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Assessment for learning: An introduction to the ESCAPE project

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Abstract

Assessment is a significant aspect of the student learning experience and good assessment engages students with the curriculum; it creates opportunities for dialogue and ultimately stimulates learning. In spite of the accepted significance of assessment within Higher Education, the National Student Survey has in the past few years highlighted assessment and feedback as the lowest scoring aspect of the student experience.

Working in partnership with the Business School and the School of Life Sciences the Effecting Sustainable Change in Assessment Practice and Experience (ESCAPE) project set out to support the development of assessment-for-learning initiatives. The ESCAPE project includes a range of curriculum development activities and change management processes.

Objectives of the project relate to improving the educational effectiveness and resource efficiency of the assessment practice. An Appreciative Inquiry approach was adopted to help module teams build on existing good assessment practice. Following the design, development and implementation of pilot assessment activities, module teachers are already reporting greater engagement from students in their studies.

Introduction and context

Assessment is a significant aspect of the student learning experience. Good assessment encourages appropriate study behaviours, provides a focus for multi-way dialogue and ultimately supports learning (Biggs, 2003; Race, 2001; Ramsden, 1994). Despite the formal curriculum described and set out to our students through module and programme documentation, assessment sends out additional messages about the curriculum. Assessment, for instance, sends out messages to students as to when they should pick up their books and when they don't need to. Assessment, consciously or otherwise, indicates which aspects of the curriculum are important and which are not. In addition, assessment has a significant influence on the students' approach to learning (Biggs, 2003; Ramsden, 1994). Assessment, therefore, has the potential to create an alternative view of the curriculum; the so-called hidden curriculum (Snyder, 1970). Although disappointing, it will be of little surprise that the hidden curriculum might be different from the formal curriculum.

Good curriculum design recognises the significant influence of assessment and purposely

sets out to embed assessment in the learning environment (Bransford, Brown, & Cocking, 2000). Good curriculum design aligns the assessment activity, and hence the anticipated student study behaviours, with the teaching and intended learning outcomes. Such an alignment is referred to as aligned teaching (Biggs, 2003) and is likely to reduce the difference between the formal curriculum and the hidden curriculum.

Given our understanding of the importance of assessment and its relationship to learning, it is disappointing to note the sector-wide challenges raised by the National Students Survey (NSS). Across the Higher Education sector the NSS has repeatedly shown Assessment and Feedback to be the poorest rated aspect of the student experience.

An opportunity

In 2008 the Joint Information Systems Committee (JISC) released a funding call to seek projects who 'wished to transform how they deliver and support learning across a curriculum area through the effective use of technology, in response to a particular challenge faced by the discipline(s), department(s) or institution(s)'. The JISC are a UK government funded organisation and describe themselves as an organisation to 'inspire UK colleges and universities in the innovative use of digital technologies, helping to maintain the UK's position as a global leader in education.'

Drawing together the expertise and experience of the Blended Learning Unit (BLU) at the University of Hertfordshire (UH), along with the growing institutional and sector-wide interest in assessment and feedback, we saw the JISC call as an opportunity to work with academic Schools within UH to help revisit their assessment and feedback practice with a view to creating more learning-oriented assessment (Black, Harrison, Lee, Marshall, & Wiliam, 2008; Black & Wiliam, 1998; Gardner, 2006; Knight, 1995).

Whilst the issues raised by the NSS were a consideration, we were particularly focused on growing the excellent examples of assessment practice that already existed within the institution. Pedagogically sound assessment activity presents challenges in a mass higher education system (Brown, Bull, & Pendlebury, 1997; Gosling, 2007), a mass higher education system being defined as access to higher education taken up by 15-50% of the age grade (Trow, 1973). Pedagogically sound assessment, for example, providing prompt feedback and detailed comments on student work, is not a trivial exercise for teachers of large classes. The provision of prompt feedback and detailed comments on student work are related to questions in the NSS that typically receive less favourable responses from students. Our response to the JISC funding call was the development and implementation of the <u>E</u>ffecting <u>S</u>ustainable <u>C</u>hange in <u>A</u>ssessment <u>P</u>ractice and <u>E</u>xperience (ESCAPE) project.

The ESCAPE project

The ESCAPE project is a two year JISC funded project (September 2008 to October 2010) and is funded under the 'transforming curriculum delivery through technology'

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programme. The project, directed by the Blended Learning Unit (BLU), is a joint venture between the BLU, the School of Life Sciences and the Business School. Fundamentally, the ESCAPE project is concerned with meeting the challenges faced by the Schools in supporting assessment through the effective use of technology. Three strands of activity define the ESCAPE project:

- helping staff develop and deploy educationally effective and resource efficient assessment activity;
- helping staff make purposeful decisions about the use of technology to support their assessment activity;
- managing the partnership (between the BLU and the partner schools) and the assessment developments through appropriate change management techniques.

Whilst the funding period is constrained to two years, the expectation is that the three strands of activity combine to bring about sustainable change. That is, change that will endure, indeed grow, long after the funding period has ended.

A review of assessment practice at UH (Gillett & Hammond, 2009) highlighted a skew in the assessment profile of many modules. Although a wide range of assessment types were identified (e.g. practice-related assessments, oral assessments, case studies, role play etc.), there was a reliance on a small number of summative assessments. Summative assessments are typically high-stakes, undertaken towards the end of a topic or module and set out to measure student learning. High stakes assessment (or tests) are those in which the results of the assessment are important to the candidate and may affect their subsequent progress to the next phase of education (JISC, 2006). Summative assessment differs from formative assessment in that formative assessment is low-stakes, embedded within the learning activity and is used to stimulate, rather than measure learning (Rolfe, 1995).

Issues surrounding summative assessment include:

- Student activity is not necessarily stimulated across the semester or across topic areas. Time-on-task (distribution of student effort) is an important aspect of student learning (Chickering & Gamson, 1987; Karweit, 1983).
- Due to the high-stakes nature of summative assessments students may tend to hide, rather than show, their misconceptions (Knight, 2001) Being aware of, and acting on, student misconceptions is important for both learners and teachers (Biggs, 2003; Heywood, 2000).
- Students may have insufficient opportunities to demonstrate how they have learned in response to feedback. Good feedback corrects, motivates, is relational and highlights future student activity (Nicol & Macfarlane-Dick, 2006; Rust, 2002).
- Information flowing to teachers about their current students' understanding is likely to be too late to be of use in helping to shape the ongoing teaching and learning interactions. Good teaching sets out to establish the students (mis)conceptions and use them in the ongoing teaching sessions (Laurillard, 2002; Novak, Gavrin, Anderson, & Patterson, 1999).

Working with four modules from the Business School and five modules from the School of Life Sciences we are supporting the development and implementation of a greater degree of learning oriented assessment. Despite our willingness to support individual Schools, the practicalities of the project meant that we (the ESCAPE team) were only able to work with a sub-set of modules within each academic School. The nine modules were chosen on the basis that they were typical of modules within each School and that they comprised challenges commonly experienced within other modules that were not part of the ESCAPE project. It was also considered that the chosen modules and module leaders had the potential to support the growth of sustainable change within their Schools. In all instances our module teams were practicing teachers, understood much of what good teaching and learning looks like, but were not tasked with pedagogical research. This latter point is important, since it would have been naïve of us to assume that our partner Schools were immersed in the educational literature. Part of our role was to bring some of the findings of the literature to the Schools and present the findings in ways that are accessible, meaningful and have real-world applicability in the HE setting.

Change Management

Change management is a significant feature of the ESCAPE project. Related to this work we view change management as a supportive and systematic process that helps module teams evaluate their current practice and move to a practice that offers more benefits.

By definition, if the ESCAPE project is to be a success it is important that we understand our partner Schools and recognise they have agendas and pressures that are different to ours. To help develop and manage our relationship with our partner Schools we have drawn on guidance on embedding innovation (Lionberger, 1968; Rogers, 2003), change management (Dyer, 1984) and adopted Appreciative Inquiry as our evaluation approach.

Despite the interests of the originators of change or those wishing to embed innovation, such activity does not happen by chance. Indeed recognising the value and inevitability of the conservative impulse is vital when leading and dealing with change (Marris, 1975). Theories around embedding innovation and hence changing practice, suggest that four sequential phases can be identified (Lionberger, 1968) as follows:

- Raising awareness
- Stimulating interest
- Providing opportunities to try the innovation
- Adopting (embedding).

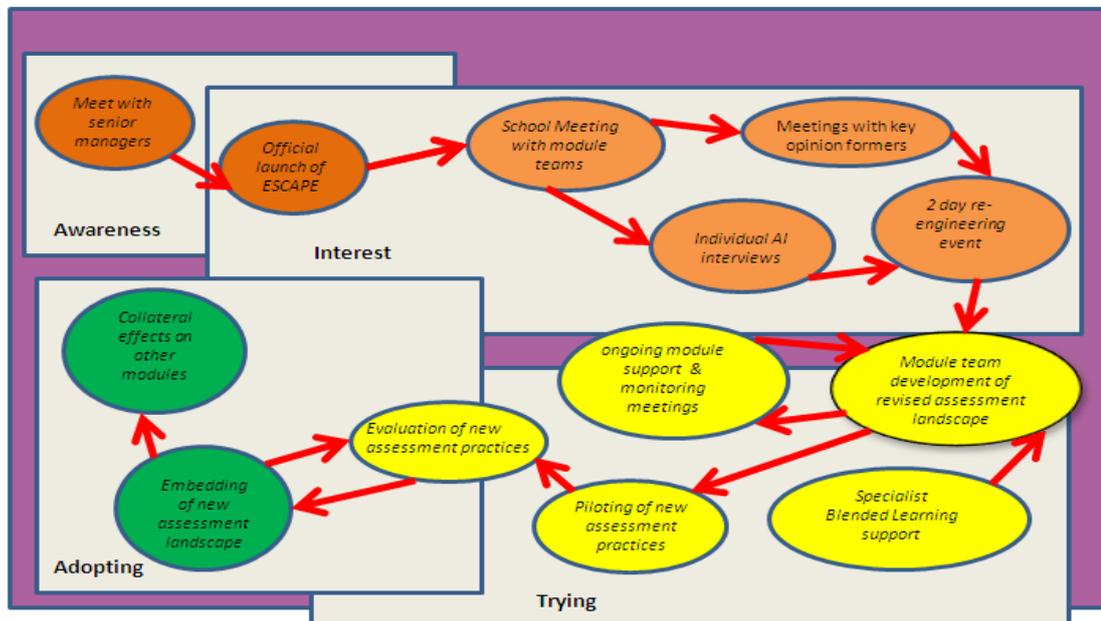Examples of ESCAPE activity overlaid on the four phases are shown in figure 1:

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Figure 1. *Four phases of the 'diffusion of innovation' related to the ESCAPE project*

To help develop the partnership with our Schools we were particularly keen:

- not to disturb Schools and module leaders with activity that may have appeared irrelevant or trivial;
- not to seek information from the Schools that we were able to establish independently;
- to recognise, and work with, the different priorities of the Schools.

At the start of the project a baseline study established the current assessment practices in the Schools. The baseline study captured the assessment profile (i.e. the percentage in-course assessment and percentage examination for module for each year). To avoid disturbing module teams, data was drawn from the module documentation. The student voice was captured through the Assessment Experience Questionnaire (AEQ) and supplementary free-text questions. The AEQ was developed by Gibbs and Simpson (2004) to establish how well, or other, the assessment activity is aligned with their conditions of assessment that support learning.

Appreciative Inquiry

Appreciative Inquiry (AI) is a method of evaluation that purposely looks for the positives in the situation being evaluated. Hence AI builds upon, and tries to grow, the processes and activities that are perceived as being successful. This is in contrast to a 'traditional', deficit-oriented method of evaluation, where according to Annis-Hammond, '*the primary focus is on what is wrong or what is broken*' (1998, p. 6).

In the ESCAPE project, an AI approach offers a number of advantages. Specifically, it:

- starts with a positive intent;
- focuses the module teams on their practice;
- gets module teams engaged quickly;
- uncovers the existing good assessment practice within the module which is then open for exploration by other module teams;
- encourages individuals and module teams to implement change and hence make a positive difference.

Fundamentally, we believed a more useful and inclusive starting point to engaging our partner Schools was asking what interactions, situations and activities were working well in their Schools and identifying what their roles were in such interactions, rather than explore things that were not going so well. The challenges that the module teams experience are not ignored in an AI evaluation but they do not form the starting point or the focus of the discussions.

AI is a structured and sequenced process that includes four separate yet related stages. The sequential process starts with Inquire and moves through Imagine, Innovate and Implement. In many regards the process is not too dissimilar from other structured models of product or curriculum design and deployment. See, for example, the Conceive, Design, Implement and Operate (CDIO) approach to engineering curriculum (Crawley, Malmqvist, Ostlund, & Brodeur, 2007).

The starting stage of AI, Inquire, determines the area for study and establishes good features of current practice. The Imagine stage invites visions for the future and opens up opportunities for sharing the vision amongst the participants engaged in the process. Innovate starts to identify opportunities for meeting the shared vision and Implementation puts the innovations into practice. The stages of AI are shown in figure 2.
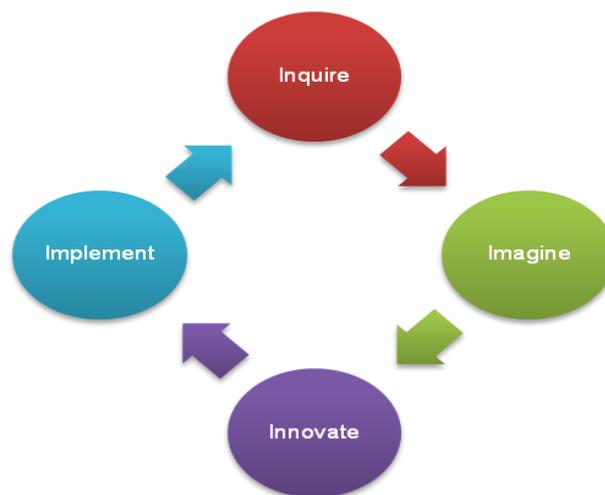

Figure 2. *The EnCompass model of Appreciative Inquiry (Preskill & Catsambas, 2006).*

The initial stage, Inquire, was carried out through an AI interview with individual members of the module teams. This interview is at the heart of the AI process and has a number of purposes. Lasting about an hour, the semi-structured interview allowed the interviewee to reflect on the strengths and successes of their module. Looking for strengths and successes indicates the positive aspects of the module and helps establish the role of the interviewee in the positive features of the module. The interview also helps to build a relationship between the ESCAPE team and members of the module teams.

The AI interviews were written up as case studies. The case studies include commentary on the current teaching and assessment activity and provide a useful picture of pre-ESCAPE activity. The case studies, therefore, form an important part of the baseline data. The case studies will be developed during the course of the project and updated to reflect the changes made as a consequence of engaging with the ESCAPE project. The case studies will subsequently highlight assessment developments and will prove useful resources for others wishing to reflect on and develop their assessment practice.

The AI interviews were followed by a two day, off-site, event. The event presented an opportunity for the module teams to come together, share experiences of good assessment practice present in the Schools. The event comprised a designed mix of presentations, small and large group discussions and active planning. It was intended that the module teams would move through the Imagine and Innovate phases of the AI cycle during the two days. Underpinning this event was a desire to enable the module teams to re-engineer their assessment practice.

To support the module teams in their planning activity, relevant findings from the literature were presented and discussed. This included notions of aligned teaching and features of good assessment and feedback practice. Aspects of the baselining study were explored and the best parts of the assessment experience identified. Teams started to imagine what the module assessment would be like if they were to extend and expand the good assessment practice already present within their modules.

Fishbone analysis was used to help module teams develop their thinking and map into abstraction their vision of the future assessment practice. Fishbone Analysis is a technique used to identify factors impacting on the topic or inquiry. It helps to structure brainstorming and sort ideas into useful categories (Tague, 2005). It is a visual technique, with a backbone relating to the topic of inquiry and connecting spines identifying areas of influences. Fishbone Analysis was also used to help the module teams see the consequences of their plans, establish the resources needed and the consequent timeline associated with their vision.

As a result of the two day event the teams were starting to develop their plans for re-engineered assessment activity. Examples of the re-engineered assessment include:

• use of blogs and student generated videos (short rationale: to develop improved student reflection and to establish student to student and student to teacher dialogue);

- extended use of electronic voting systems (short rationale: to check student understanding in class, provide more student-centred teaching sessions and improve lecture attendance and engagement with lecture material);
- use of group areas and wikis within virtual learning environments (short rationale: to establish opportunities for collaboration and co-creation);
- introduction of student generated summary lecture notes (short rationale: to distribute student effort across both the semester and topics areas, and to improve attendance and use of reading groups [organised along book-group lines] to facilitate student engagement with research literature).

Following the event we continued to work with the module teams, further developing their plans for changes in their assessment practice The module teams are now at the Implement stage, piloting the new assessment strategies.

Current position (January 2010)

Four of the nine ESCAPE modules have just finished piloting their new assessment practices. We are re-issuing the Assessment Experience Questionnaire to the students and so will look to identify changes in experience. This will be followed by an analysis of the effect that the new assessment regime has had on the module. The analysis will include comparison of the student experience, as measured by the AEQ, student performance and engagement and staff workload. The other five modules are due to complete at the end of semester B. This will allow us to investigate the effects of the project on all of the ESCAPE modules.

Conclusions and emerging findings

Sustaining change is not a trivial exercise. Supporting change needs to be systematic and recognise different attitudes towards change. Indeed good change management acknowledges that reluctance is a useful feature of change, since facilitators of change, quite rightly, need to marshal the evidence for change and show how, and what, benefits are likely to accrue (Dyer, 1984). Presenting aspects of the literature that are relevant to the project, understandable and have face-validity have proven to be useful in supporting continued engagement with the assessment agenda.

AI has helped the ESCAPE team build relationships with our partner Schools such that we can support the development and deployment of assessment activity that is relevant for the various modules. Our partner Schools are the subject matter experts and already engaging in good assessment practice. AI helps us uncover such practices for wider dissemination.

Sustainable change does not happen overnight nor will it necessarily be stimulated by a few encounters between the partner Schools and the ESCAPE team. The module teams are at different stages of change and with further encouragement we hope will continue with their assessment development work long after the ESCAPE project has finished.

Following the development of new assessment strategies, members of our partner Schools are indicating the positive effect the new assessment is having on student study behaviours. For example, Hazel Wagner, (Department of Accounting, Finance and Economics), comments that "*students are now preparing notes following each lecture and in some instances her students are doing more than was expected*". James Johnstone (Sport, Health and Exercise Sciences) comments that his students *"are now actively engaging with the feedback to improve follow-up submissions"*. Both note also that the re-engineered activity saved them time in marking and providing feedback. Hence both staff are now providing a more learning-oriented assessment experience for their students whilst also reaping efficiency gains.

In addition to the immediate gains we are already seeing some beneficial collateral effects of the ESCAPE project. These include ESCAPE module coordinators positively influencing the assessment activities on other (non-ESCAPE) modules and other non-ESCAPE modules wanting to work with the ESCAPE team. The collateral effects are important since they will help sustain and propagate good assessment and feedback practice.

If you want to find out more about the ESCAPE project or hear how we might be able to support your assessment activity please contact

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