



Congruent assessment and feedback that satisfies educators and students in higher education

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Centre for Higher Education Research and Practice Development Fund Round 6 Final Report 2013-14

Faculty Initiatives: Exploring Ways to Share and Embed Effective Practice

The purposes of this funding round were to:

- maximise opportunities to disseminate existing effective practice to the extent that it influences the practice of others and thus leads to positive impact on the student experience
- to evaluate the effectiveness of the dissemination approaches adopted so that they can inform future faculty and university practice
- projects were encouraged to explore how best they can facilitate opportunities for staff to engage in meaningful, scholarly dialogue around teaching and learning matters with a focus on enhancement.

N.B sections 1 – 9 will be published on the Centre website as a case study, sections 10-11 will be used by the Centre for monitoring purposes.

1. Project Title

‘Evaluating alignment of the views of students and tutors on assessment and feedback’

2. Project Team

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3. Project Summary (up to 200 words)

The principles and practices of assessment and feedback are of key importance to all higher education institutions. This research seeks to enhance the quality of student learning in the Faculty of Art, Design and the Built Environment by investigating the attitudes of students and educators in the area of assessment and feedback practices. The small scale study employed a mixed methodological approach to ascertain the perspectives of 51 students and 12 Tutors. A range of statistical procedures and analysis were applied to rank and measure the level and statistical significance of agreement between participants on assessment and feedback issues. Furthermore, adopting a phenomenological approach, the research undertook a thematic analysis of qualitative data in order to develop a deeper understanding of these issues. The findings identified and rank preferences of various issues related to current assessment and feedback practices and critically reveal the level and statistical significance of agreement between participants highlighting key areas where the perception of students and tutors towards assessment and feedback process diverge. The results highlight that there are key differences within and across the Faculty schools relating to the understanding, nature, sufficiency and learning impact of current assessment and feedback practice. Overall, the

findings provide new insights to evaluate the current understanding and effectiveness of assessment and feedback mechanisms and identified areas where better practice can enhance the student learning experience and inform future faculty and wider university practice.

4. **Project Overview** (what were your aims and objectives, what did you do, which groups(s) of staff/students, numbers of staff/students involved, how did you do what you did and why? What published evidence informed your approach? Ensure that this section is clearly written and aimed at staff from any subject area and teaching and learning support role – up to 2000 words)

Context

Whilst effective assessment and feedback has been identified as an essential ingredient in higher education, the assessment feedback process is complex and remains a problematic 'learning' enigma for many tutors and students. In recent years, a burgeoning corpus of literature has examined the modalities of assessment and feedback practices in higher education. In this context, research has highlighted a number of different perceptions of students and tutors towards the assessment and feedback process including multiple difficulties relating to purpose, effectiveness and temporal dynamics which can inhibit the student learning experience and propagate dissatisfaction. Despite this, there is a paucity of literature which examines congruence between the provision of feedback on assessment by educators in higher education and how undergraduate students recognise, understand and use this feedback. Moreover, there is even less literature which explores assessment and use of effective feedback mechanisms across 'hard and soft' disciplines within an educational context.

Aims & Objectives

This research seeks to enhance learning through better understanding of feedback on assessment perspectives of students and tutors in Faculty of Art, Design and the Built Environment. Drawing upon existing research literature, the principle aim of the mixed methodology research is to improve the quality of the student learning experience by exploring the congruence in attitudes between the provision of feedback on assessment by educators in higher education and how undergraduate students recognise, understand and use this feedback.

In attempting to address the aim of the research, the study utilised a questionnaire instrument adapted from a study by Northumbria University and considered:

- The nature, volume and timing of assessment and feedback
- How students and lecturers understand, interpret and use the process of assessment feedback
- Whether current assessment and feedback practices are sufficient
- How assessment and feedback practices support learning
- How can the value of assessment and feedback be increased or improved

To achieve the research aim, the objectives were to:

- Examine the nature of assessment and feedback through a review of literature;

- Collate and analyse the views of students and educators in Faculty of Art, Design and the Built Environment disciplines in relation to the recognition, comprehension and use of feedback on assessment through a mixed method approach;
- Evaluate the level and statistical significance of agreement between educators and student within and across Faculty schools relating to assessment and feedback practices

Seminal literature evidence which informed approach

The principles and practices of assessment and feedback are of key importance to all higher education institutions. In recent decades, approaches to learning and teaching have changed significantly and assessment practices have been the topic of wide ranging discussion [1-4]. With the concept of life-long learning beginning to permeate HE [5] and concomitant changes to educational standards and policy, finding ways to assess students' knowledge, skills, and competences has become a central focus of institutional effectiveness [3]. In the UK, the Quality Assurance Agency for HE has implemented changes in quality assurance standards at institutional level to enhance the student learning experience. This is to be achieved by creating a learning environment where students have the opportunity to engage in significant learning experiences which are defined in terms of learning outcomes and confirmed through the use of appropriate assessment strategies [6]. However, the impact of the recently publicised HE resource constraints on the student learning experience and extent of student dissatisfaction with the feedback processes, highlighted by the National Student Survey (NSS) results, have once again brought the effectiveness of assessment and feedback practice into sharp focus [7].

The assessment and feedback process is a crucial medium to facilitate students' development as independent learners in higher education who are able to monitor, evaluate, and regulate their own learning in order to develop beyond graduation into professional practice [8]. In this context, there is a substantial and burgeoning corpus of research in HE which considers the importance of assessment and feedback for student learning [9]. Academic discourse highlights the significant role of assessment in the student learning experience from both a measurement and enhancement perspective [9]-[10]. Assessment is often at the epicentre of the student learning experience and traditional assessment systems which measure knowledge dominate the HE learning environment. However, contemporary literature on assessment refers to contestation, unsuitable and disjointed practices [11]-[12] and an underlying lack of clarity in assessment methods which make assessment 'the Achilles' heel' of the learning process [11]. Therefore, assessment to aid learners in more formative ways has been highlighted as currently failing students [13], leading some to argue that assessment needs to be 'fit for purpose' [12] and that, in conceptualising assessment for learning, students be exposed to sustained experiences to improve the quality of their work and learning [14].

It is widely accepted that feedback is an essential component in the learning cycle and facilitates learning and development within and beyond formal educational settings. Indeed, a number of influential meta-analyses have confirmed that feedback is an essential ingredient for positive student learning [9], [15] by providing the means by which students can assess their performance and make improvements to future work [16]. However, despite its significance, literature reveals that the feedback process is considered limited in its effectiveness and considerable challenges confront educators wishing to enhance student learning through feedback. Although a body of evidence reveals that students want good feedback [17] and do revisit feedback given to them [18]-[19], difficulties in learning from feedback remain [20].

Literature indicates that most student complaints focus on the technicalities of feedback, including content, assessment activities, timing, and lack of clarity. In this context, research highlights that feedback may lack specific advice to improve [21]; may not be transferable to future learning [19]; can be difficult to interpret, understand and use [16], [22]-[23]; and may have a negative impact on students' self-perception and confidence [9], [19]. However, research evidence also shows that ineffective feedback is not simply a result of deficient practice of educators. Literature indicates that students are able to identify feedback as meaningful in terms of learning and development [18], [24] and that challenges to learning is the result of students not making use of or acting on feedback [17], [25]-[27]; failing to recognise the benefits feedback provides [16] and lacking appreciation that comments on one piece of work could help achievement on later work [28]. Literature also highlights that a fundamental lack of dialogue between lecturers and students can also result in failure to act on feedback [29]. Therefore, the feedback process confronts challenges, such as time, miscommunication and emotional barriers that distort the potential for learning [19]. Such differences in interpretation and use of feedback, exacerbated by a lack of dialogue, can result in a feedback gap and differing perspectives.

Therefore, it is argued that approaches to conceptions of feedback have remained orientated towards transmission perspectives underpinned by narrow conceptions of the purposes of feedback and shifts in relation to formative assessment and feedback have been painfully slow to emerge [39]. Considering these matters, Black and McCormick (2010) contend that greater explication is required on strategies to enhance independence in learning; there should be a greater focus on oral as opposed to written feedback and harmony is needed between formative and summative assessment [40].

Summary of Project Methodology

The principal aim of the research is to help to improve the quality of student learning in undergraduate built environment education by investigating the attitudes, conceptions and views of students and educators in the area of assessment and feedback practices. To achieve this, this small scale study employs a mixed methodological approach to generate multi-dimensional information to triangulate data achieving research aims [41].

Participants

A total of 51 undergraduate students and 12 Tutors gave their informed consent to participate in interactive workshops, semi-structured interviews and Questionnaires. Purposive and opportunistic sampling was used to recruit the lecturers from a range of disciplines within the Faculty. This approach was desirable as the sample is selected by the researcher, on the basis of knowledge of the population and nature of the research aims, to serve the purpose of the study [46]. A random sampling approach was adopted to recruit the students from within each Faculty school. The student cohort comprised a mix of those from higher and lower ability range and also students who had failed a module to elicit potentially contrasting perspectives.

Methods/procedures

Data will be collected across a number of programmes using interactive workshops, ensuring the inclusion of programmes from all three Schools within the Faculty and distinctions noted

between hard and soft subject areas, as defined by Biglin (1973) with an emphasis on differences between Art & Design (Belfast) and Built Environment (Jordanstown).

Questionnaire

The main research instrument used within the study was a Questionnaire which was piloted in the 2012-2013 academic year within the School of Architecture and Design within the Faculty of Art, Design and the Built Environment. This pilot streamlined ambiguity and design and drew upon work which was previously undertaken at Northumbria University which related to their Assessment and Feedback Ladder. The questionnaire has been reviewed for effectiveness further to the pilot and adapted as necessary for use within this research.

The questionnaire itself was distributed to 63 participants (51 students; 12 educators) to gain an insight into 'the verdict' in relation to 26 assessment and feedback issues. These issues ranged from opinions on written feedback to making schemes and assessment methods. The questionnaire also embedded Ulster's Principles of Assessment and Feedback and sought the views of participants (staff and students) on these seven principles as they align to assessment and feedback. The questionnaire instrument was the same for both student and educators to permit the analysis to identify points of convergence and divergence as a methodology for understanding the degree of alignment of the views of the two stakeholders.

Interactive Workshops

Three interactive workshops primarily serve as fora for data collection of the questionnaires but also facilitated dialogue and discussion relating to the issues under investigation in the questionnaire. In this context, data collection was undertaken in two linked stages of an interactive workshop. Completion of the questionnaire was the premier stage of the interactive workshop and was facilitated by a member of the research team and who is not within the course team of the participants involved. This was followed by an activity-based forum which sought to develop the data in the questionnaire. The two stages together should last for approximately 90 minutes.

Interviews

Eight confidential semi-structured interviews were conducted with the student and lecturer cohorts. Interviews with students were conducted by a Research Associate within the School as it was considered that students may respond more openly and candidly to the researcher than someone identified as an 'assessor', particularly with respect to issues such as lecturer practice, performance and support. Interviews were entirely confidential and the data generated anonymous.

Data analysis

Quantitative analysis of questionnaire data was undertaken using SPSS to allow for aggregation and analysis including the application of statistical procedures. This approach supports the study of social reality and permits the application of mathematical aggregation, comparison and summarisation of data observations in a more explicit format [42]. Whilst the results

considered the mean and standard deviation, simple measures of central tendency of each individual factor may not a suitable measure to assess overall rankings of agreement or opinion as they do not reflect relationships between variables. Therefore, the Relative importance Index was used to rank the level of agreement in relation to the assessment and feedback issues and indeed Ulster Principles of Assessment and Feedback. Furthermore, to determine whether there is a significant degree of agreement among the groups of respondents (students and Tutors across Faculty schools) Kendall's coefficient of concordance was used as a measure of agreement among participants and indicates the degree of agreement on a zero to one scale (Moore et al. 2003; Frimpong et al. 2003). Also, to ascertain a 'fairer measure' of data dispersion, the research employs quartiles of the distribution which serves to dissect the observation values into four uniform groupings. Finally, the research employed T-Tests and ANOVA to measure the significance of the responses of students and Tutors within and across the Faculty schools.

The research also adopted a qualitative approach involving the collation of empirical data which examines both student and lecturers perceptions of assessment and feedback process through interactive workshops and semi-structured interviews. This method of data collection is founded on an interpretivist philosophy that emphasises words and meanings in the collection and analysis of data and is receptive to elastic interpretation in the development of concepts and theories [43]. The qualitative data from the Interactive workshop and semi-structured interviews were analysed using the proprietary software package NVivo 8 'computer assisted qualitative data analysis software' (CAQDAS). This software facilitates the systematic management of qualitative data and provides a platform from which qualitative data can be analysed down to the finest levels of granularity to capture the concepts, categories and ontologies that describe and constitute the issue under investigation [50]. NVivo permits the research to proceed iteratively between data collection and analysis, using techniques of constant comparative method, 'memoing' and deviant case analysis [51]. A phenomenological approach was adopted to identify units of relevant meaning which can be clustered to identify and compare emerging themes [52]. Accordingly, the data was coded, categorized and analysed under each theme and compared with evidence from the different data sets. Where relevant, quotations that exemplified relationships between data were extracted from the interview transcripts and reported

Ethics

The primary data was confidential and held in full compliance with s1 of the Data Protection Act 1998 and the University of Ulster's '*Code of Practice for Professional Integrity in the Conduct of Research*'. Ethical approval to conduct the research was obtained and considered ethical considerations including: impact on students; informed consent; confidentiality; special needs/requirements; storage and access to data.

- 5. Evaluation of Impact/Results** (did your project achieve the purposes of the funding stream? Did your approach to sharing and embedding effective practice work? Did it have an impact e.g. on student learning/student attitudes/student performance/ staff attitudes, evidence of uptake by other practitioners /evidence of wider embedding into the curriculum? What approach did you use to evaluate this? Did you make good use of resources? Critical review of what you achieved and learnt)

A fundamental requirement of HE is to facilitate high-quality feedback exchange and interaction between educators and students. The research has provided analysis of the views and experiences of academics and students regarding assessment practices in Faculty of Arts, Design and Built Environment education. The findings show areas of congruence in assessment and feedback between educators and students. Importantly, the review highlights the multiplicity of students' and lecturers' responses to the assessment feedback process and the value of bringing together their views to assist our understanding of assessment feedback and what approaches may suit education in the modern HE institution.

There is a lack of investigation into congruence of assessment and feedback generally and the research adds to the emerging knowledge and debate in the area. Moreover, evidence in relation to hard and soft disciplines within the arts and built environment disciplines is thin and the findings add to research knowledge to inform practice. The research is also important in the context of the university community insofar as it emphasises learning issues across the School which are being highlighted and considered at a higher level. The study can be extended to other Faculties to generate multi-dimensional data and highlight dichotomy in the learning needs and teaching strategies required across the Faculty to enhance student learning experience. Indeed, the results highlight that there are key differences within and across the Faculty schools relating to the understanding and learning impact of current assessment and feedback practice. Overall, the findings provide new insights and identify areas where better practice can enhance the student learning experience and inform future faculty and wider university practice.

Interpretation of the emerging findings also suggests that, within Faculty disciplines, assessment and feedback may need to be reconceptualised to depart from formative and summative paradigms to move towards a continuous assessment strategy to the formative learning experience in order to enhance sustainable student knowledge and learning which is forward feeding and suitable to industry. By necessity, this entails the architecture of a learning, teaching and assessment pathway that utilises an assessment and feedback strategy that catalyses change from a focus on summative assessment by, primarily, the higher education system and, secondly, the student, to a focus on continuous learning, premised on understanding and advancing knowledge in order to better equip graduates with the attributes necessary for employment in industry.

The research findings will also complement and help to interpret recent NSS data results for the Faculty within the University. This can help to provide a deeper narrative through which practice can be reconsidered across the Faculty and indeed the wider University environment. A presentation of the complete findings will be offered at the next Faculty Teaching and Learning Committee meeting. Indeed, the outcomes will be used to form an evidence base for the Faculty of Art, Design and the Built Environment Teaching and Learning Strategy and the emerging results have been used to secure funding to investigate the issue of congruence across others Schools of the Faculty. It is also anticipated that the output of this study can impact on institutional policy relating to assessment design and lead to enhanced student learning and improved student satisfaction in future NSS results, particularly with regards to the quality of feedback.

- 6. Transferability** (how have you disseminated your work to others, what challenges did you face and what advice would you give others interested in trying out your ideas/ approaches to

sharing, influencing others and embedding effective practices across a faculty, what changes/developments would you incorporate next time round?)

The emerging findings provide an evidence base to inform and alter practice and strategy within the host university and dissemination of the findings through report and peer reviewed journals will provide evidence for others to draw upon. The findings, are transferable to other disciplines and indeed Faculties, and have been used by the Faculty of Art, Design and the Built Environment in the formulation of its learning, teaching and assessment strategy and policy through the Faculty Teaching and Learning Committee and the Faculty Executive. The research and its findings will form the theme and the basis for discussion at the Faculty learning and teaching symposium.

The research has a number of identified, potential external impacts on practice and academia that include:

- Following submission of final report, academic papers will also be placed in a peer-reviewed academic journals to add to the emerging knowledge and evidence base to inform practice.
- A presentation will be given at the University of Ulster Festival of Innovative Practice in June 2014.
- A conference paper ‘‘Enhancing Learning Through Better Understanding of Feedback on Assessment Perspectives of Students and Tutors’’, was delivered at the 2014 Joint International Conference on Engineering Education & International Conference on Information Technology, Riga Technical University, Latvia.
- A conference paper ‘Congruent assessment and feedback that satisfies educators and students in higher education’ was delivered at the iBEE Conference at Nottingham Trent University, 15th-16th May 2014. The conference was supported by the Higher Education Academy (HEA), the Council of Heads of the Built Environment (CHOBE) and the Associated Schools of Construction (ASC).
- A Postern was submitted and presented at HEA ‘Enhancing the STEM Student Journey’, University of Edinburgh on 30 April – 1 May 2014
- A Postern was submitted and presented at HEA ‘The 2nd international conference organised by the Enable Network for ICT Learning’ June 2014.

A significant challenge to the research was the data collection and ethical approval. As the research pertained to perception of assessment and feedback with Students in the Host University, ethical approval was slow and criteria to satisfy particularly stringent. Ethical approval was iterative and therefore took significantly longer than was anticipated and planned for at the design stage of the research exercise. This had ramifications for the project timetable and particularly the delay in ability to interview students.

Ethical consideration and good research practice also meant it was necessary to ensure that interviews and data collection with students were conducted by a Research Associate and not the Principal Investigator. The potential power dynamic and influence of a lecturer interviewing a student may skew the results. Indeed, it was considered that students may respond more openly and candidly engage with the researcher who is not identified as an ‘assessor’, particularly with respect to issues which are potentially critical of lecturer practice, performance and support. As a result it was necessary to depart from the original methodology and a slight delay to the project was incurred whilst the Researcher was engaged and ethically

cleared. Also, the delay in interviews meant that interviews and focus groups had an additional element of sensitivity as students were approaching summative assessments and some had dissertation deadlines to meet. It was therefore a delicate exercise to recruit students for the assessment and feedback research when this issue was very current in their minds and without the student perceiving it to impact of their study time.

In terms of methodology, the study would conduct interviews which explored the specific questionnaire results in more depth to generate a deeper understanding of the headline statistical results. In addition, the study would refine the questionnaire instrument; particularly the Likert scale applied which may be slightly ambiguous and skew results.

It would be beneficial to conduct a larger scale survey across a larger number of 'hard' and 'soft' disciplines including students with a wider variance of attainment and retention to allow the greater robustness in findings and permit more statistical inference and analysis of assessment and feedback practices to provide a credible evidence base to inform Faculty and University teaching strategy and policy. Furthermore, the focus of the present study was on full-time undergraduate students; additional research into assessment and feedback with post-graduate students and part-time students would be desirable to develop a wider understanding of the issues and inform teaching practice and strategy in relation to these groups of students.

7. References

Relevant references which have been particularly informative include but are not confined to:

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8. Project resources (provide links to any resources/ publications/ presentations)

Please refer to those identified in Section 6 above.

9. Contact Details (who should people contact if they want further information)

Dr Tim McLernon

10. Reflection (did you project meet your intended outcomes, if not why? Were other unanticipated outcomes achieved?)

By and large the project has achieved the intended aim, to provide a better understanding of the views and understanding of students and educators across the Faculty, whilst providing a medium to encourage both students and tutors to engage in meaningful, interactive scholarly dialogue relating to teaching and learning matters with a view to improving knowledge and practice. Having identified preference and differences in opinion, including statistical difference between students and tutors within and across Faculty schools, the project has provided a vehicle to evaluate the current understanding and effectiveness of assessment and feedback paradigms and identified areas where better practice can improve the student experience and inform future faculty and university practice. This also adds to the current debate relating to the assessment approaches used across the Faculty where there are hard and soft disciplines which innately utilise applied or pure intellect.

11. Budget (provided a breakdown of expenditure)