Maximising Student Success through the Development of Self-Regulation

Project Lead: Professor Carol Evans (University of Southampton)

Partner Providers: (University of Surrey – Dr Naomi Winstone)

(Kingston University – Dr Annie Hughes)

Evans, C., Zhu, X., Winstone, N., Balloo, K., Hughes, A., & Bright, C. (2019)

Executive Summary

1. AIM: The project aimed to implement and scale up a research-informed holistic and integrated self-regulatory assessment feedback approach focused on equity, agency and transparency (EAT, Evans. 2016) with the intention of reducing differential learning outcomes for all students and especially for those from lower-socio-economic backgrounds and for Black and Asian and minority ethnic students (BAME/BAME).

2. RATIONALE: What is done at the micro-level within higher education (HE) at the module level with assessment has the potential to override individual difference variables in impacting the attainment outcomes of students.

3. PREMISE: Assessment drives learning behaviours and therefore an approach designed to promote student and staff engagement in assessment should impact students' self-regulatory skills and potentially impact student learning outcomes if appropriate training for staff and students in research-informed assessment practices is facilitated.

4. FOCUS IN PRACTICE: The project comprised two inter-related strands: (i) supporting students' development of self-regulatory assessment feedback skills through a focus on developing students' assessment literacy, assessment feedback, and engagement in assessment design; and (ii) developing staff understanding of inclusive assessment practices that promote self-regulatory behaviours through extensive training and support.

5. PARTICIPANTS: The Maximising Student Success Project was led by the University of Southampton (Russell Group), in partnership with the University of Surrey (previously part of 1994 group), and Kingston University (Post-1992).

6. The UNDERPINNING CONCEPTUAL FRAMEWORK was EAT, a self-regulatory inclusive assessment framework that promotes an integrated approach to assessment (Evans, 2016). Underpinned by a Personal Learning Styles Pedagogy, it advocates a Universal Design approach to assessment to ensure that all users have equal access to assessment. Of fundamental importance is the integration of self-regulation and agentic engagement in guiding the development of assessment practices.

7. METHODOLOGY: The research was longitudinal, involving a series of assessment implementation-evaluation cycles, requiring the concurrent gathering, analysis and interpretation of quantitative and qualitative data sets to explore the impact of specific assessment feedback interventions on students' engagement with, and success, in assessment using a mixed methods approach.

8. IMPLEMENTATION PRINCIPLES: Core assessment feedback principles (Evans, 2013; Evans, 2016, p. 15), collaboratively developed with students and academics, formed the blue print around expectations of academics and students in the assessment feedback process (Appendix A). The intention was that assessment interventions would be developed as part of a team process, with a strong emphasis on training, support, trialling, and refining approaches, to suit specific contexts, and to inform

ongoing assessment development. A combination of approaches was used drawing on expertise within the three HEIs to include extensive use of the Developing Engagement with Feedback Tool (DEFT (Winstone & Nash, 2016) and Inclusive Curriculum approach at Kingston. Moore et al.'s (2015) process model evaluation framework was used to evaluate the effectiveness of the complex interventions in relation to: (i) fidelity – the extent to which the interventions were implemented according to the design principles of EAT; (ii) dose: how much was needed to have impact; (iii) reach: the extent to which the interventions met the target audience; (iv) significance: the relative impact of approaches.

9. FEATURES OF DESIGNS: The Southampton model involved extensive training of colleagues (staff and students) across faculties to support teams in developing a discipline-adapted interpretation of EAT; teams designed their own approaches with ongoing mentoring support, teams were responsible for design, implementation and evaluation using a critical pedagogic approach to interrogate quality. The Surrey model involved a centralised approach focusing on the implementation of two main approaches within one Faculty using a generic assessment brief and feedback workshops drawing on the Developing Engagement with Feedback tool and associated online feedback portfolio for students; data analysis was undertaken by the leadership team. Kingston employed a mixed model, whereby some projects were designed by individual module leads, and the majority were delivered by the leadership team. The focus of the projects was mainly on making assessment criteria more explicit, and supporting student engagement with feedback; approaches were generic and like Surrey, implementation focused on the surface features of making assessment criteria clear rather than focusing on interrogating the quality of the assessment criteria.

10. REACH: Approximately 3500 students were directly involved in the case study modules although the reach of the project was much wider, involving undergraduate and postgraduate students' initiatives, and academics and professional services staff across the HEIs. Engagement rates for completion of survey data varied considerably and was dependent on degrees of ownership of data collection at the local level and overall leadership approach.

11. IMPACT OF INTERVENTIONS ON STUDENT LEARNING OUTCOMES:
University of Southampton: The BAME attainment gap was removed. At Southampton in 45% of the case studies statistically significant increases in student learning outcomes were identified with increases in performance in a further 33% of case studies although differences were not statistically significant in these additional cases compared to previously matched cohorts.

University of Surrey: There were no discernible increases in performance in the case study cohorts compared to previous cohorts.

Kingston University: There were no discernible increases in performance in the case study cohorts compared to previous cohorts.

12. IMPACT OF INTERVENTIONS ON REDUCING THE SEC GAP:
At the **University of Southampton,** in case study modules socio-economic classification (SEC) attainment gaps were not in evidence in previous cohorts for the modules concerned even though they were present in most at the discipline level. In three of the nine case study modules, students from lower socio-economic classes did better but in only one of these were the results statistically significant.
At the **University of Surrey,** looking at the SEC attainment gaps/and equivalent in modules for the intervention year compared to previous years, there was no evidence to suggest that the gap was significantly reduced for the intervention year.
At **Kingston University,** there was no evidence to suggest that the SEC attainment gap was significantly reduced for the intervention year.

13 IMPACT OF INTERVENTIONS ON REDUCING THE BAME GAP:
At the **University of Southampton,** the BAME attainment gap was removed in Law, and Ocean and Earth Sciences intervention module case studies. The BAME gap was evident in only one of the nine case studies.
At the **University of Surrey,** the BAME attainment gap remained with an increase in BAME gaps within the disciplines involved for an additional nine modules within the Faculty.
At **Kingston University,** in Social Care the BAME attainment gap was significantly reduced, however, the BAME gap increased in 5 of the 11 intervention case study modules and remained the same in others with the exception of

14. IMPACT OF INTERVENTIONS ON STUDENT ENGAGEMENT IN ASSESSMENT BEHAVIOURS: There were significant improvements in students' perceptions of their assessment literacy and engagement with assessment feedback. Case studies evidenced increased co-production of assessment and increases in students' self-regulatory skills (e.g., Ocean & Earth Science, and History at Southampton. Students also comprised part of the leadership team at Southampton and were engaged in the design, analysis and evaluation of case studies. Co-creation was a feature of Fine Art and Media and Communications at Kingston, and co-responsibility with feedback was evidenced in Health Sciences at Surrey. At Southampton there were significant increases in engagement for students from Polar quintiles 1 and 2 referred to in this report as (Low Polar) as opposed to quintiles 4 and 5 referred to as High Polar in this report. Note: Quintile one shows the lowest rate of participation. Quintile five shows the highest rate of participation (https://www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/about-the-data/)

15. IMPACT ON UNDERSTANDING OF STUDENTS' ASSESSMENT TRAJECTORIES IN HE.
The project highlighted important paradoxes that get in the way of productive assessment change. In addressing student self-regulation of learning, the concept of independence needs interrogating from an agentic engagement perspective to support students in making best use of the learning environment. Managing the disconnect between students' need for external regulation (acquired through a life-time of schooling), requires appropriate scaffolding. Students need to be supported in being able to judge the quality of their work for themselves and therefore need to be facilitated to engage in assessment with lecturers. Lecturers also need support in

designing self-regulatory assessment environments, and being given the tools to critically evaluate practice; understanding best use of data is part of this.

16. The project highlighted the crucial role of INDIVIDUAL LEARNING DIFFERENCES impacting students' engagement with assessment and feedback and how assessment design may impact students' approaches to learning in different ways. Fine grained measures of assessment feedback make it possible to track students' responses over time to support learning and development of assessment design. EAT demonstrated predictive potential in some case studies where engagement was linked to student learning outcomes. Importantly, students' reactions to assessment interventions were variable for some groups and within and across case studies highlighting the complex interaction between individuals and their assessment contexts and the importance of detailed understanding of module populations and initial base lines and modes of development.

17. The VALUE OF THE EAT FRAMEWORK in encouraging a more critical approach to assessment and in encouraging more joined up INTEGRATED approaches to assessment was clear. The adoption of a critical pedagogy and a fully integrated approach to assessment were fundamental. Where impact on student learning outcomes was evident this was more likely where integrated assessment was fully realised and the principles underpinning design were fully implemented. Specific aspects of practice that were impactful are summarised in Table 7 (p.83-85).

18. IMPACT ON CURRICULUM DEVELOPMENT: There was considerable impact on the quality of curriculum design, and of engagement by staff and students across all three HEIs in research-informed assessment practices. EAT supported more holistic and integrated understandings of assessment. Upskilling of the assessment literacy of staff was evident and the Framework provided a solid base moving forward. Realising changes in students' learning outcomes and reducing and eliminating differential learning outcomes were more limited across the three HEIs, but there was evidence of significant change (increases of 20% in student learning outcomes) in the most developed of examples, and significant enhancements in thinking about assessment with consequent improvements in assessment design provided proof of the value of the concept. There was strong evidence of transfer of concepts into mainstream curriculum development, professional development training and policy initiatives at discipline, Faculty and University levels.

19. IMPACT ON STAFF: There was a significant training effect resulting in the acquisition of high level assessment feedback skills amongst staff. Of particular note is colleagues' development of social, cultural and political capital that led to promotions of staff into positions where they had substantial impact on assessment feedback practices. Recognition of impact was noted in individual achievements at the university level, including attainment of outstanding national awards for individual and collaborative practice in effective assessment practices.

20. RECOMMENDATIONS: In supporting a more integrated approach to assessment practices there needs to be strong alignment between individual, faculty and institutional assessment practices. Creating the conditions to support integrated

assessment are critical and the role of communities of practice in this are paramount. Fundamental to this endeavour is how such communities are developed and sustained to enable inclusion of all stakeholders (students, academic and professional services staff, alumni, and wider partners). HEIs need to consider the **assessment health of the organisation** as a prerequisite to supporting organisational change in assessment and feedback practices (Appendix G.). How leadership of assessment is supported and developed at all levels within an organisatio is critical.

21. In supporting students' assessment feedback literacy:
    - Greater clarity is required concerning the role of the student and the lecturer within assessment and especially at key transition points. How is assessment design supporting students to become more agentic and to change conceptions of being doers of assessment to becoming architects of it. Similarly, how is the lecturer role moving from being provider of feedback to facilitator of feedback exchanges.
    - Greater focus is needed on signposting key threshold and core concepts to address the significant skills gaps students reported on entry to HE.
    - Addressing student lack of confidence and self-efficacy (their confidence in their ability to do well) and especially in facilitating the giving, receiving and acting on feedback; a self-regulatory approach that supports modelling of alternative approaches and requires student agency is fundamental.
    - Clear mapping of the competencies required throughout a degree programme are needed to support student access to the requirements of assessment, and in order to effectively manage their own learning.
    - Training in peer engagement is essential. More concerted efforts are needed at discipline and institutional levels to embed peer mentoring as an intrinsic element of the curriculum with each student as a mentor of others.
    - In implementing Universal Design principles emphasis is on ensuring all students have equal access to assessment, the data supports a nuanced approach using data to support understanding of the impact of initiatives on the learning trajectories of indivduals, and groups of students.

22. In building assessment feedback understanding, there is overwhelming evidence of the importance of developing strong research-informed communities of practice, this is also linked to ensuring the agility and flexibility of systems to support the currency and quality of assessment at all levels. To enhance assessment feedback literacy of all stakeholders, the following need attention:
    - Clarity and shared understandings of inclusive assessment practices which requires the adoption of a more critical pedagogical approach. Building this criticality is central to enhancing assessment practices at all levels.
    - Enabling integration of assessment across modules is essential to support students' progression in learning.
    - Understanding of quality assurance literacy to support enhancements in assessment and feedback practices.
    - Building pedagogic confidence with assessment within the disciplines. This includes better access to, and use of data to inform assessment design and to support student learning, and the use of research-informed approaches to

> developing and evaluating informed, inclusive, and integrated assessment practices. This also requires a more nuanced understanding of individual differences ad how variables come together to impact students' learning outcomes.

SUMMING UP: The research-informed assessment framework (EAT) demonstrated its utility in enhancing the quality of thinking about assessment feedback with tangible results, demonstrating that the use of an integrated approach can remove differential learning outcomes. Investment is needed in building strong interdisciplinary assessment communities where evaluation is central and a critical pedagogy approach the driver. Ownership of assessment requires space and time for teams to really question what they are asking students to do, and to reconsider the student role in assessment. We constantly need to be asking is assessment relevant, is it best use of time, what is the evidence base for it, and what is most effective, and for all students.

Assessment training needs to be owned by the disciplines and on-going evaluation must be embedded within practice. In upscaling effective assessment feedback practices, recognition and reward need to be addressed. Leading assessment change requires investment in leadership at all levels so that all staff and students can develop agentic assessment practices that enable informed choices about best use of time and resource. High quality outcomes, require high investment, but not to invest is much costlier in perpetuating disadvantage.

1. Introduction and Context

The main aim of the project was to implement and scale up a research-informed holistic, and integrated self-regulatory assessment feedback approach focused on equity, agency and transparency (EAT, Evans, 2016) with the aim of reducing differential learning outcomes for all students and especially for those from lower-socio-economic backgrounds (quintiles 1 and 2 of HEFCE's (previously Higher Education Council for England, now Office for Students' participation of local areas; SEC 6-8-see link: https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticssocioeconomicclassificationnssecrebasedonsoc2010), and Black and Asian and minority ethnic students (BME/BAME). Through the implementation of this integrated approach to assessment the intention was to confirm the properties of EAT and to build academic assessment literacy to support enhancements in assessment design and delivery in support of inclusive assessment practices. The overarching aim was to build a scalable model that would have relevance to all higher education institutions (HEIs) aiming to enhance assessment practices; an issue for HEIs worldwide.

The existence and persistence of differential learning outcomes for students across the HEI sector is well-known and perpetuates patterns already known to exist from students' experiences of main stream schooling (Evans, Kandiko-Howson, & Forsythe, 2018). In this project we were particularly concerned to look at issues identified regarding the attainment of those from lower socio-economic classes (Yee, 2016) and those from BAME backgrounds (UUK, NUS, 2019). The most persistent of these unexplained gaps is commonly referred to as the 'BAME attainment gap'. The BAME attainment gap relates to the difference between the proportion of students from different ethnic groups who achieve a 'top degree' – a First or 2:1 classifications. There is a wealth of research that documents differences in degree attainment and progression across all ethnic groups in higher education. A recent publication by Universities UK and the National Union of Students (2019) confirm "year after year, evidence has shown that white students are, on average, more likely to leave university with a first or upper second-class degree compared to Black, Asian students, students from mixed ethnicity backgrounds" (p.4). In addition, despite longstanding concern within the sector, "little progress has been made in reducing it as the degree attainment gap has remained nearly static" (Austen et al. 2017, p.1). Whilst other characteristics are also linked to lower attainment, including being male, being mature, studying part-time, studying at a local university and coming from a lower socio-economic class (Woodfield 2014), evidence suggests that after controlling for other factors; white students from lower socio- economic backgrounds still do better than other ethnic groups (Stevenson et al., 2019).

While reasons for differential performance are complex and disadvantage is often multifaceted, we were also aware of the potential power of assessment to mediate such impacts. What is done at the micro-level within higher education (HE) in teaching has the potential to override individual difference variables in impacting the attainment outcomes of students (Schneider & Preckel, 2017). The potential of developing students' high level self-regulatory skills with consequent impacts on performance is also well established (Panadero, 2017). We also wished to test assumptions about perceptions of disadvantage from an

assessment perspective, and as part of this consider how to enhance inclusive assessment practices; an area in much need of development within HEIs (Waring & Evans, 2015).

Central to the integrated assessment framework (EAT) is an inclusive participatory pedagogy; the Personal Learning Styles Pedagogy (Waring & Evans, 2015) informed by understandings of individual differences and crucially the importance of Universal Design (Rogers-Shaw, Carr-Chellman, & Choi, 2018). Universal Design has at its heart the importance of adaptive design; the idea that one does not design curriculum with one specific learning need in mind but designs it so that all learners have access but can navigate it in different ways. A Universal Design stance is known to benefit all students and has been found to be especially beneficial to disadvantaged students, such as those from lower socio-economic backgrounds (quintiles 1 and 2 of HEFCE's participation of local areas; SEC 4- 7) (Mountford-Zimdars et al., 2015). Such students tend to demonstrate lower professional employment rates in their early career (Mountford Zimdars et al., 2015), relatively poor degree outcomes compared to other groups (HEFCE, 2014), enhanced susceptibility to imposter syndrome (Walker, 2016), and the need for social and emotional skills development (Devlin et al., 2012). In the 2016 report by Neves and Hillman on the Student Academic Experience Survey, they found that BAME students were least likely to be satisfied with their HE experience. In addition, students who felt their independent study skills were not being developed and were lacking in self-efficacy included BAME students and those who lived at home (commuter students) or who live alone. One of the key correlations in this survey was between student engagement/satisfaction and the engagement of staff with continuing professional development in learning and teaching (the latter of which is a key element in our approach). Thus, whilst our approach is likely to benefit all students and staff, there should be a proportionately greater effect on those populations from lower socio-economic backgrounds and BAME students, owing to the emphasis on building self-efficacy and self-regulation.

Aims of the Project

The project comprised two inter-related strands:

i. supporting students' development of self-regulatory assessment feedback skills through a focus on developing students' assessment literacy, assessment feedback, and engagement in assessment design
ii. developing staff understanding of inclusive assessment practices that promote self-regulatory behaviours through extensive training and support.

Our focus was firmly placed on enhancing assessment practices given that assessment drives curriculum change and it is what students are least satisfied with within HE; it is also an area where HEIs do least well. An assessment feedback approach that supports student self-regulation of learning is essential if we are to level the playing field and create equality of opportunity for all HE students. Our focus on building resilience through self-regulation was especially pertinent given the infantilisation of HE (Furedi, 2016); increased diversity in the student population; the current societal and educational contexts which lead students to becoming increasingly externally regulated. Differences between students will continue to be magnified if this issue is not addressed.

In summary, the premise underpinning the project was that **assessment drives learning behaviours and that an approach designed to promote student and staff engagement in assessment would impact self-regulatory skills and potentially impact student learning outcomes if appropriate training for staff and students in research-informed assessment practices was facilitated.** Assessment success, we argue, is strongly linked to individuals' deployment of cognitive (how one thinks), affective (how one feels), and metacognitive (understanding of how you learn) (Evans, 2016); with the caveat that self-regulatory abilities matter if the nature of assessment requires them. We also acknowledge that fine-grained measures of student engagement in assessment are needed as module/programme awarded grades may be too crude/broad a measure to use alone, and especially in the case of where an assessment does not require the use of high level self-regulatory skills and high levels of student engagement.

The project was ambitious in its aim and scope. It addressed a number of key issues impacting higher education pedagogical design and delivery to include inclusive design, the research-practice gap in assessment and the need to support the development of high quality self-regulatory practices and agentic engagement of students in assessment practices. The EAT framework was specifically designed to translate the complexity of assessment research into a workable model for higher education. Paradoxes that have to be addressed include the importance of developing student self-regulatory development which can be problematic for students and academics. For students coming into HE, especially those from the UK system, highly externally regulated students may find the requirement to manage learning for themselves more difficult. Increasing accountability of HE places much pressure on academics to do more for students resulting in claims of infantilising HE students (Ecclestone, & Hayes, 2008; Furedi, 2016). In aiming to develop agentic students (Reeve, 2013), the intention is to move assessment control to students which test the agility of HE systems and commitment of staff to student empowerment of learning.

To explore the development, implementation and impact of the Maximising Student Success project, this report is organised as follows:

In Section 2, the rationale and evidence base underpinning the approach is outlined. Alignment between project aims, methodology and methods of data collection analysis are explained along with the contexts of the participating higher education institutions. In Section 3 the impacts of the project on students is outlined using examples from institutional, faculty and individual levels in examining impact on student grades, student engagement in, and satisfaction with assessment and students' perceptions of facilitators and barriers. Impacts on academics and professional services staff are explored in Section 4 in relation to provision of, and engagement with training, gains in understanding, increasing confidence in understanding and using integrated assessment approaches; impact on curriculum change. Scaleability is discussed in relation to embedding of initiatives within the curriculum and in impacting policy change at local, institutional and international levels, transfer, the potential and realisation of initiatives being adopted beyond the immediate reach of the project (first year undergraduates in selected case study disciplines/faculties). Sustainability is discussed from two perspectives – enhancing students' abilities to self-regulate assessment and making assessment more manageable. In Section 5, the value of the EAT Framework is discussed in supporting acquisition of understanding of integrated assessment and specifically the value of

the approaches and tools to support such understanding including the Developing Engagement with Feedback tool (Winstone & Nash, 2016) and the Inclusive Curriculum for both academics and students. Section 6 provides a summary of overarching conclusions regarding the efficacy and impact of the project in informing assessment feedback practices, its potential in moving forward and key recommendations for practice.

2. Project Rationale and Approach

Introduction

The project involved three diverse UK HEIs all located within the SE of England. The Maximising Student Success Project was led by the University of Southampton (Russell Group), in partnership with the University of Surrey (previously part of 1994 group), and Kingston University (Post-1992). At all three HEIs improving assessment was, and is, a central concern, and especially in relation to reducing differential learning outcomes as highlighted in respective HEI Access and Participation plans (2019-2020). The project had a very strong research underpinning, drawing on extensive systematic reviews of the assessment feedback literature and use in practice, student engagement in high impact pedagogies, and individual differences in learning (Evans, 2013, Evans, Muijs & Tomlinson, 2015; Evans & Waring, 2009; 2012; Waring & Evans, 2015). The aim was to build understanding of integrated assessment (Evans, 2016) and draw on synergistic research and expertise in partner institutions (e.g. Winstone's research on engaging with feedback (Winstone & Carless, 2019; Winstone, Nash, Parker, & Rowntree, 2017; Winstone, Nash, Rowntree, & Parker 2017); and that of Eales-Reynolds on thinking skills and inclusive curricula (Eales-Reynolds et al., 2013).

The project was synergetic with policy direction at all three HEIs in its focus on:

(i) developing student self-regulatory abilities as part of sustainable practice;
(ii) supporting students in realising their full potential though development of their self regulatory skills;
(iii) promoting sustainability and efficiency agendas; and
(iv) enabling capacity building and shared understandings of what constitutes 'good'.

The project approach is summarised in the Logic chain diagrams (Figures 1 and 2) where the aim was to use an integrated research-informed self-regulatory conceptual framework (EAT) to impact student and staff assessment behaviours with the ambition that this would impact the quality of assessment practices and reduce differential learning outcomes for students. Addressing assessment design and implementation is key to addressing differential student learning outcomes. There is considerable research evidence of the power of using a self-regulatory approach to learning although translation of this into HE practice has been limited (Evans, 2016). There is very little credible research into how to translate theoretical constructs into effective assessment feedback practices. The intention, therefore, was to use a tested, research-informed integrated assessment approach to see if training staff in the use of the framework could impact differential learning outcomes for students across institutions. The premise was that by supporting students' development of self-regulation through the use of an integrated assessment framework, students would have better access to the curriculum, would be better able to manage their own learning leading to increased agency, autonomy, and success in learning (Mountford Zimdars et al., 2015; Waring & Evans, 2015).

The assessment approach (EAT) used is underpinned by a Personal Learning Styles Pedagogy (Waring & Evans, 2016) that has comprehensively utilised research and practice evidence from cognitive and educational psychology and neuroscience perspectives to support better understandings of assessment feedback to enable students to be more resilient. Resilience in learning can be developed through the use of a self-regulatory approach to assessment feedback which is encapsulated in the EAT framework (Evans, 2016). The EAT framework supports students' development of metacognitive, cognitive, and emotional regulation of assessment so that students can be empowered to maximise their learning within higher education and beyond. The emphasis is on:

> *How students come to co-own their programmes with lecturers and see themselves as active contributors to the assessment feedback process rather than seeing assessment as something that is done to them.*

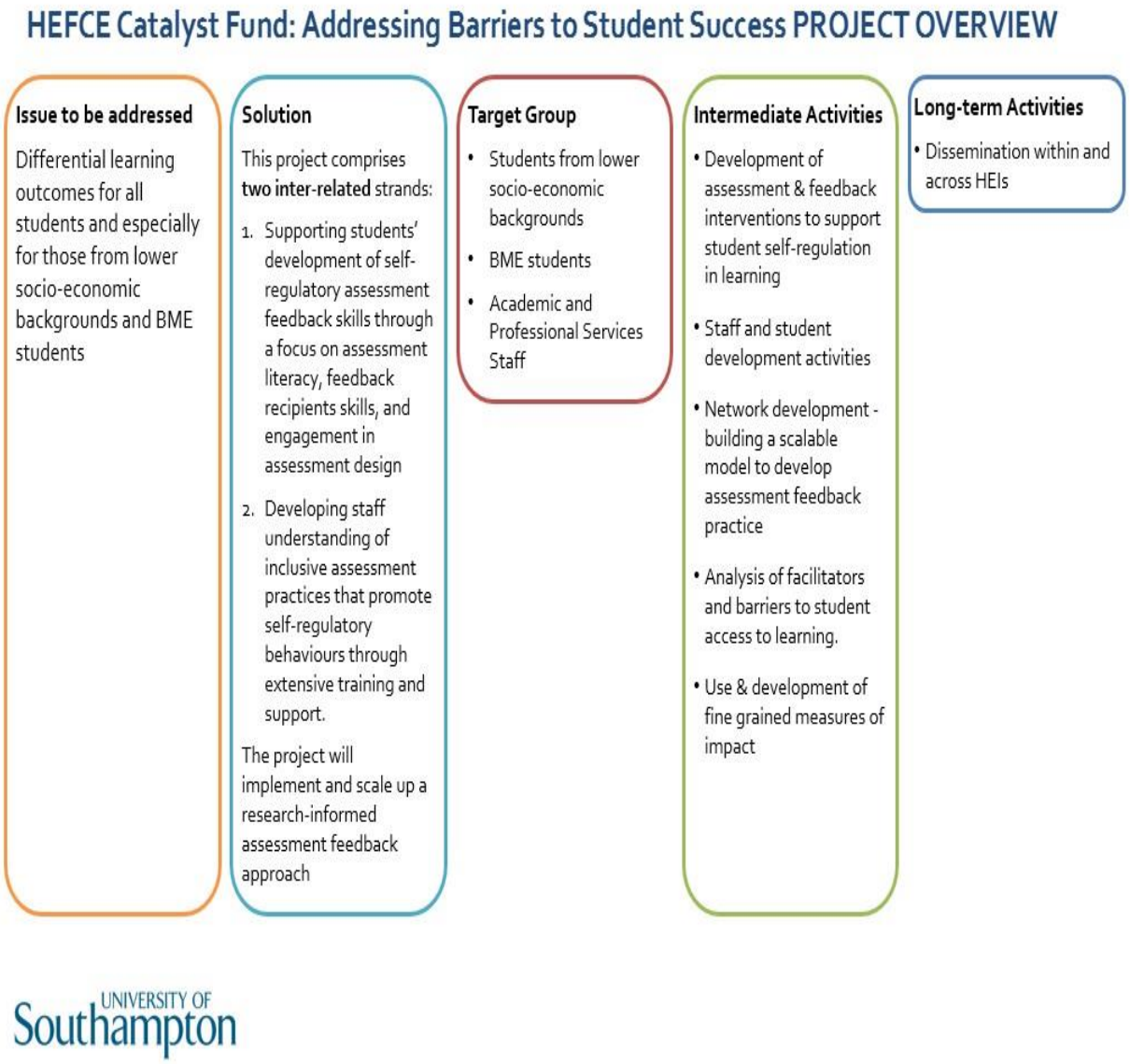


Figure 1: Project Overview

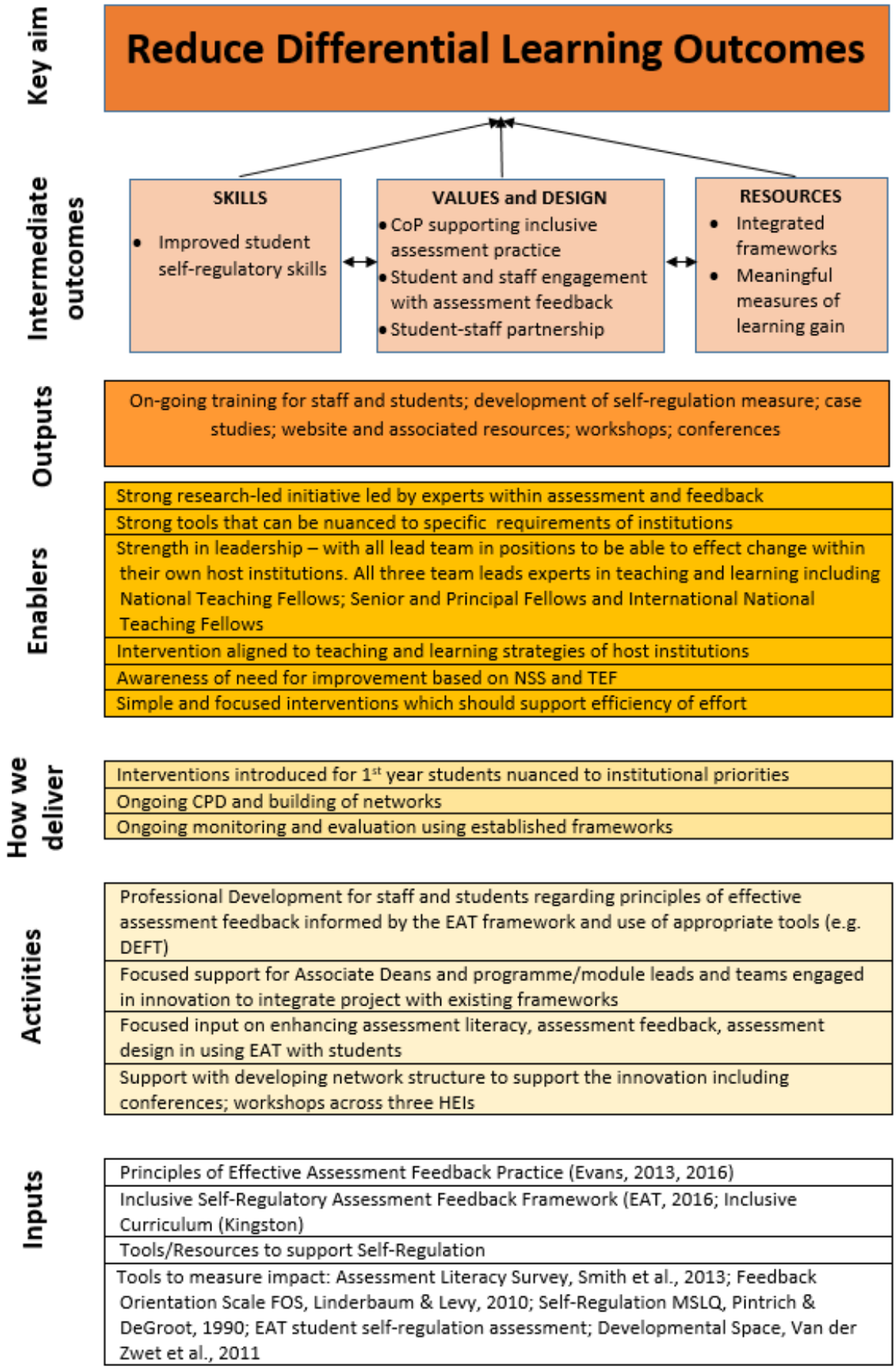


Figure 2: Logic chain showing links between aims, inputs, processes and outputs

2.1 The Underpinning Framework: What is EAT?

The EAT Framework is a tool that promotes dialogue on and contextualised changes in assessment and feedback and can be used by lecturers, students and/or programme leaders/directors. The framework strongly supports the promotion of students' self-regulatory practice in assessment. EAT translates theory into a clear set of values and provides a pragmatic tool that universities can use across disciplines. It has strong scale-up potential having been tested and developed across disciplines. The holistic framework considers three core dimensions: (i) assessment literacy – how students and staff come to understand 'what constitutes good' as without this it is difficult to achieve well; (ii) how students can become 'savvy feedback seekers' being able to seek, use, and give feedback as part of developing their self-assessment capabilities; essential for life-long learning success; and (iii) developing inclusive integrated assessment design through the way we design, organise, and deliver curricula, and with the aim of moving towards a programme level approach underpinned by universal design (e.g. to include all students and not designed with a specific group in mind).

The three interconnected dimensions each has a series of four areas for lecturers, students and programme leaders/directors to consider. Appendix B sets out 12 areas for the Lecturer to explore (Teacher- Focused) and there is a series of EAT scoring cards associated with these. Similarly, given its student-focused approach, Appendix D sets out 12 areas with associated questions for students to consider as part of a self-regulatory approach. Using the EAT Framework from programme lead/faculty/university perspectives, it highlights scaling-up considerations:

> We must find ways to stimulate and scale change across institutions - as well as to sustain those changes - if we are to create models that serve the expanding needs of our learners . . . [This leads to the core question of] where should we put strategic and sustainable efforts to improve uneven performance and variable outcomes. (Ward, 2013)

The self-regulatory approach has cognitive and social development components informed by an understanding of cognitive, metacognitive, and emotional regulation of learning (Vermunt & Verloop, 1999). Self-regulation, involving the constructive and intentional use of strategies to achieve (Prain et al., 2013), is essential to students' proactive management of assessment and feedback and is highly relevant to bridging socio-cultural incongruity for students from low socio-economic backgrounds to assist retention and success in HE (Devlin et al., 2012). Perceived as a crucial influence on student success, self-regulation is rarely a consideration when designing assessment for learning, resulting in a barrier to student success (Evans, 2016). This is particularly true for students from low socio-economic backgrounds and BAME who may not have had the same opportunities to develop self-regulation prior to HE. For this reason our main focus was on students from low socio-economic backgrounds and BAME students, although our inclusive approach aimed to develop sustained learning gains for all students. Universal approaches to closing attainment gaps are seen to be most effective (Cousin & Cureton, 2012), and are likely to be of particular benefit to those from disadvantaged backgrounds whilst simultaneously raising attainment for all (HEFCE, 2015). Issues with poor self-regulation and access to learning in HE impacts all students and especially those with low social and economic cultural capital as they enter and progress

through HE. We know that knowledge of self-regulatory strategies in itself is not enough, students need to know how, when and where to use such strategies (Cantwell & Moore, 1996). Entry into the unfamiliar context of HE can be debilitating for some students which interferes with their ability to make use of relevant self-regulatory strategies (Archer et al., 1999) and this is especially true for first-generation students from low socio-economic backgrounds who lack the necessary social and cultural capital to make good use of affordances within HEIs (Stephens et al., 2012).

The aim was to use the EAT framework underpinned by the principles of effective assessment feedback practice (Evans, 2016, p.15 – Appendix A). The approach enabled the use of a wide variety of tools and resources with the caveat that the underpinning principles of the Framework needed to be adhered to. The main tools and approaches that were used included:

Tools:

- assessment literacy research (Smith et al., 2013);
- self-regulation approaches (Pintrich, 2004);
- critical reflection tools (Brookfield, 1995);
- ipsative assessment –focused on individual progress from one point to another (Hughes, Creese, and Smith, 2015)

Approaches

- In exploring inclusive assessment the project draws heavily on a critical pedagogic approach (Waring & Evans, 2015).
- Feedback approaches such as the Developing Engagement with Feedback Toolkit (DEFT) developed at the University of Surrey (Winstone & Nash, 2016) and associated feedback resources, and ipsative approaches championed by Psychology at Surrey. The DEFT is an evidence-based suite of resources, reflective tools, and training support elements, developed in partnership with students, which support the development of the core skills underlying the recipience and implementation of feedback.
- The Inclusive Curriculum Framework developed at Kingston University and its associated resources were utilised at Kingston aligned to EAT principles of Universal Design.
- In sum, there was sufficient evidence of the value of the approaches and tools used by individual HEIs, the aim in this context was to bring expertise together to inform assessment across institutions.

2.2 Methodology and Methods

To address the key aims of the project listed below a complex methodological approach was required.

The four **key aims** were to:

(i) **integrate and scale-up the use of a holistic assessment feedback approach** and associated tools in three HEIs to support the development of student self-regulation of assessment feedback processes;

(ii) **develop staff capacity** to adopt those practices identified as most effective through development of communities of practice including ongoing formal and informal professional development;

(iii) **provide case studies** of effective practice;
(iv) **provide a clear model** for effective implementation of this approach within and across HEIs to support student and lecturer development and institutional culture change.

The longitudinal, case-based, action research, cross-cultural design of the project is exemplified in Figure 3 and demonstrates the complexity of the design. Ethical approval was gained from the University of Southampton to cover all elements of the project within and across contexts; Surrey ethics regulations also required separate ethical clearance for the work at Surrey. Following GDPR regulations, clear protocols for the collection, use, storage and sharing of data were agreed and as part of institutional collaborative agreements.

The methodology involved a combination of action-research (Scott et al., 2014), and case study design (Thomas, 2014) for three cases (Universities of Southampton, Surrey, and Kingston). The research was longitudinal, involving a series of assessment implementation-evaluation cycles, requiring the concurrent gathering, analysis and interpretation of quantitative and qualitative data sets to explore the impact of specific assessment feedback interventions on students' engagement with, and success in, assessment. The project used mixed methods involving collection of survey data, student and staff interviews, learning logs and reflection activities.

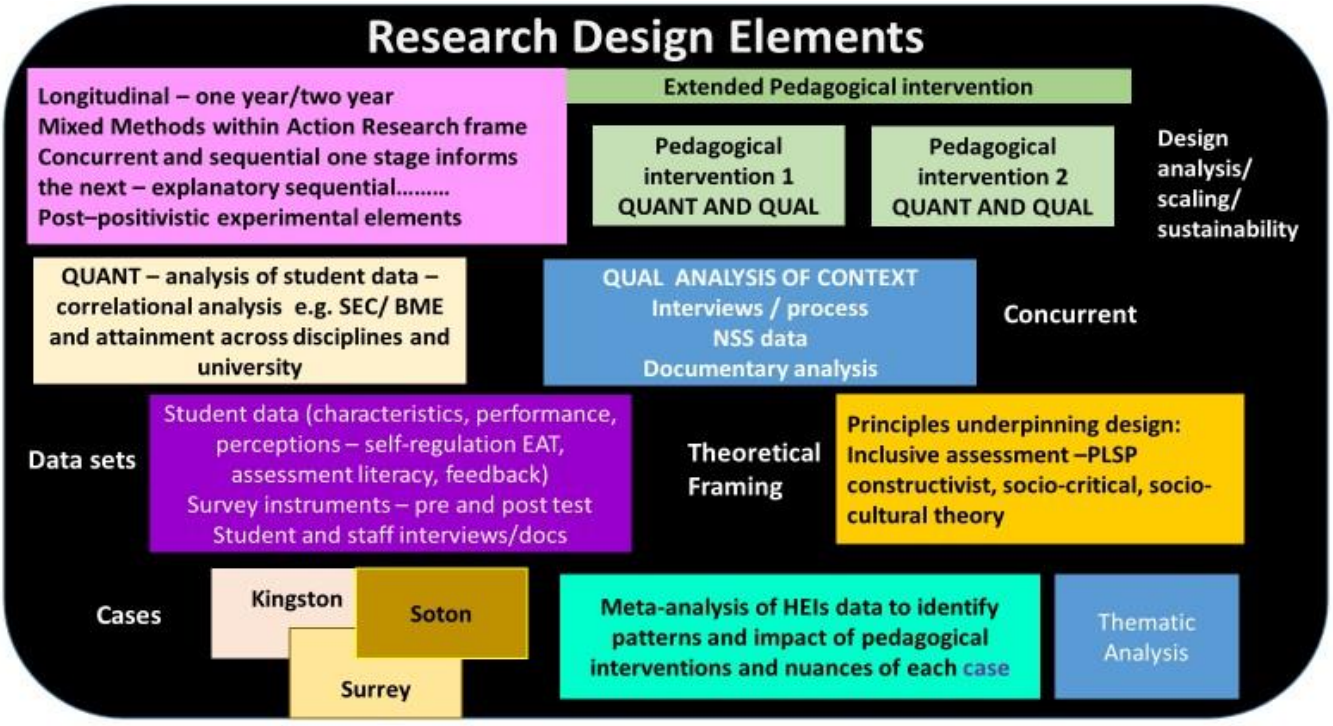


Figure 3: Maximising Student Success Research Design

Each institution was responsible for identifying their own approach to the assessment interventions based on local needs and aligned to their university strategy and cultural context but all three were asked to map their approaches to the EAT Framework and its underpinning principles which included:

a. shared beliefs and values between academics and students;
b. student-academic partnership
c. inclusivity from universal design perspectives;
d. sensitivity to context;
e. holistic – experience of the student learning journey in its entirety;
f. integrative – understanding the interconnected nature of curriculum design and all elements of the assessment process rather than looking at issues in isolation;
g. agentic in promoting student and academic ownership of assessment;
h. meaningful learning experiences – authentic and relevant assessments that promoted a deep approach to learning within the discipline;
i. sustainability in promoting student self-regulation, and in promoting best use of resource;
j. an evidence-based and research-informed perspective

(Evans, 2016; Waring & Evans 2015).

Core assessment feedback principles (Evans, 2013), collaboratively developed with students and academics, formed the blue-print around expectations of academics and students in the assessment feedback process (Appendix A). The intention was that assessment interventions would be developed as part of a team process, with a strong emphasis on training, support, trialling, and refining approaches, to suit specific contexts, and to inform ongoing assessment development.

The methodology for scaling up was informed by established conceptual frameworks (e.g. WHO, 2008; 2010; 2011); the diffusion process (Rogers, 2003); NPC Guidance (Harries et al., 2014) and Nesta (Gabriel, 2014), and institutional cultures and contexts. Moore et al.'s (2015) process model evaluation framework was used to evaluate the effectiveness of the complex interventions in relation to (i) **fidelity** – the extent to which the interventions were implemented according to the design principles of EAT; (ii) **dose**: how much was needed to have impact; (iii) **reach**: the extent to which the interventions met the target audience; (iv) **significance**: the relative impact of approaches. The approaches taken at the three institutions are broadly summarised in Table 1.

Facilitators and threats to fidelity in operationalisation of the project in different contexts were discussed in relation to what was feasible in each HEI given strategic and local requirements and approaches. The intention was to stay as true as possible to the core principles underpinning EAT assuming a solid understanding of the core ideas and how to implement them. It was hypothesized that the way in which the approach was operationalised in relation to promotion of lecturer agency in interpreting the Framework and in adapting it to the local context, and the amount and quality of training at the discipline level would have a significant impact on outcomes. The mode of operation and establishment of a solid base on which to build on mattered in supporting the efficacy of the interventions.

The models of operationalisation varied for a range of individual and contextual reasons. In the Southampton model, agency and autonomy over assessment was firmly located within the self-selected teams in a fully distributed leadership model. Surrey operated a central design and management model providing operation at the level of case study teams, but evaluation and analysis was the primary responsibility of the project leadership team with a

partial distributed leadership model involving the steering group and Level 4 (first year undergraduate) module leads. Kingston operationalised a mixed model where some local ownership of assessment initiatives was evident with a few case studies totally designed and delivered by discipline teams, however, the main approach to the assessment case study interventions was externally designed, implemented and evaluated with little ownership by module teams. An essential move to local ownership of initiatives occurred for some of the projects as one of the key outcomes for the project.

At Southampton, threats to fidelity included loss of key staff due to restructuring during the intervention phase and lack of devolved leadership in some case study teams due to personal and contextual reasons which placed high load on some of the module leads. In two case studies, module leads needed to handover work to colleagues so there were issues in relation to continuity in a few projects. While engagement of modules leads with training was excellent throughout, for those module leads who relied more on one to one support and who were less able to benefit from the regular interdisciplinary meetings, implementation of ideas was more difficult. Module leads varied in their levels of confidence in using pedagogical concepts within the disciplines and many welcomed support in introducing the project idea to students. Confidence in using EAT with students increased over the duration of the project.

At Surrey the greatest identified threat to fidelity was in relation to facilitating local ownership and agency given the requirement for centralised design and operation of approaches. Another limitation was access to data sets at the individual level which limited understanding of individual learning trajectories which was an important element of the project. At Kingston while Kingston's commitment to an Inclusive Curriculum (McDuff & Hughes, 2015) was seen as synergistic with EAT, the prescriptive nature of assessment strategies at Kingston also needed to be adhered to which some colleagues felt limited their degree of ownership and development of assessment although for other colleagues this was not seen as a limiting factor. Colleagues reported that the Kingston Framework was placed on elements of assessment feedback and design, and that EAT enabled the possibility to consider assessment literacy in greater depth.

Central to the overarching project was the intention to keep projects focused to enable alignment between Frameworks to be maximised without putting undue pressure on individuals and systems; a less is more approach was advocated. At Southampton, the assessment climate was open to an inclusive agentic approach but much investment was needed in developing assessment feedback research literacy, as this was identified early on as the driver of sustainable assessment practices.

The principle of agency and autonomy underpinning the EAT Framework argues that for the greatest level of impact, initiatives must be owned by lecturers and students if self-regulation is to become integral to curriculum delivery and maximisation of learning outcomes is to be achieved. To support local ownership requires considerable investment in supporting the development of pedagogical assessment literacy and an open and receptive climate in which to initiate such work. It also requires disciplinary-focused training in addition to generic training and an emphasis on developing a critical pedagogical approach where self-evaluation is integral to curriculum delivery. Given the varying contexts of the institutions involved, the

approaches undertaken represented a compromise as to what was possible given competing demands and priorities of institutions, faculties, disciplines, and individuals.

2.3 Intervention Focus

The approaches to the interventions are summarised below and elaborated on in Table 1.

At Southampton following extensive training in the use of the EAT Framework there was an open call inviting all those interested in leading an intervention to apply subject to approval from their Associate Deans. Teams represented four of the five new faculties; this approach was supplemented with a cross-university initiative inviting colleagues to be assessment leads across all disciplines with key strategies priorities and invitation for all disciplines to appoint assessment leads (self-appointed and recommended by Associate Deans). Teams were given extensive support to develop and pitch their initiatives and were supported in their development of them throughout the project. Designs were varied and the most successful of these, redesigned elements of the assessment design to incorporate the work as part of integral curriculum delivery. Central to the remit was that the interventions were the direct result of colleagues problematizing what their key issues in assessment were. The teams were mentored to support them in developing integrated designs where possible. For example, in History the nature of first year assessments was changed to focus on specific skills gaps that had been identified in previous cohorts; in Law, attention was focused on supporting students' learning transitions as an integral part of the curriculum; in the cross-disciplinary elective – students designed their own assessments to meet generic learning outcomes through extra curricula work; in Business Management, peer leader and support training was further developed to support student agency in learning; in Ocean and Earth Science specific tasks were developed to promote high level skills development. More widely, interventions led to the recrafting of assessment criteria, and feedback processes to support learning. Intervention case study leads were responsible for evaluating their practices and refining their initiatives and where possible instigate second iterations of the interventions taking the first year cohort into year 2 and also trialling ideas with new first year cohorts. Teams were also supported to deliver dissemination events within and across disciplines. Training in pedagogical concepts and research methods to support a critical pedagogic approach were integral to the project design. Module leads needed to consider how to engage their students, how to collect data, evaluate findings, and use this to inform curriculum design, and to mobilise colleagues within and across departments and faculties in collaborative working. All intervention leads were part of the project leadership team and had a strong input into the direction of travel of the project and policy initiatives across the university. All resources were available via the EAT website and shared regularly with Faculty assessment leads and all those on the Researching Assessment Practices mailing list (approximately 2000). Emphasis was very much on developing pedagogical research literacy, and to support upskilling in assessment practices across the University. While discipline-specific support was facilitated the teams met regularly as interdisciplinary and cross-disciplinary teams both for the project and wider work across the University.

University of Southampton Summary

Whole Institution:	Assessment Community of Practice: Researching Assessment Practices (staff and students) (2016-on) Development of University Assessment Plan mapped to the

	University Simply Better Strategy Faculty Discipline Assessment Plans (2017-2018) Faculty and Professional Services Leads Assessment and Feedback Principles (Quality Handbook) Strategic priorities: What is good (AL1) Student and staff entitlement (AL3) Focused Feedback (AF1) Discipline-specific support in all 5 Faculties
Training	>160 training events (2016-June 2019) exemplars across disciplines –bespoke training for all disciplines
Project teams	Selected from across 4 out of 5 Faculties to include Case Study modules in the following one and two year interventions
2017-2018	3. Biological Sciences; 4. Business; 8. Electronics & Computer Science; 12. History 7 (2 years). 9a. Law (2 years); 6.Ocean and Earth Science; 10a. Physiotherapy (2 years)
2018-2019	1. Graphic Arts; 2. Biological Sciences; 5. Business; 9b. Law; 7. Ocean and Earth Science; 10b. Physiotherapy; 11. Music-cross disciplinary elective; 13. Film
Total number of students	
In receipt of interventions	1313 involved in modules
Matched survey sample	444
Unmatched survey sample	979

At Surrey, a more centralised approach to interventions was used across one of the University's three Faculties whereby all module teams within the Faculty of Health and Medical Sciences were encouraged to use assessment briefs conceived by the project leadership team to support student understanding of the requirements of assessment. This one faculty included four main disciplines (health sciences, biosciences and medicine, psychology and veterinary medicine). The leadership team comprised Directors of Teaching and Learning and Pedagogic Development Coordinators and three of the module leads. The focused interventions were centred on one main key concept and tool: the assessment brief template; this was informed by and mapped onto the EAT Framework and aligned with EAT principles where possible, especially in relation to the first two elements of the assessment principles (Evans, 2016, p. 15).

The standardised assessment brief template was designed to encourage teaching staff to state the purpose of each assessment to students and provide them with a clear explanation of what was expected. Because each assessment brief needed to be authentic in context, each level 4 module convenor designed their own brief with support from the project team. Therefore, the module convenor had ownership over the design process and decided whether and how to use the template. The explicit focus was not placed on the strength of the assessment criteria themselves; rather, the focus was on ensuring that module leaders surfaced and clearly presented their tacit expectations regarding assessment requirements.

While initially launched as a surface entry approach focusing on the provision of clear criteria to students, there was evidence of a more in-depth consideration of approaches with the development of the interventions moving forward beyond the intervention year as part of embedding approaches more closely aligned to the EAT Framework with the progression of the work. Variation in the quality of the assessment briefs identified by the steering group raised a fidelity issue and training was put in place to address this during the interventions.

The assessment brief was adopted in 12 modules in Health Sciences, 9 in Biosciences and Medicine, and 3 modules in Psychology during the intervention year, and in Veterinary Medicine post the intervention year; the latter is therefore not included in analyses. Analysis of data was carried out at the discipline and not at the module level as there were many cases where a student was part of several modules and it was difficult to tease out those students who were double counted as the sample of module A and sample of Module B were not totally independent.

The premise of EAT is that in having to be explicit about the rationale of assessment, this encourages a deeper analysis of assessment design and more ownership leading to enhancements in practice but this needs to be supported by focused training. Analysis of the relative quality of assessment briefs also led to further training with module leads in year 2 to refine approaches which have become embedded within Faculty supported by guidance on online platforms.

A second initiative that was adopted by some of the module leads was a focus on developing student engagement with feedback through two different approaches; one including separate focused workshops with students; and the second approach, where workshops had become integral to module design. To clarify the role of the student in the feedback process as an active participant (seeking, using, and giving feedback to self and peers; developing networks of support), and not just as a receiver of feedback (AL3; AF1-4) the Developing Engagement with Feedback Toolkit (DEFT) was used to support students in developing the skills underpinning their effective use of feedback and to support EAT principles of engaging students actively in feedback as active participants. The workshop undertaken in semester one focused on students and their course teams developing a shared understanding of the purpose of feedback within their contexts, a set of strategies for implementing feedback, and strategies for managing emotion in response to feedback.. An e-portfolio to enable students to synthesise feedback across feedback exchanges (Evans, 2013), to visualise their overall strengths and areas for development, access resources to develop their skills, and set and monitor action points in dialogue with a tutor was developed as part of a previous project and embedded during this phase across the Institution so that all students were enrolled to use the e-portfolio to support their understanding of assessment feedback, and in relation to assessment criteria. Evaluation and write up of case studies was undertaken by the leadership team.

What all Surrey case studies had in common was the aim of 'demystifying' elements of assessment and feedback processes, and by providing students with tools to be able to adopt a more agentic role in assessment cycles. All approaches aimed to support staff to question the assumptions they might make about what students do and do not know regarding assessment requirements, criteria, and the implementation of feedback. Whilst all Schools

adopted a similar approach, there are nuances in the ways in which these approaches were embedded into practice. For example, in the School of Psychology and the School of Veterinary Medicine, the DEFT workshops were embedded into the curriculum, whereas in the School of Health Sciences and the School of Biosciences and Medicine, the workshops were run as timetabled sessions. In Psychology, the tutorials were run as small-group sessions, whereas the group sizes in the other three Schools were much larger. Whilst it is not possible to discern on the basis of the quantitative data collected which approach is most effective, some relevant insights were gleaned from the qualitative data.

University of Surrey Summary

Whole Institution:	Surrey Assessment and Learning Lab (2014-on) Adoption of DEFT and associated Online Feedback Portfolio tool to all students across the University Embedded in GradCert Professional development
Focus	Assessment Literacy – Clarity (AL1) Meaningful feedback processes (AF2) resituating role of student and academic in the feedback process – University-wide dialogue on the nature of feedback exchanges and role of the student in line with EAT Principles
Training events	13 formal training events and informal bespoke support (2017-2018)
Project teams	Faculty of Health and Medical Sciences including: Health Sciences, Biosciences and Medicine, Psychology and Veterinary Medicine One year interventions Case studies to include: 1. Health Sciences; 2. Health Sciences; 3. BioScience and Medicine; 4. BioScience and Medicine; 5. Psychology; 6. Psychology; 7 Veterinary Medicine; 8. Health Sciences & Veterinary Medicine
Total number of students In receipt of interventions	1141 receiving assessment literacy interventions across Faculty excepting Veterinary School. 606 receiving assessment feedback interventions in all key areas
Matched survey sample	82
Unmatched survey sample	300

At Kingston, a mixed model of delivery was evident with some interventions being led and delivered by the project leadership team and others developed by the module leads. Teams were involved from across all faculties. Individual interventions focused on co-creation and engagement with students closely in the assessment process. In Fine Art the focus was on academic skills development and co-creation of assessment criteria, and in the Media and Communication module where innovative assessments in the form of picture essays also

required students to co-create assessment criteria with module leads. In Maths, the focus was on supporting students to understand learning outcomes for group work assessment. The centrally delivered interventions mainly focused on two main areas: clarifying what constitutes good (AL1) involving a focus on working with staff and students to make assessment criteria more explicit and secondly, on preparing students for meaningful dialogue/student engagement (AF3). In these externally mediated interventions, the emphasis was on looking at the surface features of assessment criteria rather than the quality of the assessment criteria themselves with the intention that this would lead to a more deep and critical engagement with assessment and feedback criteria this progression; the relative role of the module leads in the interventions was a critical issue impacting the pace of change and adoption of deeper approaches. Strong regulation of assessment at Kingston acted as a strong facilitator in that staff were strongly motivated to be involved given the high priority of this work at the University but was also perceived by some module leads as limiting flexibility in what could be done in the time frame. Changes in staffing at Kingston limited lead in time and preparing for the initiative which had a strong impact on the more instrumentalist approach taken to the overall design. Where case studies were largely managed from outside of the discipline team it impacted ownership and assimilation of key ideas and understanding of project principles, with significant impact on data collection. On the one hand while strong steering control kept a degree of consistency in what was implemented it impacted sustainability and engagement at local levels. Attendance of local project teams in mainstream training was an issue although there was considerable wider engagement in the project from across the University and high levels of engagement in cross-university training and dissemination events. In summary, varying levels of ownership impacted commitment to the principles underpinning the project. Central data collection, evaluation and write up of case studies by the leadership team limited development of understanding as the approaches were less likely to be internalised by staff as they had not been responsible in the most part for critically evaluating their own context, exploring the potential of tools, and translating these into actions.

Kingston University

Whole Institution:	Kingston's Academic Framework: Inclusive Curriculum
Focus	Assessment Literacy (AL1) Student understanding of feedback (AF2) Co-creation of assessment (AD2)
Training events	22 training events (2017-2019)
Case study interventions:	All faculties in the University were represented. Fifteen modules were involved. One year interventions 2017-2018 to include Case Studies from across Faculties 1. Geography, Geology & Environment; 2. Social Care & Social Work; 3. Nursing; 4. Maths Computer Science; 5. Accounting and Finance; 6. Media & Communication; 7. Fine Art; 8. Criminology; 9. Business Management; 10. Surveying; 11. Midwifery.

Total number of students 892
In receipt of interventions
Matched sample 270 (Nursing was the largest cohort - intervention was delivered across all level 4 Nursing programmes (adult, child, mental health and learning disability).
Unmatched sample 624 for 2 instruments out of the 4 compulsory tools for pre and 360 for post survey

Table 1 summarises the different approaches to implementation at the three institutions

	Southampton	Surrey	Kingston
Approach			
Alignment with University Strategy	Aligned with University Strategy Connections with overarching strategy mapped explicitly with & shared with staff	Aligned with University Strategy	Aligned with University Strategy
Contribution to University Strategy	Designed assessment and feedback principles for Quality Handbook Established assessment leads across disciplines and priorities for development	Integration of approaches (assessment briefs– use of online assessment feedback portfolio) Embedded in professional development programme for staff	Embedded in professional development opportunities for staff
Home of initiative	Independent – supported by VC Office but set up as independent research Academic Community of Practice	Located in Faculty of Health Sciences and Medicine	Located in Learning and Teaching Enhancement Centre
Co-ordination at Strategic level	University Level approach – agreed focus on key areas across all disciplines	Faculty aligned approach	Centralised
Mode of development	Bottom up with top down support	Top down and through Faculty hierarchical structure	Mixed approach – mainly top down, with a few case studies Bottom up

Location of interventions	University-wide Assessment Feedback Network 4 out of 5 Faculties – but with differing levels of involvement	Research network One Faculty for case studies	Assessment and Feedback Community All Faculties – but with differing levels of involvement
Engagement of module leads in leadership of initiative	All module leads part of project leadership team	Three module leads part of project leadership team	Module leads not part of project leadership team
Student leadership of project	Developed in collaboration with Students' Union from outset		
Role of students	Students engaged in design of policy, data collection, analysis, teaching, and training for staff	Students received feedback workshop training; Students engaged in developing resources	Students engaged in co-creation of assessment criteria
Focus of interventions	Varied: Assessment literacy, feedback and design	Assessment briefs and feedback workshops	Assessment literacy and feedback; a few case studies focused on design
Implementation			
Level of interpretation	Critical pedagogy approach to explore below the surface to ensure quality of what was being done was good	Surface level – to ensure, for example, assessment criteria with progression to quality of assessment briefs	Surface level focusing on making assessment criteria clear and not consideration of underlying quality
Integration of approach into curriculum delivery	Mixed – best designs six of nine key discipline areas embedded initiative within curriculum design	In first phase not embedded within discipline – some examples of more developed integration	In first phase not embedded within discipline
Ownership/Autonomy			
Role of module Leads	Designed the initiative	Interpreted the initiative and adapted	Received the initiative in most of the cases; design owned by a small number of case studies.
Ownership of designs	Created by module leads	Design created by leadership team and	Design created by leadership team with some teams

		adapted by local module leads	creating their own projects
Delivery of designs	Delivered by module leads and teams	Delivered by module leads	Initially delivered from outside by members of leadership team
Data collection	Responsibility of module leads with support from project manager	Responsibility of leadership team	Responsibility of leadership team
Ownership of data and evaluation process	Module team ownership of data – trained in interpretation and analysis of data	Owned by leadership team	Owned by leadership team
Data analysis focus	Data analysed at individual level at institution, discipline and module levels	Data analysed at group level at institution, discipline and module levels	Data analysed at individual level at institution, discipline and module levels
Production of reports	Responsibility of module leads with ongoing training support in production of reports	Produced by leadership team	Produced by leadership team
Research emphasis	Using a research-informed approach to work with colleagues to support their researching of their own practice	Using a research-informed approach to inform practice and to generate research outcomes	Using a research-informed approach to inform practical application
Module lead support			
Nature of training provided	Training in use of EAT and associated tools (e.g. assessment feedback DEFT; assessment literacy, assessment design)	Training in use of EAT and associated tools (e.g. assessment feedback DEFT; assessment literacy, assessment design)	Training in use of EAT and associated tools (e.g. assessment feedback DEFT; assessment literacy, assessment design)
Frequency of training	Monthly training for module leads One to one training in data analysis Generic Programme Monthly RAP think tank meets	Training for module leads One to one focused support on assessment briefs	Training for module leads as part of main training provision. Training through observation of centrally delivered interventions

	Interdisciplinary case study team sessions	Feedback on evaluation of assessment brief	
Networked community	Newly established Researching Assessment Practices community (2015-2016)	Assessment network (2014-)	Inclusive Curriculum Network but not a dedicated assessment strand prior to project

2.4 Provider Context: Contextual Facilitators and Barriers

In landing innovations, the context (and at different scales), and changing context, of the three institutions along with levels of academic pedagogical assessment research literacy provides the backdrop for the playing out of the assessment initiative and is also reflective of the national and the international HEI context.

Table 2: Institutional Basic Statistics

INDICATORS	**Southampton**	**Surrey**	**Kingston**
No of FTE students Using HESA data 2017-2018	UG = 16869 PG = 6158	UG = 12,351 PG = 2572	UG = 12,701 PG = 2281
Number of staff	6000	2,900	2,108
World University ranking 2019	118th	251-300th	601-800th
TEF rating	BRONZE TO SILVER	GOLD	BRONZE
% BAME FT	23%	37.5%	61.9%
Black attainment gap –Sunday Times 2020 University Guide based on OfS data	-10.6%	-16.2%	-19.2%
Low tariff entry	2%	6%	33%
Polar 1 and 2 (Low)	18%	19%	19%
First generation students (HESA data 2017-2018)	35.8%	42.8%	56.8%

Southampton and Kingston, with widely different profiles, were subject to considerable disruption during the length of the project whereas Surrey represented a relatively stable environment throughout the duration of the project but was, to a certain extent impacted by staff industrial action during the intervention phase. The project had to be robust to weather what was in many respects a perfect storm in two institutions out of the three. It is important to note the disruptive factors are common within the sector so testing the model to see if it could work within extreme disruption was extremely valid although exhausting. The impact of uncertainty, lack of staff time, and constant change required an even more flexible approach than had been envisaged at the outset.

Key facilitators included the focus on assessment and feedback in all three institutions, support from senior leadership, and the complementary strengths of expertise within the universities. Aligning initiatives to existing policy and practice needed to be managed carefully and it was essential to lead with the development of assessment and feedback principles (Evans, 2013) to ensure a clear base-line of expectation. Disruption during the course of the intervention was considerable and the intention to embed and ensure sustainability in initiatives was strongly tested, and this is where local ownership of initiatives proved to be essential.

Student engagement was an issue across all institutions and also academic staff confidence in engaging students in the process. Response rates were better where the data collection tools were melded carefully into curriculum development and not seen as something external to the discipline. The Law module lead at Southampton highlighted the fact that anything not strictly connected to the curriculum was difficult for students to engage with.

Table 3: Student response rates for completion of all instruments

Completion of all survey tools	Southampton	Surrey	Kingston*
Matched sample pre and post	34%	7%	0%
Unmatched samples pre and post	75%	26%	0%
*Incomplete survey completion pre and post			Matched sample return rate for 2 of the 4 instruments = 30%
			Unmatched sample return rate for 2 of the 4 instruments = 40%

Issues with access to data, the variable quality and nature of data sets available at different institutions all impacted the nature of analyses that could be run. On a practical level, leadership mattered. Vigilance in ensuring data collection of agreed tools, ensuring protocols were followed, and that key milestones were met also impacted what could be done with the data. Where module leads owned the interventions, there was a greater likelihood that data collection requirements would be met. As one colleague noted:

> We are aware that for the interventions to work we would need students to fully engage in the process and as a result we tried to make the **formative learning opportunities student-centric** (e.g., using peer-led teaching and have students engage in the co-creation of a field sketch marking scheme). We also did our best to communicate regularly with the students about the importance of the interventions and the potential benefits to their learning if they did engage. (OES Module lead, Southampton)

Dominant disruptive factors included changes to the project lead immediately prior to the start of the project at Kingston, and changes to curriculum delivery at the University that meant the project commenced during a period of maximum disruption, with colleagues having to get up to speed in an area in which they had relatively little knowledge. Changes in staffing throughout the duration of the project including changes in project manager at a key point in the process all placed additional stressors on delivery at Kingston. The project was also impacted by ongoing changes (Academic Framework, Addendum to the Educational Strategy, Plan 2020 (Faculty/course/professional services restructuring), all cumulatively impacting receptivity and capacity to attend to competing albeit aligned initiatives.

At Southampton, faculty restructuring, a significant reduction in the number of staff, changes in policy; changes in leadership, and industrial action were all significant stressors on the potential efficacy of the project. In Year 2, the loss of the central team (ILiAD) who had played a key role in supporting communities of practice meant considerable additional load for the project lead. Establishment of new structures and systems and processes meant the system lost its agility and responsiveness, and the University focus shifted away from assessment at a critical time in the maturation of the project which impacted impetus, however, many of the core team gained leadership positions within new structures which assisted their agency and the strength of the community of practice weathered disrupting factors very well due to depth and breadth of expertise that had been developed through the Researching Assessment Practices Community of Practice. Loss of the project lead and manager in the final year of the project has been managed through the tight project management and continued input and management by the outgoing project lead with support from the departed project manager and the teams at Southampton having undergone a thorough risk-analysis.

Southampton and Surrey were impacted by Industrial Strike Action during the critical intervention year (2017-2018) leading Southampton to make the decision to extend the length of interventions at the University to give the teams more time with the initiatives. At Southampton and Surrey pressures of the REF also impacted attention placed on assessment initiatives. Surrey and Kingston highlighted innovation fatigue as an issue impacting staff engagement, whereas at Southampton the appetite for developing practice remains strong, a direct result of the support provided through membership of the community of practice; leaving staff have continued to contribute through the development of a national network (INRAP). The RAP community of practice is repositioning itself following the Faculty restructuring and the coming to an end of the OfS funding.

2.5 Project Implementation Phases

The project comprised six overall phases with individual HEIs ensuring key areas were covered but also allowing for individual interpretation.

Phase 1 (Jan- March 2017): ***Laying the Foundations: Clarifying the vision*****. Structures:** Steering group established. Student staff partnership model developed with Students' Unions to be employed in all phases; networks developed to support interventions utilising and enhancing links within and across faculties including change management event; website developed. **Ensuring synergies:** assessment feedback approach aligned and integrated with institutional and discipline learning and teaching strategies in each HEI; support secured from senior leaders and core groups at HEIs. **Staff /Student Development:** comprehensive training

in developing inclusive curricula to support self-regulation along with the development of assessment literacy and feedback skills for lecturers, senior staff and students; **Governance:** reporting structures and project management clear; Ethics clearance obtained**. Base-line data analysis.**

Phase 2 (April- July 2017): ***Design and testing of innovations with students and lecturers:*** Innovations developed; bespoke support for programme teams provided. Students and staff design and trial of pedagogical interventions on assessment literacy, feedback, and design. Design and testing of fine-grained measure of impact; analysis of institutional data to explore assessment facilitators and barriers; 'training the trainers' undertaken.

Phase 3 (September 2017- December 2017): ***Implementation of Interventions:*** *Tracking of 2017 cohort commenced.* Pre-test data from staff and students; implementation of progressive assessment feedback interventions and evaluation with students and staff at entry, mid, and end points where possible. Focused tracking of student sample; on-going professional development support for staff and students.

Phase 4 (January–June 2018): ***Fine-tuning of interventions for 2017 cohort: Refinement and Development*****.** Continued monitoring of impacts using tools and interviews. Dissemination of findings through workshops and conferences; on-going professional development support for staff and students.

Phase 5 (July 2018 – December 2018): ***Review of interventions*** *with 2017 cohort; development for 2018 cohort where feasible and refining of approaches at Surrey and Kingston:* Consolidation and dissemination phase: findings synthesized; case studies completed and findings shared through project conference event, webinars, and website resources. Finding used to review module designs for 2018 cohort with students. Student advisory teams established to work with staff in refining interventions for 2018 cohort.

Phase 6 (January – September 2019): **Embedding and transfer activities at all three HEIs**. Follow up with year 2 students at Southampton and refinement with new intake year one cohort students. Intention to integrate successful initiatives into taught curriculum. Data analysis and evaluation of all data sets including synthesis of findings across HEIs including meta-analyses and thematic analyses of transcripts. Reviewing upscaling to include utilization of approaches beyond project modules. Reviewing and developing professional development opportunities. Final dissemination phase and seeking of follow on funding.

2.6 Data Collection and Analysis

Having obtained ethical clearance and fully attended to GDPR regulations to answer the project questions regarding:

- Did differential student learning outcomes exist?
- Could an integrated assessment feedback approach make a difference to differential learning outcomes especially for low socio-economic class and BAME students' data collection was comprehensive?

In addition to the collation of **personal student information** (socio-economic status including

polar quintiles; ethnicity; first generation students), and student performance data (course marks), pre-mid- and post-data sets were collected using tools with high reliability and validity to analyse **students' engagement with the assessment process**. Students completed:

- Cognitive and Metacognitive Strategies: Metacognitive regulation assessment (MSLQ, Pintrich & DeGroot, 1990)
- an assessment literacy survey (4 subscales) (Smith et al., 2013)
- a feedback orientation scale (4 subscales) (Linderbaum & Levy, 2010)
- assessment engagement tool (EAT) (3 subscales) (Evans, 2016).

Details of the tools' subscales are outlined in Appendix G

Analysis of student data involved the use of **descriptive and inferential statistics**. The application of parametric (e.g., ANOVA and Student's t), and non-parametric tests (e.g., Friedman, Wilcoxon's Signed Ranks) was dependent on the properties of the data sets. Meta-analyses were performed combining Southampton, Surrey and Kingston data to explore pre-intervention student differential learning outcomes; the extent to which they did exist, and for what groups where comparable data sets were available; Kingston did not have POLAR data so this analysis was run for Southampton and Surrey only. The tests were re-run post intervention to see if there was any impact on university-wide differential learning outcomes. The timeline of the project did not enable collection of 2019-20 data which will be important to explore to ascertain longer term impacts as the approach needs time to embed for the full effects to be realised.

Post-intervention meta-analyses were performed on Southampton and Surrey data to explore the potential impact of the interventions on students' engagement with assessment. Kingston data was not included as there were too many incomplete cells in the data set rendering the data non-viable for use in the analyses.

Protocol for combined meta-analyses was impacted by availability of data. At Southampton, meta-analyses controlled for ability as individual level data was available. For the combined analyses, given that individual level data was not available at Surrey, a different protocol was followed. A first step in the analyses checked for whether prior ability/prior performance explained any attainment gaps (using meta-regression), and then if it did not, meta-analyses were used to determine if the size of the gap was significant.

Table 4: Data Analysis approaches based on sample characteristics

	Parametric tests	Non parametric tests equivalents
Unmatched sample	Independent t test for **two** time points	Mann-Whitney U test for two time points
	One-way ANOVA for **three** time points	Kruskal-Wallis H test for three time points
Matched sample	Paired t test for **two** time points	Wilcoxon's Signed ranks for two time points
	Repeated measures ANOVA for **three** time points	Friedman's test for three time points

Effect size interpretation for parametric tests	Effect size index: eta square (η^2) or partial eta square (η_p^2). When there is only one factor (e.g., SEC, BAME) present in the analysis, it means that for these analyses $\eta_p^2 = \eta^2$ (Levine & Hullet, 2002). In most of the analysis for the project, only one factor was put into in the model at one time. For example, when comparing females' and males' EAT scores the only factor (or independent variable) in the model was gender. Eta-Squared divides the possible values in three categories, with suggested values: small effects (~ .01), medium effects (~ .06) and large effects (~ .14) (Cohen, 1988). Effective size index: Kendall's W. Kendalls' uses the Cohen's interpretation guidelines of 0.1 (small effect), 0.3 (moderate effect) and above 0.5 as a strong effect.

Evaluation involved consideration of the effectiveness of the interventions in meeting the project aims considering **process and product outcomes.** The **longitudinal nature** of the project design enabled us to track first year undergraduate students' progress in relation to their development of self-regulatory skills in response to a number of pedagogical interventions promoting inclusive assessment feedback approaches informed by the EAT framework. In Phases 1 and 2 we explored facilitators and barriers to students' access to learning using tools using the concept of developmental space (Van der Zwet et al., 2011), and feedback from students and lecturers via interviews, and learning logs. Using a critical pedagogic stance we explored the impacts of assessment design on students and lecturers. To analyse the impact of the interventions on students' perception of self-regulation development we used **pre- and post-data sets** using tools with high reliability and validity to assess assessment literacy (Smith et al., 2013) and in addition, in some modules self-regulatory capacity was assessed through student outputs (e.g., graphical skills). Feedback orientation (Linderbaum & Levy, 2010); self-regulation (MSLQ, Pintrich & DeGroot, 1990); assessment literacy survey (Smith et al., 2013). EAT student self-regulation assessment; student learning outcomes; student interviews, and evaluations) at; **starting, mid, and end** points were all collected. To evaluate the effectiveness of approaches to support lecturer development, staff learning logs and interviews and evaluation of module developments to promote inclusive assessment designs to support student self-regulation were analysed. **Initial baseline date was collated** from university data sets and supplemented through student surveys; all subject to ethics and student permission. Collation from the outset of student data sets (e.g. address /postcodes prior to starting at university; qualifications; parents' occupations; ethnicity; age on entry; disability; gender; whether first in generation to attend university; socio-economic status; protected characteristics) enabled us to run analyses to look at impact of the interventions on all students and especially those from low socio-economic backgrounds and BAME.

To explore and evaluate **changes in outcomes that are directly attributable to the intervention** we compared results for the student population engaged in the interventions using the **previous four year data as a control**. Detailed mapping of the institutional context and existing HEI strategies enabled us to contextualise any changes resulting from the intervention. By collating data representing the context and implementation of the intervention at the programme level, we were able to measure and analyse the impact of moderator variables on both our proximal and distal outcomes. We used effect sizes to

measure the impact of our intervention across programmes using meta-analytic methods, incorporating moderator analyses.

To explore the impact of the integrated assessment feedback approach promoting student self-regulation and agentic engagement with assessment (Reeve, 2017) we first explored student learning outcomes for first year students (measured by **average end of year grade**) comparing **results within and across** institutions for first year students for the last 4 years (2014-15; 2015-16; 2016-17; 2017-2018) for socio-economic classification[ab] and ethnicity variables[c].

[a]Comparison of students' attainment from relatively higher socio-economic groups (SEC classes 1-3/ polar quintiles 4 and 5) with those from lower social classes (SEC classes 6-8 and polar quintiles 1 and 2).
[b] First in family to go to university (first generation) compared to those whose parents' had previously attended university (non-first generation)
[c] Comparison of White students' attainment compared to Black and Asian ethnic minorities

Data was considered at three levels (institutional, discipline, and module/course level). In seeking to ascertain the impact of interventions at the module level, it was necessary to look at results at the module level rather than the discipline or institutional level as it became clear that we needed to be looking at the micro-level for meaningful indicators of change. The interventions took place 2017-2019 (unfortunately at the time of writing data for 2018-2019 at the Institutional level was not available). A key question also is left regarding the 'incubation effect' in terms of prolonged impact of interventions on students' approaches to assessment which require measurement over the longer term.

Given data access and data collection issues within the three HEIs, the level of data analysis was impacted. At Kingston, incomplete survey data collection impacted the nature of analyses that could be reasonably undertaken rendering much of the data being excluded from the survey data meta-analyses. It is intended that the data will be used in subsequent research foci – particularly around the differences between students' experiences and understanding of assessment and feedback processes. Data collection processes need to consider carefully how data is collected and used and aim to avoid wastage (non-viability of data).

Data from all three HEIs was used in meta-analyses to investigate the effects of undergraduates' personal background variables (e.g., BAME, gender or socio-economic status; first generation) on their end of Year 1 academic attainment. POLAR and SEC data was not available at Kingston for this project; alternative data sets such as first generation students were used.

Two main approaches to data handling and analysis were used dependent on availability of data sets, size of sample and statistical power, and the nature of distribution of the data impacting on whether parametric or non-parametric tests could be applied to the data. Approach 1 used mainly at Southampton and Kingston considered data at the individual level (e.g. giving a measure relating to a person's 'ability'/ prior performance); whereby analysis is adjusted for each individual student's point of entry ability (entry tariff as a proxy for ability),

and then considered the attainment gap between different groups of students (e.g., BAME and White students) as laid out in ethics protocols. Analyses at Kingston highlighted the importance of consideration of the types of entry qualification and different entry pathways when considering prior performance.

Approach 2 used predominantly at Surrey analysed much of the data at the group level (giving a measure relating to the average ability in a discipline) which involved calculating the mean of each group of students' point of entry ability first (e.g., the average of low SEC students' point of entry ability and the average of high SEC students'); and then the difference between these means was calculated (e.g., point of entry ability difference between females and males); Then this prior ability/prior performance difference was controlled for in the next-step analysis which looked at the attainment gap (e.g., between Low SEC and high SEC). Given that data was only available at the group level at Surrey, approach 2 although not preferred, had to be used for the cross-institution data analyses.

Approach 1 was used at Southampton at university, discipline, and module level analysis, as was the case at Kingston University; the issue at the latter, was the lack of matched sample data of sufficient size at the case study level to enable specific types of analyses to be run. At Surrey approach 2 was used for most of the data sets.

In sum, Approach 2 (on its own) explores the impact of the intervention solely on the group and not on individuals. So it gives us a partial story. It is limited in that by only looking at group averages it ignores all the variation in impacts that are likely for different students. So where possible, and where data sets allowed. Approach 1 was the preferred choice as this was the closely aligned approach to meeting project aims and also the most robust.

In answering our key questions we used pre-mid and post-tests, where feasible, to explore changes in student profiles:

> **Matched tests** – enabled us to examine changes in an individual's trajectory through their first year journey (e.g. pre-post).
>
> **Unmatched tests** – explored changes overall in the data set between pre and post group data. This option was chosen where individual data sets were not available and where size of matched samples were too small to render any useful findings.

Qualitative data was also collected via survey instruments, through teaching activities and pre- mid- post interviews with staff and students and reflective accounts as part of the case studies produced for each of the interventions. Thematic analysis of transcripts was undertaken drawing on Braun and Clarke (2006, 2013). Protocols established core questions for staff and students for the interview process and full mapping of individual interview data using the protocols (Surrey and Southampton) samples from case study templates (Kingston) using deductive and inductive coding techniques led to the emergence of a number of key themes discussed in sections 3 – 6 of this report.

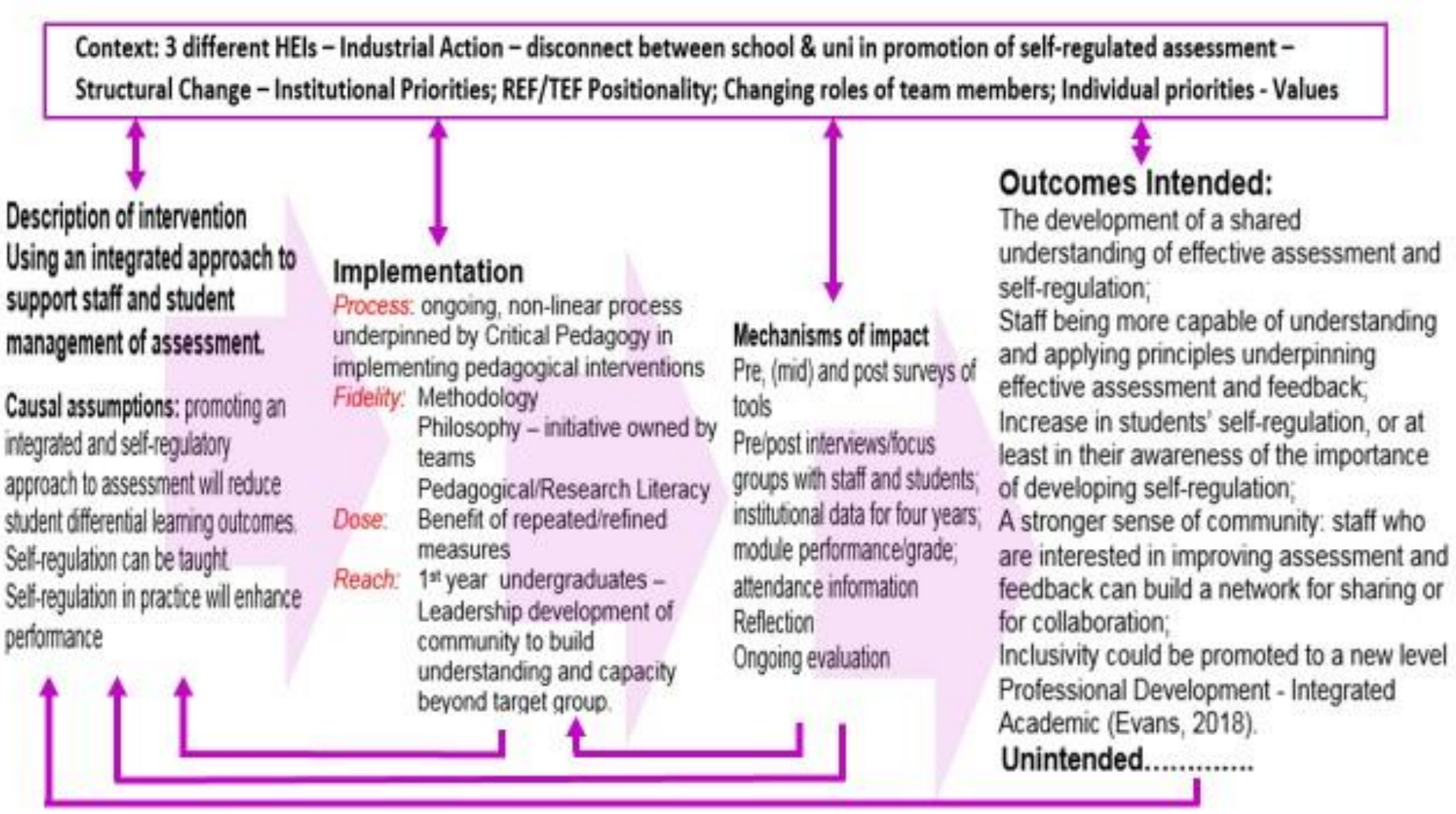


Figure 4: Project design – Complex intervention (adapted from Moore et al., 2015)

3. Outcomes and Findings: The Student Perspective

In total, approximately 3500 students were involved in the case study modules directly although the reach of the project was much wider, involving initiatives for undergraduate and postgraduate students and academics and professional services staff across the HEIs.
To mine more deeply into the student assessment experience the project explored student engagement in assessment and self-regulation of learning using a number of fine-tuned learning gain measures: students' perceptions of their cognitive and metacognitive regulation of learning; their assessment literacy; feedback orientation, and their overall engagement in assessment literacy, feedback and assessment design. Students were also interviewed about their views on assessment and the value of the interventions. Students' satisfaction was also collected through module evaluation surveys.

Note: To ascertain the impact of the assessment interventions on students' learning outcomes we used student average module grade as an indicator of performance while at the same time acknowledging the limitations of this measure in being able to identify specific assessment behaviour gains especially if the learning outcome was not closely related to the skills sets being developed and/or success in a specific module did not require high level self-regulatory assessment skills. We also considered module grades for comparable cohorts for the last four years as a control as previously highlighted.

3.1 Pre Intervention Baselines

Do Student Differential Learning Outcomes Exist?
Data was considered for cohorts for four years to include data from 2014-15 to 2017-2018 to explore the nature of differential learning outcomes across and within institutions prior to, and for the main year of the interventions. 2018-2019 data was not available at the time of writing the report.

Differential learning outcomes at the institutional level: exploring patterns over four years
The presence of students' differential learning outcomes was explored across disciplines at the three HEIs for the last four years (Zhu, Balloo, & Bright 2019). Persistent socio-economic class, BAME, and gender attainment gaps at the institutional level were identified although patterns at the discipline level were markedly varied supporting Schneider and Preckel's (2017) analysis that **curriculum variables impact outcomes** as expected in our original hypothesis.

A meta-analysis was performed to look at the **SEC attainment gap across multiple degree programmes in the three universities** for four cohorts: 2014-15, 2015-16, 2015-16, 2017-18. Meta-regression analyses across the 3 HEIs for the four years (n = 10849) indicated that any attainment gaps based on SEC could not be explained by prior ability / prior performance at point of entry (UCAS Tariff point score).

At the University level, **students from a higher SEC background performed better than students from a lower SEC background** across all three universities. Breaking this down by cohort, a marginal or significant SEC attainment gap existed in three of the four cohorts, the exception being the 2014-2015 cohort. Looking at the POLAR gap at Southampton and Surrey

there was **no significant POLAR attainment gap overall,** excepting 2014-15 where the attainment gap favouring students from **POLAR 4-5** (high student participation postcodes). As part of the process the relative usefulness of the POLAR statistic was also questioned.

A meta-analysis considering **BAME attainment gaps** found that **White students performed better than BAME students across all three universities in all four cohorts**. There was a significant **gender attainment gap** with **female students performing better than males across** all three HEIs with the exception of 2014-2015, where the difference could be explained by prior ability/prior performance.

Faculty and Discipline Differential Learning Outcomes

Examination of first year data across three institutions for the last four years, controlling for prior academic ability on entry, confirmed the persistence of differential learning outcomes for first year students from low socio-economic backgrounds and BAME. For example, in-depth analysis of discipline assessment patterns (Zhu, 2019a) at the University of Southampton identified that from 33 disciplines where SEC data was available, that in 17 of these disciplines, students from high socio- economic class backgrounds (SEC) did better, when controlling for ability. However, in five disciplines, students from lower SEC backgrounds did better than their higher SEC counterparts. Similarly, in the context of BAME, using cohort data over four years, the BAME attainment gap was present in 28 of 35 disciplines in favour of White students, with BAME students doing better than their White counterparts in four disciplines. Variations in attainment gaps were evident at discipline and module levels within and across institutions.

Data collection approaches and institutional data availability and at fine-tuned levels of analysis impacted what analyses could be run. There is limited data analysis that can be gleaned from the Kingston data given the low numbers of students who completed pre- and post-tests and data was not collected at pre and post for 2 of the instruments limiting analysis at the case study level to exploration of one study in Nursing. At the intervention case study level (module and programme) where data sets were small, analyses at Surrey could only explore unmatched samples; these are not included in this section of analyses as it would be difficult to draw conclusions from such statistical data (Surrey data at the intervention level is therefore omitted from this level of analysis).

At Southampton, the SEC attainment gap **varied considerably across disciplines** after controlling for ability (Zhu, 2019b). With the exception of History, in all other case study discipline areas (e.g., Electronics and Computer Science ECS, Law, Biological Sciences, Graphic Arts, Professional Practice in Health Sciences, Ocean and Earth Science, Business) first year students who were from **high SEC backgrounds achieved higher module results** than their lower SEC counterparts. The **POLAR attainment gap favouring high POLAR students** was evident in only two areas (Art and Film), and non-significant when considering the data set for the entire university. The **BAME attainment gap favouring White students** was evident in all case study disciplines, however there were four disciplines within the University where the BAME students demonstrated higher academic performance than their White counterparts. For the University as a whole the **BAME attainment gap was evident in 80% of disciplines**. For Surrey, at the **Faculty level** of consideration (Balloo, 2019), the only case study discipline where the **SEC attainment gap** was prevalent in the last four years was Psychology favouring

students from **High SEC backgrounds.** There were no significant POLAR attainment gaps across disciplines. The **BAME attainment gap was evident in all four core discipline areas** and across the four years considered. However, within each discipline across the 4 core areas there were modules where no BAME attainment gap existed. According to the *University of Surrey - 2019-20 Access and Participation Plan*, there is a **"progression gap for BAME students** from Year 1 to 2, compared to the University average". There is also a **retention gap** for [Low Participation Neighbourhoods] students compared to the University average".

At the discipline level, in Psychology at Surrey, there was strong evidence of attainment gaps, with all modules showing gaps favouring White students and those from high SEC groups. In Health Sciences, there was no evidence of SEC attainment gaps, but BAME attainment gaps were evident in nearly half of all modules in the intervention year, and there was similar evidence for BAME attainment gaps in the previous year. In the School of Biosciences and Medicine, only one out of the 21 modules showed a SEC attainment gap in the intervention year, whilst an additional three modules showing a SEC attainment gap in the previous year did not in the intervention year. BAME attainment gaps were more prevalent; 14 out of the 21 modules showed a BAME attainment gap favouring White students, which continued a trend demonstrated in previous years. In the School of Veterinary Medicine, there was no evidence of SEC attainment gaps either historically or in the intervention year, and just 2 out of 8 modules showed a BAME attainment gap, favouring White students. One of these modules also had a significant BAME attainment gap in the previous academic year.

3.2 Impact of Interventions

Impact of Interventions on Student Performance

In five of the nine Southampton-focused interventions where data was available, student performance was statistically significantly better than previous years, using comparable data sets, and in a three further intervention case studies marks improved, mark distribution narrowed and/or there were more students achieving at higher levels[1] although in these latter three examples differences were not statistically significant. On the whole, at Surrey, student attainment in the intervention year was on a par with previous cohorts[2]. A few modules in each discipline showed statistically significant increases and decreases in grades; however, the lack of correction for family-wise error and the lack of consistency in these changes means that it is difficult to draw any conclusions about the difference in attainment between subsequent cohorts. At Kingston, three interventions had higher results than previous years and three had decreases in scores but statistical significance could not be verified in each of these cases.

In summary, with the exception of the Southampton case studies there were no discernible impacts on student performance that could be attributed to the interventions.

Impacts of the Interventions on Closing the SEC Attainment Gap

In the Southampton case study modules SEC attainment gaps were not in evidence in previous cohorts for the modules concerned (Zhu 2019a). In **three modules, students from lower socio-economic classes did** better <u>but</u> in only one of these were the results statistically significant. At Surrey, there was evidence of socio-economic class attainment gaps in 9 modules in two of the four disciplines, with no prior attainment gaps presenting now or previously in the other two discipline areas. At Surrey, looking at the SEC attainment gaps in

every module for the intervention year compared to previous years, there was no evidence to suggest that the gap was significantly reduced by the intervention approach. At Kingston measures of socio-economic class (SEC and POLAR) were not available, and instead data on **first-generation students** and the **index of multiple deprivation** were used as proxies. In most of the disciplines, there was little evidence of attainment gap differences in previous cohorts. There was evidence of improvements in two disciplines, and at the institutional level, there are indications that the first generation attainment gap issue was removed although ability / prior performance was not controlled for in analyses so caution is needed in interpreting this finding.

Impacts of the Interventions on Closing the BAME/BAME Attainment Gap

At Southampton, there were significant reductions/removal of BAME attainment gaps in some of the intervention module case studies, for example in Law, and in Business. In Ocean and Earth Sciences a BAME gap is in existence where there was none previously in a comparable cohort. In History there was no previous BAME gap before, and no significant gap for the intervention cohort. But for the intervention cohort, the pattern reversed with BAME students starting to do better than White students (the difference is not significant though) and follows a similar SEC pattern. At Surrey, the BAME gap remained with an increase in BAME gaps within the disciplines involved for an additional seven modules within the Faculty. At Kingston the BAME gap increased in 5 of the 11 intervention case study modules and remained the same in others with the exception of Social Care where the attainment gap was significantly reduced. At Surrey, looking at the BAME attainment gaps in every module for the intervention year compared to previous years, there is no evidence to suggest that this gap significantly reduced for the intervention year. In the Nursing case study modules at Kingston, the BAME gap increased when controlling for entry tariff, however the first generation attainment gap reduced but the gap had not been significant prior to the intervention.

3.3 Impact of interventions on Student Assessment Behaviours

To explore students' assessment dispositions/engagement with assessment, and how these changed over the duration of the interventions we considered students' perceptions of their self-regulation ability, their assessment literacy, their attitudes and dispositions towards feedback and their levels of engagement with assessment and feedback. Where possible, pre-mid, and post-tests were used to explore students' learning trajectories. Matched student samples were preferred to enable us to consider individual students' assessment trajectories (i.e., comparing individuals' assessments of their assessment behaviours at different points in the year to ascertain the degree of change). Unmatched data analyses enabled comparison of group level data comparing pre to mid and post test scores for module cohorts.

To summarise, data sets included:

(I) Cognitive and Metacognitive self-regulation skills

(2) Assessment Literacy skills:

Understanding: knowing what is required
Supporting learning: the value of assessment to support understanding
Minimum Effort Orientation: doing the least possible
Assessment Judgement: capacity to judge the quality of one's own work

(3) Feedback Orientation Skills:

Utility: perception of the value of assessment feedback
Accountability: one's own responsibility with feedback
Social Awareness: awareness of contextual demands
Self-Efficacy: confidence in own ability to use feedback

(4) EAT Student engagement with assessment feedback

Assessment Literacy: understanding & ownership of requirements
Assessment Feedback: ability to seek, use and give feedback
Assessment Design: agentic engagement – creating assessment to enhance conditions for learning for self and others

Student assessment feedback behaviours across institutions

A meta-analysis at the institutional level combining Southampton and Surrey matched samples data was explored to look at overarching patterns in the data sets (Kingston data was excluded as it did not meet the conditions for meta-analysis protocols). Surrey data for matched sample analysis was predominantly drawn from Biological and Health Sciences; Southampton data was collated from across disciplines.

Key significant findings <u>using matched samples only using</u> aggregated samples within and across Institutions: Southampton and Surrey (Zhu & Balloo, 2019).

- Students' perceptions of the value of feedback from others (FOS: UTILITY) decreased ($Z = -2.42$; effect size: $r = -.23$; $p = .016$, $N = 258$). This was also evident at the individual institutional level*. (Using the Feedback Orientation Scale (FOS)).

This finding could reflect both increasing confidence in one's own abilities and less dependence on external feedback and/or greater criticality regarding the usefulnesss of feedback. Using the EAT Framework, the expectation was that students' would gain increased confidence in their own ability to assess the quality of their own work and also become more discerning regarding the value of external feedback.

- At Southampton ($n = 194$) and at Surrey ($n= 64$) overall students' perceptions of their **assessment literacy increased** ($Z = 2.30$; effect size: $r =.14$; $p = .021$, $N = 258$). (Using The EAT assessment literacy scale).

- At Southampton and Surrey, students' perceptions of their **self-regulation skills** (cognitive and metacognitive) did not significantly change over the course of the project. (The time frame may be too short to ascertain such changes).

- At Southampton, students' beliefs in their **ability to seek, use and apply feedback increased** ($Z = 2.53$; effect size: $r =.19$; $p = .012$, $N = 175$). (FOS scale).

- At Surrey, students' beliefs in the **value of assessment to support understanding increased** (Bio and Health Sciences) ($Z = 2.64$; effect size: $r =.30$; $p = .008$, $N = 78$). (Using assessment literacy survey (ALS)).

- At Surrey, increases were seen in students' **engagement in assessment** (Z = 3.41; effect size: r =.42; p<.001, N = 64), **assessment literacy** (Z = 3.53; effect size: r =.42; p<.001, N = 64), assessment feedback(Z = 2.53; effect size: r =.31; p<.011, N = 64)**,** and **assessment design** (Z = 3.41; effect size: r =.42; p<.001, N = 64). Using EAT Framework Scale.

Findings at the <u>Institutional Level</u>
Kingston: Grouped Case study level (11 case studies combined)
Overarching patterns detectable from the Kingston data grouping the case studies using matched data samples found that in the data set overall, there was a decline in students' perceptions of the utility of feedback, and increased social awareness (FOS) but no significant changes overall for the Feedback Orientation Scale. There was no significant change in the assessment literacy of students from pre to post.

Surrey: <u>Discipline level</u> (grouped module data)
Students in Veterinary Medicine modules (7) reported a decline in their **self-regulation abilities.** Students' perceptions of the value of assessment **feedback (FOS: Utility)** declined in Health Sciences modules (2) and Psychology modules (6), and a marginal decrease was also evident in Veterinary Medicine modules (7). Overall, there was a significant **decrease in utility for the low SEC group**. There was no significant change in FOS Utility for BAME students from pre to post but there was a significant decline for White students for the case study disciplines overall.

Students' perceptions of the value of **assessment to support their understanding** increased in Biosciences and Medicine modules (3). **Minimum effort orientation** (doing as little as possible) increased in Health Sciences modules (1). Students' perceptions of their ability to **accurately judge** the quality of their work increased in Psychology modules (5) although this was a marginal effect. Combining the sample, using paired t-tests, there was no change in assessment literacy judgement (FLS)) for White students but there was a significant decrease for BAME students pre to post.

Students' perceptions of their **engagement** (EAT) with assessment **increased** in Health Science modules (1, 2) and Biosciences and Medicine modules (3, 4). Students' also perceived that their **assessment literacy** increased in Health Sciences (1) and Biosciences and Medicine modules (3). Students' perceptions of their engagement in **assessment feedback** also increased in Health Sciences (1, 2), and Biosciences and Medicine modules (3, 4).

Overall, combining results from across the case studies, there was a significant increase in students' perceptions of their engagement with assessment feedback (EAT Assessment Feedback) for the high SEC group, but not for the low SEC group. There were also significant increases in engagement of students in assessment design (EAT Assessment Design) and assessment overall (EAT Overall) for the LOW POLAR 1-2 group; whereas there was no significant change in the perceptions of the HIGH POLAR 4-5 group.

Southampton: Individual Module level matched data sets (Zhu, 2019a; Ford (2019); Harding & Grange (2019); Hobson (2019); Lock (2019); Quince(2019); Pinnock (2019); Thackray, 2019).

There was evidence of increases in students' self-regulation in Ocean and Earth Sciences (7) which would be expected given the explicit focus on developing discipline-specific self-regulatory skills SRL. In History (12) significant increase in SRL were also evident for females pre to post test, but not for males.

Feedback Orientation Overall (FOS)
Overall there were no significant changes for the case study population as a whole in their feedback orientation, interesting patterns were discerned in that in:
Biological Sciences (3) – **significant increases were reported by females**;
Business (4) **first generation students scored significantly** higher in the post-test;
Business (5) **males and high POLAR students scored significantly** lower in the post-test.
Physiotherapy (10) **Low POLAR students scored more highly than high POLAR** in mid and post-tests.

Feedback Utility (FOS)
While there was no significant change in scores in the population overall, again, interesting patterns were found:
History (12) **First generation students scored this item more highly** than non-first-generation students in post-tests although their scores declined over the duration of the intervention;
Film (13) **Students from Low POLAR neighbourhoods scored lower** in the mid test;
In Biological Sciences (2) **there was a significant increase in male and female scores.**
In Biological Sciences (3) **First generation students scored lower in the post-test** than non-first generation students and **BAME scored lower than White** students at pre and post tests.
In Business (5), the pre-test **Utility scale (FOS)** measure correlated with final grade; in other words, students who perceived feedback as useful, did better. However, in Biological Sciences **(2) mid-test FOS Utility results were inversely related to student grades; suggesting that those who did not value feedback highly did better.**

In interpreting these findings, we need to consider the reliability of the scale as a factor. But in looking at the data sets within and across institutions it may be that this factor is loading differently for certain groups of students, and highly dependent on the nature of the intervention. Our initial hypothesis was that students more engaged in assessment including feedback should do better. But we also argued that the main driver of the EAT framework is supporting students to better understand the quality of their work for themselves and to not be dependent on external feedback; those students who do better may also include those who actually need less feedback. Over-reliance on feedback has also been found to lead to overload and confusion as to what to take on board impacting negatively on outcomes (Scott et al., 2014). In summary, this measure may be tapping into the characteristics of different groups of students suggesting the importance of individual difference variables. The pattern of relationships may play out very differently for different types of students and for the same student over time and space.

Feedback Accountability
Graphic Arts (1) students' showed significant increases in feedback accountability scores.
In Business (4) while there were no significant changes overall for the population, **male scores significantly declined** pre to post-test. In Business (5) there were significant declines in scores from pre to post-test.

Social Awareness
In Business (4) there were significant increases in scores from pre to post-test especially for **first generation students and females.**
In Business (5) while there were no significant changes overall for the population, **first-generation students significantly improved scores pre to post-test.** In Business (4) **FOS social awareness** was inversely related to outcomes; students whose perception of social awareness was lower at pre-test did better. This result may tap into students being over-aware and over self-conscious, and also students being insufficiently self-critical of their capabilities.

Self-Efficacy
In Graphic Arts (1) although there were no significant changes in the population overall, the **BAME/White gap disappeared by post-test.**
In Biological Sciences (3) while there were no significant changes, overall, for the population, **differences between first generation and non-first generation students disappeared pre to** post-test.

Assessment Literacy
For the modules concerned there were no statistically significant changes in students' perceptions of their understanding of the requirements of assessment using the Assessment Literacy Survey although students did report **increases in their perception to accurately judge the quality of their own work.** In Business (5) students demonstrated a significant increase in their perceptions' of their **assessment judgement skills** and this was especially the case for **males and first generation students and students from High POLAR**. Ocean and Earth Science (7) and Electronics and Computer Sciences (8) students' also demonstrated **increasing confidence** in their assessment judgement skills. In History (12) while there was no significant change in scores overall, there was a **significant increase for male students**. Conversely, in Film (13) students' demonstrated a **significant decrease in their confidence in their assessment judgement skills**, and this was especially true for **first generation students** from pre to mid-tests. Assessment Literacy results followed expected patterns in that in Business (5), those with higher **minimum grade orientation (prepared to do less)** did less well, as might be expected. In Ocean and Earth Science (6) final grade mark was positively correlated with post-test assessment for **understanding, and assessment judgement** within the assessment literacy survey.

Engagement with assessment (EAT)
Statistically significant increases in students' perceptions of their overall engagement in assessment was noted in Biological Sciences (2), Business (5), Ocean and Earth Science (7), Electronics and Computer Science (8); and Film (13).

EAT Assessment Literacy
Students reported statistically significant **increases in their perceptions of their assessment**

literacy from pre to post in **seven of the thirteen case study modules** (Graphic Arts (1); Biological Sciences (2), Business (5), OES (7), ECS (8); and Law (9).

EAT Assessment Feedback
Students reported statistically significant increases in their perceptions of their assessment feedback literacy from pre to post in two case studies, for example in Film (13) and OES (7). In Business (5), **female students and White students demonstrated increasing engagement in assessment feedback,** although for the population of the module as a whole, overall change was not significant.

Assessment Design
Students reported statistically significant increases in their perceptions of their **engagement in assessment design** from pre to post in **five case studies** (Business (5), OES (6 and 7), ECS (8) and Film (13)).

3.4 Predictive capacity of tools: The role of individual differences and context

Engagement in assessment feedback and performance
The predictive ability of tools was considered, and findings suggest the **importance of analysis at individual student and module level** given the role of contextual and individual difference variables and especially the way in which interventions are enacted. Discipline aggregated data and University level data is not sensitive enough to show what is happening on the ground and what is most effective; what this grouped data provides is an overall indication of potential areas of influence, but it certainly does not give you the specifics: the why, hows and for whom, needed to inform learning and teaching.

EAT was designed as a conceptual framework to integrate theoretical and practice findings and to demonstrate how these could be applied at a pragmatic level. From a semiotics perspective EAT represents integrated assessment, the issue is how this is understood and translated at the individual and team levels. In analysing the factor structure of EAT it loads on three main factors representing assessment literacy, self-regulation, and student engagement. There is some overlap suggesting further refinement is needed and one objective is to develop a psychometric tool drawing on the literature and practice findings at a finer tuned level.

In exploring relationships between measures at Southampton at the individual **module level** a number of patterns were evident using matched data samples. In six disciplines there was a **significant positive relationship between students' perceptions of their engagement in assessment and their final grades**:

- In Biological Sciences (3) there was a significant correlation between students' engagement in assessment literacy and their final grades.
- In Business Management (5) post-test EAT perception of engagement in assessment design and grade (this would be expected from engagement in peer learning activities and also leading such activities).
- In Ocean and Earth Science students (6, 7) students' field work sketch marks correlated with pre EAT students' perceptions of their engagement in feedback and final grade. Perceptions of engagement in assessment literacy (pre EAT AL) also

correlated with higher marks in OES (6).

- In Law (9) students' perceptions of engagement with EAT were significantly associated with higher results (Pre EAT design; Mid EAT literacy, feedback, design and EAT overall. The impact of students' perception of engagement with EAT is sustainable: pre EAT design was associated with 1st module grade. Mid EAT AD, AL AF, and EAT as a whole were associated with higher 1st year module marks. Mid EAT AD, AL AF, and EAT as a whole were also associated with higher 2nd year module marks

In Film (13) EAT overall and pre-test EAT assessment feedback (AF) were inversely correlated with student performance, suggesting that students who perceived themselves as actively engaging did worse. This pattern was also found in Biological Sciences (3) where an inverse relationship between students' initial perspectives on their engagement in assessment (pre EAT) and assessment feedback engagement (EAT AF) and second year performance was found. These negative patterns may indicate where interventions are not landing as intended and may also indicate lack of alignment between approaches and assessments, lack of training of students in assessment and misplaced efforts, and also misconceptions about levels of effort at the commencement of programmes.

Engagement in Assessment Feedback and Self-Regulation

In Law (9) pre self-regulation scores were correlated with pre EAT design scores suggesting a relationship between the two as evidenced in the factor structure of EAT. First year module grades were positively correlated with students pre-self-regulation assessments and their early perceptions of their engagement in assessment design and this was correlated with higher results. At Surrey in terms of the relationships between self-regulation and Feedback Orientation, Assessment Literacy, and EAT, looking at grouped data rather than at the individual level, the indicative findings differed by School. In the School of Health Sciences, the strongest correlations with self-regulation at both pre and post were with dimensions of EAT. Whilst correlations with EAT were also strong in the School of Biosciences and Medicine, Assessment Literacy and Feedback Orientation also showed strong correlations with self-regulation. In neither Psychology nor the School of Veterinary Medicine were there correlations between any scales and self-regulation, but this is likely to be due to the small sample sizes within these schools.

In summary, while there were some consistent patterns found in relation to a number of variables, there was also evidence of variation suggesting that the nature of relationships between variables played out differently in different modules and for individual students highlighting the role of context and of individual differences and the importance of mining data at the individual level.

At the discipline level using unmatched data samples combining modules within disciplines, in Psychology and Health Sciences (Surrey), students' perceptions of the **utility of feedback decreased**. Positive impacts on work on assessment literacy were also evidenced on **increases** in students' perceptions of the **value of assessment in supporting understanding** (Biological Sciences) and judgement (Psychology); however, in the latter, this was only a marginal effect. In the two biggest samples (Health Sciences and Biological Sciences) within the case study Faculty, students reported **increases in their engagement with assessment literacy and design** as measured by the EAT Framework.

However, maladaptive patterns were also identified with **increases in minimum effort orientation** (doing the least possible) showing in Health Sciences, and also in being higher in BAME students and higher socio-economic class students in Psychology suggesting the differential impacts of interventions on students.

Correlations between **EAT, assessment literacy, feedback orientation and self-regulation were confirmed**, however, the nature of these relationships while largely positive correlations varied within disciplines suggesting the vulnerability/malleability of student perceptions dependent on context.

Table 5 summarises key changes in assessment engagement behaviours for students in the specific case studies triangulating data from matched data analysis and from observational data and student feedback. Translation of positive behaviours into performance, however was complex and often difficult to clearly ascertain. Numerous factors are implicated in relation to the nature of interventions and the precise skills required in assessment. Where assessments were focused directly on areas that needed to be assessed and the clear links between the approaches used and potential to impact success we do see enhancements in performance (e.g. Ocean and Earth Science, Southampton). More integrated approaches which critically examined the quality of design had significant purchase on students' perceptions of engagement with assessment feedback as is the case with Law, Ocean and Earth Science, and Business at Southampton. An issue is in the translation of understandings of assessment feedback, and engagement with it, into outcomes. **The relationship between student engagement and learning outcomes is complex, the assessment design matters, and indeed how we capture the effectiveness of efforts using fine-grained measures.**

Table 5: Key impacts on students' assessment feedback behaviours

FOCUS	**Case study examples**
ASSESSMENT LITERACY	
>Better awareness of requirements and expectations	Bio Sciences (Soton); Business (Soton); Electonics & Computer Science, (Soton Film, (Soton) History High POLAR only, (Soton); Law; Ocean & Earth Sciences (Soton); Health Sciences, (Surrey); Biosciences (Surrey); Art History (Kingston) Observational data: Graphic Arts (Soton); Film (Soton);
>Understanding of assessments and the value of assessment in supporting learning	Business white students only (for business 4) and low POLAR only (for Business 5) (Soton); Females only in Law (Soton); Ocean & Earth Sciences (Soton);
>Ability to judge the quality of their own work	Business; Electonics & Computer Science, (Soton);

	Ocean & Earth Sciences (Soton); Psychology (Surrey); males in History (Soton)
< Ability to judge the quality of their own work	Film (Soton)
> Minimum effort orientation	Health Sciences (Surrey); Business (Soton); History non – first generation and high POLAR (Soton)
ASSESSMENT FEEDBACK drawing on Observational data and interview data sets in addition to matched data sets	
<Less concern on how to get feedback, what feedback needed and how to ask for more feedback	SOTON; Health Sciences (Surrey)
>engagement with feedback and appreciation of role in feedback	Biological Science (females), (Soton); Graphic Arts, (Soton)
>engagement with peers and valued peer support	Film (Soton); Physiotherapy (Soton)
>Confidence in providing peer feedback	Graphic Arts (Soton)
>Ability to apply feedback across contexts – transfer capacity	History (Soton)
<less concern about negative feedback	Film (Soton)
Enhanced understandings of role of formative feedback to support learning	(Soton); Psychology (Surrey)
>Valued feedback	Physiotherapy (Soton)
<fear of failure	Ocean & Earth Sciences (Soton)
>ability to judge the quality of their own work	Ocean & Earth Sciences (Soton)
>in student and tutor discussions around learning process within the discipline	Graphic Arts (Soton)
>social awareness	Business (Soton)
>accountability	First-generation students at KINGSTON
<in perception of value of feedback	Psychology, Veterinary Medicine (Surrey) KINGSTON AS A WHOLE
< less accountability for contribution to feedback process	Business (Soton)
ASSESSMENT DESIGN	
>Increased responsibility in assessment feedback	Graphic Arts (Soton)
>Increases in self-regulation capacity (perceived)	Graphic Arts (Soton); History (Soton – unmatched); Ocean & Earth Sciences (Soton); Extra Curriculum Elective (Soton); Law (Soton unmatched);
<decreases in self-regulation capacity (perceived)	Veterinary Medicine (unmatched Surrey)
>Increases in self-regulation capacity (perceived)	History (Soton); Law; (Soton), Ocean & Earth Sciences (Soton); Biosciences females (Soton), (unmatched), Soton;
>confidence in managing their academic lives	Film, Law (Soton)

ENGAGEMENT IN ASSESSMENT FEEDBACK	
Overall engagement in Assessment	Health Sciences (Surrey); Biosciences & Medicines (Surrey); Biological Sciences (Soton); Business, Electronics & Computer Science, (Soton); Film, Ocean & Earth Sciences (Soton); Art History (Kingston)
Increases in Assessment Literacy	Health Sciences (Surrey); Biosciences & Medicine (Surrey); Biological Sciences (Soton); Business, Electronics & Computer Science, (Soton); Film, (Soton); Law, (Soton); Ocean & Earth Sciences (Soton)
Decreases in Assessment Literacy engagement	Graphic Arts (Soton)
Increases in Assessment Feedback	Biosciences & Medicine (Surrey); Health Sciences (Surrey); Electronics & Computer Science (Soton); Film, (Soton); Ocean & Earth Sciences (Soton)
Increases in Assessment Design	Biosciences & Medicine (unmatched) (Surrey); Business, (Soton); Electronics & Computer Science, (Soton); Film, (Soton); Law, (Soton); Ocean & Earth Sciences (Soton)

At Surrey approximately 90% of students sampled within the one Faculty (n =136) felt that assessment briefs had helped them with some of their work through scaffolding their development of independence, reducing anxiety, and supporting their planning. However, 21% (n = 32) of students felt that assessment briefs did not help them (these percentages do not sum up to 100% because students were able to agree with both statements; they may have found some assessment briefs that helped with their work and some that did not) with24% of these not understanding the purpose of them. Students with higher self-regulation (SRL) scores were significantly more likely to state that they understand why they had been set some of their assessments. Conversely, participants with lower SRL scores were significantly more likely to state that they did not understand why they had been set some of their assessments.

Approximately 88% (n=134) of students at Surrey indicated that they understood the relevance and value of some of their assessments especially where learning outcomes and associated skills were clear, and knowledge needed for further assignments was included.

However, 20% (n =31) of student did not understand the relevance and value of the assessment briefs*"…I just know that I had to do an assignment but not sure about reason"*. While 80% of students indicated that they were clear about what was required for some of their assessments, 49% of them stated that there were some assessments for which they were not clear what was required of them. In the Surrey interventions, the assessment briefs were constructed for, rather than with, students. To support student understanding, a move towards constructing the briefs with students is advocated.

At Southampton in successful module assessment strategies student feedback revealed a shift in understanding of HE expectations and assessment requirements. There was less fear of failure and work not being good enough, showing how the assessment process had given them confidence and an ability to self-judge their level of achievement. There was less concern on how to get feedback, 'what constitutes good,' and how assessment works, demonstrating a clearer understanding. There was a lot more concern about specifics such as in-depth research, or a need to research from wider resources, a need to read more subject books and use the library. Results demonstrated significant improvements in student assessment literacy levels and performance in summative assessments after student participation in formative training. Overall, enhanced levels of confidence were observed which supported the students to consolidate their knowledge base and to transform the way they felt and performed in the field. This experience led to sustainable changes to the curriculum and in the process enhanced lecturer understandings of how to effectively engage with students and implement high impact pedagogies. (Ocean & Earth Science, Southampton).

In Graphic Arts (Southampton) observational data from the module lead identified that students had become more confident in providing peer feedback, had a better awareness of assessment and its criteria. Students were more aware and focused on learning outcomes (e.g., students independently printed out the new modules learning outcomes and deconstructed them, using their new understanding to reflect on progress throughout semester 2). Sketchbooks demonstrated a better awareness of requirements and were thoroughly annotated, there were more peer and tutor conversations around evidencing process in the sketchbook.

In Film (Southampton) the students appeared more confident in their own handling of their academic lives: tutors were seen as supportive, feedback was rated as helpful, guidance and documentation generally clear, and engagement with peers in class was viewed positively. The surveys identified administrative issues, such as issues learning how to use the library's online catalogue, timetabling problems, and their own time management. The tendency to focus on negative feedback was the single most important issue consistently identified but to a lesser degree than at the start of the intervention. The end-point focus group also reflected this increase in confidence. The students were much more confident that they could identify quality work in the discipline and could interpret guidelines given to them. They were also much clearer on how to obtain help. The focus group also identified administrative issues, such as clarity of communications on the specific details of assessments and the timing of that information, but acknowledged these were rare and were also able to suggest possible actions to resolve these. There was less emphasis on the impact of negative feedback. This

gain in confidence would appear to be supported by the findings of the EAT survey when taken as a whole.

In Business (Southampton) students understanding of assessments improved (this was consistent across both years). In the second year of our intervention students also improved assessment judgement but there was a corresponding increase in minimum effort orientation after the intervention. There is some evidence that students who attended a high number of Peer Learning sessions achieved greater gains to assessment understanding and judgement than students who attended a low number of sessions. The intervention leads highlighted the value in providing structured, student-led opportunities to discuss assessment and feedback with peers while also noting caution in interpretation of results given the possibility of achievement and motivational bias.

In History at Southampton, students valued the redesigned assessment tasks and especially that assessment group presentations were mainly formative. They reflected that they could use feedback from these non-assessed presentations in their subsequent assignments, even though the other assignments were mainly source commentaries and essays. This represented an important shift in their thinking and demonstrated that the mechanism for using staged and component assessment in two modules had been impactful. Students were not looking to use feedback only for a direct replication of an assignment but were instead thinking more holistically about the way in which they could use feedback across their degree programme. There were improvements in self-regulatory behaviour and in students' understanding and judgement but a decrease in student accountability.
In Law (Southampton) the gains on the self-regulation scale, assessment literacy survey and the EAT framework scales reported at the end of the year 1 interventions were maintained into the end of year 2 with demonstrable enhancements in performance across the cohort.

Summary
Southampton and Surrey combined meta-analyses identified significant gains in students' perceptions of their assessment literacy across disciplines. At Surrey, students' beliefs in the value of assessment to support understanding across disciplines within Faculty and engagement in assessment increased in Biological and Health Sciences. There were significant increases in students' efficacy regarding their ability to judge the quality of their own work across case studies at Southampton (6 out of 9) and in Psychology at Surrey. Maladaptive patterns with students' applying less effort was witnessed in three case studies.

Dispositions around feedback were more varied, and may also reflect the subtleties of different case study foci. At Southampton, overall, students' beliefs in their ability to seek, use and apply feedback increased, with increased engagement with feedback evident across most cases but in different ways; this was also the pattern for Health Sciences at Surrey. Peer focused work led to increased confidence in providing peer feedback among Graphic Arts students (Southampton); skills development in History (Southampton) led to students feeling more confident to apply feedback across contexts. Students' perceptions of the value of formative feedback to support learning increased in Southampton case studies in the institutional case study analysis; this pattern was also evident for Psychology at Surrey. At the same time, the combined meta-analysis drawing on Southampton and Surrey data identified that students' perception of the value of feedback declined and this was also found at

Kingston and in specific case studies at Surrey (Psychology and Veterinary Medicine). Whether this trend is a maladaptive or positive disposition requires more detailed analysis of the data; Utility patterns varied for different subgroups (BAME, SEC; POLAR; First Generation students and warrants consideration as identified in Business and Biological Sciences students' perceptions of utility are operating differently. In Biological Sciences, for example, students who placed lower value on feedback performed better, suggesting in this instance that students had developed the capacity to evaluate the quality of their work for themselves and were less dependent on external feedback. In some other examples, it also represented increased dissatisfaction with feedback, and not being able to see the relevance of feedback to future work.

3.5 Impacts of Interventions on Student Satisfaction

A colleague in Ocean and Earth Science (Southampton) succinctly summarises some of the key factors impacting students' perceptions of the assessment context which are borne out in the transcript analyses across institutions:

> Facilitators that impacted students' approaches to assessment, included access to easy assessment resources and guidance on the virtual learning environment (including exemplars of past students' work and the marking criteria), formative learning opportunities, access to high quality feedback (from tutors/lecturers/friends), support networks (groups chat rooms and approachable members of academic staff) and the confidence/ knowledge/ training to undertake self and peer-assessment roles. Barriers that impacted students' approaches to assessment included anxiety/ stress over certain assessment types (particularly exams), dealing with and managing specific learning difficulties, a lack of low-risk formative assessment exercises (to gauge performance), ineffective time management and many expressed a fear of failure as their major academic concern.

We need to be cautious regarding generalised statements regarding student satisfaction as we know these vary enormously within programmes, disciplines, universities and are also variable for individual students given the role of context in the process. Conversely, we do know that certain initiatives played out at the individual, discipline and university level can also have profound impacts leading to a mass of contradictions when looking at this area.
In this project sources of evidence to act as proxies for student satisfaction included institutional module/programme evaluations, focus group and module level feedback, to also include perceived facilitators and barriers to learning, and institutional surveys. At Southampton focused 5 minute assessments of the mood of the group (post-it note questions and responses during teaching sessions with module tutors about what students were most concerned about regarding their learning) were powerful in ascertaining students' concerns and at different points in the module, and were an effective format to gather data. Focus group interviews across all institutions provided valuable data about students' perceptions of assessment and their perceived role within it and their reactions to the interventions received; as would be expected student feedback was varied again attesting to the power of individual differences. At the same time there were certain key trends.

University Level Indicators of Satisfaction

At the institutional level, NSS data, albeit with recognised limitations, acted as one source of information to test whether the assessment initiative was having wider impact but there can be significant delay effects and also disruption effects of assessment initiatives on outcomes. In looking at the three institutions there are elements of both consistency and variation in satisfaction trends at the different levels of enquiry, and over time.

One needs to be cautious in making claims about the impact of first year student assessment interventions and the NSS findings of year three (final year) students, however where there had been sustained work on integrated assessment in some of the case study modules and informed by pilot projects, it was possible to note effects (Telford & Thorpe, 2019). The limited nature of the questions, which position students as receivers is well noted but the data is useful in indicating trends as a starting point. Analyses also demonstrate that satisfaction levels vary according to variables such as SEC and BAME, and ability as measured by pre-entry tariff but fine-tuned analysis is required that takes account of intersectionality and the complexity of student characteristics. What NSS does tell us is longitudinal trends in data sets. While it is very difficult to attribute NSS patterns to our interventions, key relationships are reported based on more detailed scrutiny involving wider sets of evidence.

The increase in assessment and feedback scores at Southampton in 2017, and at a time where scores on other dimensions of the NSS declined points to the efficacy of a university-wide strategy where the focus on what is good (AL1); clarifying student and staff engagement (AL3) and focused feedback (AF1) were a priority across all disciplines. Assessment gains were statistically significantly above regional comparators leading to the University rising 40 places when ranked on assessment and feedback items. Assessment and Feedback principles had been agreed and shared with colleagues across the University, a university wide researching assessment feedback group had been established, and led by a self-appointed strategy group with discipline bespoke and extensive generic training; the increase in assessment scores was extensive and across disciplines and denoted a pattern not seen in the university data set before suggesting the impact of this integrated assessment approach. This work on assessment fed into supporting the University's application for TEF Silver having previously been awarded a bronze.

NSS trends for 2018-2019 for the three institutions give an indicative state of play in assessment and feedback with relatively little change in scores for Southampton and Surrey but evidence of positive change for Kingston and especially in the areas of clarity around assessment criteria and timeliness of feedback. The Surrey trend shows all four dimensions of assessment feedback below benchmark for 2019. At Southampton, restructuring slowed down the rate of change which meant the positive impacts on assessment feedback achieved in 2016-2017 while maintained in 2017-2018, could not be substantially built upon during a phase with significant loss of key personnel, and diversion of efforts to managing university-wide structural systems and process as part of restructuring. Wider forces at play also included industrial action (2018) at Southampton and Surrey; and key staff changes and shifts in approaches to feedback at Surrey. To achieve notable shifts in satisfaction scores requires a significant amount of work to explain such changes in the rationale underpinning assessment and this needs to be shared and agreed with all stakeholders mindful of the need to carefully

scaffold such changes and also co-ordinate effectively within and across teams. Change initiatives to specific cohorts may have negative impacts on cohorts not receiving the same. In making changes to assessment for certain groups one needs to be mindful of how this information is managed for others not receiving such interventions (Evans, 2016). At the micro level, this issue was evident from the feedback from Physiotherapy students in the Southampton intervention who having experienced positive changes in one module, could not understand why this was not replicated in their following module. Also highlighting the need for agility in managing changes to modules, and expertise in the writing of programme specifications to avoid straitjacketing nuanced approaches to enhancement. Managing how new initiatives land, and the potential differential impact of these needs careful consideration at all levels.

At Kingston, institution-wide initiatives around turn-around time testify to the power of consistent approaches in impacting student satisfaction scores. Increases in the metric on clarity of assessment criteria and timeliness of feedback may relate to the implementation of the Kingston Framework and the significant professional development afforded by the project but we must be cautious in what can be claimed given the number of possible factors involved. As identified earlier, there is a clear need for consistency in key areas of assessment practice to ensure equity and fairness; this should not straitjacket disciplines and modules where a different approach is appropriate to meet specific requirements; the issue here is being clear about where differences are needed and the reasons for this. In maximising the success of highly focused initiatives, mindful attention needs to also be placed on unintended consequences on the overall quality of assessment design. A key priority for Kingston was aligning the project with the wider university approach to assessment and feedback.

Table 6: NSS data at the institutional level

NSS assessment and feedback	Southampton		Surrey		Kingston	
Overall A & F scores	2018	2019	2018	2019	2018	2019
Overall A & F scores	71.7	71.5	68.5	65.4	73.1	74
Criteria in marking clear in advance	71.99	71.5	67.5	65.4	71.4	73.3
Marking & assessment fair	71.7	70.7	70.4	65.7	71.1	71.3
Feedback timely	74.6	74	69.9	66.7	74.8	**76.8**
Comments helpful	68.5	69.9	66.3	63.8	75.3	74.7

(Below benchmark in grey; above benchmark in bold)

Finer-tuned indicators of satisfaction (discipline and case study levels)

At the level of discipline and module interventions at Southampton, increases in NSS scores were found in all but three of the case study intervention disciplines with significant increases in some of the more integrated case study interventions. In Law (9) in 2015 the Schools was towards the bottom of the sector and the Russell Group, whereas in 2019, 78% of the graduating cohort reported satisfaction with assessment and feedback. This placed the school in the top 20 in the sector and at the very top of the Russell Group. In Ocean and Earth Science (7, 8) between 2018-2019 there was an 11% increase in NSS scores placing the

discipline in the top quartile with overall satisfaction for this programme at 89%. Business also saw significant increases in NSS scores with overall satisfaction at 85%.

At Surrey, discipline student satisfaction levels are more closely aligned with sector benchmarks than for the University as a whole and increases in satisfaction from 2016-2018 are notable in Health Sciences (70-86%), and in Psychology (64-70%). In Biosciences a decline from 80% to 70% was noted in the timeframe.

At Kingston, there were sustained increases in assessment and feedback scores in four of the 11 case study disciplines with especially high scores in Fine Art (92%); Nursing (Learning Disability) (82%), Maths (75%), and with significant increases in Criminology over the last three years (55-80%), increases in Adult Nursing of 17.7% between 2017 and 2018, and sharp declines in Building Surveying (55-28%).

4. Impacts on staff development and curriculum change

Staff development was a key focus of the project, the premise being that those leading modules need to be able to clearly articulate the purposes of assessment and the nature of attainment being sought. A key aim of EAT is to empower teaching staff to be able to implement effective self-regulatory assessment practices, and fundamental to this aim is an understanding of quality assurance literacy, and a shared understanding of assessment regulations. In upskilling the assessment literacy of staff across all domains of activity involved in the design and delivery of assessment, the importance of inclusive approaches and the adoption of a critical pedagogic stance are essential. The degree of agency and autonomy afforded and supported in the development of interventions was variable and provides a useful continuum to explore the embedding and sustainability of assessment initiatives. In this project, interventions varied along a continuum of being completely 'owned' by individuals and teams to being externally designed and delivered, and not owned by module leads; this positioning provides a useful space to explore the efficacy of different approaches.

The intention of the project aligned to EAT principles is to support colleagues in designing, delivering and evaluating assessment interventions for themselves; interventions need to be owned by disciplines, and this included ensuring that "we aren't using social sciences terminology when introducing students to feedback that they may not understand "(Biosciences & Medicine, Surrey), and disciplinary specific-training inputs supporting the translation of generic ideas to practice in context are for the most effective integrated holistic assessment designs are to be achieved.

The project design considered the notion of **assessment sustainability** from three perspectives: firstly, in supporting students to self-regulate their own learning (Boud, 2000); secondly, in considering the most effective use of resource (Evans, 2016), and thirdly, from a critical pedagogical perspective, ensuring consideration of whether any groups of students are being impacted negatively by assessment (Waring & Evans, 2015). To support sustainability, the importance of **integrating interventions into mainstream curriculum delivery** and **aligning initiatives with institutional strategies** was central to ensure ideas were embedded within existing programmes and not run as separate/additional initiatives. The degree of understanding of how to combine **principles of EAT in a rich and meaningful** (less is more)

way allowing deep interrogation of issues was variably understood with some interventions being far more successful in achieving these outcomes than others; resting on understanding of an integrated approach and application of a critical pedagogy. In evaluating the relative success of case studies in achieving intended outcomes, the extent to which the principles of EAT were applied was a key consideration, along with the potential for transfer and upscaling of initiatives in a way that was fully understood by both lecturers and students. In all three universities, considerable transfer and scaling up was achieved but with differing outcomes depending on the nature of focus and alignment with core principles of EAT, as noted by one module lead at Kingston in explaining misinterpretation of requirements "there should have been more focus on alignment; rather than wholesale adoption".

4.1 Investment in Training

Considerable investment in training for staff and students through university-wide events to bespoke Faculty, discipline and one-to-one events was evident. The degree of integration of student and staff training demonstrated a progression in development to incorporation of ideas into central professional development support and accreditation. More successful approaches tackled all dimensions of practice in systematic way to ensure coverage at all levels (individual to institutional) acknowledging the nested nature of pedagogy (Evans, Muijs & Tomlinson, 2015) and the two way relationship between local development of initiatives and overarching policy directives. Training across institutions included induction into the principles and practical issues of using EAT, training in the Developing Engagement with Feedback (DEFT), and opportunities to present ideas and to gain feedback at cross institutional events. Colleagues across institutions liaised with student leads in the use of the EAT app and also the project managers organised regular meetings to review protocols and procedures with analysis of data. Student ambassadors at Southampton travelled to Kingston and Surrey to attend training opportunities.

At Southampton, from 2016-2019, including interdisciplinary and discipline-specific events, meetings with Associate Deans, regular think-tank representatives and project team meetings, over 160 events took place at involving approximately 4300 attendees; this included two cross-institution Southampton, Kingston, and Surrey events and two national dissemination events. Further support included the one-to-one mentoring for project team members in research literacy and pedagogic design throughout the duration of the project. The attendance at training and ongoing commitment of staff to monthly sessions demonstrated very strong buy-in from staff with over 80% of teams engaging in monthly meetings of one type or another. Project and wider buy-in to the Researching Assessment Practices initiative was critical in substantially raising the level of understanding of research-informed assessment practices across the university. The need for pedagogical research literacy training was not anticipated at the start of the project but became a central and essential part of it but it was extremely labour intensive. The impacts of research literacy training paid dividends in supporting case study leads to develop more integrated approaches and to own all aspects of their designs making positive change more possible and the quality of data analysis was very high. University restructuring led to the loss of some key staff at critical times, the impact of which was variable depending on the leadership approach of case study leads and support from colleagues within disciplines. Pioneers within disciplines where there was not a culture of innovation in assessment required more support.

At Surrey, thirteen key events took place between 2017-2018 to include focused events on the inclusive assessment brief intervention including self-evaluation training using exemplar assessment briefs and embedding within the VLE, and core sessions on self-regulation, the EAT Framework and DEFT training on developing student assessment feedback literacy. 352 participants engaged with this training. Of the level 4 level (first year undergraduate) FHMS module convenors 24 out of 38 (approximately 65% of module leads) attended at least one of these sessions. Engaging module leads was a priority of the project to support the fidelity of the interventions, and level of engagement in training was one factor impacting the quality of assessment briefs. More focused support for module leads in the latter stages of the project was enacted to facilitate enhanced understanding of quality in relation to the development of assessment briefs. The spread of training through a variety of approaches, and embedding of workshops, online support, and embedding of ideas within university processes enabled greater reach and depth of understanding with notable development of briefs over the duration of the project.

At Kingston, twenty key training events took place (2017- 2019). A total of 255 staff from across the University were trained in the EAT Framework and specific tools (e.g., Developing Engagement with Feedback tool (DEFT)) with 46% of engaged staff attending two or more sessions, with the vast majority of staff attending the training not being involved in the official case-study interventions. While the approach enabled breadth of coverage across faculties, the lack of in-depth training with case study module leads impacted depth of understanding and the resultant quality of many of the case studies; lecturer engagement was an issue. In supporting the development of assessment literacy, in the latter stages of the project, training was being delivered in mainstream staff development programmes, namely the Introduction to Learning and Teaching 1 and 2. Academic leads were also requesting bespoke training for their teams showing a progression in the adoption of core concepts.

4.2 Impact of Training on Understanding of Research-Informed Assessment Practices

The project had very strong impact on staff development initiatives, and at scale, impacting the provision and delivery of training and support across the HEIs. Substantial evidence of impact on the quality of assessment literacy of individual participants; on the assessment cultures of institutions, on the quality of assessment practices as evidenced in the most effective case studies, in enhancing curriculum delivery, and with lasting impact on systems and processes as part of sustainable practices. There was considerable variation in the quality and impact of case studies and this was not connected with the scale of individual projects but the quality of thinking underpinning the ideas being investigated.

To support colleagues' understanding of self-regulatory approaches to assessment, the aim was to support focused application of assessment approaches at the three institutions, mindful of, and sensitive to local contexts and institutional affordances and constraints, with evidence of progression in approaches at all three universities that encouraged a more mindful approach to assessment design. The gatekeeper role of the three leadership teams in devising the local strategy; disseminating key information, steering local projects, and providing the conditions to 'seed initiatives' was critical.

At Kingston, 67% of staff (n = 32) reported that they had changed their practice as a result of the training that they attended, and of these, 80% of staff reported that they had plans to

change their practice further. A sample of 43 staff suggested that the main focus of attention had been on developing students' understanding of their assessment (assessment literacies) (37% of responses), designing more effective feedback mechanisms (35%), and changing the design of assessment (23%). At Southampton over 90% of disciplines were attending to 'what constitutes good, student and staff entitlement and, or focused feedback.

Increased interest in research and rethinking of career trajectories having engaged in pedagogical research were high on the agenda at Southampton. In Health Sciences (Surrey) engagement in the project acted as a catalyst for improvements as articulated by one member of Surrey's project steering group, who was also a module lead:

> This has increased my interest in feedback generally….This project has really brought home what we can do to the debriefing process. In a high stress situation, you don't always recall everything, so we are finding new ways to build on positive interactions. … My practice wasn't as easy to follow if you 'weren't in my head'. My learning has been about rethinking assessments and making sure it's not just my interpretation of things. **Involving the students more in this process, being less didactic and less 'parent-mode'**…. **Understanding context is important and how people respond to** feedback in practice.

Development of understanding and implementation of core EAT principles is evident across institutions and disciplines. Increased attention on the development of **holistic assessment**, considering the whole journey of the student is evident, with an increasing concern to enhance connections across modules, requiring increased collaboration between staff, and moving away from the siloisation of assessment. Consideration of holistic assessment is highlighted in History, a discipline at Southampton where differential student learning outcomes were not in evidence:

> Thinking about assessment, I learned that I had not always considered one assignment as part of larger whole. Indeed, in my early days of running modules I saw assessment simply as a necessity in order to meet QA and other requirements and stuck to standardised models. Being pushed to consider assessment as something which wasn't testing one thing, but rather was one piece of a larger examination of learning and development, has made me much more conscious of how I design assessments moving forward. (History, Soton)

Colleagues in Graphic Art (Soton), and Health Sciences, Biosciences and Medicine, and Psychology at Surrey refer to the enhancement of curriculum through achieving a more **cohesive programme approach** through greater consideration of how the parts (modules) come together. At Surrey, the assessment briefs encouraged colleagues to start thinking about a programme level perspective through identifying programme learning outcomes, and how assessment in each module mapped to that. Going further requires analysis of the suitability of such learning outcomes and the progression and development of them. Spread effects of taking the EAT principles further to impact curriculum more widely are seen in

Health Sciences at Surrey and in many of the case studies which show clear scaling up interviews with colleagues at Surrey.
Note: In representing feedback from Surrey colleagues inserts for Surrey represent phenomenological summaries of conversations and are not reflective of a single interview but provide a synthesis of findings):

> We have taken some of the lessons from this for the new curriculum coming up in 2020 to break down the modular nature of the course to allow us the fluidity of adjusting assessments and working out where the formative and summative points are… Understand why you are assessing. It is not necessarily true that we are just assessing to see what students know. If you are querying whether your assessments are doing that, they probably aren't. We are moving to the assessment of holistic understanding. (Project steering group member and module leader, Surrey synthesis of feedback)

Connectivity and an integrated approach to assessment is demonstrated in Fine Art (Kingston) where the module lead redesigned assessments, foregrounding the role of the assessment brief, reconsidered the way in which research skills were introduced and how online fora were used, reconsidered and clearly articulated how the two assessments in the module related to one another and made the expectations of where students would be by the end of the module clear. Supporting students' understanding of how the elements of the programme come together is evident within case studies:

> The benefit of the programmatic approach to this template is that assessments can connect together, so that the whole is bigger than the sum of its parts. For example, by focusing on programme learning outcomes it encouraged students to think beyond the module and link assessments together; if students see that one programme learning outcome links to two very different assessments, it helps the transfer of feedback and learning. (Project steering group member and module leader, Surrey synthesis of feedback)

There is significant evidence of **collaboration with students as partners**. At Southampton, students were involved centrally in the project from the outset in the design of assessment feedback principles to co-delivery and training with students also providing support for lecturers in research techniques. At Kingston **co-creation** featured strongly (e.g., Media & Communication, Fine Art, and Mathematics case studies) with students engaged in co-creation of criteria in the development of innovative assessments. At Surrey, enhanced interaction with students in assessment processes is evident in discussions around **assessment feedback practices** and in the development of an **online reflective assessment feedback learning tool** whose use was expanded across Surrey during the project intervention. At Kingston there was increased emphasis on self and peer assessment , and research into group work assessment (Kingston). Training for students was evident at Surrey, for example,using tools to support effective feedback (Health Sciences, Surrey), sharing guidance with students using previous cohorts' work and enhanced discussions about assessment (Psychology, Surrey). Working with students was evident in the co-creation of assessment criteria, and working on empowering learners to become more confident at

Kingston. Co-production was evident in the work of assessment mentors (Fine Art, Kingston), demonstrators (Ocean & Earth Science, Southampton), peer leaders (Business, Southampton), development of online portfolio feedback tool (Surrey) and assessment engagement APP (Southampton); student co-design of assessment briefs (Biosciences and Medicine, Surrey). Students training staff in research literacy was evident in the model at Southampton, and also combined training for staff and students. In supporting student partnership "At level 6, you can do different things with templates, such as students co-designing briefs and key pieces of advice could come from other students, which ties into the agency ethos of the EAT Framework (Psychology, Surrey), and "By working with the students so they understand the content and what we need to achieve, they can develop ownership over the process and share this with the student body. To exclude students completely is detrimental. (Health Sciences, Surrey).

In supporting students in **coming to know for themselves** (Sadler, 2010, 2013) there is much emphasis on scaffolding and supporting student learning. The Southampton case studies suggest a deep approach to learning with concerns being raised about cognitive overload and the importance of not overloading at point of entry and instead suggested a staged or stepping stone approach in 'how we do assessment literacy.' To support student and staff understanding across all three institutions there is an increasing diversity of mediums being used to support student understanding of assessment to include on-line learning environments and podcasts, vlogs, blogs, apps to measure engagement with assessment and progress in learning. In the Surrey case studies emphasis is on training students in the use of assessment feedback skills through focused workshops, the degree to which ideas are carried forward was not tested during the one year cycle investigated but in some of the two year studies at Southampton (e.g., Law) there is clear evidence of sustained engagement in assessment from students. Although in Film, the module lead felt that most of the gains were in the first semester of the intervention and were not sustained leading to questions around the extent to which interventions are embedded and progressively developed throughout the module/programme. In developing a comprehensive approach to the enhancement of verbal feedback, Nursing and Veterinary Medicine, at Surrey used a range of resources to make the implicit explicit:

- A recorded role play of a clinical scenario which clarifies what constitutes feedback, provides model examples of good practice and depicts the students' role in the feedback process… designed to be used in class with stop/ start approach to enable discussion.
- A computer based activity to enable students to independently work through possible options in seeking and making use of feedback.
- A recorded interview with students and mentors in which further advice and guidance are provided to students to consolidate learning.

Collaboration with students was valued in creating solutions to assessment issues "we gave the students our own pictures! Maybe it would have worked better if students had brought in their own pictures…" (Media & Communication., Kingston. In supporting transitions more emphasis was placed on building on students pre-existing strengths to avoid a deficit model of transition (Nursing & Veterinary Medicine, Surrey).

The focus on making **assessment criteria and expectations explicit** was powerful in supporting the learning of staff and students. More emphasis was placed on explaining the rationale underpinning the assessment which did assist module leads to think more deeply about why they were doing what they were doing in assessment as summarised by the module lead in Fine Art (Kingston):

> "The way the brief is framed allows students to make the assessment relevant in their understanding of themselves as Fine Art practitioners. …I think introducing the assessment idea is really key. Then I think making it clear that you're learning, your stuff you're doing, your content assigned around the assessment, it just makes it relevant, rather than just learning about these few mark-ups. It sounds like, we've got to do this task, what do we need to know? What are the things we need to know to be able to do, in order to do that task? I'll think a little bit more like that".

The importance of making the **implicit explicit** was evidenced in the work of Psychology at Surrey who also developed greater awareness of how student leadership of assessment could work. In History at Southampton, the module lead emphasizes attention given to explaining assessment to students:

> **We have learned about how best to give out information to our students, the** project and EAT framework have helped us to communicate the purpose of assessment, and to set appropriate assessment which prompts the development of skills and connects to the wider degree programme in a meaningful and clear way… my willingness to think about how to make each assessment as useful as possible has increased. I want each component to make the most sense and for each of those to build on each other to create a learning framework for the student. (History, Southampton)

In one discipline at Surrey, colleagues found the task of developing an assessment brief made them reconsider their assessment approaches:

> The template asks staff to state the rationale for the assessment, so this has made me think in other modules about why I am setting that assessment and if I can't answer that, it makes me question whether the assessment is appropriate. It also makes students think about why they have been set that assessment both to measure their performance and as an opportunity to learn. (Project steering group member and module leader, Surrey synthesis of feedback)

Interaction is a key theme across all three institutions in impacting the quality of learning. Many module leads at Southampton valued the focus group activities with students in supporting their coming to know what were the main issues affecting students' perceptions of their learning. At Surrey, the interactive workshops were seen as vehicle for resituating the roles of teachers and students in the feedback process in Psychology. An expansion of support workshops is evidenced at Surrey to support student engagement with assessment across disciplines and upscaling to faculties.

The principles underpinning EAT argue the importance of embedding training within the normal teaching delivery. At Surrey there was a mixed delivery model with some workshops being integral to curriculum design and some being additional sessions. While there is no data disaggregating the impacts of this at the module level, it is an important area to consider. Integration into the curriculum is a more sustainable model as it also reflects lecturer learning and ownership. At Kingston, many interventions were external to the module, i.e. carried out by colleagues not teaching on the module and not from the discipline. On one level this can support upskilling through peer learning from colleagues but in impacting on how the module is designed and developing 'know how' within the discipline, it is much more limited in its capacity to promote sustainable practice and upskilling of knowledge and skills.

In looking at **best use of resource,** Graphic Arts at Southampton identified the powerful impact of relatively short interventions to support students' understanding of assessment and feedback but these do need to be carried forward in an iterative way. Over the duration of the project again there is a maturation effect with training being owned at the discipline level. In Nursing at Kingston, while the intervention was initially not owned by the discipline, moving beyond the project, the team are very much owning their assessment development for themselves.

There was evidence of **greater criticality** applied to assessment and certainly evidence of progression in the way in which colleagues thought and talked about assessment. While at Surrey and Kingston initially a surface approach had been considered as a starting point, i.e., focusing on making assessment criteria clear, this served as an essential 'lid opener' to explore what was lying within as to whether the criteria were appropriate and effective in the first place as articulated by the Law module lead at Southampton:

> You can't make a silk purse out of a sow's ear: if the assessment criteria / grade descriptors are not as clear as they might be then no amount of assessment literacy work is going to be able to achieve the objectives. (Law)

At Southampton, criticality was embedded from the outset using a **critical pedagogy** approach to explore elements of good design and pilot projects had been used to evaluate key issues impacting the efficacy of interventions especially where outcomes were not as expected. In Health Sciences at Surrey, the intervention led to re-evaluation of assessments to ensure the rationale for assessment could be justified and taking care not to make assumptions about what students already knew. In Psychology at Surrey, it led to questioning whether the rationale for an assessment was sound. There was increased questioning around colleagues' definitions of feedback and how this influenced how feedback was discussed with students.

> It encourages us to think about formative assessment. Rather than putting a formative assessment in there for the sake of it, EAT encourages you to think about holistic assessment design, so you are thinking about how it links to all other aspects of the learning environment. (Project steering group member and module leader, Surrey synthesis of feedback)

And also in one discipline at Surrey:

> We have questioned how much information we should provide students and that too much can be overwhelming for them. I have seen a change in my own assessment practice, making sure students know what is happening… Writing the brief has made me think about what I am assessing. This has made me question whether it is a good assessment anymore; the learning outcomes might seem confused, what are the top tips for this and how can I explain this? This approach has allowed colleagues to adjust their assessment, possibly through tweaking learning outcomes. The more robust the brief is the easier it is for students to understand, so the better it is, the more time it will save you, as you can just refer students back to it. Colleagues have now re-evaluated all of their assessments rather than just repeating it each year. Writing out the assessment on the template means you have to justify it to yourself and I have seen a lot of changes to assessments as a result of this.

At Surrey the leadership team provided the steer through the decision to adopt a uniform approach with each discipline in the Faculty: being encouraged to use an assessment brief with guidance information provided. The assessment brief stimulated colleagues to re-evaluate their practice to address recurring issues that students had with access to assessment.

> The benefit of the programmatic approach to this template is that assessments can connect together, so that the whole is bigger than the sum of its parts. For example, by focusing on programme learning outcomes it encouraged students to think beyond the module and link assessments together; if students see that one programme learning outcome links to two very different assessments, it helps the transfer of feedback and learning…The template asks staff to state the rationale for the assessment, so this has made me think in other modules about why I am setting that assessment, and if I can't answer that, it makes me question whether the assessment is appropriate. It also makes students think about why they have been set that assessment both to measure their performance and as an opportunity to learn…If staff cannot come up with a rationale for their assessment, looking at the EAT Framework could encourage them to think about how they can design their assessment differently….It encourages us to think about formative assessment. Rather than putting a formative assessment in there for the sake of it, EAT encourages you to think about holistic assessment design, so you are thinking about how it links to all other aspects of the learning environment (Project steering group member and module leader, Surrey synthesis of feedback).

At Kingston, the local approach was to 'do the interventions' for most teams but enabling independent teams to design their own approach where evidence of mindful approaches were in evidence "In delivering critical & historical studies as part of BA Fine Art, I have become increasingly aware of the importance of providing a relevant history/theory

curriculum responsive to the needs of students as contemporary practitioners (module lead, Fine Art). At Southampton, one-to-one and cross disciplinary training was provided with individual case study teams and with the disciplines in which the case studies were located and this continued throughout the duration of the intervention over two years but all module leads had to pitch and own their initiative from the outset. The intention of the project was to ensure ownership was located within the disciplines, and further training was put in place across institutions to facilitate this. In promoting greater depth of understanding and quality within and across teams, ownership should be at the local level, if ideas are to be nuanced suitably within the discipline and embedded within curriculum delivery.

A key aim of the project was to develop expertise at the local level, support strategic development of assessment at the university level. Impacts can be considered in terms of the **transfer** of the project ideas in informing the level of knowledge of individuals and incorporation of the EAT principles into all aspects of their assessment practice, to adoption of ideas across modules, disciplines, and at the institution level and across institutions. In the early preparation stages of the project the importance of **embedding the core EAT principles** within the curriculum rather than as additional add-ons, and in policy at local and institutional levels were emphasized. Sustainability of approaches beyond the project at the individual level (in supporting self-regulatory development of staff and students) and using a critical pedagogic approach (Evans, 2016; Waring & Evans, 2015) to ensure most appropriate use of resource were key.

Individual ownership and development of complex and ambitious ideas are evident in the Fine Art, Media and Mathematics case studies at Kingston. In Media and Communications the team worked through a number of teething issues with the development of illustrated essays and expanded the approach to Levels 5 and 6 and managed to develop and refine the assessment design. In Fine Art the module lead in focusing on co creation is harnessing the ideas of self-regulation within her practice: "it's just the principles of encouraging students or giving students the right things to allow them to be able to do it for themselves, is what I think learning is everywhere, so… For that idea that they can … be more self-regulatory….I think you can design learning better" (module lead, Fine Art).

The importance of **owning the assessment ideas**, making them your own, and applying them to suit the context is evident in this quote from a colleague in Ocean and Earth Science at Southampton:

> I have already adopted many of the assessment and feedback principles trialled in the interventions into several of the modules I teach, specifically in the design and implementation of formative and summative assessment. Assessment has become a key focus of my teaching in that I tend to review the assessment of a module first to determine whether the module context and delivery is fit for purpose. Also, given our experience and the positive comments received by students during the interventions, I now try to employ student-centric approaches to innovative assessment (e.g., the co-creation of marking criteria and peer- and self-appraisal style assessment). (Module lead (OES), Southampton)

The importance of embedding assessment principles, ideas and initiatives within the discipline is emphasized in many of the case studies, for example contextualisation of the concepts in relation to specific modules and assessments in Psychology at Surrey. In Film at Southampton the EAT assessment and feedback principles were embedded with a small group and then extended to a whole cohort to include students and staff. In History at Southampton the module lead discusses transfer of the research from the project to other modules "specifically in the design and implementation of new summative assessment exercises incorporating elements **of formative training and feedback,** defining what constitutes 'good', staff-student collaboration, peer-group teamwork exercises., etc., and I will continue to expand this approach by reviewing and redesigning all of the assessment activities that I employ as part of my teaching" (History, Southampton). In Physiotherapy (Southampton), the disconnect between Level 4 and 5 in the quality of guidance provided was addressed. Having produced domain specific rubrics for first years, the importance of continuing with the development of these across further levels of study was addressed.

There is strong evidence of the '**evolution in ownership of assessment training'** and adoption of tools. The three HEIs represent different stages in the continuum of adoption of research-informed approaches at the discipline level. Southampton's case studies were crafted by individual teams and supported with training provided to facilitate individual ownership of the initiatives. At Surrey, the focus was designed externally to the teams, adopted by the teams and then adapted with increasingly levels of ownership; Kingston had a mixed model which predominantly initiated approaches from the outside of the course team with little ownership by teams; the latter of which is not sustainable in developing self-regulation. Models evident in some of the case studies where there was co-delivery and ownership of initiatives facilitated embedding of initiatives. In all three institutions what is evident is the increasing ownership and development of ideas by individual teams. Linking up this work at the institutional level is essential in diversifying the language of assessment and feedback and demonstrating local solutions and adaptations to overarching models. The models used need to be disowned by the leadership teams in order to be adopted and owned at the local level. Criticality is essential in ensuring what is being adopted does work for the local population and that is why evaluation also needs to be developed and owned at the individual and team level; refined use of data is essential in this respect.

Demonstration of local solutions to assessment and feedback issues was evident across case study examples. Discussions around feedback with students prompted local solutions to disciplinary specific issues (Nursing and Veterinary Medicine, Surrey). In supporting **embedding, transfer and sustainability** there was substantial evidence of initiatives being adopted beyond Level 4 modules (first year) to second and third year undergraduate programmes (Levels 5 & 6) within the case study disciplines and more widely. At Southampton in 2017-2018, 90% of disciplines had assessment plans based on the University EAT priorities of clarifying what constitutes good, student and staff entitlement and focused feedback. Initiatives had been embedded within curriculum design to include undergraduates and post-graduates, there had been whole scale training in quality assurance literacy and establishment and embedding of a Researching Assessment Practice (RAP) think tank team with leads for Faculties and a university-wide RAP community. The EAT assessment and feedback principles had become part of the quality assurance handbook. At Surrey, Developing Engagement with Feedback for students and the development of an online

feedback portfolio, and the assessment briefs have been incorporated into university-wide practice and they have impacted significantly beyond the institution using a' training the trainer' approach (e.g. Aston, Newcastle). The assessment brief has been expanded beyond level 4 modules, and centralised workshops in developing engagement with feedback adopted within disciplines and faculties. At Surrey and Kingston, professional development training for staff had incorporated key EAT principles within tools and approaches, and new CPD and collaborative projects have been developed. The Developing Engagement with Feedback Tool supported the resituating of the role of teachers and students in the feedback process (Veterinary Medicine, Surrey) and embedding this across programmes was a clear way to support evolution of understandings of roles within assessment. At Southampton, emphasis was placed on lessening students' reliance on feedback from others through providing multiple opportunities for students to come to understand for themselves. Using the EAT Framework to support students in considering their role in assessment was important and also found to be valuable at Surrey in conjunction with the assessment briefs and feedback workshops:

> The EAT self-assessment tool and the app is fantastic. I would like to get all students to complete this and let them keep a copy of their response, so they can learn from this. I would then get all staff members to have a copy of this for each student, so they could discuss this during feedback tutorials. As a result of using the EAT app, I decided to put on a workshop to explain to students about assessment criteria – students' self-assessments indicated that they no idea what their assessment criteria was and where to find them. (Project steering group member and module leader, Surrey synthesis of feedback)

Academic colleagues valued training on assessment design which proved critical in supporting the integrity of case study interventions:

> Alignment training [helped] me to better align assessment with learning outcomes and feedback to assessment criteria. Key lessons: Consider the learning outcomes and the most appropriate form of assessment; Endeavor to employ a research-informed approach….consider what you want the key learning outcomes of a module to be, then design the assessment that best tests those competencies (as opposed to designing the module around the assessment types you are most familiar with delivering. (Composite feedback from module teams at Southampton)

In taking training forward at Surrey, a colleague noted that it "would be useful for the pedagogic development coordinators to do an 'MOT' to go through each module leader's assessment and feedback practices, looking at things that need to change, and doing this in collaboration with student reps." A further step, and noted in several of the case studies, was for module leads to take on this training for others from a disciplinary perspective. In many case studies especially in Physiotherapy at Southampton and also at Surrey the importance of continuity was highlighted "Having used the templates in level 4, many of us have continued to use them in level 5, because if students note a lack of continuity they start to lost faith in the process. We didn't want to go back to the old style of presenting assessment. As a result,

this approach is working up through the levels." (Project steering group member and module leader, Surrey SYNTHESIS OF FEEDBACK)

4.3 Wider Impacts of the Maximising Student Success Project

The impact of the project on the acquisition of understanding of research-informed assessment practices was considerable. The project supported the professional development of staff within and beyond the three institutions. Two annual project conferences in 2017 and 2018 at Southampton included approximately 60 presentations with contributions from colleagues at the three partner institutions. External facing conferences at Southampton (2018) and Surrey and Birmingham (2019) enabled dissemination to HEIs more widely. International facing presentations on the EAT approach (e.g., Canada, Croatia, Hong Kong, Ireland, Netherlands, Portugal, Scotland, Singapore, Spain, Switzerland, USA, Wales), and more widely through the related interests of the leadership team and module leads. Staff/students have contributed workshops, posters, case studies, handbooks, and publications. Work on research-informed assessment has been shared at national events with Universities UK (UUK); Advance HE, SRHE, Committee of the Association of National Teaching Fellows and related NTF events. The approach has also been recognised in the attainment of national awards and international funding.

Dissemination events beyond faculty, discipline-specific and project groups included:

- **Academic Paper:** Balloo, K., Evans, C., Hughes, A., Zhu, X., & Winstone, N. (2018). Transparency isn't spoon-feeding: How a transformative approach to the use of explicit assessment criteria can support student self-regulation. *Frontiers in Education, 3*(69), https://doi.org/10.3389/feduc.2018.00069

Conference presentations (also see Bibliography):

- Balloo, K., Downward, S., Evans, C. A., & Winstone, N. E. (2018, January). *Developing assessment and feedback practices to support students' assessment literacy and self-regulation.* Paper Presented at the Excellence in Teaching Symposium (Surrey ExciTeS), University of Surrey, Guildford, UK.
- Balloo, K., Winstone, N. E., & Evans, C. A. (2018, August). *The intervening role of assessment literacy in relationships between feedback literacy and self-regulation.* Poster Presented at the 9th Biennial Conference of the European Association for Research on Learning and Instruction (EARLI) SIG1: Assessment and Evaluation, Helsinki, Finland. https://doi.org/10.13140/RG.2.2.27769.93283

Symposia: Our SRHE symposium: *A principled approach to the development, implementation, and evaluation of research-informed assessment practices within higher education.* Symposium Conducted at the Society for Research into Higher Education (SRHE) International Conference, Newport, UK included four papers:

- Al'Adawi S., & Evans, C. (2018). Meaningful Assessment Practices in Higher Education.

- Balloo, K., Norman, M., & Winstone, N. E. (2018, December). Evaluation of a large-scale inclusive assessment intervention: a novel approach to quantifying perceptions about assessment literacy.
- Evans, C. A., Winstone, N. E., Hughes, A., Zhu, X., Balloo, K., & Kyei, C. (2018, December). Managing complex assessment interventions: Research within research.
- Zhu X., Spencer, V., & Evans, C. (2018). Building Pedagogical Research Literacy in Assessment Practices within Higher Education.

Teaching Support Materials: Guidance information, Evaluation EAT tool: APP videos and other sources of guidance on the development of assessment criteria, programme approaches to assessment; self-regulation; assessment literacy and assessment feedback; critical reflection; Inclusive Assessment Brief Materials; Inclusive assessment screencasts.

Accreditation: New course development to support the professional development of staff: PhD EAT Framework developed with input from students and supervisors and led by PhD students; Graduate Certificate in Learning and Teaching (Surrey); Wide-scale adoption of DEFT across Faculties and use of online assessment portfolio; Teaching and Learning staff development modules supporting the development of assessment aligned to the Kingston Framework and Inclusive Curriculum (Kingston); Accredited Fellowship programme ENGAGE developed with Advance HE support (Southampton)

Seminars: *Developing students' assessment literacy and self-regulation with assessment briefs*. Henley Business School, University of Reading, Reading, UK, November 2018.

In moving forward collaborative research between Surrey and Kingston on new paradigms for feedback pedagogic projects including trialling the use of the online feedback portfolio developed at Surrey from their original feedback footprints Catalyst A funding project with colleagues at Kingston is planned.

The EAT Framework has been used by colleagues in over 140 higher education institutions in the UK and adapted for use at individual, discipline, faculty and university levels as an inclusive partnership self-regulatory approach. In leading the European Universities Association (EUA) student feedback strand, further work with EAT is being undertaken working with European HEIs to inform policy and practice, and through European Funding will support further development of the approach. Working with Advance HE an Interdisciplinary Network for Research-Informed Assessment Practices (INRAP) has been established with the aim of supporting colleagues in developing robust research-informed assessment approaches through the development of a cross-institution assessment community of practice.

4.4. Evaluative Summary of Intervention Approach

In evaluating process and outcomes as an integral part of the project, we drew on Moore et al.'s (2015) framework on evaluation of complex interventions and Mountford Zimdars et al. (2015) work on evaluation of differential student learning outcomes. Key areas considered included:

Testing assertions about the existence of differential learning outcomes: This involved detailed mining of student data using data from four student cohorts (2013-2018) across

institutions. Data was considered at institutional level, discipline level and module level. The most useful level of analysis was at the module level. A key learning point was the variability of access to, and quality of, institutional data sets. Data can do a much better job in supporting pedagogy but institutions need to utilise and address this potential more directly; it is an underused and inefficiently used resource.

Clarity of purpose: our intention was to explore whether a research-informed assessment framework (EAT) could support enhancements in the design and delivery of assessment with longer term impacts on student learning outcomes. This was ambitious within the relatively short-time frames. The value of the EAT Framework in encouraging a more critical approach to assessment and in encouraging more joined up approaches was clear. Where impact on student learning outcomes was evident this was more likely where integrated assessment was fully realised and the principles underpinning design were fully implemented. We were able to identify the impact of interventions on students' engagement with assessment and the role of individual differences in this.

In considering the appropriateness of interventions: Fidelity – the degree of alignment with the project aims and principles was critical. It was acknowledged from the outset that some of the interventions were much smaller in ambition and scope than others reflecting different starting points, different approaches, and contextual requirements (institutional, discipline, individual). The work is important in demonstrating entry level and more sophisticated approaches to developing assessment practices and forefronts the importance of developing pedagogical research literacy. It also identified strengths and weaknesses of different approaches to implementing the case study interventions.

Ethical issues were paramount at all stages in the project in relation to data collection, storage and sharing of data. Issues were raised regarding data collection and analysis approaches. Where data sets were incomplete, insufficient in numbers, and where analyses were not robust and protocols not followed through on, data sets could not be used.

Suitability of research design: Initially, the intention had been to use a quasi-experimental approach but this was not feasible and the final research design was the result of working out what was most suitable and robust within a naturalistic setting. The impact of the research was compromised by large scale structural changes in two of the three HEIs and industrial strike action in 2 of the HEIs, leading to one of the partners extending some of the case studies with students over a longer time frame (Southampton) to ensure findings were not compromised by such events.

Sustainability (also considers notions of dose– how much is needed to effect positive change (Moore et al., 2015): The aim was to ensure that resource was used most effectively to support enhancements in students' self-regulation capacity. The aim was to embed ideas within the taught curriculum, and to develop capacity for scaling and transfer. HEIs adopted different strategies to maximise effectiveness from the directed singular co-ordinated approach at Surrey within one Faculty, with all teams encouraged to use an assessment brief, to interventions being mainly implemented by a non-discipline expert external to the module core team to ensure consistency across interventions at Kingston, to the investment at Southampton in building a research-informed community of practice and training staff in pedagogical research literacy and effective assessment to enable colleagues' full ownership

and management of all interventions from start to completion. The different models significantly impacted alignment with the principles of EAT in the development of lecturer agency and ownership of assessment which had a direct impact on outcomes and sustainability. The fundamental issue is the level of knowledge and understanding developed within the discipline team and the capacity for the work to be sustained post project. **If the work is owned by the discipline, sustainability is more readily achieved.**

Reach: (the numbers impacted by the project) is very extensive in all institutions. A key issue identified is the quality of understanding; academics need support with assessment literacy as do students. The complexities of assessment are often underestimated. There is a considerable body of evidence of how information was cascaded within and across disciplines, and institutions including students (undergraduate and post graduate), academics, professional services, and wider stakeholders in assessment.

Impact on outcomes: There was considerable impact on the quality of curriculum design, and of engagement by staff and students. Realising changes in students' learning outcomes and reducing and eliminating differential learning outcomes were more limited but were evident in some of the best examples, proving the value of the concept. EAT supported more holistic and integrated understandings of assessment. Upskilling of the assessment literacy of staff was evident and the Framework provided a solid base moving forward. The use of fine grained measures of engagement in assessment gain made it possible to track student responses over time. The value of such an approach lies in the ability to identify and address the variable impact of assessment on students and to also consider the potential relationships of different variables with outcomes which provides a useful tool for students and academics. Of most importance, EAT challenged lecturers to consider the rationale underpinning their practices. More work is needed in developing understanding of inclusive practices and adopting a more critical pedagogical understanding to facilitate research-informed understandings of practice. Building this criticality is central to enhancing assessment practices at all levels.

The value of the fine grained tools in supporting development of assessment practices was identified through the data analyses where, in some case studies, strong relationships (positive and negative) were found between students' engagement in assessment and outcomes. There were examples, where too much support (over-scaffolding) had led to reduced investment in assessment by students. Overconfidence in one's own abilities to self-regulate were also identified in student responses and were associated with real crises early on in students' assessment journey; the journey of 'coming to understand' is not an easy one for students in assessment. Students' uncertainty about the requirements of assessment were still evident for many students by the end of their first year experience suggesting a more **iterative approach to supporting student understanding of assessment as part of curriculum design is needed.**

5. Reflections and Recommendations- Lecturer Perspective

Introduction

There is substantial evidence of more critical engagement with assessment and feedback within and across HEIs. In impacting understanding of assessment and feedback from a more critical pedagogical perspective, the significant impact on the professional development of colleagues' and subsequent enhancement of assessment practices is evidence of meeting the key proximal aim of the project.

In aiming to reduce student differential learning outcomes, and specifically in relation to indices of socio-economic class and ethnicity (BAME), our key distal aim, while there is evidence of significant success in some modules, this is not widespread but by building sustainable, research informed assessment communities, the potential to follow the evidence of the most effective case studies is there and more incubation time is needed to refine and embed approaches.

EAT was seen as 'a good scaffold for thinking about assessment design' (Psychology, Surrey). Significant buy-in was achieved, with colleagues using the EAT Framework and its principles to varying degrees to: (i) identify their assessment and feedback priorities, and identify where interventions could have the most impact; (ii) clarify their role in assessment feedback and enter into a dialogue with students, during which they could clarify their individual responsibilities in the assessment feedback process and proceed as partners, and by observing best practice, inform their teaching practice, prioritising one or several of the sub-dimensions; (iii) make the rationale underpinning assessment and the processes to support understanding clear, and build shared understandings between teacher and student; (iv) evaluate the effectiveness of the interventions and inform understanding of whether assessment design could negate differential student learning outcomes; (v) review student and lecturer engagement with assessment feedback and how that varied across modules; throughout the length of a programme etc.; (vi) ascertain whether any gains achieved in enhancing student confidence and assessment literacy levels translated into higher student attainment; (vii) as an induction tool for staff and students; (viii) test the efficacy of assessment design as part of on-going curriculum review; (ix) holistically address how all components have been considered within assessment; (x) and fundamentally, address the state of health of assessment.

a. shared beliefs and values between academics and students;
b. student-academic partnership;
c. inclusivity from universal design perspectives;
d. sensitivity to context;
e. holistic – experience of the student learning journey in its entirety;
f. integrative – understanding the interconnected nature of curriculum design and all elements of the assessment process rather than looking at issues in isolation;
g. agentic in promoting student and academic ownership of assessment;
h. meaningful learning experiences – authentic and relevant assessments that promoted a deep approach to learning within the discipline;
i. sustainability in promoting student self-regulation, and in promoting best use of resource;
j. an evidence-based and research-informed perspective.

Evans (2016)

Figure 5: EAT Principles

5.1. The Utility of EAT: Factors Impacting Engagement with EAT and Associated Tools

Colleagues involved in the projects cited a number of facilitators and barriers impacting access to the ideas underpinning EAT, and utilisation of the Framework in practice, and associated tools (e.g., DEFT). Key issues in adoption of the principles revolved around cognitive issues in gaining access to the ideas underpinning EAT, which also significantly challenged beliefs and values. Time to allow ideas to incubate, to be developed, trialled and refined. Operationalisation issues revolved around individual issues of competence in leading assessment approaches which were reliant on leadership support and how the projects were developed in the three case study institutions. The extent to which academics and students 'bought in' (i.e., student-staff partnership) to assessment innovations very much determined whether staff and student engagement was considered to be a barrier or facilitator to implementing new assessment.

Overarching barriers that impacted implementation included the relative experience of leadership of initiatives at a variety of levels, competing priorities and commitment to the project ideals, managing unexpected impacts of structural change, industrial strike action and its timing in the middle of interventions at a critical time; competing strategic imperatives including the demands of the Research Excellence Framework. All three institutions were managing educational strategy change. Kingston and Surrey highlighted the issue of innovation fatigue this was not an issue at Southampton where the assessment community was robust in successfully buffering the large scale impact of institutional restructuring, the loss of a significant number of key personnel and increased workloads for many of the project leads. At the institutional level, more widely, a lack of recognition and reward for enhancing assessment greatly reduced staff's volition to engage in innovative practices, as did frequent change in university direction.

Table 6: Lecturer Facilitators and Barriers to Enhancing Assessment Practices

Facilitators	Barriers
Supportive Project team with ongoing mentoring	Limited support in making sense of approaches
Support from Colleagues	Lack of support from Colleagues
Student partnership valued by colleagues	Student partnership not valued by colleagues
Regular Meetings with colleagues	Lack of opportunities to meet with colleagues
Senior Management buy-in	Changes within Institutions (restructuring/ strike action; competing priorities etc.) Institutional inertia
Institutional agility to adapt assessment	Institutional inertia maintaining a status quo
Freedom to innovate minus constraints	Decisions led by pragmatics (space; time; size of groups)
Student buy-in	Lack of student buy-in

Student engagement in assessment	Students seeing themselves as receivers rather than as contributors to the assessment process.
Feeling freed from constraints of roles and conventions	Feeling constrained by systems and processes
Funding	Lack of resource
Documents, tools and resources Accessibility of resources and ability to integrate different approaches	Lack of access to resources and lack of clarification of how resources link together
Technology aligned to support initiatives	Technology 'clonky' (slow to adjust; too many platforms, and inconsistent) undermining efficacy of assessment approaches
Agile quality assurance systems	Restrictive quality assurance – time needed to change approaches
Agile timetabling solutions	Timetabling issues
	Time
Strong sense of agency and control	Lack of agency – not feeling empowered to lead on initiatives
Pedagogical Research Literacy	Limited experience of pedagogical research.
Disciplinary affordances	Disciplinary limitations
Confidence in being able to lead and innovate	Lack of confidence in being able to lead and innovate
Ability to work outside one's comfort zone	
	Competing priorities
Feeling valued	Not feeling valued

> You see some really cool stuff done elsewhere and, okay, there's some really cool stuff done here as well but it's always done with maybe 20 people or you have maybe a class of a hundred divided into five groups and then, yes, you can do it but that takes more staff time. There's a correlation between innovative assessment and designing them and the amount of staff time it takes to actually run that and that is the more innovative you're being, the more staff time it takes. That's not something that the higher education design is set up for because the push is not on teaching; the push is on research. (Module leader, Surrey)

Fundamental to EAT's successful use in practice was how it was **adapted to the local context mindful of specific university strategic principles and discipline requirements**. In scaling up any initiative, it is important to be clear on what is the central premise and in order to maximize the effectiveness of EAT it was essential to uphold inclusive principles and especially around issues of equity, agency and transparency with student partnership as central:

> How students come to co-own their programmes with lecturers and see themselves as active contributors to the assessment feedback process rather than seeing assessment as something that is done to them. (Evans, 2016, p. 2)

The importance of fully addressing the underpinning principles of the EAT Approach was found to be critical in impacting degrees of success. Where fidelity was compromised and the principles not adhered to closely enough, the power of the approach to effect change was compromised.

A key question is the extent to which colleagues (lecturers and students) have shared understandings of core principles and what this looks like in practice. In facilitating access, it was important to address contextual variables at individual, team and organisational levels.

The importance of high quality training and the creation and maintenance of supportive communities of practice to facilitate academic and professional services colleagues' development of assessment literacy were critical.

EAT aimed to provide a pragmatic framework that students and lecturers could use to tackle the complex and interconnected nature of assessment and in doing so, address the research practice gap in assessment feedback. It takes findings from across disciplines, theories and perspectives, drawing on wide range of theoretical and conceptual frameworks from psychological, educational and neuroscientific perspectives and translates them to a workable form for individuals, teams and organisations. From a semiotics perspective, (Peirce, n.d.), EAT is a sign or symbol (the representamen) for integrated assessment practices (the object of which EAT is about). How students and lecturers make sense of this as 'interpretants' is essential.

Frequently referred to as the 'spider' diagram', the 'wheel', the 'web' staff needed to work with the Framework to make sense of it with some colleagues finding it relatively straightforward to understand while others found the framework initially quite daunting and challenging and 'alien' to staff. The whole point of the Framework is it allows individuals to approach assessment flexibly. The EAT Framework remains in a constant state of evolution having changed considerably since its inception in 2015, building on Evans (2013), and being informed by practice across disciplines and through updating of the systematic review of the assessment feedback literature.

The Framework worked best where colleagues adapted it to the language of their own discipline/context. Levels of pedagogical research literacy among academics and professional services staff impacted the degree of scaffolding that colleagues required. **The importance of colleagues' owning of the framework and converting it to their disciplinary context was essential in facilitating this process**. Lack of confidence with the Framework in early stages limited its wide-scale use with students but where it was used with students and especially in the wheel format so that students could also see the connections it had greatest value. Staff reported that while they had previously seen assessment as a purely evaluative tool, through

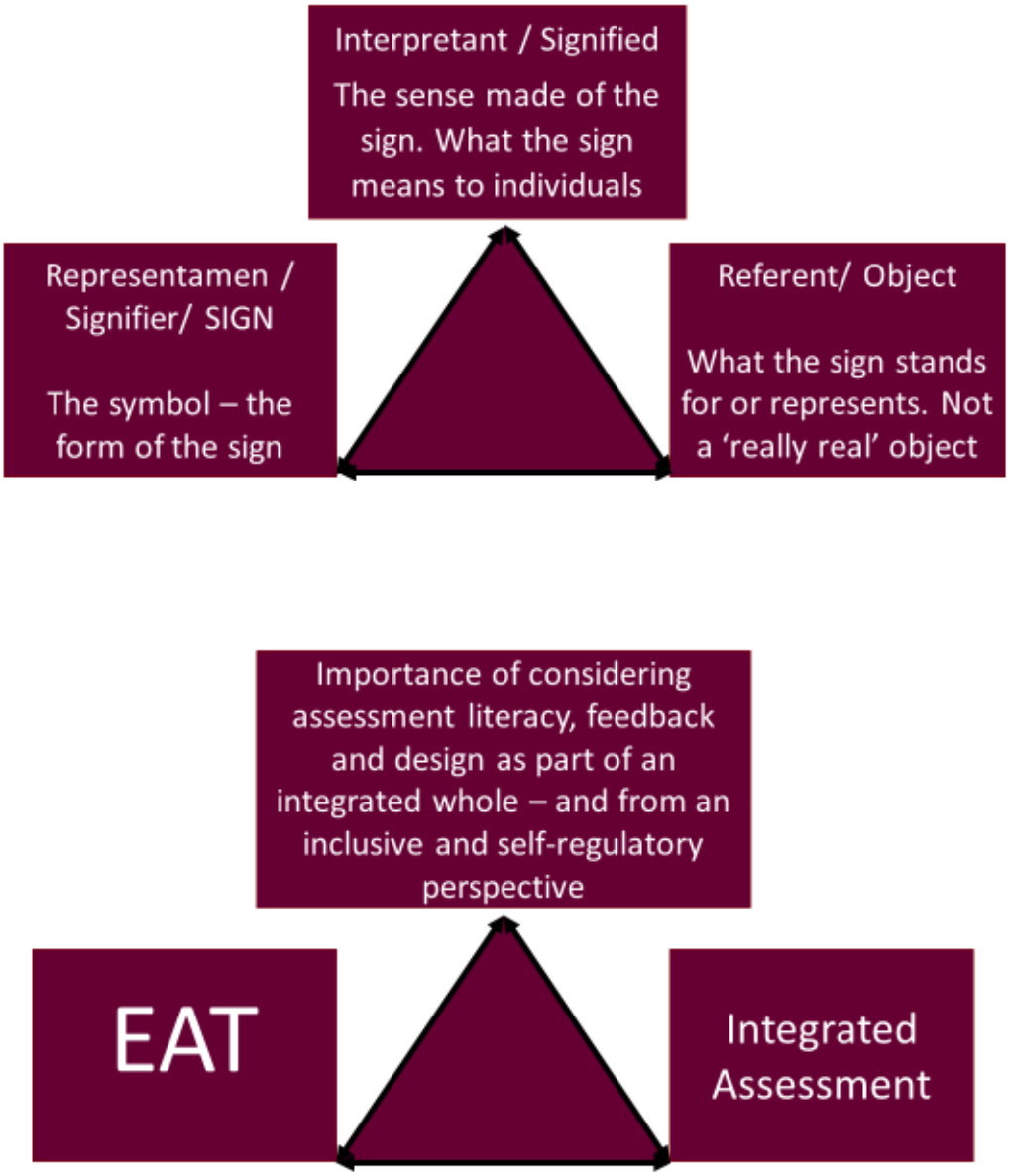


Figure 4: What EAT represents and how it is interpreted drawing on Pierce's model

their engagement with the project, they appreciated the broad versatility of assessment, particularly in the adoption of assessment for learning approaches:

> I have become more away of the wide variety of assessment and feedback principles. I have found the spider diagrams really helpful when considering both my own practices and that of others. This is both in relation to this project and my wider responsibilities for assessment practices. (Project steering group member and module leader, Surrey SYNTHESIS OF FEEDBACK)

In identifying a starting point to work with the Framework, the majority of projects began by considering assessment literacy finding this a more concrete area to tackle from the outset, and a valuable step in thinking about the quality of assessment "Defining what was good, while seemingly obvious, was a key question and learning point" (module lead, Kingston). Which led to much deeper questions around the **efficacy of assessment which is all about design.** "**If the fundamental premise of assessment is flawed, tinkering around on the surface will not address this problem but it will consume vast amounts of resource with limited gain.**" (Module lead, Southampton)

Colleagues needed careful and ongoing induction into using EAT, as some found it complex and it surfaced varying lecturer beliefs about assessment and feedback and the student role within it. Colleagues in making sense of the Framework discussed important staged entry points with using the EAT Framework:

> EAT could be used to encourage staff to interrogate their own practices. It might be beneficial to focus on one element of the framework with new staff rather than the whole framework straight away. It is useful to get staff to look at their module and ask themselves how it is working. (Project steering group member and module leader, Surrey SYNTHESIS OF FEEDBACK)

Integrating ideas into practice is highlighted:

> It was a big elephant to eat. I think having these key questions like, 'What is good? What constitutes good? Make sure you understand, your students understand, and you have a shared understanding', was really useful - the assessment literacy. These are things where we kind of need to have this in our standard pedagogic practice that we're tailoring. (Media and Communication, Kingston)

Tools to support understanding such as the assessment brief at Surrey helped colleagues' to clarify the reasoning behind assessment supporting a more inclusive approach.

> I have considered the advice contained within the EAT Framework related to assessment literacy, when redesigning an assessment for a module I lead. I recognised there was a need to clarify more clearly what the 'intention of the assessment was so that students could better understand the relevance and value of it.' As a result of being involved in the 'Maximising Student Success through the Development of Self-Regulation' project I have utilised the new assessment brief template to better inform students both about the expectations of the assessment and the purpose and relevance in relation to the wider programme. (Module leader, Surrey).

EAT was found useful in generating a dialogue between lecturers and students at undergraduate and postgraduate levels. It foregrounded lecturer and student relationships; a key theme arising from lecturer and student focus group interviews. In best cases it became incorporated into the lecturer's teaching repertoire and way of thinking "The EAT tool especially will not go into a draw and be forgotten about, instead it will be used to think about

assessment for each new module I design." (Southampton module lead). Its use also supported colleagues to build connections, and to evaluate practice on an ongoing basis:

> I would embed this [EAT] within the clinical PGCert and I know that within our dissertation module the module leader has taken points from this framework to update supervisors, so they are consistent with their practices. Running regular workshops, because you forget things like as part of CPD**. It encourages us to think about formative assessment**. Rather than putting a formative assessment in there for the sake of it, EAT **encourages you to think about holistic assessment design,** so you are thinking about how it links to all other aspects of the learning environment. (Module leader, Surrey)

Supporting academics to manage interventions at a scale with which they are comfortable is important. Much support is needed in the early stages of planning an intervention to ascertain what the real nature of the assessment issue is, and what was the most manageable and robust way to address this. **Some of the most successful interventions were those where individuals had carefully thought through all the dimensions of practice and then focused clearly down on one main idea and then ensured that all activities aligned to support this**. In addressing this very issue, one colleague having worked through an intervention reflected that in retrospect they would suggest:

> Start[ing] with a small scale activity-based session where students take a role in interpreting the assessment criteria. [AL1 what is good]. If I was to do this project again, I would start with a small working group which was comprised of staff and students who could work in partnership to develop new assessment and feedback models. I would then trial these on a small scale, such as within a module, and then, based on a rigorous analysis of what worked and what didn't, I would consider rolling changes out to a bigger module…Big scale projects sound great, but there are so many factors which are outside of your control – timings, timetabling, attendance, participation, colleagues, etc.– that things feel very superficial and distant. I think that this is why I liked the focus groups so much: they were tangible. (History module lead, Southampton).

5.2. Assessment Pedagogical Research Literacy

A lack of confidence of many lecturers to undertake pedagogic research, and also a lack of understanding of research-focused staff to understand the nuances of how to develop assessment capacity in practice with others were identified as major factors impacting the development of research-informed assessment practices. The notion of the 'integrated academic' (Evans, 2018) is pertinent in considering the combination of skills required in enacting effective higher education practices to include (Disciplinary Knowledge, Pedagogical Expertise, Academic Practice, Contextual Awareness, Data Analytic Competence, Research Methodology Expertise, Critical Pedagogy).

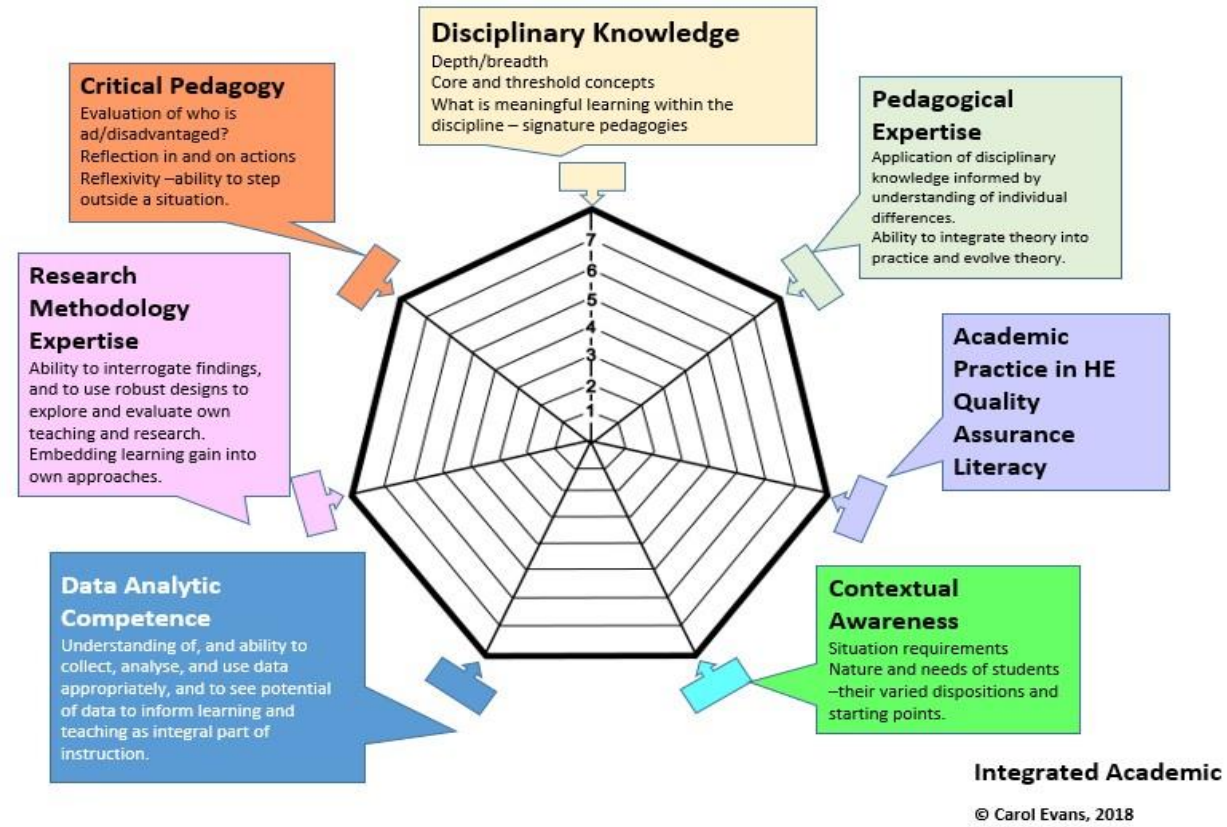


Figure 6: Integrated Academic

Lecturers found navigating and distilling pedagogical literature and terminology challenging.

> Sometimes you get some good stuff from literature but I think educational literature is quite inaccessible in that everybody writes it for other people who read educational literature (Module leader, Surrey)

Research literacy of colleagues, the "ability to judiciously use, apply and develop research as an integral part of one's teaching" (Evans, Waring, & Christodoulou, 2017) was an area that needed to be addressed within the project and one where significant progress was made:

> That I could develop a basic understanding of pedagogical theory and practice having never received any formal training in the subject, despite the lack of familiarity with the terminology, and develop a level of confidence in the subject area that permitted me to communicate at the right level with the students. That I can work within an area where I lack fully established "scaffolding", and that the application of "stressors" can result in achieving outside your usual safety envelope. (Module lead Ocean and Earth Science, Southampton).

Mindful of the pressures on academics with HE (Morrish, 2019) colleagues commented on the anxieties associated with introducing the research project to students because of their actual, or perceived, lack of pedagogic knowledge. Training and on-going support was essential in order to give colleagues a better appreciation for the steps (intellectual and practical) that needed to be followed when undertaking pedagogical research.

There was a lack of awareness of disciplinary assessment feedback research within disciplines which although extensive, colleagues found it hard to access and did not feel confident in judging the quality of it. Lecturers found that engagement in the projects helped to break down some of these barriers and consequently were inspired to pursue involvement in future projects and especially following positive outcomes they observed in students' discipline-specific skills, confidence, attainment and assessment literacy level (Ocean & Earth Science, Southampton).

Colleagues felt that "explanation of process and theory has proved invaluable… I learned that we shared common fears and anxieties and that we also shared the same frustrations around assessment design and implementation. The project became infinitely more possible to undertake because of the support and guidance given by others…..[that] I also have a better understanding of how formative learning activities can fit into your module design and complement summative assessment tasks" and "Overwhelmingly a better understanding of pedagogical practise and how innovative teaching methods can be applied to enhance the student learning experience – and the fact that I can rise to new challenges and be taught new 'tricks'." (Discipline team feedback comments, Southampton).

The importance of valuing pedagogical research within the disciplines was dominant in colleagues' discourses.

> we operate within a professional culture that is rather dismissive of pedagogic engagement, instead favouring academic endeavours to be discipline focussed. This attitude is very limiting and dissuades most from trying to improve their teaching practice… we require fundamental change in institutional attitudes to staff engagement in pedagogic research, particularly in STEM subjects.... The traditional view fails to recognise these activities as valid, instead preferring staff engage in research pertinent to their discipline expertise. There is a general lack of appreciation for the time and effort required to design and implement such interventions and the financial implications of undertaking innovative activities….We also require more material and evidential institution-wide recognition of the value of educational innovation and the staff involved (as opposed to paying 'lip-service'), so that these activities can contribute to an academic staff member's career progress and promotion (Module lead, Southampton).

5.3. . Assessment Literacy Competency

Implementation of EAT draws attention to student and lecturer conceptions and beliefs about assessment feedback which impact learning and teaching behaviours. It is not just students that struggle with assessment criteria and regulations. **Lack of understanding of quality assurance literacy is a key barrier for academics and more needs to be done to induct colleagues into such practices to support more efficient use of resource for all**. Assessment criteria are often obfuscate for staff and students; development of shared understandings through interrogation of the meaning of assessment criteria, and exploring how robust they are is essential in driving assessment practices forward. A key learning point from a focus on assessment literacy was also the lack of understanding of the assessment from the lecturer

perspective especially in the case of inherited modules to which lecturers were not party to their design and the rationale underpinning them. The variable quality of assessment criteria was unearthed during the project with significant engagement to rework criteria, and importantly, with students, that then spread up to discipline and Faculty levels in the most successful examples. To enhance understanding and operationalisation of high quality assessments, the importance of working closely with QA teams and the need for agility and degree of flexibility without compromising quality are fore-fronted in this project.

5.4 Assessment Feedback Competency

The project identified a lack of shared understandings in the conceptualisation and operationalisation of assessment feedback on the ground. The extent to which colleagues discussed the nature of feedback and agreed baselines of provision was variable. The importance of clear explanation to students of the differences in the nature of feedback across modules to facilitate transitions was noted. Considerable emphasis was placed on developing feedback practices with students but staff wanted more specific support with giving feedback to students (Biosciences & Medicine, Surrey).

In supporting EAT principles, much work is needed to recalibrate how feedback is conceptualised and operationalised within HE systems. In the Feedback Landscape, Evans (2013) highlighted the problematic nature of the feedback process given the multiple individual and contextual variables involved and introduced the notion of feedback exchange to explore student and lecturer understandings of feedback and their use of volitional strategies to manage feedback combining research on cognitive, metacognitive and emotional strategies. In supporting this call for a partnership approach to assessment feedback, EAT requires reconsideration of the student and lecturer role in the feedback process. The EAT framework argues for the importance of assessment design in managing key decisions around the 'where and what of feedback' where the emphasis is on shared ownership and feedback exchange (Evans, 2013, 2016); this theme has been followed up in Nash and Winstone's (2016) and by Winstone et al. (2017) and is reflected in the DEFT.

In interpreting feedback exchange as a concept, feedback cannot be discussed in isolation from assessment design as it is design that is key in managing the efficacy of feedback.

In rethinking feedback and the student and lecturer role within this, lecturers are orchestrators of design in facilitating opportunities that enable feedback exchanges to be maximised, lecturer feedback is one element of the feedback process. Mapping of the assessment design is needed to make clear what those feedback opportunities are, and who is leading on them, student and/or lecturer. It is about supporting students to identify, use and create assessment cues. In sum, in facilitating feedback exchange it is how assessment is designed to maximise opportunities for students to come to understand requirements for themselves without being dependent on external feedback in order to be able to accurately judge the quality of their own learning (Boud & Molloy, 2013; Sadler, 2010, 2013). Consideration of how students can be co-opted into supporting the development of such opportunities, still requires a substantial shift in thinking.

> Many higher education staff spend a large amount of time involved in teaching and learning activities, including marking. When students score us poorly for feedback, we blame them for not understanding what it is, because of how much time we have invested in it. We don't like criticism either! …. Feedback

> is an emotive issue for staff too. It takes us a lot of time. We work hard to be consistent. However, that feedback isn't always engaged with. We need to begin to appreciate why this may occur, by seeing things from a student perspective. It is one assessment, in one module. They have probably already moved their focus to the next piece of assessment. It is not immediately obvious how feedback may be able to help with a different type of assessment in a different module (Biological Sciences, Southampton).

Shifts in operationalisation of feedback were evident. A key feature of the projects across institutions was increasing **integration of formative feedback opportunities** especially in co-design activities (e.g. Film and Media at Kingston) to support students to understand for themselves, and in doing so thinking about where best to place feedback to have maximum impact in supporting students in moving forward.

5.5 Assessment Design Competency

Across all institutions issues of equity and fairness were identified by students as key issues in addition to a very strong cognitive issue of not fully understanding how assessments linked and what constituted feedback. To address such issues, ensuring that assessment is consistent and focused is essential at the module level. Inclusion although central to the project was implicitly rather than explicitly referred to in most projects. It is evident that understandings of inclusive practice are variable. Addressing key Universal Design features (making expectations explicit, maximising resource availability; reducing cognitive complexity at transition points; modelling and providing exemplars) are all good but knowledge of individual tribes is essential. The post-it-note exercises at Southampton highlighted very different needs and expectations of students across different disciplines at specific points in time in their learning trajectories. The feedback from students highlighted extremely diverse views both within and across disciplines about what was wanted. Students had very different responses to learning contexts. Cohorts from one year to the next had very different responses to initiatives. This highlights the importance of baseline testing both formal and informal for students and lecturers to assess starting points, and identify priorities; students can be facilitated to do this for themselves.

Inclusive practices at the University level need to be able to ensure that at the operational level that they do not inadvertently negatively impact learning for disciplines and individuals. Policy can undermine inclusive practices. At Kingston, the mitigating circumstances policy changed in the year of the intervention. The policy was changed so that students did not need to produce any evidence to get an extension which meant that many more students requested mitigation. This led to significant problems for assessment in 2017/8. For example the policy change meant that in Adult Nursing alone only 115 out of 150 students submitted their first assignment.

There are increasing tensions in HEIs to address growing anxiety and mental issues with students, however, how this is being used in assessment can undermine the very nature of assessment itself especially where such decisions are not in the control of discipline module teams. A suggested way forward would be for disciplines to identify prior to a student embarking on a module what the continuum of reasonable adjustments could be and what it

could not within the parameters of meeting the learning outcomes working closely with professional services teams around enabling and well-being.

Lecturer preconceptions about **engaging students as partners** was variable, as was lecturer confidence to engage in discussions about learning with students which initially felt considerably outside the comfort zone for many. In one of the case studies a module lead at Southampton had felt that students would not be interested in engaging with the assessment criteria but it became evident that through the interventions "that when students understand how assessment aligns with their learning, the criteria becomes an important tool for [them] to self-evaluate and to act upon feedback". Another colleague also commented that "we should not make assumptions about how much [the students] know. If we can relieve anxiety about the logistics or learning they will be more open to the biggest transition that they need to make, becoming independent learners". Engaging students as partners was conceptualised as part of a progressive developmental process by one of the project steering group memners and module leads at Surrey:

> I would have got students involved in populating the assessment brief, so students have an opportunity to design it themselves… Don't be afraid to involve students in the assessment design process, particularly at the higher levels. This kind of approach should be scaffolded. At level 4 you can give more support, then you can gradually give students more ownership, so they can develop what they think are the key things needed in each assessment. I also recommend that colleagues really think about the progression across the programme.

The role of institutional processes and indeed quality assurance was sometimes seen as getting in the way of genuine partnership. For example, at Kingston there was a lack of alignment between module evaluation questions with some project initiatives so that students who were busy co-constructing assessment criteria could not respond positively to questions that asked them if they were clear about criteria from the outset (an NSS derived question). New initiatives need to be contextualised with students to support understanding of how to respond to such questions as this can be contextualised. One colleague commented: "Although increasing attention is paid to assessment design and 'giving' feedback, I believe there are still few opportunities for students to engage in discussion as active partners in the process. My reflection is that quality procedures (such as anonymous marking) can create barriers to having open discussions between students and staff. My key messages would be **to think as much about how to facilitate discussion around assessment and feedback as the assessment itself**" (Business, Southampton).

Understandings of independent learning were variable for both lecturers and students. Yee's (2016) work points to the fact that many first generation students, (first in family to go to university), believe that independence means not asking for help. This goes against notions of agentic engagement where the aim is make the learning environment as supportive as possible which involves ascertaining where and off whom to get support from (Reeve, 2013). The notion of students as authors of the assessment process was contentious for some lecturers who did not see how students could make informed decisions about assessment practices given their limited understandings of HE and its processes. Others highlighted the

importance of training to enable students to step up. There were numerous examples of students 'stepping up' and working with lecturers to co-author assessment. The need to work with students more so that they would feel confident to lead on assessment was recognised. As one colleague at Southampton noted "students can play a role in developing new and different kinds of assessment which we have not thought about including and which they will find useful and, dare I say it: fun" (History, Southampton). There is a strong paradox here in that **many lecturers did not feel comfortable in working with students to develop their self-regulatory assessment skills within the discipline given lack of experience of this, and also students in our project regularly reported the desire to receive learning and not to be an active agent in it**. As an aside to this, in projects where students were supported to take a key lead in assessment, the results were good with some exceptions, in that the mode of assessment needed to reward the changed dynamic and skills acquired. The student ambassadors at Southampton project is one example where students could apply to take on a research role where they worked with colleagues across the university where they had full access to all events and an input to all decision making (e.g., developing websites, apps, resources, conducting focus groups; analysing data; training staff in specific research skills; supporting conference development). Researching with and not doing research to students was found to be very powerful by members of the Project steering group at Surrey:

> The work that [we] have undertaken as part of our **student/staff partnership** project has enabled students to share their experiences with us. This has enhanced our understanding and enabled us to develop a shared understanding of the importance of both the student role in the feedback process and the clinicians' role. Sharing the results of the research with colleagues and students has enabled us to reflect and consider how we can enable effective feedback seeking behaviours and skills of self–regulation. Our **shared beliefs and values,** related to the need to support students to drive feedback for themselves and engage in meaningful dialogue has provided the motivation to challenge current practices through engagement and partnership working with colleagues and students from across the Faculty of Health and Medical Sciences.

5.6 The Role of Communities of Practice

The project identified the key role that communities of practice play in supporting the development, implementation, and sustainable nature of pedagogical interventions. This project demonstrated the power of strong communities of practice in withstanding the buffering that comes from internal and external assaults to developing practice. In the Southampton example, Researching Assessment Practices (RAP) created depth and breadth of expertise which was essential during a period of extensive change resulting from institutional restructuring and the loss of significant staff during the process.

Communities of practice were extremely important in supporting development of assessment feedback operations. How these communities are envisioned, configured, operationalised, and supported, impacts outcomes for staff and students. At Southampton, the RAP network "facilitated departmental and cross-faculty debate about module design and student assessment, encouraged experimentation, and provided high-level backup for colleagues wanting to run experiments… It dared colleagues to do things differently, and to take risks

with strong provision of support and close working with Quality Assurance teams to test what could be done " (RAP member). "In this unusually open-minded environment the Extra-Curricular Elective was discussable. Previously I suspect it would have been dismissed as a maverick idea with no real potential….support for the concept and …practical help with the wording of assessment criteria smoothed the module's way through internal QA and validation systems" (Music, RAP Rep, Southampton). The RAP Network had been built from the bottom-up with top-down support but it allowed membership for all students and staff at whatever levels they felt able to contribute to. There were planned in opportunities to lead ideas at different levels: overarching strategy, faculty and discipline-specific roles down to individual leadership of ideas.

At Surrey, experience of working on the project steering group was seen as empowering:

> It has encouraged me to approach individual staff members about how they can improve their feedback practices. Some staff are better at writing future-oriented feedback comments, so I now feel more able to talk to colleagues about how they can write feedback comments that will be more helpful for students on future work. Students have also become more aware of what feedback they need and how to ask for more feedback. (Project steering group member and module leader, Surrey SYNTHESIS OF FEEDBACK)

And staff welcomed the development of "A forum for people who are interested in assessment for people who actually teach, that also includes educationalists who know the literature". The important element beyond the establishment of networks and sharing of understandings is the important transfer point when the initiatives become owned by the disciplines, and are developed by them, and not led by external teams. A significant gain was in colleagues' confidence in being able to deliver training outside their own areas of discipline expertise, and to also be able to take the lead in running internal and external events, building yet further networks, and capacity.

The political, social and cultural capital accrued by colleagues who were members of the research-informed assessment communities was significant. Being a member of a project group and part of communities of practice within and across institutions led to increased confidence, empowerment to lead, and relationship building; increased professional standing, supported career progression and professional development of colleagues in many ways:

> It has stopped me from stagnating. It has also opened me up to other people within the university to build my network. Looking at our students, they have got better at understanding what we write and knowing there is a reason for doing this, which has come from this project. (Project steering group member and module leader, Surrey SYNTHESIS OF FEEDBACK)

Colleagues valued opportunities to work with peers and experts in research and practice and to consider assessment from different perspectives. A significant number of colleagues, who at the start of the project, felt that they were not in position to influence assessment ended the project leading initiatives. Colleagues noted that the project was powerful as it gave new initiatives 'institutional permission' to happen, it emboldened QA colleagues to take a risk

with it, and led to greater freedom to explore and implement new ideas. The degree of freedom was something that was both variable within and across institutions and over time given competing initiatives and concerns. There was an increasing willingness to open oneself up to scrutiny from others which supported redevelopment of assessment criteria within and across disciplines (e.g. Art, Southampton, Health Sciences, Surrey, Fine Art, Communication and Media, Kingston). Where tools were being used across an institution, this provided assurance of the value of the approach and also provided opportunities for cross-disciplines discussions (e.g., using the Framework with the Developing Engagement with Feedback Tool (DEFT, Winstone & Nash, 2016); using the Kingston Framework).

Membership of **cross-disciplinary assessment communities of practice** was seen as valuable in encouraging interdisciplinary work (e.g., at Faculty level in Health Sciences, Biosciences, Psychology and Veterinary Medicine and beyond at Surrey to the cross-disciplinary Researching Assessment Practices group at Southampton encompassing colleagues from across the University. At Kingston the approach was institutional-wide and managed through provision of professional development communities, with strong levels of development evident with the Nursing team. At Southampton the cross- and inter-disciplinary approaches were replicated at all levels in the monthly training for the project team, in the development of the University RAP think tank and in the provision of training.

Building a critical mass to support enhanced understandings of assessment and feedback was highlighted by the Biosciences and Medicine at Surrey and one of the Steering group members also noted that:

> I have become much more aware of how student leadership of assessment can work from being involved in the project. Being on the steering group meant there was faculty-level ownership and learning from each other; we were constantly meeting and talking about what we were doing in our own assessment practices. (Project steering group member and module leader, Surrey)

Academic colleagues wanted further training in how to design marking schemes and learning outcomes that are 'fit for purpose', in data analysis techniques and how to seek ethics approval for pedagogic research projects and also in the collection of student data given the lack of mechanisms or frameworks in place for approving this type of research certain disciplines. Support from the project manager and supporting undergraduate students to address research questions was highly valued with the concept of reverse mentoring from students to staff being valued on both sides.

6. Reflections and Recommendations: Understanding Students' Engagement with Assessment

6. 1. Transition Conflicts

Students' transitions into HE are complex and highlight the role of individual difference variables, previous experiences, **disciplinary knowledge and skills gaps in transitioning** from secondary to tertiary systems, and with consequent impacts on confidence and self-efficacy.

Universally, students expressed concerns around coming to terms with the expectations of HE assessment practices, and difficulties in understanding process; specific concerns were pertinent to the disciplinary context, and the perceived and real 'jump' in requirements from school to university within the disciplines (Appendix F).

Successful interventions that impacted student learning outcomes, identified and focused on key threshold and core concepts and also identified where the skills gaps were in relation to transitioning from school to university.

Many factors impacted students' interaction with assessment. The case study interventions highlight the complexity of students' responses to assessment feedback. Students' assessment engagement trajectories varied within and between modules. First-generation, lower socio-economic class, and BAME students did not necessarily enter HE with lower perceptions of their self-regulatory skills. It was also evident, in certain cases, that where assessment literacy scores had declined it actually represented greater understanding of assessment and more accurate self-assessment as witnessed in student behaviour.

In interpreting students' understanding of how well they could judge the quality of assessment for their own and their peers' work, and how well they thought they used the assessment criteria, there is a social and cultural capital explanation. What might be happening for certain groups of students (first generation and low SEC) is that they initially lack what Bourdieu has called a 'feel for the game' ('*sens practique'*) (Bourdieu, 1992, 66): a familiarity with and understanding of how, the *habitus* (Bourdieu, 1992, 60) and, in particular, an institution or social convention, functions. Where there are decreasing scores, these do not necessarily indicate that the students' ability to perform those functions has lessened. Instead, this may reflect a change in their expectations on entry that their assessment judgement is good, to a more informed 'feel for the game', a more nuanced understanding of the varied, testing, and complex nature of assessment at undergraduate level, which they have gained through the year.

6.2 Assessment Confidence

Students demonstrated very high levels of uncertainty about assessment at point of entry that were much greater than academics had anticipated. Despite considerable investment in developing assessment literacy, many students still reported being **confused by the requirements of assessment at the end of their first year, suggesting more needs to be done to secure better levels of understanding.** While students reported an increased awareness of assessment literacy (understanding and judgement), their feelings of confusion as to *why* they were being asked to develop independently, speaks to a lack of confidence in taking control and in being accountable for their own learning. Assumptions about assessment, often erroneous, created barriers to students' approaches to assessment.

A significant number of students felt they **lacked confidence in knowing what was expected of them in assessment**, and that feedback did not always help them in coming to an understanding of that (Law, Southampton). Relatively poor self-regulators wanted more feedback and were also less satisfied with it. Key emergent themes included:

- Students struggled to understand the language of HE assessment and the process.

- Students predominantly saw themselves as 'doers' of assessment. In other words, they saw assessment as something that was 'done' to them as opposed to them having co-ownership.
- Students were strongly focused on the role of the lecturer as a feedback giver, they rarely discussed their feedback role in learning at all. They saw their feedback role very narrowly as providing an opinion on the quality of the course. Lecturers also conceived their role predominantly as feedback givers.
- Many students lacked confidence to ask questions.
- Active contributions to learning during taught sessions were difficult for many students; the willingness to offer highlighted by Barnett (2011) was an issue.
- Students were very instrumentalist in their approaches to assessment, with a demand for very tightly linked information about achieving good marks.
- Students were highly variable in their use of strategies across time and space.
- 'Ultra-autodidacts', the students who do not engage with the taught curriculum represented a varied group with some regulating very well and others very poorly.
- Students lacked understanding of independent work and how to seek out support from others.
- Students expressed difficulties in communicating and expressing ideas clearly with lecturers; not knowing how to communicate.
- Lack of awareness of the boundaries of lecturer roles and what they could and could not ask.
- A level of discomfort regarding peer work and also value in getting feedback from peers as felt less confronting than discussing with lecturers.
- Dislike of self- and peer-evaluation, because of the difficulty of judging the quality of their own work.
- Student lack of confidence in the marking and moderation process.

In supporting students' learning transitions addressing **student lack of confidence and self-efficacy (their confidence in their ability to do well) is fundamental and especially in facilitating the giving, receiving and acting on feedback**. These considerations are particularly important when students start their university journey and make the transition from school and Further Education to Higher Education. In addition, as more universities lower their entry tariffs to meet recruitment and widening participation targets, the typical student intake will likely be populated to a relatively large extent by students who have obtained lower grades that were previously accepted onto many university degree programmes. Consequently, the support offered to these students needs to be reviewed and likely redesigned, and the approach developed fit for purpose. Developing these students' levels of assessment literacy and their understanding of university assessment standards is going to be key to their success.

Disconnects between school and university teaching in terms of disciplinary knowledge and skills, and approaches to learning, impact transitions, and need to be directly addressed. Supporting students to Identify potential skills gaps at point of entry and preferably prior to entry is important. **Clear mapping of the competencies required throughout a degree programme are needed to support student access to the requirements. Ideally, this task should be done with students.**

Peer engagement in assessment is complex and our findings mirror the often contradictory views found in the literature (Evans, 2014). Students valued support from peers, finding it less threatening, than that from academics, but at the same time questioned the quality of it. Students gained from learning with each but often reported discomfort with the process. **Training in peer engagement is essential:**

> As reflected in EAT, we need to facilitate improvements in learning, and thinking about how we train students to engage in peer learning rather than assuming these are things students can do or are innate. We need to ensure we build in opportunities for all students to use and seek feedback; there are some students whose social and cultural capital might give them an advantage and this could widen the attainment gap further. The use of universal interventions that support the development of assessment and feedback literacy is a key learning point – DEFT challenges assumptions by opening up a discussion and levelling the playing field when it comes to students being able to make use of feedback. (Module leader, Surrey)

6.3 Lack of Understanding of the Assessment Process

Students reported being perplexed by the assessment process. For example, students were confused about **how assessment elements fitted together** and **the nature of formative assessment exercises, and how these related to summative assessment.** Confusion was also evident in not being clear about what they needed to know; how they would receive feedback from non-assessed work; whether feedback from formative assignments was useful; being expected to make decisions regarding assignment choices for themselves; how one module related to another. In sum they did not have access to the decisions behind the curriculum. **Mapping the student journey from novice to competent professional and articulating the key steps, knowledge and skills that are required is essential.** The importance of understanding the connections between modules was found to be important for lecturers and students, and especially in coming to understand assessment load and distribution of tasks across the three year experience and how student come to own their own assessment and identify strategies to manage key crunch points. To support students, lecturers need this holistic understanding and their needs to be more integration between personal and academic tutoring if assessment practices are to be enhanced.

These barriers underscored the importance of being clear on 'what constitutes good' (Evans, EAT, 2016). **Balancing provision of explicit guidance and student self-regulation of assessment and ensuring avoidance of spoonfeeding is essential** (Balloo et al., 2018). As discussed by the History lead at Southampton: " We do not offer a formulation to complete an assignment, but we can support students in understanding what they need to do with clear guidance, clear marking criteria and an understanding of how to do well. Through the mechanism of feedback we can show students what they did well and what they did less well and how to improve for the next assignment."

Assessment literacy interventions must go deep and be embedded within curriculum design and not marginalised to a one off induction experience when students may be too overloaded to attend to the details. Repeated opportunities for students to explore the suitability of criteria, for lecturers to explain the rationale underpinning assessment is

fundamental. **Student ownership of criteria is essential** (Sadler, 2010, 2013). **Development of assessment criteria needs to facilitate co-construction** so that students are able to internalise standards and work out requirements for themselves at a deeper level. The importance of **preparing students for peer-to-peer working and self-reflection** is also integral to this process, and as part of a facilitated journey to support students' development of self-evaluation skills. For the group of students who do not engage (from an attendance perspective), documents setting out work submission requirements and explaining assessment criteria need to be completely unambiguous. Anything that can be misunderstood by students whom teachers rarely get to meet probably will be. The importance of explaining the meaning behind the words was critical.

Much is written about the role of the student in the feedback process but students in this project highlighted that feedback remains a predominantly one-way system perpetuated by students' assumptions and expectations about feedback, and also lecturer confidence and belief in the value of co-partnership. Across all institutions, tools and approaches that facilitated dialogue around the different dimensions of the assessment feedback process were highly valued. In this project case studies implementing peer support initiatives were successful in impacting student learning outcomes. We know that peer engagement activities are effective in supporting students' self-judgement skills. **More concerted efforts are needed at discipline and institutional levels to embed peer mentoring as an intrinsic element of the curriculum with each student as a mentor of others.**

Summary: Through integrating lecturer and student feedback, and exploring the relative success of the case studies it is possible to highlight important aspects of interventions that were most successful as summarised below in Table 7. Key lessons highlight the importance of an integrated approach. Assessment feedback is vulnerable given the varied goals of learners and emotions in mediating the impact of feedback. The EAT Framework highlights the importance of supporting students in coming to understand for themselves highlighting the importance of design in providing students with multiple opportunities to test their understandings. In stressing the cognitive dimension of assessment feedback, emphasis needs to be placed on making requirements explicit, and honing curriculum to focus on the core constructs and troublesome knowledge that students cannot readily attend to on their own. Best use of resource considers, therefore, how we make information most accessible and minimise misinterpretation, ensure feedback is focused on key messages, and is placed where it can have maximum impact, and assessment is designed so as to focus on supporting students to engage meaningfully with content that is authentic and relevant to current and future requirements.

The project confirmed the importance of individual learning differences in relation to the variable starting points of students on entering HE, their diverse life and learning experiences, their innate characteristics, their differing needs mediated by their self-regulatory behaviours, and differing perceptions of context. Lack of agency was amplified by a lack of understanding of process and their roles within assessment. Students reacted in similar and different ways to input. The data demonstrated the importance of understanding individual student trajectories and also highlighted universal concerns. Universal concerns were around access to the language and rules of assessment, the need for clarification of process, and understandings of how to engage effectively with lecturers in order to make sense of the requirements of assessment. There was strong evidence of assessment washback; students not valuing a task; students' perceptions of task value mattered. A feedback pathology of avoidance was evident

demonstrating students' use of self-regulatory behaviours to avoid feedback to protect sense of self-worth. Students overwhelmingly wanted early opportunities to test their understanding but in a way that did not challenge their sense of self, highlighting the importance of formative feedback processes and potential to work with students to self-generate such opportunities. (See Appendix F for summary of themes generated from student interviews across Southampton and Surrey).

Table 7: Effectiveness Factors in using EAT

EAT Principles	EAT dimensions and sub-dimensions	Elements evident in successful case studies
a. shared beliefs and values between academics and students b. student-academic partnership c. inclusivity from universal design perspectives d. sensitivity to context e. holistic – experience of the student learning journey in its entirety f. integrative – interconnected g. agentic in promoting student and academic ownership of assessment h. meaningful learning experiences i. sustainable j. evidence-based	Literacy AL1	Involvement of students in the development of assessment criteria. Explanation of the rationale underpinning the assessment criteria and facilitating students to work with these to refine and develop at the level of the task. Lecturers going beyond looking at transparency to questioning the relevance and validity of the criteria and tasks themselves (AD2).
	Literacy AL2	Making clear how all elements of a programme fitted together and how the assessments were linked for staff and students. Getting students to walk through the programme and to map their own journeys and potential crunch points. Team development of programmes (AD2) to critically examine the placement and nature of different assessments and how these map to learning outcomes.
	Literacy AL3	Being explicit about what partnership means and what entitlement is – how much support and when. In navigating the rules of engagement, what is black and white and what is grey. Clarifying with students at point of entry what is expected from them in terms of their contribution to programme development, attendance, supporting other students etc.
	Literacy AL4	Clarifying what the core and threshold concepts are and agreeing these as a team. Identifying any specific skills gaps in the transition from school to HEI at the discipline level. Undertaking a skills and knowledge audit / base line testing at point of entry for students. Agreeing a 'common language' for the discipline and making this accessible to students. Focusing on relational dimensions in building a discipline-specific community with students.
	Feedback AF1	Focusing feedback on what was good, what let you down and how to improve – rationalising feedback to focus on the most important points. Staff and students working together to clarify what feedback is, how to seek, give and use it. Situating feedback where it can have most impact (AD2). Agreeing clear baselines for the quality of feedback, ensuring quality and moderating quality.
	Feedback AF2	Making sure students have many opportunities to test their understanding from point of entry into university – with students also leading on providing such opportunities (AD2).

a. shared beliefs and values between academics and students b. student-academic partnership c. inclusivity from universal design perspectives d. sensitivity to context e. holistic – experience of the student learning journey in its entirety f. integrative – interconnected g. agentic in promoting student and academic ownership of assessment h. meaningful learning experiences i. sustainable j. evidence-based		Ensuring that the formative feedback directly supported summative outputs (AD2). Supporting student reflection on feedback but with an emphasis on goal setting - on how feedback is used to move forward.
	Feedback AF3	Providing training for students in how to give, use and seek feedback with others. Making requirements for peer support explicit. Ensuring team activities are authentic and support students to use the individual strengths of team members to maximise outputs. Reward based on getting all team members over the line. Making the tensions involved in team work explicit from the outset. Providing the mechanisms to support the building of team networks. Flexibility in team membership and individual ownership of team efforts. Students engaged in identifying 'crunch points' for future cohorts and providing timely training for peers.
	Feedback AF4	Student self-assessment built into all activities. Students engaged in summative marking.
	Design AD1	Training staff and students in assessment regulations. Making marking and moderation procedures explicit. Allocating time in workload models to ensure teams are able to come together to discuss assessment processes and to calibrate judgements.
	Design AD2	Designing assessments that require students to engage. Emphasis on inquiry based, project/product based learning requiring depth of understanding. Emphasis on students as producers working in partnership with lecturers on real problems with a community focus. Students as mentors to others.
	Design AD3	Making how to access and use resources explicit. Clarifying what good resources look like and how to access them. Supporting students to build their own networks of support beyond their current network base. Engaging students in resource development and research. Analysis of data to interrogate whether any students are disadvantaged by assessment. Ensuring the mode of assessment is the most appropriate to test understanding required by the learning outcome and being explicit on the range of ways in which meeting the requirements of the learning outcome can be achieved.

	Design AD4	Evaluation as iterative as part of each teaching episode and evaluated and supported by the student body. Ensuring evaluation is aligned and asking the right questions as to what the students understand and what they need help with. Training in the use and application of data to support student learning trajectories.

7. Conclusions and Recommendations

Differential student learning outcomes were removed in case studies, at the module level, where there was the strongest fidelity with the project aims in implementing an integrated assessment framework highlighting the potential of the approach.

Longer-term sustainable impacts of the project included the embedding of the assessment feedback approach within and beyond the project modules, leading to the adoption of the project's core concepts at discipline, faculty and institutional levels. Significant impacts on the quality of: (i) quality assurance, e.g., assessment feedback guidelines; (ii) professional development programmes; (iii) assessment criteria; (iv) co-creation and student-staff partnerships, and (v) collaborative assessment feedback research between institutions and including national bodies (e.g., Advance HE; European Universities Association).
Next steps in the development of assessment feedback practices include further embedding of ideas within and across institutions, and especially, the adoption, assimilation and evolution of ideas at disciplinary levels. Dissemination vehicles beyond internal professional development training and community of practice groups will be facilitated through further engagement with all HE stakeholders, and through a range of dissemination events to include webinars; development of e-learning resources based on the project, and securement of follow on funding.

The EAT conceptual framework was powerful in assisting colleagues in developing a more critical approach to assessment across institutions. Strong fidelity to EAT Framework principles impacted outcomes. The adoption of a critical pedagogy and a fully integrated approach to assessment were fundamental. Inclusion is central to the EAT framework which is underpinned by a Personal Learning Styles Pedagogy (Evans & Waring, 2009), closely aligned to Universal Design. Understanding of inclusive approaches to assessment is an area that HEIs need to focus on more, and especially given increasing concern regarding interpretation of reasonable adjustments.

The EAT Framework encouraged more collaborative effort and especially in relation to exploring the progression pathways for students within and across modules and programmes. There was considerable spread of effects in that interventions for first year students permeated and filtered down into the development of assessment provision for year two and three students and at one university for PhD supervision support.

How assessment design and delivery is enacted has the power to impact student differential learning outcomes but this is dependent on how assessment is enacted at the micro-level and how assessment practices are supported at the institutional level; it takes time and investment. Failure to consider the integrated nature of assessment is costly for students and staff.

Creating the conditions to support integrated assessment is critical and the role of communities of practice in this is paramount. Fundamental to this endeavour is how such communities are developed and sustained to enable inclusion of all stakeholders (students, academic and professional services staff, alumni, and wider partners). HEIs need to consider their assessment health as a prerequisite to supporting organisational change in assessment and feedback practices (Appendix G.).

To scale up integrated assessment practices, significant investment in training is needed to address the fundamentals of assessment design; this requires an understanding of quality assurance literacy. Greater emphasis is needed on the quality and use of data to inform assessment design and the use of research-informed approaches to developing and evaluating informed and inclusive assessment practices. Where research understanding is limited, results are compromised (Ifanthaler, 2017).

Oases of equality exist within institutions, places where differential learning outcomes are not evident. HEIs would be well advised to use their own institutional analyses as a starting point to investigate the factors impacting the relative success of disciplines/modules in tacking the differential student learning outcome issue; to what extent does assessment and overarching curriculum design play a part in this? What lessons can be learnt from successful disciplines where differential learning outcomes are absent, what is the role of assessment in this, and how can such lessons be applied to others? This research proved the potential of interdisciplinary communities of practice but also highlighted the importance of high quality assessment training within the disciplines that needs to be owned by the disciplines. Ownership of assessment training must be at the discipline level drawing on evidence from assessment research and institutional data; central professional development units in HEIs have a key role in co-ordinating and supporting communities of practice in this endeavour.

The project highlighted the importance of considering intersectionality in data analyses. Students who did least well were male, BAME and from low SEC backgrounds; exploring data purely at SEC/BAME levels gives a very incomplete picture. Gender attainment gaps were evident at all levels of inquiry and across all three institutions. In seeking to ensure assessment is equally supporting all students, intersectionality, needs attention in considering how different individual differences variables and contextual variables combine to impact student success and the role of assessment in this.

In the most successful examples where the issue of student differential learning outcomes was addressed there was strong alignment between research-informed practices at individual and institutional levels. **The project highlighted the importance of preparatory work when situating a new initiative to ensure all systems and processes support one another.** The disruptive nature of poorly aligned institutional assessment practices can undermine positive change at the institutional level. Chasing of metrics at the institutional level and ill-conceived assessment initiatives can interrupt productive assessment change (e.g., competition to reduce turn-around times for marked work can compromise the quality of assessment and moderation of it and especially for certain disciplines; quick fixes may undermine the coherence of assessment; increasing choice without mediation of that choice, can negatively impact on those students who regulate badly; fixation on giving more feedback but not addressing assessment design, the role of students in the feedback process, and where feedback could be best placed to maximise support learning; overloading induction practices impacting cognitive overload for staff and students).

The complexity of assessment was highlighted and demonstrated the complex interactions identified between individuals (staff and students) and their assessment environments. The project was successful in generating significant change in students' approaches to assessment

and the relationship between student engagement in assessment and outcomes was noted where integrated assessment approaches were more embedded. In analysing student learning trajectories, and the reasons implicated, data needs to be explored at the module level; aggregated data gives us limited insights into the learning trajectories of individual students.

There is much potential to use fine grained measures of learning gain which are especially valuable if related to disciplinary specific knowledge and skills. This data can be used with students to support their learning and to refine curricula in the moment, acknowledging the dynamic possibilities of assessment to support learning. HEIs have a vast vault of student data, and being mindful of GDPR regulations, this can be mined more fruitfully to support enhancements in learning. Lack of available institutional data at the individual level compromises the quality of evaluation as it as the micro-level where the impact of delivery on students' approaches to assessment is most acutely evident. Training for staff needs to consider how data can be used most effectively to support student learning.

The project advocated a 'students as partners approach' and the most successful projects evidenced student engagement in co-production, for example, in the design of assessment criteria, delivery of content, peer mentoring, and active engagement in research with academic colleagues. However, a paradox was evident in that many students at point of entry saw themselves as receivers and not doers of assessment, and some academics were concerned about the level at which students could constructively be partners. How students are inducted into higher education to be partners in assessment is a priority. In addressing student partnership the gulf between students' assessment experiences prior to HE and at point of entry need to be considered in how to bridge the gap through appropriate scaffolding experiences which aim to support students' agentic engagement in assessment.

Aligned with Schneider and Preckel's (2017) findings, the project highlighted relational capital as an issue. Lack of student confidence in discussing ideas and seeking feedback from lecturers, and in assessing the quality of their own work were considerable issues but these were also issues for many academics. The 'personal hurt' of academics when they felt that their efforts were not valued by students or recognised through reward and recognition within institutions was palpable. How feedback is viewed still requires a significant mindshift in relation to reviewing the role of the student and lecturer in the process. The current emphasis on feedback needs to shift to assessment design, and how we can provide opportunities for students to test their understanding throughout their programmes of study – a carefully crafted experience that enables students to recognise different sources of feedback and to come to understand their role in the process better. In this project we emphasized the importance of developing students' self-regulatory skills to include critical reflection on practice and this also need to be emulated in supporting students in goal setting with the intention of moving their own learning forward. Our language needs to change to facilitate this to consider how we promote opportunities for feedback exchanges (Evans, 2013), and move away from notions of feedback recipience which maintain the status quo in relation to the expectations of students and lecturers.

The Office for Students' funding facilitated collaboration between the three institutions, and at a level that would not have been feasible without it. A key element of the project was the

significant investment in the development of assessment feedback research literacy of staff, and protected time to be able to plan such support, and over a sustained period of time. The cultural capital accrued through this work had significant impact on the professional development of many colleagues who are now in positions leading assessment practice in their respective areas. This specialist upskilling of staff and associated snowball effects on the quality of assessment provision with demonstrable impacts on students' learning was a direct result of the project funding. The funding also made it possible to access and analyse data at sophisticated levels to inform policy and practice; an area that needs more investment in the future to ensure that we critically evaluate the impact of assessment practices on all students to ensure equity and access for all. The ending of OfS funding for projects of this nature represents a massive loss to the higher education sector given the significant gains in understanding accrued from being involved in the ABSS initiative, and the collective gains that can be achieved through collaboration across HEIs.

In sum, assessment practices do have the potential to nullify the impacts of student differential learning outcomes but this requires investment at all levels within an institution and the adoption of a research-informed integrated approach. To do this requires extensive training at the disciplinary level, a very clear institutional focus; enhanced data handling capacity, and integrating practice and research in the pursuit of high quality assessment practices that meet the benchmark of high quality research. While there are no short cuts to achieving high quality research-informed inclusive assessment practices, not to invest is extremely costly on staff and student time and negligent, as evidence suggests that what we do at the module level can address differential learning outcomes and level the playing field for all leaners (students and academics).

8. Acknowledgements: Case study Template Contributors

Southampton

Ford, N. (2019). The Impact of Peer Learning on Assessment Literacy and Feedback Orientation. Office for Students ABSS Case Study, Southampton, University of Southampton.

Harding, I., & Grange, L. (2019). Using formative field-skills training to improve student assessment literacy and outcomes in the Earth Sciences. Office for Students ABSS Case Study, Southampton, University of Southampton.

Hobson, D. (2019). Developing first year Graphic Design students' assessment literacy in relation to the sketchbook through exemplars and peer feedback against learning outcomes. Office for Students ABSS Case Study, Southampton, University of Southampton.

Lock, J. (2019). Feedback on multiple choice exams. Office for Students ABSS Case Study, Southampton, University of Southampton.

Pinnock, A. (2019). The extra-curricular elective. Office for Students ABSS Case Study, Southampton, University of Southampton.

Quince, E. (2019). Developing self-regulatory behaviour in first year history students Office for Students ABSS Case Study, Southampton, University of Southampton.

Spencer, V. (2019). Building resilience and the self-confidence to support students in making their transitions into university more effective and successful. Office for Students ABSS Case Study, Southampton, University of Southampton.

Telford, M., & Thorpe, K. (2019). Evaluation of interventions in Law modules as part of the University of Southampton's RAP Project Catalyst B Activities. Office for Students ABSS Case Study, Southampton, University of Southampton.

Thackray, D. (2019). Improving the feedback given to students to facilitate students' self-evaluation of their own performance. Office for Students ABSS Case Study, Southampton, University of Southampton.

CONTRIBUTORS: Xiaotong Zhu; Sharifa Al'Adawi; Louis Bayman; Sofia Bull; Beth Carroll; Richard Cartwright; Shelley Cobb; Sara Dixon; Linda Edwards; Carol Evans; Mike Hammond; Julie Gammon; Mary Gobbi; Neil Gostling; Laura Grange; Ian Harding; Victoria Hillman; Daniel Hobson; James Hunt; Huw Jones; Nick Karn; Julia Kelly; Judith Lock; Emma Mansfield; John Mcaleer; Heather Pasero; Goran Mashanovich; Palmour; Eloise Parrack; Andrew Pinnock; Sharon Presecci; Eleanor Quince; Chris Radu-Chiorean; Veronica Spencer; Mark Telford; Debbie Thackray; Keir Thorpe; Anis Zra.

Surrey

Derham et al. (2019). Embedding assessment literacy in the School of Health Sciences. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding feedback literacy in the School of Health Sciences. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding assessment literacy in the School of Biosciences and Medicine. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding feedback literacy in the School of Biosciences and Medicine. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding assessment literacy in Psychology. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding feedback literacy in Psychology. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Embedding feedback literacy in the School of Veterinary Medicine. Office for Students ABSS Case Study, Surrey, University of Surrey.

Derham et al. (2019). Preparing students for verbal feedback in the clinical learning environment. Office for Students ABSS Case Study, Surrey, University of Surrey.

CONTRIBUTORS: Naomi Winstone; Kieran Balloo; Simon Bettles; Kikki Bodman-Smith; Peter Cockroft; Cathrine Derham; Bridget Dibb; Jackie McBride; Rachel Stead; Andrew Stokoe; Chris Trace; Alfred Thumser.

Kingston

Hughes, A., De Camargo C., & Bright, C. (2019). Maximising student success: Criminology/Sociology. Office for Students ABSS Case Study, Kingston, Kingston University.

Carter, F., Yilmaz, A., & Bright, C. (2019). Maximising Student Success in Media and Communications. Office for Students ABSS Case Study, Kingston, Kingston University.

Hughes, A., & & Bright, C. (2019). Maximising Student Success: Geography. Office for Students ABSS Case Study, Kingston, Kingston University.

Hughes, A., & Bright, C. (2019). Maximising Student Success in Nursing. Office for Students ABSS Case Study, Kingston, Kingston University.

Potkin, H. (2019). Maximising student success: Art History. Office for Students ABSS Case Study, Kingston, Kingston University.

Watson, S. (2019). Maximising Student Success in Social Care and Social Work. Office for Students ABSS Case Study, Kingston, Kingston University.

CONTRIBUTORS: Annie Hughes; Mary Brady; Chantal Bright, C. Fan Carter; Rosie Castle; John Docherty; Debbie Humphrey; Mary Kelly; Helen Potkin; Christine Skilton; Susan Watson; Maha White; Aybige Yilmaz.

9. Bibliography

Ajjawi, R., & Boud, D. (2017). Researching feedback dialogue: an interactional analysis approach. *Assessment and Evaluation in Higher Education*, *42*(2), 252-265.

Al'Adawi, S. (2018). Assessment literacy highlighting students' partnership and its impact on students' academic achievement and sense of belonging to the university. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Al'Adawi, S. (2019). How can A Research-informed Approach to the Integration of Self-Regulated Learning Strategies Support Sustainable Assessment Practices at a College of Education, Oman? PhD Thesis, University of Southampton.

Archer, J., Cantwell, R., Bourke, S. (1999). Coping at university: an examination of achievement, motivation, self-regulation, confidence and method of entry. *Higher Education Research and Development, 18(*1), 31-54.

Austen, L. Heaton, C. Jones-Devitt, & S. Pickering, N. (2017). Why is the BAME attainment gap such a wicked problem? *The Journal of Educational Innovation, Partnership and Change, 3* (1).

Balloo, K., Evans, C., Hughes, A., Zhu, X., & Winstone, N. (2018). Transparency isn't spoon-feeding: How a transformative approach to the use of explicit assessment criteria can support student self-regulation. *Frontiers in Education*, *3*(69).

Balloo, K., Downward, S., Evans, C. A., & Winstone, N. E. (2018, January). *Developing assessment and feedback practices to support students' assessment literacy and self-regulation.* Paper Presented at the Excellence in Teaching Symposium (Surrey ExciTeS), University of Surrey, Guildford, UK.

Balloo, K., Norman, M., & Trace, C. (2018, April). *The use of a standardised assessment brief template to enhance self-regulatory skills and student-staff assessment dialogue.* Roundtable Discussion at the Simply Better: Building Partnerships in Assessment Practices Conference, University of Southampton, Southampton, UK.

Balloo, K., Norman, M., & Winstone, N. E. (2018, September). *Using an assessment brief template to enhance students' assessment literacy and develop their self-regulation.* Paper Presented at the Simply Better: Researching Assessment Practices – Improving Student Outcomes Conference, University of Southampton, Southampton, UK. https://doi.org/10.3389/feduc.2018.00069

Balloo, K., Norman, M., & Winstone, N. E. (2018, December). Evaluation of a large-scale inclusive assessment intervention: a novel approach to quantifying perceptions about assessment literacy. In C. A. Evans (Chair), *A principled approach to the development, implementation, and evaluation of research-informed assessment practices within higher education.* Symposium Conducted at the Society for Research into Higher Education (SRHE) International Conference, Newport, UK.

Balloo, K., Winstone, N. E., & Evans, C. A. (2018, August). *The intervening role of assessment literacy in relationships between feedback literacy and self-regulation.* Poster Presented at the 9th Biennial Conference of the European Association for Research on Learning and Instruction

(EARLI) SIG1: Assessment and Evaluation, Helsinki, Finland. https://doi.org/10.13140/RG.2.2.27769.93283

Baverstock. A. (2018). The process of releasing feedback *before* the marks. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Baverstock. A. (2018). What part can pre-arrival shared-reading play in student understanding of their transition to higher education and the nature and role of assessment within universities? *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Bell, A. R., & Brooks, C. (2018). What makes students satisfied? A discussion and analysis of the UK's national student survey. *Journal of Further and Higher Education, 42*(8), 1118-1142.

Bennett, R., & Kane, S. (2014). Students' interpretations of the meanings of questionnaire items in the National Student Survey. *Quality in Higher Education*, *20*(2), 129-164.

Blackmore, J. (2009). Academic pedagogies, quality logics and performative universities: evaluating teaching and what students want. *Studies in Higher Education, 34*(8), 857-872.

Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment and Evaluation in Higher Education*, *38*(6), 698-712.

Brocke, S. Nicholls, T. (2007). Ethnicity and degree attainment. Department for Education and Skills, England, UK.

Burgess, A., Senior, C., & Moores, E. (2018). A 10-year case study on the changing determinants of university student satisfaction in the UK. *PLoS One, 13*(2), 1-15.

Brown, S. (2015). A review of contemporary trends in Higher Education assessment. *@tic. Revista d'innovació Educativa*, (14), 43–49. https://doi.org/10.7203/attic.14.4166

Cantwell, R. H., & Moore, P. J. (1996). The development of measures of individual differences in self-regulatory control and their relationship to academic performance. *Contemp Educ Psychology, 21*(4):500-17.

Carey, B. Franklina Owusu-Brobbey, F., Nakibuuka, L-M. (2018). Academic Slurs: Understanding how language can create an unintentional separation in higher education for black minority ethnic students. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Carless, D. (2015). *Excellence in university assessment: Learning from award-winning practice*. London: Routledge.

Carless, D., & Boud, D. (2018). The development of student feedback literacy: enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, *43*(8), 1315-1325.

Carless, D. (2017). Scaling up assessment for learning: Progress and prospects. In D. Carless, S. M. Bridges, C. K. Y. Chan, & R. Glofcheski (Eds.), *Scaling up assessment for learning in higher education* (pp. 3–17). Singapore: Springer. https://doi.org/10.1007/978-981-10-3045-1_1.

Chiorean, R-C., & Zhu, X. (2018). The EAT APP: Exploring students' engagement in assessment. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Cotton, D.R.E. Joyner, M. George, R, Cotton, P.A. (2017). Understanding the gender and ethnicity attainment gap in UK higher education. *Innovations in Education and Teaching International*, 53 (5), 475-487.

Cousin, G. and Cureton, D. (2012) *Disparities in student attainment (DISA).* York: HEA.

Croft, A. & Schmader, T. (2012).The feedback withholding bias: Minority students do not receive critical feedback from evaluators concerned about appearing racist. *Journal of Experimental Social Psychology, 48*(5), 1139-1144.

Dansoh, C. (2018). Adding realism to the subject. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Davidson, T., & Rowledge, T. (2018). EAT Framework Application. Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton.

Dawson, J. Tai, R. Ajjawi, & D. Boud (Eds.) (in progress). *Re-imagining university assessment in a digital world. Place:* Springer. https://doi.org/10.1007/978-3-030-25112-3

Dawson, P., Henderson, M., Mahoney, P., Phillips, M., Ryan, T., Boud, D., & Molloy, E. (2019). What makes for effective feedback: staff and student perspectives. *Assessment & Evaluation in Higher Education*, *44*(1), 25-36.

Deeley, S. J. (2018). Using technology to facilitate effective assessment for learning and feedback in higher education. *Assessment & Evaluation in Higher Education*, *43*(3), 439-448

Deeley, S. J., & Bovill, C. (2017). Staff student partnership in assessment: enhancing assessment literacy through democratic practices. *Assessment & Evaluation in Higher Education*, *42*(3), 463–477. https://doi.org/10.1080/02602938.2015.1126551

Devlin, M., Kift, S., Nelson, K., Smith, L. & McKay, J. (2012). Effective teaching and support of students from low socioeconomic backgrounds: Resources for Australian higher education.Sydney: Office for Learning and Teaching http://www.lowses.edu.au/assets/Practical%20Advice%20for%20Teaching%20Staff.pdf

DfE (2017). Teaching Excellence and Student Outcomes Framework Specification. London, UK. Department for Education. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/658490/Teaching_Excellence_and_Student_Outcomes_Framework_Specification.pdf

Eales-Reynolds, L- J., Judge, B., McCreery, E., & Jones, P. (2013). *Critical thinking skills for Education students.* London: Learning Matters, Sage.

Ecclestone, K., & Hayes, D. (2008). *The dangerous rise of therapeutic education*. London: Routledge.

Elevation Networks Trust (2012). Race to the top: The experience of Black students in higher education, [online] Available from: https://www.bowgroup.org/sites/bowgroup.uat.pleasetest.co.uk/files/Race%2520to%2520the%2520Top%2520-%2520Bow%2520Group%2520-%2520Elevation%2520Networks%2520(April%25202012)_0.pdf [Accessed 1st of March 2019].

Esterhazy, R., & Damşa, C. (2019). Unpacking the feedback process: An analysis of undergraduate students' interactional meaning-making of feedback comments. *Studies in Higher Education, 44*(2), 260-274.

Evans, C. (2013). Making sense of assessment feedback in higher education. *Review of Educational Research*, *83*(1), 70-120. doi:10.3102/0034654312474350.

Evans, C. (2014). Exploring the use of a deep approach to learning with students in the process of learning to teach in D. Gijbels, V. Donche, J. T. E Richardson, and J. Vermunt. *Learning patterns in higher education. Dimensions and research perspectives* (pp. 187-213).EARLI Book Series. London and New York: Routledge.

Evans, C. (2015a). Exploring students' emotions and emotional regulation of feedback in the context of learning to teach. In V. Donche, S. De Maeyer, D. Gijbels, and H. van den Bergh (Eds.) (2015). Methodological challenges in research on student learning (pp. 107-160). Garant: Antwerpen.

Evans, C. (2015b). Students' perspectives on the role of peer feedback in supporting learning. *Journal of Cognitive Education and Psychology, 14(1), 110-125.*

Evans, C. (2016). Enhancing assessment feedback practice in higher education: The EAT framework. Southampton: University of Southampton. Retrieved from https://eatframework.org.uk/

Evans, C. (2017).Implementing the EAT Framework introduction, January 19, 2017, Kingston: Kingston University Training Session.

Evans, C. (2017). Principles underpinning practice. 26 June, 2017, Kingston: Kingston University Training Session.

Evans, C. (2017). How can Assessment Practice support Student Learning Transitions? 28 July, 2017, Kingston: Kingston University Training Session.

Evans, C. (2017). Maximising student success through the development of self-regulation, 7th September, 2017. Surrey: University of Surrey.

Evans, C. (2018).Implementing the EAT Framework, Stage 2, January 15, 2018, Surrey: University of Surrey.

Evans, C. (2018). Supporting students' learning transitions: An Inclusive Assessment Approach -Using the EAT Framework. Unravelling assessment and feedback literacy conference, 8 June, 2018 Surrey: University of Surrey.

Evans, C. (2018).Implementing the EAT Framework, Stage 2, January 19, 2018, Kingston: Kingston University Training Session.

Evans, C. (2018). Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton.

Evans, C. (2018).Making assessment feedback manageable, July 10, 2018, Kingston: Kingston University Training Session.

Evans, C. (2018). High impact pedagogical research: measuring meaningful gains in assessment. 11 October, 2018, SRHE, London.

Evans, C. (2018). Designing Transparent and Inclusive Assessment using EAT. November 1st, 2018, Kingston: Kingston University Training Session.

Evans, C. (2019). Key Factors Impacting the Effectiveness of Assessment and Feedback: A Go to Guide. *Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Evans, C., Kandiko-Howson, C., & Forsythe, A. (2018). Making sense of learning gain in higher education. *Higher Education Pedagogies,* 3(1): 1-45, DOI: 10.1080/23752696.2018.1508360 *https://www.tandfonline.com/doi/pdf/10.1080/23752696.2018.1508360*

Evans, C., with Muijs, D., & Tomlinson, D. (2015). *Engaged student learning: high impact strategies to enhance student achievement.* York: Higher Education Academy.

Evans, C., Spencer, V. with Chipulu. C., Ford, N., Gobbi, M., Grange, L., Harding, I., Harris, L., Lock, J., Lotti, E., Mashanovich, G., Perisic, V., Petit, S., & Telford, M. (2018). *Developing students' ability to self-monitor and self-evaluate their own work.* Presented at: 3rd Enhancing Student Learning Through Innovative Scholarship Conference (#ESLTIS17), University of Sheffield, 20 -21 July 2017.

Evans, C., Waring, M., & Christoudolou, A,. (2017). Building teachers' research literacy: Integrating practice and research. *Research Papers in Education, 32(4), 303-423.*

Evans, C., Winstone, N., Eales Reynolds, L-J. (2016). Maximising Student Success through the Development of Self-Regulation 1, November 7th 2016, HEFCE Meeting, Bristol.

Evans, C., Winstone, N., & Hughes, A. (2017). Maximising Student Success through the Development of Self-Regulation 2, May 8, 2017, Birmingham: HEFCE.

Evans, C. A., Winstone, N. E., Hughes, A., Zhu, X.,Balloo, K., & Kyei, C. (2018, December). Managing complex assessment interventions: Research within research. In C. A. Evans (Chair), *A principled approach to the development, implementation, and evaluation of research-informed assessment practices within higher education.* Symposium Conducted at the Society for Research into Higher Education (SRHE) International Conference, Newport, UK.

Eysenck, Michael, et al., (2007). 'Anxiety and Cognitive Performance: Attentional Control Theory'. *Emotion*, 7(2), 336–353

Fielding, A., Dunleavy, P. J., & Langan, M. (2010). Interpreting context to the UK's national student (satisfaction) survey data for science subjects. *Journal of Further and Higher Education, 34*(3), 347-368.

Ford, N. (2018). Partnerships, peer learning and pizza: developing peer support with students as partners, Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton

Ford, N. 2018). 'My Peer Leaders inspired me': How to implement a peer learning scheme with students as partners. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton. *Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Ford, N. (2019). Partnership and Peer Learning: The Impact of Peer Learning on Assessment Literacy and Feedback Orientation. *Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Ford, N., Baxter, D., Lester, E. (2017); Peer learning. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Furedi, F. (2016). *What's happened to the university? a sociological exploration of its infantilisation*. London: Routledge.

Gabriel, M. (2014). Making it big: Strategies for scaling social interventions https://www.nesta.org.uk/report/making-it-big-strategies-for-scaling-social-innovations/.

Gobbi, M., Faulds, S., Wood A., & Bonnar –Janes, M. (2018). Learning from students for students (first year readiness). Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018, Southampton: University of Southampton.

Gordon, C., McKenna, C., & McCabe, M. (2017). Catalyst fund project survey findings: Enablers, challenges, student involvement. Hefce/OfS Catalyst fund webinar.

Gostling, N., Grange, L., Harding, I., Lock, J., & Read, D. (2018). Supporting formative feedback through staff development, Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton.

Grange, L., Harding, I., Lock, J., Gostling Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton., N., & Read, D. (2018). Embedding formative feedback in your teaching practice. Researching Assessment Practices, Southampton, University of Southampton.

Gravett, K., & Winstone, N. E. (in press). Feedback interpreters: the role of learning development professionals in facilitating university students' engagement with feedback. *Teaching in Higher Education.*

Harding, I. & Grange. L. (2019). *Using student-led innovations in formative field-based teaching to improve student outcomes. Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Harrison, M. (2017). Engaging students in assessment practices. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Hughes, A., Downward, S., Bright, C., Michener, C. (2018). Exploring differential levels of confidence in assessment and feed- back literacies amongst a diverse student body: a case-study of year 1 students at the start of their Higher Education experience in a post-1992 University. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Langan, A. M., & Harris, W. E. (in press). National student survey metrics: where is the room for improvement? *Higher Education*.

Lock, J. (2017). Students' development of multiple choice questions to support assessment literacy. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Lock, J. (2019). *Feedback on Multiple Choice Exams. Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Lock, J., & Grange, L. (2017). The challenges and opportunities with fieldwork. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Lygo Baker, S., Kinchin, I.M., & Winstone, N.E. (2019). The single voice fallacy. In S. Lygo-Baker, I.M. Kinchin, & N.E. Winstone (Eds.), *Engaging student voices in higher education: Diverse perspectives and expectations in partnership.* London: Palgrave.

Hanesworth, P. Bracken, S, Elkington, S. (2019) A typology for a social justice approach to assessment: learning from universal design and culturally sustaining pedagogy, *Teaching in Higher Education*, 24 (1), 98-114.

Harries, E., & Hodgson, L. (2014) Creating your theory of change: NPC's practical guide https://www.thinknpc.org/resource-hub/creating-your-theory-of-change-npcs-practical-guide/

HEFCE (2014/03) *Differences in Degree Outcomes*. Bristol: HEFCE.

Henderson, M., & Phillips, M. (2015). Video-based feedback on student assessment: scarily personal. *Australasian Journal of Educational Technology*, *31*(1), 51-66.

Hill, N. Denholm-Price, J. Atkins, N. Dourado, L. Owuraku, N. Page, N. (2016). Does group assessment impact BAME attainment? *New Directions in the Teaching of Physical Sciences, 11* (1).

Hockings, C (2010). Inclusive Learning and Teaching in Higher Education: A synthesis of research, [online] Available from: https://www.heacademy.ac.uk/system/files/inclusive_teaching_and_learning_in_he_synthesis_200410_0.pdf [Accessed 21 May 2019].

Ifenthaler, D. (2017). Are higher education institutions prepared for learning analytics? *Tech Trends, 61*, 366-371.

Jönsson, A. (2013). Facilitating productive use of feedback in higher education. *Active Learning in Higher Education*, *14*(1), 63-76.

Linderbaum, B. A., & Levy, P. E. (2010). The development and validation of the Feedback Orientation Scale (FOS). *Journal of Management*, 36(6) 1372-1405.

Malouff, J., Emmerton, A., & Schutte, N. (2013) The Risk of a Halo Bias as a Reason to Keep Students Anonymous During Grading. *Teaching of Psychology, 40*(3) 233-237.
(McDuff & Hughes, 2015

Mahoney, P., Macfarlane, S., & Ajjawi, R. (2019). A qualitative synthesis of video feedback in higher education. *Teaching in Higher Education*, *24*(2), 157-179.

Mayhew, E. (2017). Playback feedback: the impact of screen-captured video feedback on student satisfaction, learning and attainment. *European Political Science*, *16*, 179-192.

McLean, A. J., Bond, C. H., & Nicholson, H. D. (2015). An anatomy of feedback: a phenomenographic investigation of undergraduate students' conceptions of feedback. *Studies in Higher Education*, *40*(5), 921-932.

Medland, E. (2016). Assessment in higher education: drivers, barriers and directions for change in the UK. *Assessment & Evaluation in Higher Education*, *41*(1), 81–96. https://doi.org/10.1080/02602938.2014.982072

Miller, M. (2016). The Ethnicity Attainment Gap a Literature Review. Sheffield, UK: The University of Sheffield.

Moore, G. M., Audrey, S., Barker, M., Bond, L., Bonell, C., Hardeman, W., Moore, L., O'Cathain, A., Tinati, T., Wight, D., & Baird, J. (2015). Process evaluation of complex interventions: Medical Research Council Guidance. *BMJ 2015;* 3350:h1258

Morrish, L. (2019). Pressure vessels: The epidemic of poor mental health among higher education staff. HEPI number Occasional Paper 20. https://www.hepi.ac.uk/wp-content/uploads/2019/05/HEPI-Pressure-Vessels-Occasional-Paper-20.pdf

Mountford Zimdars, A., Sabri, D., Moore, J., Sanders, J., Jones, S., & Higham, L. (2015). *Causes of differences in student outcomes*. London: HEFCE. Report to HEFCE by King's College London, ARC Network and the University of Manchester. Retrieved from http://dera.ioe.ac.uk/23653/1/HEFCE2015_diffout.pdf

Mulliner, E., & Tucker, M. (2017). Feedback on feedback practice: perceptions of students and academics. *Assessment and Evaluation in Higher Education*, *42*(2), 266-288.

Nash, R. A., & Winstone, N. E. (2017). Responsibility sharing in the giving and receiving of assessment feedback. *Frontiers in Psychology, 8,* 1519.

Nash, R. A., Winstone, N. E., Gregory, S. E. A., & Papps, E. (2018). A memory advantage for past-oriented over future-oriented performance feedback. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 44*(12), 1864-1879.

Neves, J. and Hillman, N. (2016). Report on the Student Academic Experience Survey. https://www.advance-he.ac.uk/knowledge-hub/hepi-hea-student-academic-experience-survey-2016

Newcombe, P. (2018). Improved assessment outcomes in nursing – on the hunt for the holy grail. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Nicol, D. (2010). From monologue to dialogue: Improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, *35*(5), 501–517. https://doi.org/10.1080/02602931003786559

NUS. 2008. Higher Education Campaign: Mark My Words, Not My Name. Available from: http://www.nus.org.uk/en/Campaigns/Higher-Education/ Mark-my-words-not-my-name/ [Accessed on 13 March 2019].

National Union for Students (2011). Race for Equality: A report on the experiences of Black students in further and higher education.

Norman,M., Balloo, K., & Winstone, N. (2018). The use of a standardised assessment brief template to enhance self-regulatory skills and student-staff assessment dialogue, Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton.

O'Donovan, B., Rust, C., & Price, M. (2016). A scholarly approach to solving the feedback dilemma in practice. *Assessment & Evaluation in Higher Education*, *41*(6), 938–949. https://doi.org/10.1080/02602938.2015.1052774

Panadero, E. (2017). A review of self-regulated learning: six models and four directions for research. *Frontiers Psychology, 8*:422. doi: 10.3389/fpsyg.2017.00422

Perisic, V. (2017). Improving efficiency of feedback through improving students' perception and understanding of the feedback issued on bi-weekly problem sheets. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Perisic, V. (2018). Calculus driving test. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Pinnock, A. (2018). Academic credit for interns: the extra-curricular elective. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Pinnock, A. (2019). *End-of-year reflections on the Extra-Curricular Elective. Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Pintrich, P. R. (2004). A Conceptual Framework for Assessing Motivation and Self-Regulated Learning in College Students. Educational Psychology Review, 16, 385-407. http://dx.doi.org/10.1007/s10648-004-0006-x

Pintrich, P. R., & de Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33-40.http://dx.doi.org/10.1037/0022-0663.82.1.33

Pitt, E., & Norton, L. (2017). 'Now that's the feedback I want!' Students' reactions to feedback on graded work and what they do with it. *Assessment and Evaluation in Higher Education*, *42*(4), 499-516.

Potkin, H. (2018).Co-creating the Curriculum. Case study: collaborative assessment design, Simply Better: Building Partnerships in Assessment Practices, April, 24, 2018 Conference, Southampton: University of Southampton.

Potkin, H. (2019). Co-creating the curriculum. Special issue on Creativity for Student Engagement: Purpose, Process, Product, *Journal of Student Engagement in Higher Education*, RAISE.

Price, M., Handley, K., & Millar, J. (2011). Feedback: Focusing attention on engagement. *Studies in Higher Education*, *36*(8), 879-896.

Panadero, E. (2017). A review of self-regulated learning: six models and four directions for research. *Frontiers Psychology, 8*:422. doi: 10.3389/fpsyg.2017.00422

Price, M., Rust, C., O'Donovan, B., Handley, K., & Bryant, R. (2012). *Assessment literacy: the foundation for improving student learning*. Oxford: Oxford Centre for Staff and Learning Development.

Prain, V., Cox, P. Deed, C., Dorman, J., Edwards, D., Farrelly, C., Keeffe, M., Lovejoy, V., Mow, L., Sellings, P., Waldrip, B., and Yager, Z(2013). Personalised learning: Lessons to be learnt. *British Educational Research Journal, 39*(4), *654–676.*

Preston, A., Gillman, L., & Mc Kellow, C. (2018). Using participatory visual methods to aid assessment literacy practice. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Price. J., Padovani, C., & Thorpe, K. (2018). "To vary or not to vary?" challenges in balancing assessment patterns. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Purdy, S. (2018). Filmed formative OSCE to support student skills development. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Rand, J. (2017). Misunderstandings and mismatches: The collective disillusionment of written summative assessment feedback. *Research in Education*, *97*(1), 33-48.

Reay, D., Crozier, G., and Clayton, J. (2010). "Fitting in" or "standing out": working-class students in UK higher education. Br. Educ. Res. J. 36, 107–124. doi: 10.1080/01411920902878925

Reeve, M. (2013). How students create motivationally supportive learning environments for themselves: the concept of agentic engagement. *Journal of Educational Psychology,* 105(3): 579–595 DOI: 10.1037/a0032690

Rogers, E. M. (2003). Diffusion of innovations (5th Edn). London: Macmillan.

Rogers-Shaw, C., Carr-Chellman, D. J., and Choi, J. (2018). Universal design for learning. *Adult Learning, 29*(1):20-32. DOI: 10.1177/1045159517735530.

Rose-Adams, J. (2014). Black and minority attainment: A survey of research and exploration of the importance of teacher and student expectations. *Widening Participation and Lifelong Learning, 14* (2), 1-25.

Richardson, J.T.E (2008). The Attainment of ethnic minority students in UK Higher Education. *Studies in Higher Education, 33* (1), 33-48.

Richardson, J, T.E. Rivers, B. A., & Whitelock, D. (2015). The role of feedback in the under-attainment of ethnic minority students: evidence from distance learning. *Assessment and Evaluation in Higher Education, 40* (4), 557-573.

Rosenfeld, M., & Rosenfeld, S. (2011). Illustrating a complementary paradigm for styles research: From a third-person to a second-person perspective. In S. Rayner and E. Cools (Eds.), *Style differences in cognition, learning, and management: Theory, research and practice* (pp. 143-159). New York, NY: Routledge.

Sadler, D. R. (2010). Beyond Feedback: Developing student capability in complex appraisal. *Assessment and Evaluation in Higher Education, 35*, 535-550.

Sadler, D. R. (2013). Opening up feedback: Teaching learners to see. In Merry, S., Price, M., Carless, D., & Taras, M. (Eds.) *Reconceptualising Feedback in Higher Education: developing dialogue with students*. (Ch. 5, 54-63 (London, UK: Routledge).

Sambell, K. (2013). Engaging students through assessment. In E. Dunne & D. Owen (Eds.), *The student engagement handbook: practice in higher education* (pp. 379–396). Bingley, UK: Emerald Group Publishing Limited. Retrieved from https://core.ac.uk/download/pdf/158350324.pdf

Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education. A systematic review of meta-analyses. *Psychological Bulletin, 143*(6), 565-600.

Schultz, C. (2018). Using the Art school crit in humanities education. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Scott, D., Hughes, G., Evans, C., Burke, P-L, Walter, C.., & Watson, D, and Walter, C. (2014). *Learning Transitions in Higher Education. London: Palgrave.*

Smith, C. D., Worsfold, K., Davies, L., Fisher, R., & McPhail, R. (2013). Assessment literacy and student learning: The case for explicitly developing students "assessment literacy." *Assessment & Evaluation in Higher Education*, *38*(1), 44–60. https://doi.org/10.1080/02602938.2011.598636

Senior, N. (2012). Exploring the retention and attainment of black and minority ethnic (BAME) students on social Policy pathways in higher education. The Higher Education Academy, [online] Available from: https://www.heacademy.ac.uk/system/files/exploring_retention_and_attainment_of_BAME_students_nicki_senior.pdf [Accessed on 20 February 2019].

Shepherd, M. (2011). Effects of Ethnicity and Gender on Teachers' Evaluation of Students' Spoken, Urban Education 46(5) 1011–1028

Smith, S. (2017) Exploring the Black and Minority Ethnic (BAME) Student Attainment Gap: What Did It Tell Us? Actions to Address Home BAME Undergraduate Students' Degree Attainment**.** *Journal of Applied Pedagogic Practice, 5* (1), 48-57.

Southall, J., Wason, H., & Avery, B. (2016). Non-traditional, commuter students and their transition to higher education-a synthesis of recent literature to enhance understanding of their needs. Student Engagement. Exp. J. 5, 1–15. doi: 10.7190/seej.v4i1.128

Spencer, V., & Schultz, C. (2017). Improving students' assessment literacy. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Stevenson, J. (2012) Black and minority ethnic student degree retention and attainment. The Higher Education Academy, [online] Available from: https://www.heacademy.ac.uk/system/files/BAME_summit_final_report.pdf [Accessed on 20 February 2019].

Stevenson, J. & Whelan, P. (2013) Synthesis of US literature relating to the retention, progression, completion and attainment of black and minority ethnic (BAME) students in HE. Higher Education Academy, York.

Stevenson, J. O'Mahony, Khan, O. Ghaffar, F., & Stiell, B. (2019). Understanding and overcoming the challenges of targeting students from under-represented and disadvantaged ethnic backgrounds. Report to the Office for Students, [online] Available from: https://www.officeforstudents.org.uk/media/d21cb263-526d-401c-bc74-299c748e9ecd/ethnicity-targeting-research-report.pdf

Schneider, M., & Preckel, F. (2017). Variables associated with achievement in higher education. A systematic review of meta-analyses. *Psychological Bulletin, 143*(6), 565-600.

Scott, D., & Evans, C. (2015). Chapter Eighteen: The Elements of a Learning Environment, in D. Scott and E. Hargreaves, *Sage Handbook of Learning.* London: Sage.

Stevenson J (2012) 'An exploration of the link between minority ethnic and white students' degree attainment and views of their future "possible selves"'. *Higher Education Studies,* 2(4). At www.ccsenet.org/journal/index.php/hes/article/download/22576/14561

Stevenson. J, O' Mahony, J., Khan, O., Ghaffar, F., & Stiell, B. (2019). Understanding and overcoming the challenges of targeting students from under-represented and disadvantaged ethnic backgrounds. London: Office for Students. At www.officeforstudents.org.uk/media/d21cb263-526d-401c-bc74-299c748e9ecd/ethnicity-targetingresearch-report.pdf

Telford, M. & Annison, M. (2018). Developing students' assessment literacy and capacity for 'evaluative judgement'. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Telford, M. & Thorpe. K. (2019). *Enhancing Self-Regulation through Assessment Literacy to Close Attainment Gaps: CAT B Project in the School of Law. Simply Better*: Student-Staff Partnership, June 4, 2019, Southampton, University of Southampton.

Thackray, D. (2018). How we can facilitate and help students to develop their own insight into their own performance. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Thackray, D., & Savage J. (2017). Use of video during the OSPE to support clear and focused feedback. What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Thomas, L., & Quinn, J. (2007). *First generation entry into higher education.* Maidenhead: Open University Press.

Thomas, R. A., West, R. E., & Borup, J. (2017). An analysis of instructor social presence in online text and asynchronous video feedback comments. *The Internet and Higher Education*, *33*, 61-73.

The Higher Education Academy & Equality Challenge Unit (2008). Ethnicity, gender degree attainment project final report. [online] Available from: https://www.ecu.ac.uk/wp-content/uploads/external/ethnicity-gender-and-degree-attainment-project-final-report.pdf [Accessed 22 March 2019].

Torrance, H. (2007). Assessment *as* learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education: Principles, Policy & Practice*, *14*(3), 281–294. https://doi.org/10.1080/09695940701591867

Ungley, P. (2018). You've got the power: Student co-creation of non-weighted portfolio assessment. *Simply Better*: Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

UUK, NUS Universities UK, National Union of Students (2019). Black and minority ethnic student attainment at UK Universities: Closing the gap. Available from: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2019/bame-student-attainment-uk-universities-closing-the-gap.pdf [Accessed 21 May 2019].

Van der Zwet, J., Zwietering, P. J., Teunissen, P. W., van der Vleuten, C. P., & Scherpbier, A. J. . (2011). Workplace learning from a socio-cultural perspective: Creating developmental space during the general practice clerkship. *Advances in Health Science Education 16*, 359–373.

Vermunt, J. D., & Verloop, N. (1999). Congruence and friction between learning and teaching. *Learn. Instr.* 9, 257–280. doi:10.1016/S0959-4752(98)00028-0.
Walker, D. (2016). Is imposter syndrome a growing problem for students. Times Higher Education supplement. https://www.timeshighereducation.com/news/impostorism-growing-problem-students.

Waring, M., & Evans, C. (2015). *Understanding Pedagogy: Developing a Critical Approach to Teaching and Learning*. Abingdon, Oxford, United Kingdom: Routledge.

WHO (2008). Scaling up health services: challenges and choices. Technical Brief, 3(3) June 12. World Health Organisation. Retrieved from http://www.who.int/healthsystems/topics/delivery/technical_brief_scale-up_june12.pdf

WHO (2010). Nine steps for developing a scaling-up strategy. World Health Organisation. Retrieved from http://www.who.int/reproductivehealth/publications/strategic_approach/9789241500319/en/

WHO (2011). Beginning with the end in mind. Planting pilot projects and other programmatic research for successful scaling up. World Health Organisation. Retrieved from http://www.expandnet.net/PDFs/ExpandNet-WHO%20-%20Beginning%20with%20the%20end%20in%20mind%20-%202011.pdf

Wilde, A., & Perisic, V. (2018). A comparative view of mentoring approaches in Southampton. Researching Assessment Practices – Improving Student Outcomes September 13, 2018, Southampton: University of Southampton.

Winstone, N. (2017). Fostering engagement with feedback. Keynote: What Works in Assessment and Feedback: Simply Better Inaugural Conference, September 14 2017, Southampton, University of Southampton.

Williams, K. (2005). Lecturer and first year student (mis)understandings of assessment task verbs: 'Mind the gap.' *Teaching in Higher Education*, *10*(2), 157–173. https://doi.org/10.1080/1356251042000337927

Williams, J., & Kane, D. (2009). Assessment and feedback: Institutional experiences of student feedback, 1996 to 2007. *Higher Education Quarterly, 63,* 264-286.

Winstone, N.E., & Boud, D. (2019). Developing assessment feedback: From occasional survey to everyday practice. In S. Lygo-Baker, I.M. Kinchin, & N.E. Winstone (Eds.), *Engaging student voices in higher education: Diverse perspectives and expectations in partnership.* London: Palgrave.

Winstone, N. E., & Boud, D. (in press). Exploring cultures of feedback practice: The adoption of learning-focused feedback practices in the UK and Australia. *Higher Education Research and Development.*

Winstone, N. E., & Carless, D. (2019). *Designing for Student Uptake of Feedback.* London: Routledge.

Winstone, N.E., & Carless, D. (2019). *Designing effective feedback processes in higher education: A learning-focused approach.* London: Routledge.

Winstone, N. and Nash, R. (2016). *The Developing Engagement with Feedback Toolkit (DEFT)*. York: Higher Education Academy.

Winstone, N. E., Nash, R. A., Parker, M., & Rowntree, J. (2017). Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of recipience processes. *Educational Psychologist*, *52*(1), 17–37. https://doi.org/10.1080/00461520.2016.1207538

Winstone, N. E., Nash, R. A., Rowntree, J., & Parker, M. (2017). 'It'd be useful, but I wouldn't use it': barriers to university students' feedback seeking and recipience. *Studies in Higher Education*, *42*(11), 2026–2041. https://doi.org/10.1080/03075079.2015.1130032

Winstone, N., Nash., R., Parker, M., & Rowntree, J. (2017). Supporting learners' engagement with feedback: A systematic review and a taxonomy of recipience processes. *Educational Psychologist, 52,* 17-37.

Winstone, N., Nash, R., Rowntree, J., & Parker, M. (2017). "It'd be useful, but I wouldn't use it". Barriers to University students' feedback seeking and recipience. *Studies in Higher Education, 42*(11), 2026-2041.

Witkowsky, P., Mendez, S., Ogunbowo, O., Clayton, G., and Hernandez, N. (2016). Nontraditional student perceptions of collegiate inclusion. J. Contin. High. Educ. 64, 30–41. doi: 10.1080/07377363.2016.11 30581

Woodfield, R. (2014) Undergraduate attainment and retention across all disciplines. The Higher Education Academy, [online] Available from: [Accessed on 20 February 2019].

Yee, A. (2016). The unwritten rules of engagement: Social class differences in undergraduates' academic strategies. *The Journal of Higher Education, 87*(6), 831-858. Ohio: The Ohio State University Press. *DOI:* https://doi.org/10.1353/jhe.2016.0031

Young, P. 2000. "'I Might as Well Give Up': Self-esteem and Mature Students' Feelings about Feedbacks on Assessments." *Journal of Further and Higher Education* 24 (3), 409–418.

Zhu, X. (2019a). Attainment Gap report: the context of the University of Southampton. Southampton: University of Southampton.

Zhu, X. (2019b). Catalyst B Discipline Report Series 2017-2019. OfS Catalyst B ABSS. Southampton: University of Southampton.

Zhu, X., & Balloo, K. (2019). Survey data Meta-analysis University of Southampton and University of Surrey. OfS Catalyst B ABSS. Southampton: University of Southampton.

Zhu, X., Balloo, K., & Bright, C. (2019). Institutional data analysis differential learning outcomes, University of Southampton, University of Surrey and Kingston University – meta analysis data OfS Catalyst B ABSS (2013-2018). Southampton: University of Southampton.

Zhu, X., Balloo, K., & Michener, C. (2018). A holistic and measured approach to evaluation: Process and Product, May 24, 2018. London, The Law Society: Office for Students.

A. APPENDIX A (Evans, 2016, p.15): Effective Assessment Feedback

The key aim of assessment feedback should be to support students to become more self-regulatory in managing their own learning as part of sustainable assessment practice; a focus on three core areas is recommended: Assessment Literacy; Facilitating Improvements in Learning; Holistic Assessment Design.

To support assessment literacy we should:

1. **Clarify what the assessment is and how it is organised**. Explain the principles underpinning the design of assessment so that students can understand the relevance and value of it.
2. **Provide explicit guidance** to students on the requirements of each assessment (e.g. clarification of assessment criteria; learning outcomes; good academic practice).
3. **Clarify with students the different forms, sources, and timings of feedback** available including e-learning opportunities.
4. **Clarify the role of the student in the feedback process** as an active participant (seeking, using, and giving feedback to self and peers; developing networks of support), and not just as a receiver of feedback.
5. **Provide opportunities for students to work with assessment criteria** and to work with examples of work at different grade levels in order to understand 'what constitutes good.'

To facilitate improvements in learning we should:

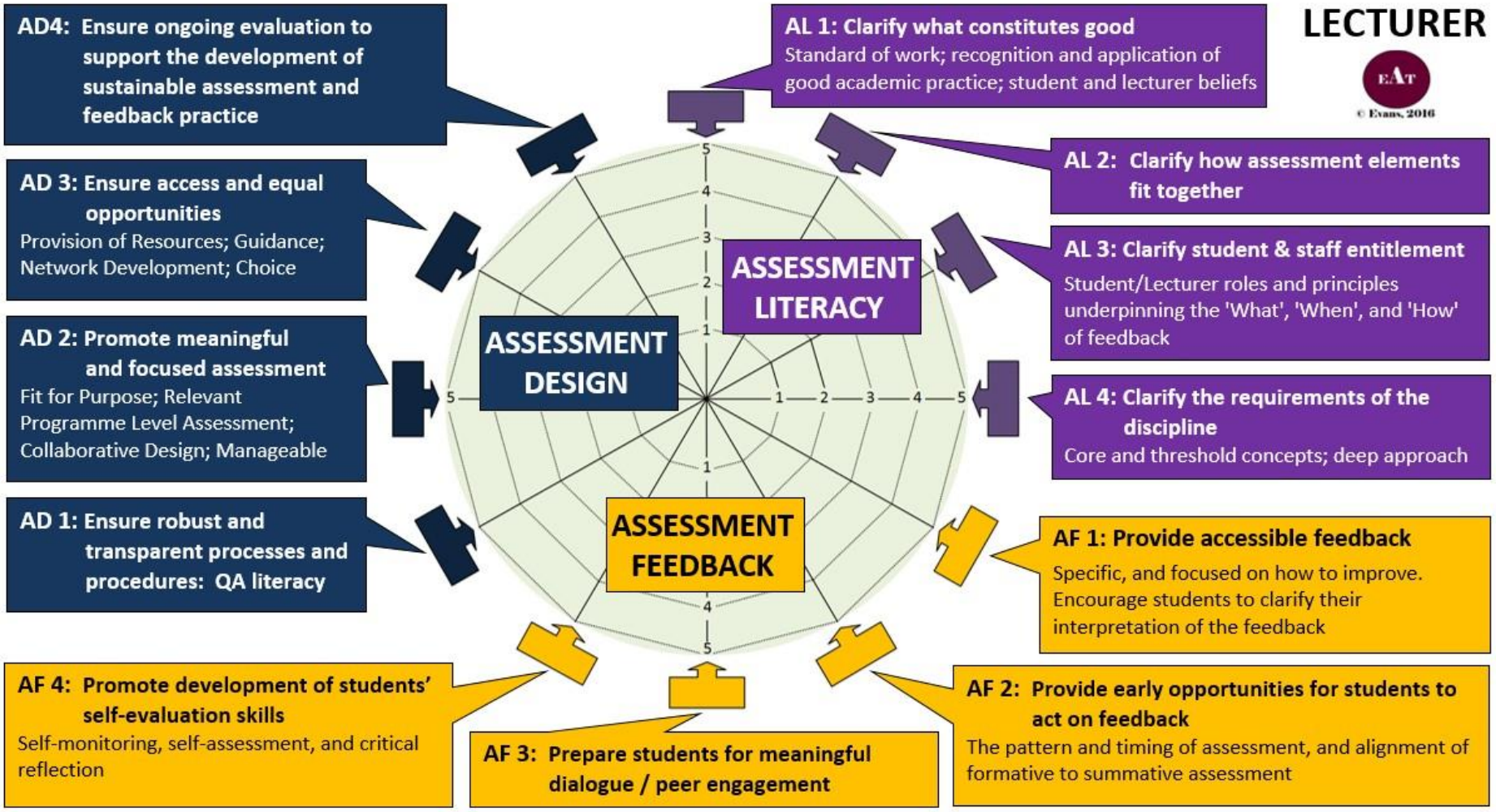
6. Ensure that the curriculum design enables sufficient time for students to apply the lessons learnt from formative feedback in their summative assessments.
7. **Give clear and focused feedback** on how students can improve their work including signposting the most important areas to address (what was good; what could be improved; and most importantly, how to improve).
8. Ensure that formative feedback precedes summative assessment; that the links between formative feedback and the requirements of summative assessment are clear.
9. Ensure that there are opportunities and support for students to develop self-assessment/self-monitoring skills, and training in peer feedback to support self-understanding of assessment and feedback.
10. Ensure training opportunities on assessment feedback for all those engaged in curriculum delivery to enhance shared understanding of assessment requirements.

To promote holistic assessment design we should:

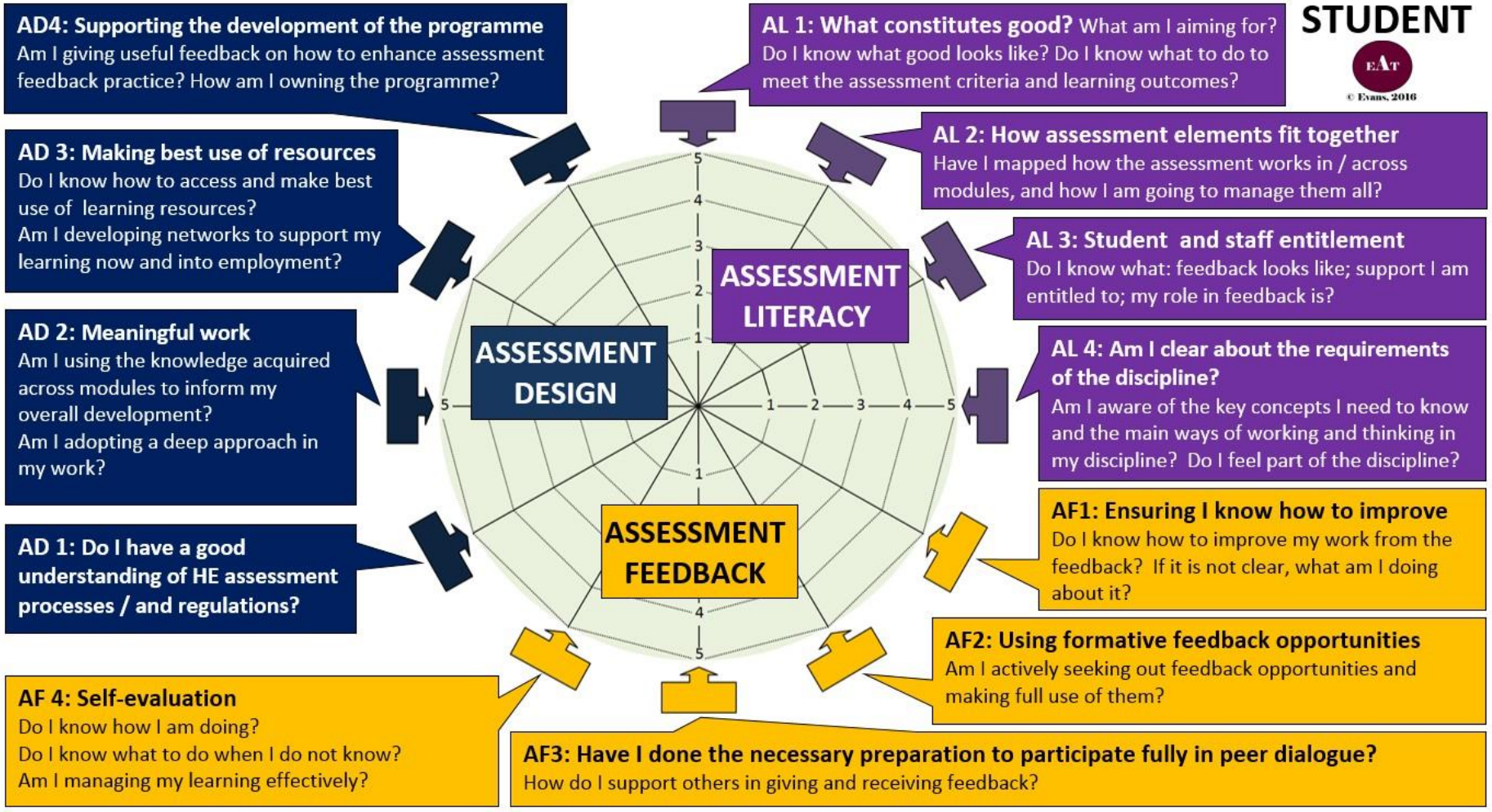
11. Ensure that opportunities for formative assessment are integral to curriculum design at module and programme levels.
12. **Ensure that all core* resources are available** to students electronically through the virtual learning environment (e.g. Blackboard) and other relevant sources from the start of the semester to enable students to take responsibility for organising their own learning.
13. Provide an appropriate range and choice of assessment opportunities throughout a programme of study.
14. Ensure that there are opportunities for students to feedback on learning and teaching, both individually, and via the Students' Union's Academic Representatives, during a taught module as well as at the end of it, to enable reasonable amendments to be made during the teaching of the module subject to the discretion of the module leader.

* Core = handbook; assessment guidelines; formative & summative tasks and deadlines; resources for each session

APPENDIX B (Evans, 2016, p.17)



APPENDIX D (Evans, 2016, p. 20)



Appendix E: State of Health of Assessment

	Core areas : 1= poorly developed - 5 well developed	Rating
AL1-AD4	Agreed assessment and feedback principles act as a baseline for all assessment endeavours.	
AL1-AD4	There is strong alignment between institutional assessment strategic priorities and enactment of assessment strategy at the local level but flexibility to allow fine-tuning to local contexts.	
AL1	There is clear university-level guidance on assessment criteria and this is translated to programme and module/course levels by discipline teams involving staff and students.	
AL1/AD1	There is transparency in marking criteria and moderation processes.	
AL2 / AD2	Emphasis is on a programme level approach to assessment where assessment is co-constructed with teams and links between modules are clear.	
AL2/AD2	Progression of knowledge, skills and understanding are mapped with students across their degree programmes.	
AL2	Assessment load and distribution of assessment is regularly reviewed to ensure manageability for staff and students.	
AL1 -4	Student partnership in co-production activities is promoted (teaching/marking/moderation, research, leadership, enterprise).	
AL1-AD4	Assessment and feedback policies are co-constructed with students.	
AL3	Expectations of staff and students in all dimensions of assessment and feedback within the discipline are explicitly defined at the course level.	
AF1-4	Co-ownership of feedback is promoted (student and staff shared responsibility).	
AF1-4	Students and staff are trained in seeking, using and giving feedback.	
AF1-4	Emphasis is placed on early opportunities for students to test their knowledge, understanding and skills. (e.g., formative activities including peer and self-assessment).	
AF1-4	Feedback approaches are standardised within modules.	
AF1-4	The feedback process is made explicit.	
AF1-2	Feedback is aligned to learning outcomes and reflective of assessment criteria.	
AF2 AD1-4	Assessment support for students is placed where it can have maximum impact in supporting attainment of learning outcomes with greater emphasis on formative rather than summative feedback.	
AF3	Peer learning is supported – training provided- all students expected to be mentors of each other.	
AF3	Students map 'crunch points for assessment with module leads and solutions developed to support ongoing transitions with assessment.	
AF3	Personal academic tutoring assessment support is aligned closely with course demands with students leading on findings solutions.	
AD1	Complaints and appeals processes are transparent.	
AD1	There is clarity regarding the boundaries of reasonable adjustments that are specified at the course level, to enable students embarking on a course of study to be clear regarding what can and cannot be adjusted to ensure the integrity of assessment while at the same time supporting individual student needs.	
AD1	Processes for checking the integrity of awarded grades, to fully address issues around grade inflation, are robust.	
AL1-AD4	Time is allocated for team planning of assessment, marking and moderation within workload models.	

AD1	Staff are trained in quality assurance assessment literacy.	
AL1-AD4	There is a commitment to the development of research-informed assessment and feedback processes and training for staff and students in the development and analysis of fine-grained measures of student learning gains at the discipline level (to include ethics, data analysis and programme design; bidding; dissemination).	
AL1-AD4	Interdisciplinary assessment communities of practice are supported and leadership training provided to sustain and develop them.	
AD1	There are assessment leads in each discipline and clear priorities established for enhancing assessment practices sensitive to context.	
AL1-AD4	There is investment in the sophisticated use of data to support assessment and feedback at all levels.	
AL1-AD4	Staff and students receive comprehensive induction into institutional assessment processes in an iterative and developmental way.	
AL1-AD4	Assessment resources have a dedicated website and links to all relevant materials and support a dedicated assessment network.	
AD2	Electronic management of assessment fully supports the assessment process in providing seamless registration, submission of work, and online support via virtual learning systems aligned to personal networks.	
	Best use is made of technology to support assessment processes. (e.g., mode of feedback; g opportunities; virtual learning; personalized support using AI).	
AD2	Disciplines highlight the 4th industrial age key knowledge and skills that students will need to be an 'expert' within specific fields.	
AD2	Assessment is meaningful and encourages students' adoption of deep approaches within the disciplines; assessment is relevant and challenging.	
AD2 AF4	Emphasis is on sustainable assessment – manageable - with consideration of best use of resource; and in promoting student engagement and self-regulation of assessment so that students are trained in how to evaluate the quality of their own work for themselves.	
AD2 AL1-4	Assessment methods are aligned to enable students to fully meet the learning outcomes using the most appropriate assessment tasks.	
AD2	There is an appropriate range of assessment tasks to support students' attainment of learning outcomes.	
AD2	There is an appropriate balance of formative and summative assessment.	
AD3	There is commitment to inclusive assessment principles, such as Universal Design, to enable all students to have equitable access to, and chances of success within, assessment and feedback.	
AD3	Data is used to support learning and curriculum development. Regular analysis is undertaken to ensure assessment is not disadvantaging any specific groups of students.	
AD3 AL1-AD4	There is a team approach to assessment engaging with wider stakeholders within and beyond the university to support authentic assessment practices (e.g., IT teams, library, careers, employers, alumni).	
AD4	There is reward and recognition for effectiveness in assessment and feedback for staff and students.	
AD4	Evaluation is embedded within regular teaching sessions to inform iterative development of assessment.	
AD4	Course evaluations are aligned to promoting high level focused learning outcomes that place emphasis on students' development of high level skills.	
AD4/AD2	Assessment design is dynamic and QA structures and processes are agile to support ongoing enhancement in assessment design to ensure relevance.	

APPENDIX F. Facilitators and Barriers Student amalgamated file

Tasks unclear – what and how to do the task/ assignment- Feedback needed to achieve clarity about what is needed More in-depth explanation of requirements wanted Difference in clarity of exams vs coursework vs MCT	**Lack of clarity about requirements of assessment**	**AL1**
Not all students aware of assessments		
Information not accessible		AD3
Element of guesswork and trial and error in doing assessment		
Concerns with dealing with diverse and various approaches to assessment		AD2
Lecturers/students have different interpretations of/approaches to assessment tasks/requirements		
Lack of clear instructions in a timely way		AL1
Uncertainty of what good looks like		AL1
Comprehensive information needed on assessment tasks and expected quality to minimise uncertainty		AL1
Importance of clarity on criteria/location of assessment information and criteria		AL1/ AD3
Positive assessment experience when clarity of what assessment looks like and purpose is clear and met		AL1
Not enough guidance is offered		AL1
Not all students aware of the assessments		AL1
Difficulty in understanding requirements of a task even with an assessment outline		AL1
First assignments as trial and guesswork		AF2
Examples beneficial in understanding requirements (including model/top examples), not enough of them		AL1
Not enough mock/past exams/ exercises		
Examples to clarify grade boundaries and grade boundaries more specific and less superficial		
Brief and lists allow students to be independent and understand requirements when they need them		

Having relevant and useful material (e.g. grade boundaries) online makes students feel reassured/ lecturers do not always upload everything		
Mark schemes/requirements too generalised		
Some students happy with averages, analytics and histograms for the whole year cohort as a measurement method		
Provide standards for all essays e.g. font size, margins, id number		
Unsure where to find resources		
Lack of clarity on how module/programme fitted together – lack of holistic view	**Lack of clarity about organisation of module**	AL2
Need to join up multiple communications of assessment tasks	**Coherence and alignment of assessment information**	AD2
Lack of consistency across modules and lecturers on information/feedback available		AL2/AD 2
Lack of alignment between marks and comments, marking scheme, tasks	**Feedback alignment**	AF1/AD 2
Importance of feedback to give a sense of quality	**Feedback as benchmark/ to support learning**	AF1/AD 1
More in-depth feedback wanted on how to improve (in future tasks)		AF1
Importance of dialogue with lecturers and peers to support understanding	**Feedback approaches to support understanding**	AF1/AF 3
The value of feedback was related to the nature of the task and whether the students valued the task and its relevance (p.116 task value)	**Value of feedback/ Utility**	AD2
The value of feedback was related to its relevance to other modules		AL2
Issue of confidence that feedback/help will be given when asked		AF1
Feedback from self and peers as less valuable		AF3
Teachers as the main and expert feedback providers		AF1
Importance of tailored individual feedback/ personalized approach	**Feedback preferences**	AF1
Too much emphasis on generic (minutiae) feedback rather than on substantive issues		AF1
Need for specific, in-depth, relevant timely feedback to improve and motivate students		AF1
Feedback in class assessment opportunities noticed and viewed as useful		AF1/AD 2
Wish for anonymous channel of feedback		AF1

More frequent and early feedback Value of formative feedback		AF2
Generic feedback that can be reapplied in other assessments		AF1/AL 2
Importance of dialogue to understand expectations		AF3/AL 1
More frequent feedback on module		AF1/AF 2
Importance of diverse formative assessment & feedback		AF1
Importance of face to face contact / explanation		AF1
Students recognise dedicated teachers pick up more questions from students		AF1
Need for clear assessment feedback sheet for students		AF2
Effectiveness of feedback depends on how it is delivered – voice notes, face-to-face, written		AF2
Appreciation for variety of assessment tasks		AD2
Value of training to support understanding of feedback (e.g., assessment feedback sessions – DEFT)		
Value of exemplars to support learning		
Importance of videos for feedback		
Importance of early feedback to support "finding the way"	**Feedback judgement**	AF2
Large class sizes making feedback difficult and less effective	**Feedback logistics/class size**	AD2
Difficulty of asking questions in lectures		AF1
Unsure how feedback works		AF1
Proactivity of students in seeking feedback from lecturers	**Feedback seeking**	AL3/AF 3
Building the courage and mindset to ask for feedback/challenge marks		AL3/AF 4
Seeking feedback from many sources		AF3
	Feedback competency	
Ability to process feedback shaped by attitudes/resilience to criticism		AL4
Importance of feedback not to demoralize students		
Hard to accept feedback		
		AF4
Difficulty and subjectivity of assessing yourself	**Self-assessment competency**	AF4
Too involved in own work to notice strengths and areas to improve		AF4
Lack of knowledge to assess own work		AF4

Confidence levels in assessing own work		AF4
	Pragmatics of peer support	AF3
Being in the same boat and struggling/moving forward with peers	**Peer Scaffolds**	AF3
Value of peer support / mentoring in diff ways – personal, academic, providing guidelines and giving examples		AF3
Peers' feedback is valued and sometimes preferred		AF3
Peers easy to approach		AF3
Peers 1st point of contact when unclear ASSIGNMENT AND FEEDBACK		AF3
Peer-leader sessions motivations: timetabling, planned and need to seek info		AF3
Peers allow to learn from each other, peers support each other in understanding requirements (e.g. group chats)		AF3
Valuable peer support if from people with expertise and established trust/rapport		AF3
Importance of peer group chats on apps		AF3
In peer led sessions unclear as to what role of attendee is – meaning ambivalence and not best use of peer resource	**Peer support limited**	AF3
Pitfalls with peer support/feedback, mentoring – established rapport, different experiences		
What is individual group responsibility in peer led sessions		AF3
Misuse of peer leader time		AF3
To what extent do peer leader sessions support academic content – lack of alignment between sessions and aims of module		AF3
Barriers to giving feedback to peers – barriers – losing face, lack of knowledge, rapport, consider teacher workload		AF3
Peer opinion not valued		
End of module feedback of little relevance	**Limitations of feedback**	AD2
Positive feedback to not destroy' s student morale		
Late feedback		
Unclear feedback		
Students not fully aware of feedback until it has been marked		
Better feedback for exams wanted		
Feedback is not valued when not relevant and timely		
Critics sessions (for ART) were positive	**Positives of feedback**	

1-1 or small feedback sessions		
Importance of access to relevant and organized information online – website/VLE	**Access to resources**	AD3
Lack of clarity around where resources are located and how organised		
Lack of clarity about how marks allocated and lack of explanation of marking and moderation processes	**Lack of confidence in the marking process**	AD1
Lack of clarity regarding marking		AD1
Unclear questions/ Errors in assessment and moderation procedures		
Role of weighting and marking scheme in ensuring fairness		
Perceived subjectivity of assessment and marking		
Errors in assessment methods		
Conflicting/contradictory guidelines minimizing fairness		
Perceived subjectivity of assessment and marking		
Role of moderation in strengthening fairness		AD3
Unfair assessment – not covering the whole topics in the module		
Queries/issues resolved late in the process		
Fairness of paramount importance – issue of inconsistency		
Lack in alignment between what is taught and assessed		
Lack of reasonable adjustments/flexibility for students with different learning needs		
Whether module/ task perceived as relevant	**Task Value/relevance immediate and longer term**	AL1
Feedback of little value when task perceived as being of little value		AF1
When module perceived as relevant, students more motivated in carrying out the task		AD2
Little value is seen in task, only reason student do it is to achieve a grade		
Relevance of module/assessment design to student discipline and deep learning and instruction		
Importance of relevant assessment tasks to discipline and future needs		
		AL3

No/minimal agency in whole assessment system	**Students' perceptions of agency**	
Greater agency and freedom comes with responsibility		
1st years do not feel as valued as the others		
Confidence achieved by students proactivity		
Confidence equals efforts put into the task		
Student involvement in design of assessment/criteria	**Engagement in Assessment**	AL3 AD2
Ethical and governance issues	**Assessment Design/Organisation**	AD2
Lack of communication on important changes or miscommunications, timetabling		AD2
Lack of clarity regarding purposes of sessions – what is the point		AL1/AD 2
Lack of clarity regarding expectations causing dissent – issue around responsibility and partnership		AL3
Perceived manageability of assessment task – load, timing & time management	**Assessment design and management**	
Lack of consistency in difficulty of task		
Lack of alignment between aims and methods		
Lack of joined up thinking e.g. recording sessions and releasing them		
Underuse of time especially in year 1		
Lack of support and clarity on genre requirements and how to communicate/research content	**Discipline expectations**	AL4
Too many assignments in a short period of time, students cannot deal with deadlines clashing		
Assessment washback – shapes what students focus energies on		
Pitfalls/issues with (simulated) performance assessment		
More small exams, spread throughout the semester, variation of them	**Design preferences**	
Change structure of tutorials – smaller, interactive and informal		
	TRANSITIONS	
Website not up to date when students applying to uni	**Transitions (pre)/expectations**	
Students unaware of assessment requirements when choosing uni		

Little understanding of university expectations on arrival		
Viewing assessment at university as more sensitive to context		
Teachers also coming to understand requirements over time		
Confusion (of new process/place)		
Task surprising - Adjustment or tolerance to new kind of task (e.g. multiple choice questionnaires)		
(Continuously) faced with a number of diverse and new assessment activities/genres		
Transitioning from clear/continual/scaffolded communication of (large-scale, standardised) assessment expectations at school		
Transferring practices/norms from school and other disciplines to navigate (first) university assessments		
Expectations before university vs reality (harder, lot of work)	**Expectations /challenges**	
Anticipating essays as main assessment type		AD2
Difficulties in getting up to speed quickly – lack of clear communications		
Induction issues – whose role is it to induct students into HE protocols		AL3
(Not) getting to grips with resources at university		AD3
Issue of building confidence		AL1
Lack of competence – no idea how to write an essay		AL1
Student perceptions that they need to do things for themselves and not bother lecturers		AL3
Different expectations of students and lecturers		AL3
Lack of clarity on how programme fitted together – lack of holistic view		AL2
Scaffold that were useful		
Usefulness of model answers/ samples/mocks (if mirrors real test)	**Assessment design useful scaffolds**	AF2
Importance of scaffolded learning and assessment activities		AD2
Importance of criteria mapped to task		AL1
Coming to understand assessment through socialization in the context		
Process of learning to understand – learning by doing		

Value of seminar/lecture sessions on assessment pointers/technique/expectations		AF2
Sessions aimed at understanding the system better were well-perceived		
Practical labs valuable in aiding understanding of task and subject		AD2
Use of examples to make feedback more understandable		AL1
Usefulness of rubrics/assessment briefs		AL1
Value of practical performance assessment close to real-life tasks/scenarios		
Importance of assessment tasks which develop and trace progress over time		
Need to find ways to acknowledge human dimension in assessment and find ways to best showcase what students can do		
Getting the balance right: Balance between spoon-feeding and no guidance		
	EQUITY AND FAIRNESS	
Role of lecturers as supportive and as assessors		
Getting value for money – fairness implications of marketization and financialization of HE		
Discipline undervalued compared to others resulting in less support		
Courses differences and felt injustice for being offered less		
Importance of practice opportunities and clarity of expectations in ensuring fairness		
Feeling of being cheated when do not get feedback (especially due to cost of education)		
	ROLES	
Students value someone who 'teaches not lectures'	Perceptions of teachers and needs	AL3
Teachers should help with *how* to *communicate/research* content – teachers see themselves only as content teachers		AL3
Lecturers to share availability with students		AL3
Lecturers as giving assurances and keeping on the right track		AL3
Lecturers expected to signpost to resources and have digital literacy		AL3
Importance of lecturers to be approachable, supportive, professional		AL3
Important for lecturers to acknowledge transition phase of learners		AL3

Lecturers and tutors are the primary contact for unclear assessment		AL3
Lack of clarity around roles	Student role	AL3
Unclear as to what their role in assessment is		AL3
Student's perceived role is to act upon feedback		AL3
University role: make students connect among themselves and lecturers		AL3
Statistics meanings (e.g. low grades or low attendance) lecturers in charge of student engagement?		AL3
Too much responsibility on students		AL3
Students don't see themselves as active participants in assessment more as passive recipients		AL3
Student role in assessment as limited to seeking and implementing feedback		AL3
Student expected role as active, determined proactive learners taking responsibility		AL3
Students required to be open-minded, invested, critical		AL3
Unclear as to what their role in assessment is		AL3
Student preparing for less feedback and support at university		AL3
Students need to seek the support		AL3
Students feel capable of giving feedback (maybe limited compared to lecturers)		AL3
Students need to check communications and materials on VLE		AL3
	SELF-REGULATION	
Anticipating greater independent study		
Anticipating the need to take initiative		
Students self-motivated		
Proactive in seeking support vs not active in seeking key information/support		
Proactive in finding the info needed		
Proactive in seeking tasks which play to strengths/preferences prior to choosing module/course/uni		
Proactive in adjusting one's work and taking feedback on-board		
Setting goals		
Giving themselves an average/baseline		
Relying on rough estimates of assessment requirements and expectations		

Accepting inconsistent assessment practice if low weighting		
Confusing independent learning with self-reliance		
Preferring to go it alone		
Preferring to seek help via email		
Not looking at assessment details before transition – taking one step at a time		
Objective – could see things from lecturer perspective		
Personal how students apply feedback (they can or not) and debate with feedback giver		
Students' criticality: ability to be critical of their own work		
Students' confidence in accepting critiques		
Using assessment criteria for self-regulation		
Seeking support/ student advising lecturer on how to improve		
Futures oriented- Need to look into future plans/careers		
(lack of)competence to judge quality of work	Lack of regulation	
	RELATIONAL	
Student and staff mutual effort and engagement seen as foundation of successful learning and assessment practices	Partnership	AL3
Importance of whether they felt lecturers cared/ were invested		
Clear guidance and rapport creates student engagement and investment in learning and assessment		
Barriers to seeking help -Losing face and imposter syndrome, unapproachable teachers		
Negotiating different type of teacher-student relationship at university		
Importance of emotional support/role of affective factors		
Lack of engagement of being involved in process		
Importance of a point of contact – knowing when and where they could get hold of someone	Logistics /organisation	
Expectations of lecturers		
Student independence in learning – sample were v independent and not reliant		
Perceptions of what a good session looked like important		

Expectations unclear		
Outsiders relations important in academic support and feedback		
Expectations of university and assessment		
Big lectures hard to raise question - environment		
More interactions with lectures makes students more comfortable		
Module satisfaction affected by lecturer attitude		
Considerable variation in how different students perceived the same context	Individual differences	
Differences in how students apply the theory		
Level of confidence, self-efficacy beliefs in own voice and knowledge		
Different educational backgrounds (and how these impacted the transitioning at university)		
Different starting points in disciplinary knowledge		
Disposition and experience shaping goals – aiming high or for the middle		
Diverse previous assessment experiences (prior to university)		
Diverse preferences regarding assessment formats and tasks		
Differences in how people organise their work/ study		
Different approaches to checking assessment tasks and requirements		
Different levels of valuable support/feedback/information from individual teachers		

. . . . . .

Appendix G: Survey tools and dimensions

Self-regulation scale (cognitive and metacognitive dimension)

MSLQ, Pintrich & DeGroot, 1990)

Please rate the degree to which the following statement is true for yourself:	**1 not at all true for me**	**2**	**3**	**4 Neither true or untrue**	**5**	**6**	**7 very true for me**
1. During teaching sessions I often miss important points because I'm thinking of other things.							
2. When reading for this course, I make up questions to help focus my reading.							
3. When I become confused about something I'm reading for this course I go back and try to figure it out.							
4. If course materials are difficult to understand, I change the way I read the material.							
5. Before I study new course material thoroughly, I often skim it to see how it is organized.							
6. I ask myself questions to make sure I understand the material I have been studying in this course.							
7. I try to change the way I study in order to fit the course requirements and lecturers' teaching styles.							
8. I often find that I have been doing reading for the course but don't know what it was all about.							
9. I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying.							
10. When studying for this course I try to determine which concepts I don't understand well.							
11. When I study for this course, I set goals for myself in order to focus my activities on what I need to do.							

Assessment Literacy Survey (ALS) Smith, C. D., Worsfold, K., Davies, L., Fisher, R., & McPhail, R. (2013)

Please rate your agreement with the following statements:	**1 Strongly disagree**	**2 Disagree**	**3 Don't know**	**4 Agree**	**5 Strongly Agree**
1. I use assessment to figure out what is important to learn					
2. I learn more when I do the assessment tasks					
3. I use assessment to show me how much of the course content I understand					
4. I use assessment to work out what are the expected achievement standards					
5. I use assessment to work out how well I am doing					
6. My aim is to pass the course with as little work as possible					
7. I do assessment because I have to					
8. I use assessment to work out the minimum work needed to pass					
9. I understand the rules applying to assessment					
10. The Department's assessment procedures are clear to me					
11. I understand the criteria against which my work will be assessed					
12. I understand the achievement standards against which my work will be assessed					
13. I understand what I need to do to advance my learning to achieve the standard I want					
14. I understand what I need to do in the assessment task to get the mark or grade I want					
15. I feel confident I could judge my own work accurately using my knowledge of the criteria and achievement standards provided					
16. I feel confident that I could judge my peer's work accurately using my knowledge of the criteria and achievement standards provided					
17. I feel confident that I use the criteria and assessment guidelines provided in order to help me improve my work					

Feedback Orientation Survey Linderbaum, B. A., & Levy, P. E. (2010).

Please tick the column that best applies to you:	**Strongly Disagree 1**	**Disagree 2**	**Neither Agree nor Disagree 3**	**Agree 4**	**Strongly Agree 5**
1. Feedback contributes to my success at university					
2. To develop my skills, I rely on feedback					
3. Feedback is critical for improving performance					
4. Feedback from teachers can help me advance					
5. I find that feedback is critical for reaching my goals					
6. It is my responsibility to apply feedback to improve my performance					
7. I hold myself accountable to apply feedback appropriately					
8. I don't feel a sense of closure until I apply feedback					
9. If my teacher gives me feedback, it is my responsibility to apply it					
10. I feel obligated to make changes based on feedback					
11. I try to be aware of what other people think of me					
12. Using feedback, I am more aware of what people think of me					
13. Feedback helps me to manage the impression I make on others					
14. Feedback lets me know how I am perceived by others					
15. I rely on feedback to help me make a good impression					
16. I feel confident in my ability to apply feedback					
17. Compared to other students, I am more competent at applying feedback					
18. I believe that I have the ability to apply feedback effectively					
19. I feel confident when applying both positive and negative feedback					
20. I know that I can apply the feedback I receive					

EAT ENGAGEMENT SURVEY

Reviewing my assessment contribution (Evans, 2016)

In scoring this document 1= I do relatively little in this area to 5 = I do a lot in this area

	Assessment Literacy						Please add comments to support answers especially in relation to does the module/ course allow you to participate in these areas of activity
		1	2	3	4	5	
AL1	**What constitutes good** I know what good looks like. I know what to do to meet the assessment criteria and learning outcomes.						
AL2	**How assessment elements fit together** I have mapped all the assessment components of my programme and how I am going to manage them all.						
AL3	**Student and staff entitlement** I know what feedback looks like, what support I am entitled to, and what my role in feedback is.						
AL4	**Am I clear about the requirements of the discipline** I am aware of the key concepts I need to know and the main ways of working and thinking in my discipline.						
	Assessment Feedback: developing student skills through:						
		1	2	3	4	5	
AF1	**I know how to improve** I know how to improve my work from the feedback.						
AF2	**Using formative feedback opportunities** I actively seek out feedback opportunities and make full use of them.						
AF3	**I have done the necessary preparation to participate fully in peer dialogue** including the giving and receiving of peer feedback.						
AF4	**Self-evaluation**						

	I know how well I am doing and I am able to manage my own learning effectively.						
	Assessment Design considerations:						
		1	2	3	4	5	
AD1	**I have a good understanding of higher education assessment processes and regulations.**						
AD2	**Meaningful work** I am adopting a deep approach in my work (getting to grips with key concepts and ideas, and trying to apply and develop them).						
AD3	**Making best use of resources** I know how to access and make best use of learning resources. I am developing networks to support my learning now and into employment.						
AD4	**Supporting the development of the programme** I am contributing to the development of the programme (e.g. giving useful feedback on how to enhance assessment).						

ABSS: Maximising Success Project: Office for Students (OfS)

Southampton, University of Southampton

2019

Thank you to all colleagues at the Universities of Southampton, Surrey and Kingston for their contribution to the Maximising Student Success Project.

Evans, C., Zhu, X., Winstone, N., Ballloo, K.,Hughes, A., Bright, C. (2019). Maximising Student Success through the Development of Self-Regulation. Office for Students ABSS Report (L16). Southampton, University of Southampton.