

# **Title: Embedding Formative Feedback Within Module Delivery: Experiences Of A Cyclical Approach**

Authors: Dr Judith McKnight<sup>1</sup> and Miss Kayleigh Watson<sup>2</sup>

Institutions: <sup>1</sup>University of Ulster, Belfast, Northern Ireland  
<sup>2</sup>University of Sunderland, Sunderland, England

## **Abstract**

*Centred on the pioneering efforts of a UK based University, this paper outlines and evaluates attempts to embed formative feedback provision as a recursive process with a cyclical approach to module design. This approach provides frequent opportunities for students to receive and apply formative feedback and facilitates the realignment of teaching in response to the learning needs identified.*

## **Introduction**

The provision of regular and frequent formative feedback is widely considered advantageous and conducive to student success (Bennett, 2011; Nisreen and Teviotdale 2008; Boud and Falchikov, 2007; Fisher et al, 2011; Gibbs, 2006; Yorke, 2003). However misjudged perceptions that students can and will easily engage with and transform such feedback into pertinent action (Nichol and Macfarlane-Dick, 2006) can present challenges. Module design might be suggested as an important vehicle for overcoming such challenges, however the clarity of the link between module design and formative feedback has been cited as an area of concern (Yorke, 2001). Such concerns are echoed by National Student Survey results and the Quality Assurance Agency for Higher Education (QAA, 2012), who highlight the need for module design to incorporate feedback that is detailed, timely and facilitates student response. When integrated as a gradual recursive process within module design, formative feedback may provide a mechanism through which such objectives may be satisfied (QAA, 2007; Bartram et al., 2010). Problematically however, such integration in module design can be impeded by a dissonance between the rationale for embedded formative feedback and the 'traditional' lecture-seminar approach which still holds a central position in UK higher education.

Focussing on a stage one undergraduate business module at a university in the North East of England this paper seeks to explore the perceived effectiveness of embedding formative feedback within module delivery. In addition the paper will outline and evaluate how heavily embedding the provision of formative feedback (and feed forward) through module design has been achieved through the implementation of a 'cyclical approach'. Finally in an attempt to share practice (Higgins et al., 2010) this paper will offer a practical insight into the operationalization of embedding formative feedback within module delivery.

## **Theoretical Background**

It is now widely perceived that for formative feedback to be utilised to its fullest potential it must become an iterative process in which students are actively involved and engaged (Fluckiger et al, 2010; Jenkins, 2010; Kift and Moody, 2009; Liu and Careless, 2006). This is

underlined by the notion that feedback is only conducive to learning if the student engages with the feedback provided (Wingate, 2010) and if the process is gradual in nature (Sadler, 1998) thus affording students greater control over the feedback process. However, with a largely top down approach to dialogue and feedback, there is clearly a disparity between the theoretical recommendations that have been put forward and the everyday practices of feedback provision (Nicol and Macfarlane-Dick, 2006).

As well as offering a means by which students take control of their own learning, a further advantage of formative feedback is that it enables teachers / educators to assess learning and realign their teaching strategies in response to the learning needs of their students (Ashgar, 2012; Nicol and Macfarlane-Dick, 2004). When appropriately operationalised formative feedback should provide teachers with information about where students are experiencing difficulty and consequently where teaching efforts should be focussed (Nicol and Macfarlane-Dick, 2004; Yorke, 2003; Johnson and Jenkins, 2010). This once again reinforces the need for the formative feedback process to be gradual in nature thus allowing the educator sufficient time to realign their teaching activities in accordance with the learning needs identified (Sadler, 1998; Shute, 2008).

The dominant mode and tradition of module delivery in HE is the lecture-seminar set-up (Laurillard, 2002), this approach features the directed flow of information from teacher to student (Raine and Collett, 2003; Baptista-Nunes and McPhearson, 2002) with teachers generally viewed as adopting the role of “sage” and students the “receptacle” (Raine and Collett, 2003; p41). Through this approach knowledge is communicated in a didactic fashion with teachers disseminating pre-processed information that is passively absorbed by their students (McCarthy and Anderson, 2000; Baptista-Nunes and McPhearson, 2002). In such a traditional approach to module delivery value is placed on the strict adherence to fixed curriculum with structure being according to subject content rather than process of learning. Despite some elements of change in order to create learning environments which are more student-centred (Bransford et al., 2000), the traditional approach to module delivery remains the dominant approach employed in higher education (Nicholls, 2002) which may pose problems in terms of the provision and operationalization of an effective formative feedback process.

Given the current dissonance between the rationale for formative feedback and the “traditional” approach to module delivery, a shift in module structure and delivery pattern may prove beneficial. With this in mind, this paper proposes the embedding of formative feedback within a cyclical pattern of module delivery. The “cyclical approach” enables formative feedback to become an iterative process in which students are actively involved (Jenkins, 2010; Kift and Moody, 2009; Liu and Careless, 2006) as well as a vehicle through which learning needs are identified and teaching realigned in response to these needs (Nicol and Macfarlane-Dick, 2004).

## **Method**

In response to calls for greater qualitative research about how students perceive, engage with and respond to formative feedback (Black and Wiliam, 1998; Yorke, 2003) this research adopts a qualitative approach to the exploration of embedding formative feedback within a cyclical module delivery pattern. With the research aiming to elicit the opinions of module participants as well as members of the module delivery team, focus groups provided a timely

method for the acquisition of in-depth, qualitative insights grounded in the lived experiences of module stakeholders (Krueger and Casey, 2000).

Data was drawn from current module participants<sup>1</sup> via nine focus groups with an average of 10 students in each. Within the focus groups students were asked to reflect upon their experience in terms of the purpose, impact and application of formative feedback within the module as well as the cyclical approach to module delivery. With the aim of providing a robust and comprehensive insight into embedding of formative feedback within module delivery, focus groups were also conducted among the module delivery team. Topics addressed included the operationalization of embedding formative feedback within module delivery, the cyclical delivery pattern and the impact of such endeavours on student progress.

## **Findings**

Findings suggest that students welcome frequent opportunities to obtain formative feedback. With the cyclical approach to module delivery devoting one in four sessions to dissemination, discussion and application of formative feedback, students enjoyed and utilised opportunities to engage with and digest the feedback provided. These sessions were found to support the consolidation of learning and the identification, acquisition and development of any deficient skills needed for summative assessment.

With the module running concurrently alongside two other modules, students also drew attention to the fact that formative feedback was rarely employed as part of their teaching and learning in other modules. As the following indicates:

*We haven't received formative feedback [in our other modules] we usually just do the final version of an assessment and the feedback you get is just your grade.*

*We don't get formative feedback in other modules like we do in this one. I would like to get it. A lot of the assignments we are given we haven't done before, we are first years and so when we don't really know the topic and then we get a 2000 word assignment on it, it can be difficult.*

Findings also suggest that knowledge and skills students had acquired as part of the embedded formative feedback process were also effectively utilised in the summative assessment for other modules where possible:

*In University you have to know how to reference for example, and without this model and the formative feedback we receive I would not be half as good at it...It has also been of benefit in other modules as I know how to reference from the formative feedback I got in this module.*

From the perspective of the module delivery team, embedding formative feedback within a cyclical delivery pattern was perceived as a useful method in terms of improving student progress and responding to their constantly evolving learning needs:

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<sup>1</sup> Students that were enrolled in the module at the time of the research (March, 2013).

*On the whole I have seen significant improvements in student progress and I believe a great proportion of this is due to the embedding of formative feedback within the module.*

*Through being inherently student centred, the cyclical approach is flexible and receptive to the evolving learning needs of the first year undergraduate transitioning to higher education.*

Although the general consensus amongst staff and students was positive insights from the module delivery team highlighted the resource intensive nature of this embedded approach:

*This module is fundamentally different in that formative feedback is embedded throughout its delivery and whilst this is having a positive impact on student development and progress it is extremely time consuming for us. For example, in some cases we are providing formative feedback on around 5 assignments every four weeks and to ensure that the feedback is serving its purpose it needs to be as detailed as possible and this can take a lot of time.*

## **Discussion**

Whilst there is widespread acknowledgement of the utility of formative feedback in terms of student progress and success (Bennett, 2011; Fisher et al, 2011; Yorke, 2003) the link between module design and formative feedback remains an area of concern. As previously indicated, in order to be effective, formative feedback must be a gradual and iterative process in which students are actively involved (Jenkins, 2010; Kift and Moody, 2009; Liu and Careless, 2006). Although efforts have been made to create learning environments that are more student-centred (Bransford et al., 2000), the traditional lecture-seminar approach to module delivery dominates in higher education (Nicholls, 2002) and can pose problems in terms of the provision and operationalization of an effective formative feedback process.

In exploring the above this paper reiterates the general consensus regarding the effectiveness of formative feedback in student learning, with both students and educators attesting to its benefits. In addition, and perhaps more importantly, this paper also finds that if formative feedback is to be truly effective it must be embedded as a recursive and dialogic process within module delivery. One way in which this may be achieved is through the adoption of a cyclical delivery approach in which students are consistently given opportunities to engage with and digest the feedback provided. Such an approach represents an attempt at re-thinking and retreating from traditional module design and embedding the formative feedback process into the teaching and learning situation with evidence of success in terms of enhanced student learning, progress and engagement. However, whilst a case can be made in favour of such an approach in terms of student learning it also comes with a note of caution. As the findings highlight, embedding formative feedback within a cyclical pattern of module delivery requires greater time and effort on the part of the module delivery team. Such resource intensity might therefore render such an approach less appropriate within certain frameworks.

## **Practical implications**

This research will interest any HE practitioners seeking to manage the demands of embedding formative feedback within module delivery, in a way which meaningfully engages the student as part of an integrated and dialogic process. The paper also serves to further highlight the

complexities of balancing the educational effectiveness of formative feedback provision and resource limitations within the HE sector (Higgins et al., 2010).

## References

- Asghar, M. (2012). The lived experience of formative assessment practice in a British University. *Journal of Further and Higher Education*, 36(2), 205-223.
- Baptista-Nunes, M. & McPherson, M. (2002). *No lectures on-campus: can e-learning provide a better learning experience?* In: Proceedings of the Second IEEE International Conference on Advanced Learning Technologies (ICALT'03). IEEE Computer Society, pp. 442-447.
- Bartram, B., Brant, J. & Prowse, S. (2010). Embedding pedagogic innovations in higher education: a cross-faculty investigation of staff views at an English university. *Education-Line*, Retrieved from <http://www.leeds.ac.uk/educol/documents/193686.pdf>.
- Bennett, R. E. (2011). Formative assessment: a critical review. *Assessment in Education: Principles, Policy & Practice*, 18(1), 5-25
- Black, P., and Wiliam, D. (1998). Assessment and classroom learning, *Assessment in Education*, 5(1); 7-74.
- Boud, D. & Falchikov, N. (eds.) (2007). *Rethinking assessment in higher education*. Oxford, UK: Routledge.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Fisher, R., Cavanagh, J. & Bowles, A. (2011). Assisting transition to university: Using assessment as a formative learning tool. *Assessment and Evaluation in Higher Education*, 36, 225-237.
- Fluckiger, J., Tixier, Y., Vigil, R. P., & Danielson, K. (2010). Formative Feedback: Involving Students as Partners in Assessment to Enhance Learning. *College Teaching*, 58(4), 136-140.
- Gibbs, G. (2006). How assessment frames student learning. In Bryan, C. and Clegg, K. (eds) *Innovative Assessment in Higher Education*, pp. 23-36, Oxon: Routledge.
- Higgins, M., Grant, F., Thompson, P., & Montarzino, A. (2010). Effective and efficient methods of formative assessment. *CEBE Innovative Project in Learning and Teaching, Heriot-Watt University*.
- Jenkins, J.O. (2010). A multi-faceted formative assessment approach: better recognising the learning needs of students. *Assessment & Evaluation in Higher Education*, 35(5), 565-576.
- Johnson, E. and Jenkins, J. (2010). *Formative and Summative Assessment*. Retrieved from <http://www.education.com/reference/article/formative-and-summative-assessment>.

Kift, S. & Moody, K. (2009). *Harnessing Assessment and Feedback in the First Year to Support Learning Success, Engagement and Retention* in: ATN Assessment Conference 2009 proceedings, 19-20 Nov 2009, RMIT University, Melbourne.

Krueger, R. A. & Casey, M. A. (2000). *Focus groups: A practical guide for applied researchers* (3rd edition). Thousand Oaks, CA: Sage.

Laurillard, D. (2002) *Rethinking University Teaching: A Conversational Framework for the Effective Use of Learning Technologies* (2nd ed.), London: Routledge Falmer.

Liu, N. F. & Carless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education*, 11(3), 279-290.

McCarthy, P. J. & Anderson, L. (2000). Active Learning Techniques Versus Traditional Teaching Styles: Two Experiments from History and Political Science. *Innovative Higher Education*, 24 (4), 279-294.

McPherson, M. A. & Nunes, J. M. B. (2002). *No lectures on-campus: can e-learning provide a better learning experience?* In: Proceedings of the Second IEEE International Conference on Advanced Learning Technologies (ICALT'03). IEEE Computer Society, pp. 442-447.

Nicol, D. J. & Macfarlane-Dick, D. (2004). *Rethinking Formative Assessment in HE: a theoretical model and seven principles of good feedback practice*. Retrieved from [http://www.heacademy.ac.uk/assets/documents/assessment/web0015\\_rethinking\\_formative\\_a  
ssessment\\_in\\_he.pdf](http://www.heacademy.ac.uk/assets/documents/assessment/web0015_rethinking_formative_assessment_in_he.pdf).

Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative Assessment and Self-Regulated Learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.

Nicholls, G. (2002). *Developing Teaching and Learning in Higher Education*. London: Routledge Falmer.

Nisreen, A. & Teviotdale, W. (2008). *Formative Assessment in Higher Education*. In: BMAF Annual Conference 2008 The Learning and Teaching Agenda in the UK: National Perspectives but Common Concerns? 29th – 30th April 2008, Edinburgh, UK.

QAA (2007). *Enhancing Practice. Integrative assessment: Managing assessment practices and procedures. Guide no. 4*. Mansfield: Quality Assurance Agency for Higher Education.

QAA (2012). *Understanding assessment: its role in safeguarding academic standards and quality in higher education. A guide for early career staff*. Mansfield: Quality Assurance Agency for Higher Education.

Rae, A. M. & Cochrane, D. K. (2008). Listening to students. *Active Learning in Higher Education*, 9(3), 217–230

Raine, D. & Collett, J. (2003). Problem-based learning in astrophysics. *European Journal of Physics*, 24, S41-S46.

Sadler, D. R. (1998). Formative assessment: Revisiting the territory. *Assessment in Education*, 5(1), 77-84.

Shute V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–89.

Wingate, U. (2010). The impact of formative feedback on the development of academic writing. *Assessment & Evaluation in Higher Education*, 35(5), 519-533.

Yorke, M. (2001). Formative Assessment and its relevance to retention. *Higher Education Research and Development*, 20(2), 115-126.

Yorke, M. (2003). Formative Assessment in Higher Education: Moves towards theory and the enhancement of pedagogic practice. *Higher Education*, 45(4), 477-501.