative Inquiry Approach for 2014/15.* (UU)

It was also combined with and contributed to professional development around pedagogical evaluation and research:

> *The core team and discipline team leads attended a two-day residential writing retreat which enabled sharing of all data to date and to engage in case study writing. Peer groups were formed, which facilitated cross-disciplinary peer review before submission of case studies.* (UU)

These four institutions utilised a centralised model of evaluation to evaluate changes at the discipline level and to use this knowledge to facilitate change at an institutional level. It was a characteristic of these project teams that they were responsible for implementing policy for or could report directly to strategy-making committees:

The evaluation comprised both quantitative and qualitative methods. Together they helped to identity strategic factors that contribute to change and issues that need development to support change at the institutional level. (UOB)

8.3.2 Locally-led, centrally-supported evaluation

Nine universities adopted an evaluation model whereby discipline teams were encouraged to 'own' the evaluation strategy, although they were supported by the central project team. This approach generally consisted of: provision of a reporting mechanism in which feedback on the project was transmitted to institutional strategic groups concerned with retention; advice over evaluation methodology; practical help in leading student and staff focus groups; and management of the acquisition, interpretation and dissemination of quantitative and qualitative data to the discipline teams. However, there were distinct differences among the universities in terms of how many of these issues were addressed by the project team and how well they were implemented by the discipline teams.

Three universities had very well-thought-through approaches to this model and this resulted in discipline teams developing effective evaluations of their interventions. For example, UOS describes its approach:

Each discipline team was afforded flexibility to develop its own evaluation strategy. Support was provided via core team meetings and through individual annual review meetings with each discipline team. The academic lead member of the core team took primary responsibility for working with the discipline teams to develop their evaluation strategy following the 'What Works?' evaluation methodology (logic chain model). Additional support was provided by the Business and Management Information Analyst. In addition to the main 'What Works?' survey tool and analysis of student retention and attainment data provided by the programme… quantitative and qualitative mechanisms were employed to evaluate changes in staff and student attitudes and behaviours… The data collected was in accordance with the ethical approval application submitted by the core team to the appropriate university body at the outset of the change programme. (UOS)

The same university describes the approach used by one of its disciplines – Aeronautical Engineering:

Student focus groups were carried out by the leader of the module in which the peer mentoring intervention was embedded during the first-year pilot phase… Separately, teaching staff obtained informal feedback from the mentors during scheduled teaching sessions with the second-year students. A further focus group was conducted by members of the 'What Works?' core team in autumn 2015 with final-year students who had been mentored in their first year, and with two of the original mentors who had progressed to a Master's degree… Staff feedback was collected by the discipline lead through staff meetings and informal discussions. (UOS)

A second university describes a similar approach of locally-led, centrally-supported evaluation:

The institutional evaluation process involved gathering continuous feedback by reporting on progress in 'What Works? Student retention and success programme' activities in a standing item on the agenda of the Retention and Success Working Group (RSWG). Broader staff opinion was gathered through consultations and workshops. For example, the four College Deans of Learning and Teaching and their nominees were consulted on data use and reporting; and workshops were held with academics and service staff involved in supporting student retention and success to consider what the priorities are and what staff need to know. In addition to the engagement and belonging survey and other central 'What Works? Student retention and success programme' evaluation, we have monitored: engagement with the VLE; physical attendance; internal school retention data; course evaluation forms; and survey results. In addition, student focus groups were held to better understand the student experience. The core team also supported the evaluation of discipline projects by facilitating these focus groups with first- and second-year students. Employment of the core team (including student facilitators) in this context provides a neutral or independent interviewer/ facilitator to encourage open and honest feedback from participating students. (UOG)

The same university developed appropriate datasets and provided these to discipline teams:

With the improvement in data available at the University, College and School levels, and for MD20/40 cohorts, developed as part of the 'What Works? Student retention and success programme', the progress of students from the more socioeconomically disadvantaged communities can be tracked and monitored in terms of continuation and progression to ensure institutional and local support initiatives are having an effect. Student engagement was measured in terms of student attendance at classes or co-curricular activities, and interaction with the VLE. Student satisfaction was also monitored through survey results and course evaluation forms. (UOG)

A third university describes its approach, emphasising the central project team's role in providing the institution with feedback to inform strategic approaches:

The institution adopted an overall impact evaluation approach to help determine the extent to which the various institutional and disciplinary actions led the institution in the desired direction as outlined in the project vision. This has enabled the institution to judge whether the various changes have had a broadly positive, neutral or negative effect. (USW)

It was significant that, as well as the institutional role taken on by the project team, there were effective approaches developed within the discipline teams, with each discipline team developing a mixed-methods approach to meet its own evaluation needs. This is demonstrated by the evaluation methods developed by each of the discipline teams:

Computing, USW

- Online student evaluation of induction;
- Module evaluation of programming module, plus focus groups to explore the effectiveness of the module on the student learning experience;

- Qualitative and quantitative review of the learner's use of Radio-Frequency Identification (RFID) tracking;
- Student interviews to support evaluation of knowledge acquisition via RFID tracking.

Business, USW

- Online student profile forms to be given out at induction, capturing students' expectations, backgrounds and 'preparedness for higher education';
- Student evaluation questionnaires and focus groups in week two about student induction experiences;
- Focus groups at the end of term one (December) to identify first-term student experiences. Fortnightly liaison meetings between the course leader and course representatives to provide opportunities for action at significant points.

Music Technology, USW

- Questionnaires given to students at the end of each co-curricular activity;
- Module leaders and tutors to monitor student progression and engagement with the module, and to take action on non-submissions as early as possible;
- Early interventions will be discussed and coordinated by the course leader and module teams throughout the year.

Further details about these evaluation approaches can be found in the institutional report and case studies.

Two other universities employed a model whereby disciplines were given more autonomy over the development and implementation of the evaluation model. These universities supported disciplines mainly through the analysis of data and the utilisation of feedback to influence institutional policies. For example, one university describes its approach:

> *As with the development of initiatives, we have relied upon a localised approach to evaluation. However, there has been a centralised approach to the analysis of the retention rates to support findings so that they tally with those provided to 'What Works?'. In addition, the analysis of themes across the participating disciplines by the project lead has led to institution-wide initiatives to support programmes and students across the institution.* (BCU)

A second university also provided support on evaluation methodology – in this case, the design of questionnaires and the interpretation of centrally provided data:

> *Last year, we found, for example, that one of the departments in our university programme did a survey of staff and students, but they obviously weren't experienced in designing those instruments. Some of the questions weren't actually very good. If we were looking at it from an ethical point of view, in terms of good questions to get the data that you need to answer your research questions, there were some concerns there really. Lots of data but, you know, not necessarily with any point to it and that's another one of those underpinning skills that needed to be learnt by the staff in the department if all of this was going to work properly. Just as when interpreting central data again, we'd relied on the departments to develop these change indicators for themselves, principally, of course, because they were developing the activities as well. I think they all had a reasonable go at this. In fact the ones that they've given in the reports seemed okay but what we have to be very careful of, and I think this is something that you only learn by experience, is to balance the amount of data collection that's done from, with the students fairly. You can get questionnaire overkill can't you?* (Project leader interview)

The university went on to utilise an existing survey to evaluate *What Works?* initiatives.

Another institution decided that the central project team, as well as supporting the discipline teams, would also gather evidence regarding institution-wide strategies and initiatives concerned with retention and influenced by *What Works?* findings. They developed their interventions and an evaluation strategy at the institutional level to focus on three key areas: promoting cohort identity; generating awareness of issues relating to the progression and success of students; and staff development. This institution-wide approach to implementation and evaluation was complemented by a clear approach to the evaluation of interventions at the discipline level, as described below:

> *Integrating professional support into timetabled sessions and offering mentoring opportunities was instigated to encourage early intervention where needed. It was intended that evidence of re-sit patterns and interactions with student support would be useful in evaluating the behaviour of students in relation to their confidence in asking for help. This was seen as a potential indication of the development of their identity as successful learners in HE.* (WWCYPF, NUB)

> *Changes to the activities provided at induction engaged students in a period of reflection, and were designed to support successful completion of the school experience, thus fulfilling their aspiration to teach. Evidence of this was gathered from Mahara; Student Staff Consultative Committee meetings; tutor feedback; exam board statistics; and academic professional tutor records. This ascertained the level of improved engagement and belonging through a better understanding in students of the university processes, alongside building positive relationships between staff and students.* (ITE (Primary), NUB)

> *The introduction of seminars specifically discussing academic and pastoral issues in groups was designed to engage students by making the learning experience relevant to them, thus improving continuation from levels 4 and 5, as outlined in phase one of the 'What Works?' programme. The attitudes of EMPP students towards their studies, and their experiences of being on a combined programme with EMPP, were evaluated via focus groups and tutor tracking to understand how students identify themselves as learners in HE, and where they feel they belong.* (EMPP in combination, NUB)

At another university, the central team mainly focused on the monitoring and reporting nature of their role and the way they would use findings to report to strategic committees within the university. Little evidence was found here of academic teams being explicitly supported in their approaches to evaluation and details of the evaluations that did take place were not publicised. Another core team went further in distancing itself from the evaluation process.

To enable the model of locally-led but centrally-supported evaluations to be effective, the core team needed to be proactive and understanding and meet the needs of the discipline team – for example, by providing appropriate data and the development and implementation of qualitative techniques using the logic chain model, discipline teams became more confident and explicit in their descriptions, justifications and implementations of evaluation strategies.

8.3.3 Effective evaluation approaches

In a quality enhancement model in which discipline teams take the lead in implementing institutional policies by customising them to suit the culture and context of the discipline, then evaluation has to be valid and reliable. The most effective evaluation models implemented by discipline teams were used at those institutions which recognised academic staff as needing the right tools and information to do the job. They needed the evidence to help them devise research-informed interventions; they needed support in developing instruments to evaluate the impact of pedagogical interventions; they needed both qualitative (probably local) and quantitative (available centrally) data; they needed the capacity in their workload to engage in this; and they needed the support of other academic colleagues. At a time when the sector is witnessing increasing encouragement for academic staff to become involved in pedagogical evaluation and research, it should be useful to recognise the different approaches taken during this project and the resources, culture and structures required to implement them.

8.4 Using evaluative information formatively

By integrating research and evaluation into the process it was easier to identify emerging problems and rectify them or look for alternative interventions and approaches. This contributed to the ongoing refinement and improvement of interventions and enhanced wider organisational learning:

> *What is clear is that the circular change process incorporating appreciative inquiry as an action research approach integral to this programme has been successful, and may be applied as a model of educational development to enhance student engagement within other disciplines and other universities.* (UOB)

Chapter 3 has discussed the importance attached to and the approach used to evaluate the *What Works?2* programme, and section 8.3 above has discussed the approaches used by different participating institutions. Much of this evidence has been formative and used to improve the effectiveness and impact of the interventions (see section 3.5, 'Working in the tradition of action research'). Institutions valued the process of collecting evidence and using it to revise their interventions:

> *After semester one each year, data for each discipline area was made available, which included: early leavers, non-returners, fails, repeats, re-sits, leaves of absence and a total percentage attrition rate. Similarly, year-end data was provided and collated for the participating programmes. This was supplemented by internal forms (action plans and progress reports) developed by the core team, which discipline leads completed twice yearly in relation to the progress of interventions and their subsequent impact. In addition, we placed a strong emphasis on gathering qualitative data in order to understand more fully the impact of the change programme on the student experience to enable us to develop future L&T strategies and policies to sustain our work and impact across the institution.* (UU)

This type of systematic evaluation, seen in other institutions too, might be expected in an externally facilitated programme such as this, but is necessary whenever the institution invests time and resources in new activities to explore, whether or not they are having the desired effect:

> *As well as the qualitative feedback through surveys and focus groups held to gather evidence for impact of the initiative, attendance records were used as a measure of engagement and show an excellent trend in attendance for all the courses. Student satisfaction was measured through regular course evaluations and although there has been a significant increase in student numbers on the campus in recent years, the average evaluation scores remained as high as in previous years. Retention statistics show that the continuation and progression of the 2013/14 first-year cohort in the School of Interdisciplinary Studies improved relative to the 2012/13 cohort.* (Interdisciplinary Studies, UOG)

8.5 Evaluating outcomes at the individual level and for specific groups of students

The evaluation was particularly valuable when it was used to examine the experiences and outcomes of specific groups within the main cohort. As discussed in section 4.3.1 the *What Works?2* surveys found that across the 13 universities some student groups have lower rates of engagement and belonging than others: in particular, male students, BME students and students with adverse circumstances (particularly a one-way travel time of 45 minutes or more and the lack of a quiet space in which to study). It is, therefore, particularly important to evaluate the impact of interventions on these and other groups identified by institutional evidence as having lower rates of engagement and success than other students. For example, as part of their rationale for participating in the *What Works?2* programme UOG identified the need to enhance the success of SIMD40 students.[129] They then included a specific focus on these groups as part of their institutional data, and were able to detect an improvement in the *What Works?2* disciplines for these students compared to the trend in the whole of the university:

[129] SIMD is the Scottish Index of Multiple Deprivation, and it is used to identify poverty and inequality more broadly, including opportunities in education; the population is split into geographically based quintiles, so SIMD40 refers to the most deprived 40% of areas. It is used in Scotland in relation to policies, funding and interventions to widen access to higher education.

In our internal retention data, we can compare trends for the university as a whole, the discipline schools and the MD40 cohorts within these. There is a lot of variability year-on-year in the smaller cohorts in particular, such as Interdisciplinary Studies and the MD40 demographic sub-group in each School, and it is, therefore, not easy to draw firm conclusions on impact. However, when compared to the institutional total, which is on an upward trajectory of small increments due to work across the institution, retention of MD40 students in our discipline Schools can be seen to be relatively high compared to their peers. That is, the latest data shows that the continuation of MD40 students lags behind the average continuation rate of the whole first year cohort by 3%, which is in line with the sectoral averages published by the SFC (2015). Meanwhile, the continuation of MD40 students in our discipline areas differs from the School cohorts by -1% to +4.5%. Despite the variability in the relatively small cohort sizes, this gives us a positive indication that activities in the disciplines are improving the retention and success of the group of students most in need of support. (UOG)

There was a similar experience at UOW: from the outset UOW was concerned with improving the attainment rate of BME students. While the interventions were inclusive, the evaluation considered the impact on this particular student group within each cohort. Again, this showed that the UOW *What Works?2* interventions made improvements to the number of assessment submissions and attainment levels of all students, but the gain was larger for those from minority backgrounds:

The analysis of this data revealed that there was a significant increase in performance compared to previous years in the numbers of students who gain 50% or more, with a marked difference in those students who gained 70% and above. There was also a significant reduction in the number of students who did not submit work for assessment. Where it was possible to find comparator modules, these changes were not observed. Of particular interest is that this approach impacted more significantly on students from minority backgrounds, who demonstrated improved grades in comparison to their white counterparts. This suggests that this initiative is a useful technique within the wider work the university is undertaking to significantly reduce its ethnicity-based attainment gap. (UOW)

These two examples highlight the value of both identifying the student characteristics associated with lower engagement, belonging, retention or success outcomes, and using the evaluation to verify whether the intervention is having an impact on these students and to determine the extent to which they compare with the whole cohort.

8.6 Implications and recommendations

Monitoring and evaluation were central elements of the *What Works?2* programme, and were crucial to the success of institutions and discipline teams. Monitoring enabled individual student behaviour and performance to be tracked, and additional interventions to be made if necessary; the need for this was not always established at the beginning, but rather tended to emerge over the course of *What Works?2*. Monitoring was, therefore, integrated during the programme, or will be taken forward after the end of the formal programme. A range of indicators and approaches was used to monitor students, ranging from manual monitoring of attendance at specific sessions, to electronic monitoring and learner analytics across the board. Personal tutoring, however, was the primary vehicle for follow up.

Institutions developed their own approaches to managing the evaluation process, and two models emerged: centrally led and locally led. The most effective approaches recognised that academic staff benefited from support to evaluate their work, and mechanisms to feed it back into the institution to effect wider change.

Formative evaluation was used to understand how interventions were working and to make adjustments. As might be expected, not everything worked, but by integrating research and evaluation into the process of change it was easier to identify emerging problems and rectify them (e.g. by introducing monitoring) or look for alternative interventions and approaches. In addition, there was a significant number of unintended benefits and outcomes for students, staff and institutions, which should be recognised. It was particularly valuable to focus some of the evaluative effort on students with lower levels of engagement or success.

It is recommended that institutions include monitoring in their work to improve student retention and success from the outset. This will involve consideration of which indicators of engagement, performance and satisfaction to use, how this information will be collected and collated, who will intervene, and how students will be supported.

It is recommended that evaluation is built into efforts to improve student retention and success. A mixed-methods model of evaluation, which provides discipline staff with methodological and practical support to undertake the evaluation and use the data both locally and more widely within the institution, has been particularly effective. Evaluation evidence should be used formatively to improve interventions, and should include a specific focus on student groups with lower rates of engagement, belonging, retention or success.

Chapter 9: Draw on organisational learning to embed, sustain and enhance the student experience and outcomes

Summary

This chapter considers the ways in which participating in *What Works?2* has been valuable to institutions and individuals beyond the implementation of specific interventions during the life of the programme. Participation has contributed to embedding sustainable change, developing organisational learning, and enhancing institutions' and individuals' capacities. In particular, the following types of sustainable outcomes have been identified:

1. Continuation and embedding of specific interventions in the academic areas where they were developed;
2. Extending the direct learning from *What Works?2* to other parts of the institution through replication of the *What Works?2* model and specific interventions;
3. Wider learning and staff capacity development, which contributes to and informs further institutional development and research.

The chapter concludes with reflections on the factors that contributed to more sustainable outcomes.

9.1 Introduction

Participating in the *What Works?2* programme represents a significant investment on the part of institutions and individuals. It is, therefore, important that the benefits extend beyond the life of the programme itself. Colleagues from participating institutions identified numerous ways in which participating in *What Works?2* has been valuable to them in relation to organisational learning and embedding change.

9.2 Continuing and embedding interventions

What Works?2 provided the opportunity to develop, pilot and refine interventions, and to evaluate their impact on the student experience and student outcomes. Learning and teaching interventions are often not the subject of systematic reflection, evaluation and research; however, these interventions have benefited from this kind of spotlight over a three-year period.

The annual reporting and 'action research' model of evaluation embedded into the programme has encouraged teams to uncover, review and revise their interventions to develop more effective approaches to engaging students and enhancing their belonging, retention and success. Subsequently, the majority of these interventions have become embedded into these academic areas.

9.3 Transferring learning from *What Works?2* interventions and processes

In addition to simply embedding interventions, some institutions have been successful in extending the learning from *What Works?2* to other parts of the institution. This has included rolling out specific interventions to other parts of the institution, and utilising the *What Works?2* model of change.

9.3.1 Engaging other discipline teams in the What Works?2 process of change

From the beginning, some institutions have been able to draw additional discipline teams into the *What Works?2* programme: UU worked with seven teams throughout the programme, while BCU has facilitated the involvement of new discipline teams as word has spread of the value of participating:

> *The BSc (Hons) Nursing team, the largest programme at the university, is the latest to be added to the 'What Works?' programme and they had their first planning meeting with 15 students in July 2015. CELT facilitated the half day, which has now impacted on the delivery of interventions in spring 2016.* (BCU)

The *What Works?2* process of working has proved to be an attractive change model in some institutions and other discipline teams have opted to use the same approach to develop their own interventions to improve student retention and success.

9.3.2 Rolling out successful interventions

There are quite a few examples of successful interventions being rolled out to other parts of the institution. For example, the inclusive assessment approach developed and piloted by three course teams at UOW is being implemented across each of the participating faculties in their other courses:

> *The inclusive assessment approach is currently being embedded at the course level, having been rolled out in different ways in each participating faculty. A systematic approach has been adopted by the Faculty of Education, Health and Wellbeing, where the initiative has been rolled out across the Institute of Sport and a two-year plan has been developed for rollout across the whole Faculty. This Faculty has engaged Institute Attainment Champions who will be responsible for rolling out and embedding the 'What Works?' initiative in each of its other discipline areas.* (UOW)

The rollout in one faculty is discussed more fully in the UOW case study: *What works at Wolves? - A successful rollout across the Institute of Sport.*

Similarly, the success of the curriculum review and revalidation in the School of the Built Environment at UU, implemented as part of *What Works?2*, informed changes across the school, covering 21 undergraduate and postgraduate courses:

The 'What Works?' project at Ulster has been instrumental in developing a transformative learning experience for students across the institution. One example is the recent curriculum review/revalidation of the provision in the School of the Built Environment. The three courses taking part in the SRS project in the School of the Built Environment achieved significant outcomes, creating innovative and good pedagogical practice. These activities have informed learning and teaching practices across the School as part of the current institutional review of their 21 undergraduate and postgraduate courses. (UU)

In the School of Media at BCU, the role of Graduate Student Success Adviser (GSSA) was developed. GSSAs are recent graduates employed to build a bridge between students and staff to improve student retention and create a sense of community. They had a significant impact during the programme's first year of operation, resulting in a 7% increase in student retention on Media courses (19 students). The initiative has received widespread support, and its success has encouraged other schools to employ GSSAs in all of their faculties:

… the Executive Dean of the Arts, Design and Media faculty immediately became a champion of the work of GSSAs and reported it to the university's Executive Group. This led to GSSAs being employed across all faculties in the university from 2014 onwards. The success of this role continues to be recognised, with one faculty now appointing a GSSA for each of its schools. There are now 13 GSSAs spread across the university who focus upon the first-year student and improving the student experience. (BCU)

At SU a new institutional approach to personal tutoring has been implemented, informed by the work that was developed and piloted by one discipline team as part of the What Works?2 programme:

In 2015/16 the university's new personal tutoring system (developed in part by one of the discipline teams from 'What Works?') will be implemented across all courses and will be reviewed at the end of the academic year. (SU)

9.4 Wider institutional development

In many institutions there was learning and capacity development as a result of individuals, teams and institutions participating in *What Works?2*, which has and is continuing to contribute to wider institutional development. In short, the value of *What Works?2* is much greater than the sum of its parts, and the implications are potentially far reaching and long lasting. They include:

- Learning from the interventions to inform wider policies and developments;
- Developing staff and institutional capacity to implement change;
- Informing future research and funding opportunities.

9.4.1 Learning from the interventions to inform wider policies and developments

A number of institutions demonstrated how learning from their involvement in *What Works?2* had contributed to wider curriculum development, student-centred policies and other aspects of the institution that contribute to the student experience. For example, UU synthesised the learning from across its core and disciplinary teams, using this to develop a framework to inform curriculum and engagement development across the institution:

The university… has developed Student Learning Experience Principles aimed at staff and it is planned that these will be implemented from summer 2016. The evidence base from this project has been used to inform this initiative. The six principles are: the learning model; employability; internationalisation; digital fluency; the research teaching nexus; and ethics and sustainability. These have been identified to: define what we mean by the student learning experience at Ulster; provide a shared understanding across disciplines; bring together a range of current learning and teaching strategies; and realise the university's graduate qualities in all students. (UU)

UOS has developed an inclusive curriculum pilot project drawing on the principles from *What Works?2*, which was subsequently to be rolled out across the institution:

In 2014/15 an inclusive teaching pilot project was undertaken in a small number of programmes in one academic school… 'What Works?' principles underpinned this piece of work, such as mainstreaming inclusive teaching practices and a proactive approach to informing students about the aims of the project while enabling students who declared a disability to continue to access disability support and services. Arising from this pilot phase, the Inclusive Student Experience Project is developing and rolling out an institutional framework which will be completed by September 2016. (UOS)

Similarly, colleagues from GCU have introduced a student engagement project, which draws on and is informed by *What Works?2*:

Building on the successful implementation, positive evaluation and widespread acceptance of the new academic advising standard, in 2014 a small team of academics and professional staff, in partnership with the GCU Students' Association (GCUSA), introduced an additional enhancement: a one-year institutional student engagement (SE) project (Engage). This project was incorporated into the GCU 'What Works?' programme of activity. (GCU)

At BCU, participating in *What Works?2* raised awareness of the importance of the first-year experience and saw new activities piloted. This resulted in the *What Works?2* team leading the development of Welcome Week across the institution:

'What Works?' and other initiatives have raised the importance of the first year at the university and new activities that support the first year have come under the auspices of the team… The senior management in the university saw the work being undertaken through the 'What Works?' programme and suggested that the project lead take a fresh look at the university's Welcome Week planning… that would focus upon activities that instilled a sense of community and belonging with new students... The first iteration of this new approach in September 2014 was heralded as a significant improvement, with larger numbers of students attending events and the Students' Union reporting a 20% increase in the number of students signing up to clubs and societies. Welcome Week 2015 built upon this, with over 9,000 students attending the Welcome Fair. (BCU)

9.4.2 Developing staff and institutional capacity to implement change

A significant outcome has been the development of staff capacity, including knowledge about student retention and success, and skills and capabilities concerned with managing and implementing change. This has enabled staff to continue developing the student experience in their academic areas, and to be a reference point and resource for others in their academic area, the wider institution and other higher education providers. These comments demonstrate this theme:

The biggest change in all areas, though, is the way in which those staff close to the project have taken on board the key messages of belongingness, and recognised how to implement this within their subject areas. (SU)

The core and disciplinary teams are being used as reference points for new developments in belonging, success and self-confidence. The interventions which emerged from the disciplinary teams have informed practice across the institution, far beyond the original discipline. These practices have now become embedded as the university has moved beyond merger and is looking to the future of its identity as a major leader in higher education across Wales and beyond. What was innovative practice as part of the project has become normal practice and is informing the development of the institution's new Student Experience strategy, which will develop the future direction in this area, informed by the outcomes of the project. (USW)

Staff champions – whether they were volunteers or victims at the beginning – were engaged as a means to an end (to improve student retention and success), but along the way they have developed new skills, networks and knowledge which enable them to play pivotal roles in their discipline communities and institutions. Capacity has been developed in relation to working across the institution: taking a more strategic perspective; interdisciplinary working; conducting pedagogical research and evaluation; leading and managing change; and inspiring staff and students to engage in the process. Expertise has been developed in a diversity of areas, and productive relationships have developed within and between institutions and disciplinary communities.

This knowledge, skill and expertise has been recognised through HEA Fellowships and promotion routes:

Without a doubt, the individuals involved in the HEA student retention and success change programme at Salford have developed knowledge and skills they are unlikely to have gained without participation in 'What Works?'. Team members have undertaken specific development activities. (UOS)

Many of the staff who have been involved in the 'What Works?' programme have utilised the experience for their applications for Principal or Senior Fellowships. Two of the 'What Works?' team at BCU have received Principal Fellow awards that cited their 'What Works?' activities. Two others have achieved Senior Fellow status. In addition, it is interesting to note that every member of the original 'What Works?' steering group has been promoted during their time on the programme. Clearly, participation in the programme and the impact of being seen to drive change have benefited the participants. (BCU)

A list of achievements and outcomes is presented in Appendix 3. A case study from UOB explores the experiences of project team members: The 'What Works?' project: Beyond intended outcomes – The views of the institutional project team members, Julie Fowlie, Brighton Business School.

One institution noted that there has been a less positive side to the development of staff capacity at a personal level, as these staff members can come to have additional demands placed on them:

In the future we would give careful consideration to the wider aspects of the work, including the impact on individuals (being seen as an expert can be both positive and negative) and plan in the potential for change and development at the beginning, clearly defining any CPD requirements as part of an ongoing action plan. This would be the key advice for other institutions.

This capacity has not only resulted in personal benefits, such as promotion and fellowships, but has also contributed to staff going on to lead institutional development work. For example, the *What Works?2* team at BCU is now going on to lead the development of the institution's new employability initiative, drawing on lessons and methods from *What Works?2* (and other relevant research):

However, perhaps the greatest impact is yet to be delivered as the university is creating a new employability initiative that is being led by the 'What Works?' project lead. This will look at creating university-wide opportunities for students to develop that sense of belonging at level 4, while adopting some principles of high-impact practices (AACU) and Lizzio (2006). The plan is for a BCU Graduate+ programme across all undergraduate provision that builds upon the 'What Works?' lessons. This work is being developed and piloted throughout 2015/16 for rollout with students in September 2016. (BCU)

9.4.3 Informing future research and funding opportunities

A further wider benefit of participating in What Works?2 has been additional research and funding opportunities. GCU identified a number of pieces of additional research that will be undertaken in the schools as a consequence of participating in this programme:

Encouragingly, work has not come to a standstill. The School of Health and Life Sciences (SHLS) is building on the SE work through the appointment of an intern. The Glasgow School of Business and Society (GSBS) is undertaking further research focused on belonging, engagement and confidence, using the 'What Works?' survey data as the starting point for a larger mixed-methods study. The School of Engineering and the Built Environment (SEBE) is using the findings to develop the role of the academic advisor in the School. (GCU)

NUB used its learning from *What Works?2* to inform its bid to the HEA's Strategic Excellence Initiative for vice-chancellors or principals, and secured funding to undertake student partnership projects to enhance retention, progression and achievement:

> *The intentions of this project will be to continue the university's drive to reduce non-continuation at the end of year one, reduce the current attainment gap between BME and other students, and to reduce the attainment gap between students from other entry routes and A-level entry.* (NUB)

9.5 Implications and recommendations

Participating in *What Works?2* has delivered sustainable outcomes for individuals, disciplines and institutions. A number of factors appear to have contributed to sustainable outcomes:

- Taking an evidence-informed approach, drawing on *What Works?1*;
- Extending the timeframe during which not everything is expected to work;
- Facilitating institutional teams to have ownership of the interventions and processes, and develop their knowledge and capacity by 'doing' and researching 'change';
- Integrating a mixed-methods evaluation approach into the process and using evaluative evidence formatively to improve interventions;
- Providing opportunities for reflection and learning, through meetings and annual reporting in particular, but also through publications and presentations;
- Connecting local work to wider institutional priorities and agendas to enable broader engagement with the outcomes and the adoption of processes, interventions, capacity and other opportunities.

It is recommended that institutions seek to mimic the processes and conditions described here to implement change to facilitate sustainable development and impact.

Chapter 10: Learning from the programme: A whole-institution approach to improving student retention and success

Summary

This final chapter draws together the learning from across this report, and indicates the ways in which this learning can be used, particularly by higher education providers, to improve student experiences and outcomes and contribute to institutional and disciplinary excellence. It reviews, considers and presents:

- The complexity of improving student retention and success;
- The value of a whole-institution approach as understanding improves and a more sophisticated approach is required;
- Recommendations for higher education providers, policy makers and sector-wide bodies.

10.1 Introduction

What Works?1 generated evidence and understanding about the significant contribution of engagement and belonging to improving student retention and success. In the second phase of *What Works?2* work, the evidence supports and extends these findings in relation to specific interventions, but the programme has also uncovered greater complexity and thus the overriding message concerns the importance of using institutional data, local research and national evidence to inform interventions and change at all stages and all levels. Institutional and disciplinary teams have also experienced first-hand that the process of change is time-consuming, and requires significant commitment on the part of institutions and individuals. It is, however, highly engaging and rewarding for the staff that participate, developing their capacity in learning, teaching, change management and pedagogical research, as well as their wider engagement and sense of belonging within the institution.

10.2 A whole-institution approach to improving student retention and success

The findings from this study point towards the importance of a whole-institution approach to improving student retention and success, which should be prioritised over this being a concern of academic departments, student services or another part of the institution in isolation. Office for Fair Access (OFFA) defines a whole-institution approach as:

> *An approach… that is embedded at all levels of an institution, not limited to a particular unit or department, engaging across all areas of its institutions' work and inclusive of senior management.*[130]

This study has found that the most effective outcomes are achieved when the different elements within the institution work together to create a positive student experience and improve outcomes for all students. This can be understood as an inclusive approach that:

> *Necessitates a shift away from supporting specific student groups through a discrete set of policies or time-bound interventions, towards equity considerations being embedded within all functions of the institution and treated as an ongoing process of quality enhancement. Making a shift of such magnitude requires cultural and systemic change at both the policy and practice levels.*[131]

A whole-institution approach emerged from *What Works?1*, with the focus being on changing learning and teaching rather than 'bolting on' peripheral activities to support targeted groups at risk of withdrawal or low success. Furthermore, it was built into the structure and content of the *What Works?2* programme in the form of:

- A cross-institutional team, including a senior manager, a data expert, a student and academic teams;
- Partnership working between staff and students, and different parts of the institution;
- Implementing change at the course level and the institutional level;
- Changing structures, cultures, practices and evidence;
- Action research, generating evidence and addressing challenges as they arose;
- A holistic, mixed-methods evaluation;
- Externally facilitated change programmes, with expert input and peer support.

What Works?2 has demonstrated the need for all parts of the institution to be involved, and the wide-ranging nature of the changes that are required:

- Leadership at all level, and staff in all roles across the institution;
- A culture that values and prioritises success;
- Policies that prioritise and foster success;
- Systems and processes that enable everyone to work towards success;
- Student involvement in the process of change;

[130] OFFA glossary, whole-institution approach. Available at: https://www.offa.org.uk/glossary/ (retrieved 21 February 2017).
[131] May, H. and Bridger, K. (2010) *Developing and embedding inclusive policy and practice in higher education.* York: Higher Education Academy, p. 6.

- Data and evidence that inform success;
- Academic support and regulatory practices that nurture success.

The What Works? programmes have moved understanding, policy and practice about retention and success in the UK to a state of increased maturity, akin to work in Australia on the first-year experience.[132] The journey towards improving student retention and success can be summarised as follows:

1. First generation retention and success focused on 'fixing up' the needs of specific groups of students through additional support services to improve retention (pre-*What Works?*).
2. Second generation retention and success focused on student engagement and belonging in their academic learning contexts to improve success (*What Works?1*).
3. Third generation retention and success focuses on the whole institution working together and using evidence to understand the issues and implement contextually relevant changes across the whole student lifecycle and the entire institution. (*What Works?2*)

At this stage, our understanding of the whole-institution approach is greatly enhanced, especially in many of the participating institutions, where improvements continue to be experienced and the legacy of being a *What Works?2* institution continues. There is, however, much to do to ensure that all students and institutions benefit from this learning.

[132] Kift, S., Nelson, K. and Clarke. J. (2010) Transition Pedagogy: A Third Generation Approach to FYE – A Case Study of Policy and Practice for the Higher Education Sector. *The International Journal of the First Year in Higher Education,* 1(1), pp. 1–20.

Recommendations

1. Institutions wanting to develop excellence in learning and teaching and improve the student experience and outcomes should adopt an evidence-informed, whole-institution approach to implement change in a complex context, as described in the *What Works?2* report. The approach should include drawing on research evidence from both *What Works?* programmes, an extended change programme, a cross-institutional team involving students taking action, and the use of data, evaluation and feedback.

2. A mixed-methodology evaluation, informed by a logic chain to map the relationship between interventions and intended outcomes, is essential to driving forward evidence-based interventions to improve student retention and success.

3. Institutional data and qualitative research should be used to understand the local contexts before specific interventions are selected. This includes disciplines, courses and modules with lower than expected rates of success; the characteristics of students or groups who withdraw or who have other 'success issues'; and the specific factors contributing to these outcomes.

4. An evidence-informed, ongoing programme of interventions tailored to address student retention should draw on the *What Works?2* features of effective practice. These are: develops an academic purpose for interventions, which is explicitly relevant to students; allows delivery through the mainstream curriculum to all students; facilitates collaboration between students and staff; and monitors and follows up, as necessary, individual student engagement, satisfaction and success.

5. Check that the institutional environment is enabling and implementing institution-level changes to address any shortcomings with respect to: explicit leadership and management support at all levels; the alignment of institutional policies and procedures; structures to recognise, develop and reward staff engagement; and the provision of data to be used to improve student engagement, belonging, retention and success.

6. A process to implement and manage change should be designed and utilised, including explicit goals and timelines; a cross-institutional team (including enthusiastic champions) with clear roles; and an emphasis on working in an integrated and collaborative manner. Collaborative working with students in the process of change is essential, as is the fostering of wider staff engagement. Managers at all levels need to understand and support the process – in particular, the value of working with students as partners. Suitable data needs to be available and staff and students need to be supported to discuss and engage with data to improve student retention and success.

7. Monitor individual student behaviour, satisfaction and performance, and intervene if necessary. Select indicators of engagement, performance and satisfaction, and decide how this information will be collated, who will intervene, and how students will be engaged and supported.

8. Adopt a mixed-methods model of formative evaluation that is built into the process of change. Provide discipline staff with methodological and practical support to undertake the evaluation and use the data, both locally and more widely within the institution.

9. Ensure the institutional processes and conditions facilitate sustainable development and impact.

10. Policy makers and sector-wide bodies have a key role to play in developing and supporting networks for sharing learning about student retention and success; promoting access to standard tools that can help to enhance retention initiatives, frameworks, and survey and impact tools (for example); providing incentives, rewards and recognition to celebrate excellent practice; and championing the value of working with students and student bodies in the planning and delivery of student retention and success initiatives. Policy makers and sector-wide bodies can reinforce the key learning from this report, and in particular encourage:

    a) Institutions and disciplines wanting to develop excellence in learning, teaching and student outcomes to learn from the experiences of the institutions and disciplines participating in *What Works?2*;

    b) An evidence-informed approach to planning and implementing change, including understanding the local contexts and a systematic mixed-methods evaluation that identifies the anticipated relationship between interventions and outcomes, and allows for unintended consequences;

    c) Interventions informed by the features of effective practice identified in this study, and monitoring student engagement to quickly identify potentially at-risk students.

    d) A planned process for managing change, paying particular attention to wider staff engagement and drawing on students' expertise;

    e) A whole-institution approach that embeds retention and success at the strategic and operational levels throughout the institution.

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Technical Appendix 1: Findings

Institutional data

Where possible, comparisons relating to institutional records of success and progression were made between the disciplinary cohorts entering in 2012 (i.e. before *What Works?2* began) and 2014 (by which time *What Works?2* interventions had been established across all participating cohorts). The comparisons are limited to years one and two (levels 4 and 5 in the qualifications framework in the UK, excluding Scotland) because year three data was not available for the 2014 entry by the time *What Works?2* came to a close.

Table a1: Comparisons between the 2012 and 2014 cohorts for mean year mark, 'success' and progression

University	Univ 01					Univ 02			Univ 03			Univ 04		Univ 05			Univ 06				Univ 07		Univ 08			Univ 09		
Programme	A	B	C	D	E	A	B	C	A	B	C	A	B	A	B	C	A	B	C	D	A	B	A	B	C	A	B	C
Success and progression																												
% Level 4 success																												
% Progress L4-L5																												
% Level 5 success																												
Cohort mean mark (excluding zeros)																												
Level 4/Year 1																												
Level 5/Year 2																												

Notes
- Green shading indicates where there was no comparison possible or where there was no difference between the values for the 2012 and 2014 cohorts.
- Orange shading indicates where a 2014 cohort's values exceeded those of the 2012 cohort.
- No shading indicates where a 2012 cohort's values exceeded those of the 2014 cohort.

A 'straws in the wind' analysis (see Technical Appendix 2) was undertaken at the university level, using the mean marks gained by students for each of the three years of study.[133] The students in this analysis belonged to full-time cohorts entering the selected subject disciplines in 11 of the 13 universities participating in *What Works?* in the academic year 2012/13. They exhibited a continuous run of marks through the first three or two years (nine and two universities, respectively) of a degree programme.[134] The mean and median marks for the cohorts varied widely, and so it was decided not to rely on the raw marks for comparative analyses but to divide each cohort into two sections – below the median mean mark and at or above the median mark. The numbers in some subdivisions of the cohort data were small in a few cases, notably where a university had few students other than 'home' students or where there was only a small number of BME students. No comparisons were made where one of the contributing groups numbered fewer than 20. The numbers became progressively smaller as the students progressed through the three years.

The comparisons are summarised in Table a2. The numbers in the cells indicate the number of universities in which the mean marks of selected groups were at or above the median mean mark – for example, in 10 of the 11 universities the percentage of female students at or above the median mean mark exceeded the percentage of male students in year one, and in only one university was the reverse the case. The difference, according to the sign test, is statistically significant at $p<.05$. A similar, but non-significant, trend is evident for years two and three. The strongest difference is seen when the data is split between white students and BME students,[135] where, in all instances, the percentage of white students obtaining a mark at or above the median mean mark exceeds that of BME students to a statistically significant level (sign test). In most cases, the disparity in actual mean mark percentages, though not shown here, was marked.

[133] Some students' records contained a small proportion of results at a lower level, for reasons such as 'failing and trailing', or because of the switch from a period of part-time study to full-time study. These inevitably introduce some 'noise' into the data, but the effect was judged to be small in the 'big picture'.

[134] The level descriptors corresponding to the first three years of study are different for Scotland and the rest of the UK, which is why the reference is to years of study.

[135] BME is an over-simplified grouping for analysis, since sub-groups of BME tend to show variation in outcomes (see, e.g., HEFCE 2013; Equality Challenge Unit 2014, p. 139ff). Because of the differing ways in which universities record ethnicity, BME is the only level of grouping that is possible across all 13 universities in *What Works?*.

Table a2: How does your work intersect with institutional policy? Choose the one statement that best describes the situation at your institution

Comparison	Year 1	Year 2	Year 3
Gender			
Male	1	2	1
Female	10	9	6
Age			
Young	7	7	5
Mature	4	3	3
Ethnicity			
White	11	10	6
BME	0	0	0
Disability declared			
No	9	6	5
Yes	2	3	2
Domicile			
Home	4	4	2
Not Home	6	3	2

Note
- White boxes indicate statistical significance at p<.05; the grey shaded box indicates p=.001.

The 'big picture' from the 'belongingness' survey

Thirteen universities administered the survey on a majority of the seven occasions (see section 3.1.2). Each university received analyses of the data from its own students, set against analyses from the totality of respondents (acknowledging that this totality would be considerably influenced by a number of variables, notably the wide variation in cohort size). In this section we focus on findings that span the 13 participating universities.

Table a3 summarises the results for the seven administrations of the 'belongingness' survey. Considerable caution needs to be applied to the interpretation of the data because of a variety of underlying factors, which include the wide disparity in cohort size across and within the participating universities; varied response rates (notably lower in spring 2016 for the 2013 entry, as most of these students were in their final year and also contributing to the National Student Survey); and that only 12 of the 13 universities administered the survey on all of the occasions.

Table a3: Summary outcomes from the seven administrations of the 'belongingness' survey

	Cohort entry 2013				Cohort entry 2014		
	Aut 2013 Nmax 2841 Mean	**Spr 2014** Nmax 2464 Mean	**Spr 2015** Nmax 2200 Mean	**Spr 2016** Nmax 1370 Mean	**Aut 2014** Nmax 3718 Mean	**Spr 2015** Nmax 2652 Mean	**Spr 2016** Nmax 1769 Mean
Belongingness	4.06	4.03	3.97	3.95	4.18	4.06	3.95
Engagement	3.82	3.78	3.90	3.93	3.86	3.82	3.85
Self-confidence	3.48	3.51	3.54	3.52	3.51	3.53	3.47

Taking all the caveats into account, there are hints – nothing more definite can be claimed – that students' sense of 'belongingness' may decline a little over time, which could be attributable to the efforts universities make to ensure that their incoming students are made welcome and aware of the academic expectations laid upon them, and the fact that students subsequently develop their independence further.

Analyses were conducted for each of the seven sets of responses, focusing on selected demographic variables and employing the 'straws in the wind' methodology illustrated in the Technical Appendix. For economy in presentation, only those subgroup analyses showing a significant difference between the selected groups are highlighted in Tables a4, a5 and a6. Zeros in these tables indicate that the subgroup differences concerned failed to reach statistical significance. In the two Scottish universities, the third year of study was the students' penultimate year rather than their final year, which is signalled by an asterisk in the tables.

Caution needs to be exercised regarding outcomes relating to disability, ethnicity and domicile where, as in a small minority of institutional results, the number of respondents was low. Caution also needs to be exercised when considering results from a longitudinal perspective, since there was variability in response rates (with data missing from particular subject disciplines in a few cases).

Table a4: Subgroup comparisons based on the 'belongingness' scale of the survey

The highlighted results show the group that scored more highly (i.e. were more positive about belonging) on the particular survey:

		Final Year*						
	Surevy date Cohort entry N	Autumn 13 2013 2,841	Spring 14 2013 2,696	Spring 15 2013 2,200	Spring 16 2013 1,368	Autumn 14 2014 3,718	Spring 15 2014 2,652	Spring 16 2014 1,767
Comparison								
Male	Female	0	0	Female	Female	Female	0	0
Under 20	20+	0	20+	0	0	0	0	0
White Brit	Other	White Brit	0	White Brit	0	White Brit	White Brit	0
White Brit	BME Brit	0	0	0	0	White Brit	White Brit	0
First/Fam	Not First	0	First/Fam	0	0	0	0	Not First
Home	Not Home	0	0	0	0	0	0	0
DisabDec	Not Dec	0	0	0	0	0	0	0
LowDisadv	HighDisadv	LowDisadv	0	LowDisadv	LowDisadv	0	LowDisadv	LowDisadv

Note
In this and the following two tables, the abbreviations are:
- Brit = British;
- BME = black and minority ethnic;
- First/Fam = first in immediate family to enter higher education;
- Home = home student;
- DisabDec = disability declared to the university;
- Disadv = disadvantage (see Technical Appendix 2 for details).

Table a5: Subgroup comparisons based on the 'engagement' scale of the survey

The highlighted results show the group that scored more highly (i.e. were more positive about engagement) on the particular survey.

		Final Year*						
	Surevy date Cohort entry N	Autumn 13 2013 2,841	Spring 14 2013 2,696	Spring 15 2013 2,200	Spring 16 2013 1,368	Autumn 14 2014 3,718	Spring 15 2014 2,652	Spring 16 2014 1,767
Comparison								
Male	Female	Female	Female	Female	0	Female	Female	0
Under 20	20+	20+	20+	20+	0	20+	0	0
White Brit	Other	0	0	0	0	0	0	0
White Brit	BME Brit	0	0	0	0	0	0	0
First/Fam	Not First	0	0	0	0	0	0	Not First
Home	Not Home	0	0	0	0	0	0	0
DisabDec	Not Dec	0	0	0	DisabDec	DisabDec	0	DisabDec
LowDisadv	HighDisadv	LowDisadv	0	0	0	0	0	0

Table a6: Subgroup comparisons based on the 'self-confidence' scale of the survey

The highlighted results show the group that scored more highly (i.e. were more positive about self-confidence) on the particular survey:

Final Year*								
	Surevy date Cohort entry N	Autumn 13 2013 2,841	Spring 14 2013 2,696	Spring 15 2013 2,200	Spring 16 2013 1,368	Autumn 14 2014 3,718	Spring 15 2014 2,652	Spring 16 2014 1,767
Comparison								
Male	Female	Male	Male	Male	Male	Male	Male	Male
Under 20	20+	0	0	0	0	0	Under 20	0
White Brit	Other	Other	Other	0	Other	Other	0	0
White Brit	BME Brit	0	0	0	0	BME Brit	0	0
First/Fam	Not First	0	0	0	0	0	0	Not First
Home	Not Home	0	Not Home	Not Home	0	Not Home	0	0
DisabDec	Not Dec	Not Dec	Not Dec	Not Dec	0	Not Dec	Not Dec	0
LowDisadv	HighDisadv	LowDisadv	0	LowDisadv	LowDisad	0	0	LowDisadv

If four statistically significant outcomes (shaded cells in the tables) pointing in the same direction are taken as a criterion for suggesting a 'big picture' feature, then the following points become apparent:

- Male students tend to be more self-confident than females.
- Students who are not white British tend to be more self-confident than their white British peers.
- Students who have not declared a disability tend to be more self-confident than those who have.
- Female students tend to be more engaged than their male peers.
- Older (aged 20 and above) students tend to be more engaged than younger students.
- White British students tend to exhibit a stronger sense of 'belongingness' than other respondents.
- Students who are not relatively disadvantaged by their circumstances tend to exhibit a stronger sense of 'belongingness' than those whose circumstances are more disadvantageous.

The category of no strong differences between subgroups includes the following:

- 'Belongingness' scores show few differences by age, between white British and BME British students, between 'home' students and those from further afield, between those who were the first in their family to attend university and those who were not, and between those who had declared a disability and those who had not.
- Other than comparisons based on gender and age, there are few differences in scores on engagement. However, the three occasions where students who had declared a disability outscored those who had not is perhaps an indication of determination to succeed despite facing problems.
- Self-confidence seems to have little connection with age, whether the student is white or BME British, whether or not the student is the first in their family to enter university, and regardless of where the student's domicile is.

Technical Appendix 2: Methodology

The 'belongingness' survey

A survey that can act as an index over time and across academic disciplines in higher education has necessarily to be generic in nature. As *What Works?2* got underway, a number of survey instruments that bore relevance, with varying degrees of directness, to engagement were considered, including:

- The National Student Survey in the UK;
- The first-year experience survey administered in the UK by Yorke and Longden (2007);
- The National Survey of Student Engagement (NSSE) in the US;
- The 'Your First Year in College' survey in the US (Ruiz et al. 2010);
- The series of first-year experience surveys ran in Australia (see James, Krause and Jennings 2010, for example); more recently, the Australian Survey of Student Engagement (AUSSE) (ACER 2011) and the University Experience Survey have been administered in Australian universities.[136]

The NSSE has been extensively researched in the United States,[137] and has spawned variants tailored to other countries, such as the AUSSE. In the UK, a subset of the NSSE's items has been used during the period in which *What Works?* took place (see Buckley 2013, 2014, 2016; Neves 2016). The NSSE and its derivatives emphasise what students actually do – with all that implies for variation in academic demand over time (compare what is expected of first-year students with what is expected of final-year students, for example) and across subject disciplines (compare, say, history with engineering). As regards students' sense of 'belongingness', Goodenow (1993) developed an instrument for use in American schools, but its items did not suit higher education. Whereas self-confidence is the focus in a number of psychometric instruments, it was only one of three foci of interest to *What Works?2* and could not be given the same level of attention as it would have been afforded in a specifically focused instrument.

In order to get around these difficulties, the instrument developed for the *What Works?2* programme had to operate at the meta level of student attitudes to, and perceptions of, academic engagement, as well as incorporating short scales relating to 'belongingness' and self-confidence. For practical reasons relating to its administration, the survey also had to be short (students in the UK seem more resistant to completing long surveys than their counterparts in the United States and Australia), thereby trading off length (desirable on psychometric grounds) for practicability. Nevertheless, the survey instrument had to be sufficiently robust for the purposes to which it was being put.

[136] See https://www.education.gov.au/university-experience-survey for reports of the administrations in 2012, 2013 and 2014. The report of the 2015 survey is at https://www.qilt.edu.au/docs/default-source/default-document-library/2015-student-experience-survey-national-report.pdf. The 2012 report (Radloff et al. 2012) informed the 'belongingness' survey.

[137] See http://nsse.indiana.edu/ as the entry point to an extensive repository of information. The 2013 questionnaire was consulted during the development of the 'belongingness' survey (NSSE 2013).

The survey instrument was designed to produce three scales capturing students' perceptions of belongingness, engagement (focusing on academic commitment) and self-confidence, with the scale scores being used at the cohort level over the duration of the *What Works?2* programme. Reporting back the results to participating universities provided them with data that could assist them in their enhancement activities, this being consistent with the 'action research' approach of *What Works?*.

The survey instrument was piloted with 941 students in four universities and refined, and showed technical characteristics sufficient for the purpose to which the survey was being put. The version used in *What Works?* is composed of 16 Likert-type items (six relating to belongingness, six to engagement and four to self-confidence), of which four are negatively expressed, which offered five response categories, ranging from 'strongly agree' to 'strongly disagree'. The instrument also included 13 demographic questions. A detailed account of the development and early use of the instrument can be found in Yorke (2016).

To date, the survey has been administered on seven occasions to students who entered higher education in autumn 2013 and autumn 2014. The 2013 entrants were surveyed during the first and second terms of their first year, and subsequently during the second term of the two succeeding years. The 2014 entrants were surveyed in a similar pattern though, since *What Works?* concluded in 2016, they were not surveyed in their third year.[138]

The technical characteristics of the instrument have been stable over the duration of *What Works?* (Table a7).

Table a7: Variance explained and scale reliabilities for the belongingness survey – The data covers the two cohorts entering university in 2013 and 2014

	Cohort entry year Administration date No of respondents	2013 Aut. 13 2,841	2013 Spr. 14 2,696	2013 Spr. 15 2,200	2013 Spr. 16 1,368	2014 Spr. 15 2,652	2014 Spr. 16 1,767
Characteristic	Year of course	Year 1	Year 1	Year 1	Year 1	Year 1	Year 2
Variance explained, %	51	53	54	54	52	54	52
Reliability, belongingness (6 items)	0.77	0.78	0.81	0.83	0.77	0.80	0.79
Reliability, engagement (6 items)	0.75	0.77	0.76	0.75	0.74	0.77	0.76
Reliability, self-confidence (4 items)	0.74	0.73	0.74	0.72	0.73	0.75	0.72

[138] There were minor variations to the surveys' timing, which were occasioned by the need to accommodate particular institutional circumstances, such as students being on placements.

The method of administration has varied across *What Works?*. For the 2013 survey the administration was conducted in either hard copy or electronic format according to institutional preferences (the option was also available for universities to choose the particular method with their cohorts). However, the response rate for the electronic administration was in general lower than for hard-copy surveys administered in class sessions, the mean response rates being 47% for electronic administration compared with 54% for hard copy. The dual approach was also used later in the same academic year, in spring 2014. The hard copy approach was adopted as the sole method of administration from autumn 2014 onwards. Scannable hard copies were used in the two administrations in spring 2015: though this method was technically successful, the spreadsheet output could not accurately record a considerable minority of responses, mainly where students had not followed the instruction to draw a black horizontal bar in response boxes. In these cases it was necessary to scrutinise JPEG files of the individual scanned responses in order to ensure that the spreadsheet was as accurate as possible. It was judged that strengthening the instructions would be unlikely to ensure 'cleaner' responding: as a result, it was decided to forego the scannability and, for the spring 2016 surveys, to input the data manually from the hard copy since this would have the advantage of the inputter being able to resolve ambiguities as the responses were being worked through, instead of facing the time-consuming task of having to open up and examine the JPEG files.

Table a6 above shows that the numbers of responses to administrations of the survey vary. This variation is due to a number of factors, which include:

- On two of the seven occasions (spring 2014 and spring 2016), only 12 of the 13 universities administered the survey.
- Within a few universities, not all subject-based cohorts were represented across all surveys.
- There was marked variation in the response rate within some subject-based cohorts.

This makes longitudinal comparisons for the student cohorts entering university in 2013 and 2014 more problematic than had been anticipated.

The data presented in this appendix provides an illustration of the analyses, drawing on the totality of responses across the survey of first-year students conducted in the autumn of 2014, which received the highest number of responses. ***The tabulations are illustrative only*** of the analyses sent to the individual universities, since cohort sizes across the 13 universities differed markedly. University-specific outcomes are not presented because of the heterogeneity both between and within institutions as regards the particular cohorts participating in *What Works?*, and the need to ensure anonymity in the public reporting of comparable data.

Each participating university received, for each survey it conducted, three levels of analysis of the survey results (the mean scale score was used as the index for each of the constructs – belongingness, engagement and self-confidence – since this allowed for the occasional missing response):

- The overall analysis of item and scale scores as presented in Table a8 below, with a caution that this was skewed because of wide variations in cohort sizes;
- An analysis of the totality of the university's responses, again with a caution pointing to the variation in cohort size within the university;
- An analysis of the responses at the subject cohort level.

Table a8 is merely an exemplification of the kinds of analyses that each university received.

Each university also received a series of analyses based on demographic characteristics, where the numbers in sub-groups permitted (see the following subsection).

Table a8: An illustration of the analyses of survey responses received by participating universities (overall data from the first-year survey in autumn 2014)

Survey item/scale	N	Mean
1E I am motivated towards my studies.	3,708	4.27
2B I feel at home in this university.	3,712	4.07
3S I expect to do well on my programme.	3,698	4.19
4B Being at this university is an enriching experience.	3,655	4.20
5E I try to make connections between what I learn from different parts of my programme.	3,676	4.12
6E I try to do a bit more on the programme than it asks me to.	3,690	3.54
7B I wish I'd gone to a different university. [R]	3,683	4.16
8E I seek out academic staff in order to discuss topics relevant to my programme.	3,669	3.03
9S I worry about the difficulty of my programme. [R]	3,683	2.52
10E I put a lot of effort into the work I do.	3,701	4.10
11B I have found this department to be welcoming.	3,700	4.34
12E I use feedback on my work to help me improve what I do.	3,677	4.10
13S I doubt my ability to study at university level. [R]	3,679	3.30
14B I am shown respect by members of staff in this department.	3,682	4.37
15B Sometimes I feel I don't belong in this university. [R]	3,690	3.95
16S I'm confident of completing my programme successfully.	3,701	4.01
Belongingness scale	**3,718**	**4.18**
Engagement scale	**3,718**	**3.86**
Self-confidence scale	**3,718**	**3.51**

Notes
1. The items are coded according to the scale to which they belong: B = Belongingness; E = Engagement; S = Self-confidence.
2. The items marked 'R' are reverse-scored because they are expressed in negative terms.
3. All scores are such that higher levels of positivity with respect to belongingness, engagement and self-confidence are at the upper end of the five-point scale.

The three scales should not be assumed to be the same, since they are made up of items that have different semantic and technical characteristics. Comparisons should only be made within scales, and definitely not between scales (see Yorke 2016 for a detailed discussion of this).

Demographic analyses

Table a9 presents a number of 'cuts' of the data based on demographic characteristics, where provided. Again, the example is taken from the survey of first-year students that was run in the autumn of 2014. Each participating university received the overall analyses reported below, together with analyses of its own totality of responses and, where numbers in analytical categories were sufficient, analyses at the subject-cohort level. The reportage to universities was the same for all of the surveys conducted.

At the end of the survey, students were asked four questions that might bear on their responses: whether they had a part-time job; whether they cared for dependants; whether they had a quiet place in which to study; and whether their travel to the university took at least 45 minutes (one way). Correlation analyses showed that the undertaking of a part-time job had a negligible impact on scale scores, and so the intended composite index of disadvantage was limited in this report to the issues of caring for dependants, the availability of quiet space and travel time.[139] The responses to the first two questions were scored ('yes' responses 1, 'no' responses 0) and those to the scaled travel question were dichotomised (never/occasionally scored 0, frequently/always scored 1) before the mean for the three responses was computed. Those with means of 0.5 or above were deemed to have a higher level of adverse circumstances; those below 0.5 had a lower level.

[139] In feeding back results to universities, and in earlier reports for What Works?, the 'adverse circumstances' index was computed on all four variables.

Table a9: Examples of analyses related to demographic characteristics

Gender		**Belongingness**	**Engagement**	**Self-confidence**
Male	Mean	**4.13**	**3.80**	**3.65**
	N	1,647	1,647	1,647
Female	Mean	**4.24**	**3.91**	**3.39**
	N	1,902	1,902	1,902
Under 20 v 20 and above		**Belongingness**	**Engagement**	**Self-confidence**
Under 20	Mean	**4.19**	***3.81***	**3.51**
	N	2,717	2,717	2,717
20+	Mean	**4.18**	**3.99**	**3.52**
	N	951	951	951
White British		**Belongingness**	**Engagement**	**Self-confidence**
White British	Mean	**4.24**	**3.86**	**3.47**
	N	2,562	2,562	2,562
Other than white British	Mean	**4.07**	**3.88**	**3.61**
	N	967	967	967
Disability declared or not		**Belongingness**	**Engagement**	**Self-confidence**
Disability declared	Mean	**4.21**	**3.98**	**3.38**
	N	258	258	258
Disability not declared	Mean	**4.18**	**3.85**	**3.52**
	N	3,413	3,413	3,413
First in family ('unsure' excluded)		**Belongingness**	**Engagement**	**Self-confidence**
First in family	Mean	**4.18**	**3.88**	**3.49**
	N	1,396	1,396	1,396
Not first in family	Mean	**4.19**	**3.85**	**3.52**
	N	2,216	2,216	2,216
UK domiciled v not UK domiciled		**Belongingness**	**Engagement**	**Self-confidence**
UK domiciled	Mean	**4.19**	**3.86**	**3.50**
	N	3,333	3,333	3,333
Not UK domiciled	Mean	**4.10**	**3.81**	**3.62**
	N	333	333	333
Adverse circumstances, lower v higher		**Belongingness**	**Engagement**	**Self-confidence**
Lower	Mean	**4.20**	**3.85**	**3.53**
	N	3,388	3,388	3,388
Higher	Mean	**4.04**	**3.95**	**3.29**
	N	286	286	286

Table a10: Some illustrative 'cuts' of the data from the administration of the survey in autumn 2014

Comparison		Belongingness	Engagement	Self-confidence
Male	Female	.19	.20	.39
Under 20	20+		.33	
First in family	Not first			
Disability declared	Not declared		.24	.20
White British	BME British	.38		.21
UK domicile	Not UK	.15		.17
High adverse circs	Low adverse circs	.26	.17	.33

The 'cuts' show that, where there are differences on the independent samples t-test which under random sampling would be statistically significant at the $p<.05$ level (all of the 'significant' differences were at $p<.01$). 'Significant' differences – the inverted commas are used to indicate that the analyses are based on what is in effect an opportunity sample rather than a random sample – are indicated in the shaded cells of Table a10, with the colour coding of the cells showing which subgroup in the comparison achieved the higher mean score (blank cells in the table indicate that the difference did not reach a statistically 'significant' level). Since p values are influenced by sample size, Cohen's d was computed to provide a measure of the effect sizes for 'significant' differences. Cohen (1988) interprets a value of d of 0.2 and less than 0.5 as indicating a small but real difference. He acknowledges that the d statistic is not unproblematic but argues that its utility overrides the difficulties (see Cohen 1988, p. 24ff). For a further critique of the statistic, see Lipsey et al. (2012). The differences noted in Table a10 are worth consideration by universities in order to identify possible pointers towards developing aspects of institutional practice. It should be noted that the technical requirements for inferential statistical testing were not met, and hence statistical significances and effect sizes should be interpreted no more strongly than as possibly indicative.

'Straws in the wind'

The wide variations between and within universities imply that it is inappropriate to aggregate statistics such as scale scores in order to identify an overall picture. And the parametric analyses in the previous paragraph make some – in truth – unwarranted assumptions about sampling. A simpler methodology is, however, available. For all the universities, the differences between the categories in the cuts such as those in Table a9 can be lined up to see how many point (or, metaphorically, how many straws are blowing) in the same direction, using a simple difference between the two subgroup means as the indicator. This difference is determined on a 'within university' level, since scale score means vary between universities (tied mean scores are disregarded). The chances of at least 11 of the 13 results[140] pointing in the same direction are, according to the sign test (Siegel and Castellan 1988), sufficiently low for the pattern across all the universities to be statistically significant.[141] When such a cut is statistically significant, it does not imply that the significance applies to a particular university – rather, it points out a trend across the universities that invites them to consider the extent to which it might apply in their circumstances and to consider what, if any, enhancement actions might be needed.

[140] For some analyses the total number of universities is less than 13. Tied scores are disregarded in sign test analyses, and there are a few instances where a category is missing (for example, in one institution all the respondents were 'home' students).

[141] The same method could be applied at the subject cohort level, but in many cases there were too few members on one side of a cut to make this viable.

Appendix 3: Outcomes from *What Works?2*

In this appendix an overview of the external recognition of staff participating in the *What Works?2* programme is presented, providing details of publications and presentations.

Publications

Bowden, R., Jones, J., Fowlie, J., Fyvie-Gauld, M. and Guy, E. (2017) What Works? Student Retention and Success. *UoB Reports and Case Studies: UoB publication*, February 2017.

Curran, R. and Millard, L. (2015) A partnership approach to developing student capacity to engage and staff capacity to be engaging: opportunities for academic developers. *International Journal for Academic Development*, 21(1), pp. 67–78. Available at: http://dx.doi.org/10.1080/1360144X.2015.1120212

Jones, J., Masika, R., Bowden, J., Fowlie, M., Fyvie-Gauld, E. and Wisker, G. (2016) What Works? Students' experiences and perceptions of belonging, confidence and engagement during the first year of their degrees in three disciplines at the University of Brighton: Flexible Futures, 2014. *Learning and Teaching Conference Post Conference Publication*, University of Brighton.

Jones, J. and Masika, R. (2014) Belong and engage: first-year students' experiences of discipline-focused retention and success interventions. *Conference Proceedings Paper*, International Consortium for International Development (ICED), Stockholm, June 2014.

Masika, R. and Jones, J. (2016) Building student belonging and engagement: insights into higher education students' experiences of participating and learning together. *Teaching in Higher Education*, 21(2).

Millard, L., Gough, K., Morton, N., White, H., Schiessel, H.N., Morris, J. and Brand, S. (2016) Students as co-designers in revitalising the first-year student experience. In P. Bonne and D. Nutt (eds), *Ten Times the First Year – Reflections on ten years of the European first-year experience conference*, Lannoo Campus, pp. 91–120.

Morton, N., Vincent, W., Schiessel Harvey, N. and Curzon, R. (2017, forthcoming) 'Thank you for taking the time to understand': a critical reflection on peer-led interventions in enhancing early experiences of higher education. *International Journal of Construction Education and Research.*

Spruce, M. (2015) *Management Information Systems in Higher Education: A Case Study of the University of Chester Student Retention and Success Programme* (Unpublished Master's Dissertation). University of Chester.

Steventon, G., Cureton, D. and Clouder, L. (eds) (2016) *Student Attainment in Higher Education: Controversies and Debates.* London: Routledge.

Other work

Life Sciences at University of Glasgow: Work undertaken as part of *What Works?2* is being used as best practice case studies in their current Periodic Subject Review, which is part of the University of Glasgow Academic Quality Framework.

Presentations

Black, M. (2015) Active, Creative and Critical Thinking: Engaging Year 1 Students Groups with Final Year Mentors Offers Enhanced Employability for ALL. *European First-Year Experience (EFYE) 2015 Conference*, University of Bergen, Norway.

Black, M., Curran, R., Hamill, M., Luney, T. and White, R. (2015) A partnership approach in and between disciplines to improve student engagement, belonging and retention (Ulster Symposium). *RAISE Conference*, Manchester Metropolitan University.

Bowden, R., on behalf of Fowlie, J., Fyvie-Gauld, M., Guy, E., Jones, J. and Masika, R. (2014) Evaluating the HEA's What Works? Programme: building engagement and belonging for student retention and success at the University of Brighton. *7th annual UK and Ireland Higher Education Institutional Research Conference*, HEIR 2014: From Research to Action, Oxford Brookes University, Oxford, 8–9 September 2014.

Bowden, R., Fowlie, J., Fyvie-Gauld, M., Guy, L., Jones, J. and Masika, R. (2014) Evaluating the HEA's What Works? Findings: building engagement and belonging for students' success in three disciplines. *Pedagogic Research Conference,* University of Brighton, February 2014.

Bowden, R., Fowlie, J., Fyvie-Gauld, M., Guy, L., Jones, J., Masika, R. and Wisker, G. (2014) Evaluating findings of the HEA's What Works? Programme: building engagement and belonging for students' success in three disciplines. *Flexible Futures – Learning and Teaching Conference,* University of Brighton, July 2014.

Bowden, R., Fowlie, J., Fyvie-Gauld, M., Guy, L., Jones, J. and Masika, R. (2014) Building engagement and belonging for students' success in three disciplines. *Student Retention and Success Framework Event*, University of Brighton, September 2014.

Bowden, R., Fyvie-Gauld, M., Guy, E. and Jones, J. (2017) What Works? some tried-and-tested actions. *Enhancing HE Through Research Conference*, University of Brighton, February 2017.

Bowden, R., Guy, E., Jones, J. and Lewis, C. (2015) Student Retention and Success: 'What worked' for us and could work for you. *Enduring Legacies: Emerging Innovations – Learning and Teaching Conference*, University of Brighton, July 2015.

Bowden, R., Guy, E. and Jones, J. (2015) The HEA What Works? project – UoB. *Student Retention and Success Framework Annual Conference*, September 2015.

Browitt, A., Finlay, C., Griffiths, M. and Rinaldi, C. (2016) Supporting student retention and success at the University of Glasgow: A workshop. *13th Annual Enhancement Themes Conference*, John McIntyre Conference Centre, Edinburgh, June 2016.

Browitt, A., Balance, D., Rinaldi, C. and Finlay, C. (2017) Enhancing the student journey: Supporting student retention and success: A workshop. *10th Annual University of Glasgow Learning and Teaching Conference*, Glasgow, March 2017.

Bruce, H. and Gault, A. (2014) Cloth, Colour and Co-curricular Community Practice. *European First-Year Experience (EFYE) 2014 Conference*, Nottingham Trent University.

Cousin, G. and Cureton, D. (2013) Reflexive co-enquiry with students: Consensus-Oriented Research Approach: Keynote Presentation. *Annual University of Worcester Learning, Teaching and Student Experience Conference*, June 2013.

Cureton, D. (2016) What Works: University Interventions [The Discussant], Closing the Gap. *Research and Practice on BAME Student Attainment in Higher Education*, University of Kent, June 2016.

Cureton, D. (2015) The Affective Aspects of the Learning Relationship: Keynote Presentation. *London College of Fashion Learning and Teaching Conference*, March 2015.

Cureton, D. (2015) The Power of the Teacher–Student Relationship: Keynote Presentation. *Society for Research in Higher Education*, London, March 2015.

Cureton, D. and Cousin, G. (2013) Minding the Gap – From Disparity to Beyond. *SRHE Annual Research Conference*, Newport, Wales, 11–13 December 2013.

Curran, R., McKillop, A., Dooher, G., Honan, A., Grogan, J. and Montgomery, I. (2015) Improving student engagement and belonging through student–staff partnerships: Outcomes from the HEA *What Works?* programme at Ulster University. *SEDA conference*, Cardiff.

Davismoon, S. (2016) Supporting transition, improving retention and student success, and transforming culture through personal tutoring. *Ready for Retention Conference*, University of South Wales.

Grogan, S. (2016) Placing students at the heart of the university by co-creating their journey: A case study at the University of Salford. *UK Advising and Tutoring Conference*, Southampton Solent University.

Keenan, M. (2015) Building the Environment: How a shared team ethos and innovative student support can help to tackle retention and improve student success. *RAISE Conference*, Nottingham Trent University.

Keenan, M. (2015) Developing Belonging: The value of academic mentors within the first-year student experience. *European First-Year Experience (EFYE) 2015 Conference*, University of Bergen, Norway.

Millard, L. (2016) Increasing Retention Rates of Students from Disadvantaged Backgrounds. *Inside Government Conference: Widening Access and Improving Social Mobility in Higher Education*, London, 8 December 2016.

Millard, L. (2016) Students as co-designers: creating contemporary curriculum – Pre-conference workshop. *European Association of Institutional Research Annual Conference*, Birmingham, 31 August 2016.

Millard, L. (2016) Potentially a Graduate – a survey for student self-awareness. *HEA Surveys Conference: Linking Enhancement and Excellence*, Birmingham, 13 July 2016.

Millard, L. (2016) Working in partnership to develop students' employability: Joint presentation with JISC. *Mind the Gap – Exploring Institutional Practices in the Post-Digital Age*, University of Greenwich, 5 July 2016.

Millard, L. (2016) Learning Gain(ed) – Encouraging student-led development through partnership and metrics: Pre-conference workshop. *European First-Year Experience Conference*, Ghent, Belgium, March 2016.

Millard, L. (2016) Student engagement challenges and opportunities. *Higher Education Academy: Leading Transformation in Learning and Teaching Programme*, February 2016.

Millard, L. (2015) Students as Partners in Redesigning the First-Year *Experience. European First-Year Experience Conference*, Bergen, Norway, 15–17 June 2015.

Millard, L. (2015) *Students as Partners in Redesigning the First-Year Experience. QAA 12th Enhancement Themes Conference*, Glasgow, 9–11 June 2015.

Millard, L. (2015) Life-wide learning and the myth of the full-time student: Invited speaker to the Liverpool John Moores University. *Research and Practice in Higher Education Seminar Series*, April 2015.

Molyneaux, G. (2015) Priorities and challenges for institutional change to support success throughout the student lifecycle. *Westminster Higher Education Forum Keynote Seminar: Improving student attainment and retention – Financial support, additional needs and widening participation*, London.

Molyneaux, G. (2016) Priorities and Challenges for Institutional Change to Support Success Throughout the Student Lifecycle. *Association of University Administrators Managing Change in Higher Education Network Annual Forum*, City University London.

Molyneaux, G. (2017) What Works? A research-informed approach to discipline and institutional interventions to improve student retention and success. *Making an Impact: School of Art, Design and Architecture Teaching and Learning Conference 2017*, University of Huddersfield.

Parkes, S. (2016) Beyond the Silos: Working in partnership to promote effective student progression and success. *HEA Wales – Ready for Retention: Effective Systems for Transition and Student Success*, University of South Wales Conference Centre, Pontypridd, Wales, July 2016.

Parkes, S. (2016) Beyond the Silos: Partnership working for student success: Keynote address. *Faculty of Science Conference*, University of Portsmouth, Portsmouth, December 2016.

Parkes, S. (2016) Enhancing the student experience: Keynote address. *University of Hull Professional Services Forum*, Hull, April 2016.

Quigley, T. and Harding, J. (2015) Working with students to shape the transitional experience to university education in a transdisciplinary course. *European First-Year Experience (EFYE) 2015 Conference*, University of Bergen, Norway.

Vaganay, M. and Keenan, M. (2015) It's all about communication: Tackling retention and improving student success in the Built Environment. *iBEE Conference 2015*, Bath.

Whittaker, D. (2016) Segmenting the student journey at the University of Salford: A student-centric action-orientated approach to enhancing transition, retention and attainment. *Ready for Retention Conference*, University of South Wales

Zacharopoulou, A. (2016) Addressing student expectations and building confidence through a pre-arrival activity. *Society of Legal Scholars Annual Conference: Legal Education Stream*, Oxford.

Zacharopoulou, A. and Diver, A. (2014) Transition and belonging – a programme of change in induction practice for first-year law students. *Society of Legal Scholars Annual Conference.*

Zacharopoulou, A. and Kennedy, J. (2013) Developing a 'community of practice' @ Ulster: Evaluating the impact of a focused programme of change for student retention and success in the School of Law. *Irish Association of Law Teachers Annual Conference, Changing Times for the Legal Professions – Re-evaluating the Role of the Law Teacher*, Belfast.

A vodcast was produced which combined the key highlights of effective practice across the disciplines. This was disseminated on the internal university online channel for staff in December 2015. Subsequently, a short vodcast (less than one minute) accompanied each case study. These are now available on the Ulster CHERP website. These vodcasts could also be made available on the HEA website, along with the Ulster case studies.

Recognition of achievement

Dr Debra Cureton, University of Wolverhampton

A Senior Fellowship of the HEA in 2014 based on the research and development work of DISA and *What Works?* and the implementation of this work.

University of Wolverhampton Learning and Teaching Fellowship (2014–17), which allowed Debra to complete and extend the *What Works?* programme.

Professor Stephen Davismoon, formerly of University of Salford (now Edge Hill University)

Senior Fellowship of the HEA, drawing on *What Works?2*, November 2016.

Julie Fowlie

Senior Fellowship of the HEA, drawing on *What Works?2*.

Mark Groves, University of Wolverhampton

Senior Fellowship of the HEA, including work on 'What works at Wolves?'.

Luke Millard, Birmingham City University

Appointed Head of Centre for Excellence in Learning and Teaching, drawing on *What Works?2*.

Principal Fellowship of the HEA, drawing on *What Works?2*.

Professor Nick Morton, Birmingham City University

Principal Fellowship of the HEA, drawing on *What Works?2*.

Sarah Parkes, Newman University Birmingham

Senior Fellowship of the HEA, drawing on *What Works?2*.

Helen White, Birmingham City University

Promoted to Head of Radiography Department after leading the discipline-level *What Works?2* intervention in that subject.

Ulster University

Staff	Category of Fellowship
Ms Avril Honan	AFHEA
Mrs Ursula Chaney	FHEA
Miss Stephanie Dunleavey	FHEA
Mrs Helen Foster	FHEA
Dr Khanyisela Moyo	FHEA
Mr Paul Stewart	FHEA
Dr Murat Akser	FHEA
Mr Stephen King	FHEA
Dr Michaela Black	SFHEA
Ms Hazel Bruce	SFHEA
Ms Janet Coulter	SFHEA
Ms Rachel Dickson	SFHEA
Mrs Alison Gault	SFHEA
Dr Michaela Keenan	SFHEA
Mr Brian McGowan	SFHEA
Professor Aine McKillop	SFHEA
Ms Amanda Zacharopoulou	SFHEA
Mrs Roisín Curran	PFHEA
Professor Martin McKinney	PFHEA

The annual Students' Union Learning and Teaching Awards, launched in 2014, aim to raise the status of, and thereby promote and celebrate, excellent learning and teaching practice at Ulster.

2014

- Two staff members, from Computing and Law respectively, were shortlisted in two other award categories:
  - Dr Michaela Black (Senior Lecturer in Computing Science), 'Excellence in Innovative Teaching Award' (shortlisted);
  - Dr Jacinta Miller (Lecturer in Law), 'Inspirational Teaching Award' (shortlisted).
- The category of 'Partnership Award' was jointly won by a member of the core team, Roisín Curran (Professional Development Manager, Staff Development).

2015

- The 'Inspirational Teaching Award', which is awarded to each faculty, was won by two of the discipline leads in their respective faculties:
  - Dr Alice Diver (Lecturer in Law), Faculty of Social Sciences;
  - Dr Michaela Black (Senior Lecturer in Computing Science), Faculty of Computing and Engineering.
- The category of 'Excellence in Student Representation' was won by one of the Mental Health Nursing student partners:
  - Gary Rutherford (final-year student), School of Nursing.
- The Social Sciences faculty was the recipient of the Partnership Award due to its innovative work in developing representation, volunteer projects and student societies in partnership with the Students' Union.

2016

- Amanda Zacharopoulou (Senior Lecturer in Law) was shortlisted for the 'Excellence in Teaching Award' (Social Sciences).

2017

- PhD awarded to Roisin Curran, Ulster University based on doctoral research undertaken as part of the What Works? programme

- **University of South Wales**

  University of South Wales' Project Team recognition - four team members achieved recognition by the HEA partly attributable to their work on the project:

  Carey Freeman (member of the Computing disciplinary team) – achieved Fellow of the HEA

  Sue Stocking (Lead of Computing Disciplinary team) - Senior Fellow of the HEA

  Haydn Blackey (Senior Academic Representative) Principal Fellow of the HEA

  Karen Fitzgibbon (Project Lead) Principal Fellow of the HEA

  In addition, Keith Norris (member of the Computing disciplinary team) won a University Excellence in Learning, Teaching and Assessment Award for his work on the project.

  Promotion

  Karen Fitzgibbon (Project Lead) was promoted to Professor of Learning & Teaching in part for her work leading the institutional team in the project.

Promotion

The following staff have been promoted to new leadership roles:

- Professor Ian Montgomery – Pro-Vice-Chancellor (Global Engagement)
- Professor Aine McKillop (Professor of Biomedical Sciences) – Chair in Learning and Teaching
- Dr Michaela Black – Head of School of Computing and Intelligent Systems
- Dr Michaela Keenan – Associate Dean (Education) of the Faculty of Computing, Engineering and the Built Environment
- Hazel Bruce – Learning and Teaching Coordinator of the Belfast School of Art
- Iain McGowan – Discipline Lead of the School of Nursing
- Rachel Dickson – Associate Head of School of the Belfast School of Art
- Julie Fowlie – Deputy Head of Learning and Teaching at Brighton Business School
- Dr Liz Guy – Deputy Head of Quality Assurance and Enhancement at the School of Computing, Engineering and Mathematics

Paul Hamlyn Foundation

Paul Hamlyn Foundation was established by Paul Hamlyn in 1987. Upon his death in 2001, he left most of his estate to the Foundation, creating one of the largest independent grant-making foundations in the UK.

Our mission is to help people overcome disadvantage and lack of opportunity, so that they can realise their potential and enjoy fulfilling and creative lives.

We have a particular interest in supporting young people and a strong belief in the importance of the arts and social justice is the golden thread that links all our work. We hope, therefore, that our work will help to improve and enrich the lives of those who are experiencing disadvantage or are in some way excluded.

www.phf.org.uk

Action on Access

Action on Access is the national provider of coordination and support for widening participation and access to higher education in the UK.

We advise and support colleagues working in access, widening participation, and student retention and success, whether they work in higher education providers, collaborative outreach partners, stakeholder organisations and funders, or as independent educational consultants. We have a strong commitment to contributing to a coordinated national strategic approach and support for broadening access and widening participation. Action on Access works with institutional leaders and practitioners, policy makers, funders and stakeholder groups to promote inclusivity and diversity, challenge exclusion, and to lobby for the broadest possible access to higher education which will, in turn, contribute significantly to greater social mobility.

www.actionaccess.org

Higher Education Academy

The Higher Education Academy (HEA) is the national body which champions teaching excellence. We work with governments, ministries, universities and individual academics in the UK, and around the globe. We support the HE sector by focusing on the contribution of teaching as part of the wider student learning experience.

- The HEA champions teaching excellence in higher education across the globe to improve student outcomes.
- We focus entirely on improving approaches to teaching, and individual teaching practice, to help improve the student journey into, through and beyond higher education.
- We help to raise the profile of teaching so that staff are recognised for their work and are motivated to keep developing their knowledge and careers.
- We are an independent, not-for-profit, charitable and non-regulatory organisation working for, and on behalf of, the whole sector.

www.heacademy.ac.uk

Paul Hamlyn Foundation
5-11 Leeke Street
London | WC1X 9HY

Tel: 020 7812 3300
Fax: 020 7812 3310
Email: information@phf.org.uk
www.phf.org.uk

Registered charity number 1102927

Designed by: joannabettles.com