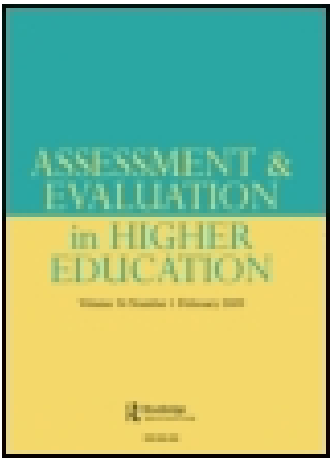

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Maddalena Taras
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Using Assessment for Learning and Learning from Assessment[1]

MADDALENA TARAS, *School of Education and Lifelong Learning, University of Sunderland, UK*

ABSTRACT *Innovation in assessment is no longer an option in higher education in Britain if we examine the aims and the claims that are being made. From the Dearing Report to our module guides, we claim to wish to support independent and life-long learning, put the students at the heart of the learning process and to help students take responsibility for their own learning. This cannot be done without including students in mainstream summative assessment and without reconciling the contradictions that currently contribute to impeding the students this access. This article will look briefly at the aims of higher education, provide an overview of current thinking on student learning and formative assessment as a framework for offering one possible practical solution to the problem. This possible solution is Taras's (2001) version of student self-assessment which works within the theoretical framework of Sadler's (1989) theory of formative assessment and of what we know about student learning.*

Introduction

This article notes that innovation in assessment in no longer an option in higher education. Contradictions between aims and pedagogic processes in British universities are probably an important factor which contributes to undermining educational credibility with both staff and students. Staff, on the one hand, are deterred from attempting to implement innovations and ideas which do not conform to the protocols of internal and external quality control. Students, on the other hand, are disillusioned and frustrated because the aims and ideals for the pedagogic process seem to be shattered by the perennial pressures of summative grades. Currently, these contradictions and discrepancies are probably an important factor undermining development in higher education. To begin with, the means, both theoretical and practical, are available to resolve them and, as paying customers, students perhaps have the right to demand coherent and logical educational processes that are not detrimental to their learning. These contradictions can

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be seen by students as a failure to deliver these promises thereby leading to dissatisfaction.

After initially examining the current aims in higher education, I will look at what research tells us about student success and learning. The main focus will be on formative assessment and feedback, but placed in a context that is also appropriate for summative assessment.

Aims for Students in Higher Education

The Dearing Report provides a coherent overview of recent educational developments in higher education in Britain and is therefore a useful vantage point from which to see the aims of higher education for the present and future.

> The world of work is in continual change: individuals will increasingly need to develop new capabilities and to *manage their own development and learning throughout life*. (Dearing, 1997, p. 12) (emphasis added)

From the above quotation, we could expect higher education to produce confident, independent and autonomous students so that we can "sustain a learning society" (Dearing, 1997, p. 13). Unfortunately, far from sustaining such a society, it is becoming doubtful whether we are actually producing confident, independent and autonomous learners, or worse still, whether these qualities are actually being undermined in learners during their time at university. Initial research by Fazey seems to indicate that first-year university students have a higher perception of autonomy than either second- or third-year students. As they progress, this seems to decrease. Fazey (1996, p. 197) hopes that further longitudinal study will show otherwise, but the initial findings are disturbing nonetheless.

One possible reason to explain this could be that we are providing students with contradictory messages: that there is lack of coherence between what we purport to do and what is reflected in reality. Perhaps the things we value are being submerged in the procedures and processes that students encounter. Entwistle and Entwistle summarise this clearly.

> In higher education, there has always been an emphasis on a broader view of learning and on independent interpretation and judgement, but the way the course is presented to the student, and the nature of the examinations, may give students the strong impression that it is detailed knowledge, and the correct use of procedures, which will bring the greatest rewards. (Entwistle & Entwistle, 1991, cited in Atkins *et al.*, 1993, p. 57)

By using the context of assessment and assessment feedback, I wish to examine this possibility. Before looking at this, it is pertinent to look at what promotes students' success or learning in order that we may equate either or both with our final aims.

Student Success—Student Learning

Cross (1996) provides three conditions for excellence. These are: (1) high expectations, (2) student participation and involvement, and (3) assessment and feedback. Students should have high expectations (what Sadler calls "hard goals") which should be student-owned (Sadler, 1989, p. 129). Interestingly, "do your best" goals and advice are as unproductive as no goals at all. Tutors can promote this aspect by enabling students

to place their high expectations in the academic context of higher education and encourage ownership by such means as learning contracts.

Student-centred learning has, in theory, promoted and brought about greater student participation and involvement. For students to be at the centre of the learning and teaching process, their needs and requirements must be at the heart of this process. Increasing student involvement in group work, project work, oral presentations, and task- and problem-based learning all contribute to turning the essential focus onto the student learning process. Furthermore, as Gibbs and Lucas (1996) have found, selecting appropriate teaching methods can overcome difficulties presented by progressively large classes.

In both of the above areas, much has been done, particularly in the past decade, to improve the theoretical grounding and practical advice in higher education for student excellence and student learning to flourish. From quality assurance feedback, both across other institutions as well as in my own, it would seem that the weakest link of the three is the third aspect—assessment and feedback. This is the area to which students attach the most importance, as well as it being the lynchpin for learning and validation. Therefore, it is necessary to establish why, on the one hand, assessment and feedback have both been identified as the weakest aspects of higher education and why, on the other hand, something that is so crucial to both staff and students should still be bottom of the evolutionary agenda.

Assessment and feedback are not only central to learning but also to the student experience (Falchikov & Thomson, 1996) because the three conditions identified by Cross are not discrete items, but rather integrated and interdependent. Despite assessment and feedback being central to learning (too many examples exist to dwell on this area for too long—see the work of Dreyfus & Dreyfus, 1980 in Atkins *et al*., 1993 and Marton *et al*., 1997), student involvement with assessment, whether peer- or self-assessment is still rare in higher education. Hounsell *et al*. (1996) report back on data gathered in Scotland on learning and teaching practice and find some increases in the use of peer-assessment, but much less in the use of self-assessment. Glasner (1999) looks at subjects assessed between 1993 and 1995 by the Higher Education Funding Council (HEFCE) in Britain and finds that there is little increase in innovation relating to student assessment.

> *A few providers* had introduced an element of self-assessment and peer-group assessment. Feedback to students on their performance ranged from detailed evaluations to informal orally transmitted comments from tutors. (Glasner, 1999, pp. 17–18) (emphasis added)

Examining assessment practice is also a useful means of gauging change and development in higher education, since, as Hounsell *et al*. note, it impacts directly or indirectly on other processes.

> Assessment practices offer a particularly fruitful vantage-point from which to view the impact and evolution of such changes [in higher education], since they inevitably reflect and incorporate developments in course design and teaching-learning methods as well as in assessment itself. (Hounsell *et al*., 1996, p. i)

I would suggest that we are giving out contradictory messages. We have student-centred learning, on the one hand, and students as protagonists being excluded from the main role which is assessment, on the other. A central tenet which may have contributed to the current situation is that, while assessment and feedback are considered to be the

exclusive domain of tutors, they are what have distinguished teachers or lecturers from the rest of society. Assessment and feedback are at the heart of tutor identity and this must surely be one of the deciding factors which make so many tutors reluctant to hand over any of this responsibility or even share it with students. Even allowing students participation permits them entry into the bastions of academia. Students, for their part, can also be reluctant to cross the thresh-hold of what has always been forbidden territory.

Another possible reason is that high-stake validating tests and examinations tend to dominate education (Black & Wiliam, 1998, p. 142; Orsmond *et al*., 2000, p. 24). This makes it extremely difficult to include students in the assessment equation, and it is also probably the reason why peer- and self-assessment are rarely used in summative assessment tasks (Taras, 1999). The sum total is that students are generally only allowed access to peripheral and relatively unimportant forms of assessment. In the given context, unless students have access to formal, summative assessment (i.e., assessment that is graded and contributes to their academic results), then they are effectively being excluded from a central aspect of student learning and a very important means of developing their autonomy and independence (Taras, 2001).

Feedback, Formative Assessment and Student Self-Assessment

The third condition for excellence cited by Cross is assessment and feedback. All feedback necessarily requires as a prerequisite some form of assessment or judgement of the work (Rowntree, 1987, p. 4). In this article I will focus only on feedback as part of assessment (whether formative or summative) and not on feedback as part of the classroom learning process. I see the former as providing the consolidation of learning, the deepening of understanding and realignment of concepts within each individual student's conceptual framework. The latter needs to follow the pace of the class and therefore provide ideas, problems and possible solutions. With modularisation (that is to say, dividing course credits into semester-long units) and increases in class sizes, assessment patterns have changed. Often this involves streamlining coursework assessments and increasing time-constrained assessments and examinations (Gibbs & Lucas, 1996). This often has as a consequence a reduction in tutor feedback from assessed work. Taras (2001) has argued that this feedback can be of crucial importance for formative feedback to students from tutors. The formative-summative assessment debate, both on a theoretical and practical level, is a lynch pin in the assessment debate since it has direct implications for teaching and therefore student learning. This debate is dealt with comprehensively elsewhere (see Wiliam & Black, 1996; Wiliam, 2000; also Taras, 2002). What is pertinent to note for the purposes of this article is that it transpires that formative assessment, and therefore feedback, is essential both for judging work (either by tutors or students) and for permitting learning to become a logical outcome. Suffice it to say, that the current accepted theory no longer separates formative-summative assessment and, what is more, requires all assessment to be primarily formative in nature. Some reasons are highlighted in the following discussion which presents the theory of formative assessment as expounded by Sadler.

The need for learners to have feedback is not generally questioned.

> One of the basic principles of learning is that learners need feedback. They need to know what they are trying to accomplish, and then they need to know how close they are coming to the goal. (Cross, 1996, p. 4)

Cross provides a vivid and evocative metaphor for learning without feedback where it is likened to learning archery in a darkened room. Feedback is an integral part of learning and teaching. Orsmond *et al*. highlight the necessity of tutor feedback in learning:

> Tutor feedback and student learning *should* be inseparable. If they become uncoupled, the formative aspect of assessment is lost. (Orsmond *et al*., 2000, p. 24)

Black and Wiliam show that it is the essential feature in good teaching as well as in efficient learning:

> We focus on one aspect of teaching: formative assessment. But we will show that this feature is at the heart of effective teaching. (Black & Wiliam, 1998, p. 140)

Black and Wiliam (1998, p. 144) summarise research evidence from 250 articles or chapters, at all educational levels, from infant school to university, and across subjects and different countries, and note that emphasising and strengthening formative assessment improves learning.

> All these studies show that innovations that include strengthening the practice of formative assessment produce significant and often substantial learning gains. (Black & Wiliam, 1998, p. 140)

To understand the process of formative assessment, it is pertinent to understand the theory of formative feedback. Sadler (1989) provides us with a coherent and working theory in complex learning settings requiring qualitative judgements. He uses Ramaprasad's definition of feedback:

> Feedback is information about the gap between the actual level and the reference level of a system parameter which is used to alter the gap in some way. (Ramaprasad, 1983, p. 4)

The significant idea in this definition is that feedback is not a one-way system of information. What was called "knowledge of results" (i.e., tutors (or others) providing judgements on students' work) was a one way system. On the contrary, for feedback to take place, the learner who is receiving it is required to be an active participant and use the information to alter the "gap". This definition emphasises the centrality of the learner and also the learner's responsibility in the equation. As the saying goes, we can take a horse to water but we can't make it drink. Sadler's definition, which is derived from the above, highlights both speed and efficiency as being inherent in formative feedback.

> Formative assessment is concerned with how judgements about the quality of student responses (performance, pieces, or works) can be used to shape and improve the students' competence by short-circuiting the randomness and inefficiency of trial-and-error learning. (Sadler, 1989, p. 120)

Three conditions for effective feedback are then identified. These are: (1) a knowledge of standards, (2) the necessity to compare these standards to one's own work, and (3) taking action to close the gap. A knowledge of standards requires students to gain access to the "guild knowledge" that is inside tutors' heads, as well as having access to a combination of descriptive statements and exemplars. Neither of the latter is sufficient in itself and a combination of verbal descriptors and associated exemplars provides a practical and efficient means of externalising a reference level (Sadler, 1989, pp. 126–127). Students must have access to the tutors' guild knowledge and the assumptions that

are being made, partly through negotiation of criteria and partly through discussion of descriptive statements and exemplars. The second condition, like the first, will be met through practice on the part of the students and guidance from the tutor. The comparison between the standard and the students' work is better done through the breakdown into explicit criteria: if necessary, the tutors can also explain their use of the tacit knowledge in their heads that it is difficult to exteriorise, other than in specific, concrete examples, as they arise. When students have carried out conditions one and two, they have effectively carried out the same or a similar procedure to the tutors, and if this relates to their own work, then they have carried out student self-assessment; Sadler calls this "student self-monitoring" (Sadler, 1989, p. 120). If it is the tutor (or a peer) that is carrying out conditions one and two, then it is the tutor (or the peer) that is assessing. The third and final condition requires learners to use this new information at the same time as producing. All three conditions must be met for formative feedback to have taken place. Therefore, assessment (whether formative or summative) is subsumed within the theoretical premise of formative feedback since feedback goes a step beyond assessment.

This definition is not only interesting on a theoretical level, but it has enormous implications for learning and for teaching. Our responsibility as teachers who wish to provide formative feedback does not end when we have given students their knowledge of results or information. Formative feedback implies and necessitates a partnership and a symbiotic relationship which works in a two-way system since it does not count as formative feedback unless the student has understood what the purpose of the assessment was, how it was assessed or judged, and how they can use their shortfalls in the future. Even this is not sufficient. Formative feedback is not complete until the students have produced an equivalent piece of work where the issues have been addressed and remedied, that is to say, until true learning has taken place and has been shown to have taken place.

Wiliam and Black, when using this definition, specify that intention does not and cannot replace actual effect.

> Crucially, an assessment that is *intended* to be formative (i.e. has a formative *purpose*) but does not, ultimately have the intended effect (i.e. lacks a formative *function*), would not, with this definition, be regarded as formative. (Wiliam & Black, 1996, pp. 543–544)

This is true for both formative and summative assessment (Wiliam & Black, 1996, p. 540). A wish to prioritise learning in students will naturally lead to emphasis being placed on formative assessment and feedback, even if the work produced is also destined for use for summative purposes (Taras, 1999).

Student Self-Assessment

For Sadler, self-assessment (i.e., assessment by the students of their work using comparable cognitive, intellectual and pedagogic processes to that of the tutor) is required *before* the feedback loop can be completed. Taras (2001) argues that, given the expert knowledge required of the students (Sadler's "guild knowledge"), this is initially difficult for them to carry out without support from tutor feedback, which will act as a bridge to help them to access this guild knowledge. Taras's version of self-assessment uses summative work for two reasons: (1) to train students in the processes that Sadler describes and therefore make them efficient learners, and (2) to allow students access to summative assessment processes and so support students on the road to autonomy and

independence (Taras, 1999, 2001). Taras's practical example is in accordance with the aims of university education as defined by Dearing, and also fits into the theoretical framework of formative assessment as proposed by Sadler (1989).

The Grade or Mark

The grade is usually indissociably linked to summative work, and yet from the above it can be argued that since the grade is linked to ideas of standards, it is also of great importance for formative work. Its importance is directly related to the effect it has on students, and often this has the unfortunate effect of distracting them from the essentials.

> In any area of the curriculum where a grade or score assigned by a teacher constitutes a one-way cipher for students, attention is diverted away from fundamental judgement and the criteria for making them. A grade therefore may actually be counterproductive for formative purposes. (Sadler, 1989, p. 121)

I have been using a variation of student self-assessment with my students for a number of years and I have found that any appearance of a grade from either peers or tutor before students have had the opportunity to interiorise feedback on their work, from whatever source it might be, invariably interferes with the assimilation and understanding of this feedback. Furthermore, it influences and interferes with their own judgements, making self-assessment more difficult (Taras, 2001). I was awarded a Teaching Fellowship by my university from 1995 to 1997 to promote the use of this self-assessment across the university. Staff who used it confirmed that students found it easier to assimilate feedback and make their own judgements when a grade was not given back with their work. Black and Wiliam note similar observations from other research findings (Black & Wiliam, 1998, p. 144). I reiterate that marks have a place even in formative assessment, but not in isolation and not before feedback and judgements have been interiorised. Black and Wiliam further note that marks on their own, and particularly a series of bad marks, can lead to a downward spiral for student learning and confidence (Black & Wiliam, 1998, p. 144). Klenowski (1995, p. 148) reports a similar experience. In addition to the above mentioned direct benefits to students, withholding the mark until feedback has been assimilated helps to demonstrate to students that tutors attach greater importance to learning and to the process of learning than to emphasising the result. The product is also important, but as evidence of learning and not just for accreditation.

> Students know the importance that lecturers attach to both content and process by the emphasis that is placed on it. In this self-assessment process, the understanding of feedback is placed well before the grade that is given. (Taras, 2001, p. 609)

Three key features combine to distinguish this self-assessment process. They are:

> firstly, to use summative, graded work for self-assessment, secondly, to receive tutor feedback in order to help them identify and understand their errors prior to self-assessment. Thirdly, it is proposed that students should receive their grade or mark only after they have completed the formative, learning aspect of the self-assessment exercise. It is argued that this process will go some way towards giving students real access to power sharing in assessment. (Taras, 2001, p. 605)

Hinett finds a great difference in reaction to grades and assessment between first- and second-year students. Whereas first-year students seemed thrilled by the low 40% "pass" mark, second-year students are obsessed with grades since they are used for the final degree classification (Hinett, 1996, pp. 287–290). This reaction has also been noted at my own university. When second-year grades were demoted (i.e., only used as back-up grades when final-year marks were borderline cases), it was immediately noted that second-year students seemed less committed to their work by increased absences. When questioned, their reply was invariably "the grades don't count". We felt as a team that this had serious repercussions on standards of final-year work.

Grades are often a means to an end, but they have serious repercussions on learning. In our own classrooms, we can help to remediate the perceived hierarchy of importance that the macro structure of education is giving and attempt to put learning where it belongs—at the centre of the student experience.

Conclusion

This article points out that we are giving students the wrong message in higher education since we often appear more concerned with grades than we are with learning. If our processes and procedures are giving the signal that this is what we value should we perhaps be examining what we do in the light of this? This is particularly relevant in the area of assessment and feedback. Greater emphasis on student participation through peer- and self-assessment, particularly in summative assessment that "counts", could help to redress the balance. Work on student learning and Sadler's theory of formative feedback reiterates the same sentiment: that we need to implicate students as active participants and protagonists in the assessment process. Related to this is the problem of grades. For assessment to be formative, assessment and feedback should initially be separate from grading. Students need to be allowed to develop their own judgements before being presented with grades from other assessors. Providing coherence of theory and practice, both as an institution and as individuals, will help to ensure that students receive unambiguous messages.

Academic processes, by their very nature, need coherence between theory and practice. This is part of the ethos that we inculcate in our students. The least we can do is to attempt to adhere to these principles ourselves. Current practices in assessment in higher education in Britain have not generally kept pace with our ideals of student-centred learning, preparation for life-long and autonomous learning (Hounsell *et al*., 1996, p. i; Glasner, 1999). Much research has been done on the central position that assessment occupies in learning. Yet the tension between assessment for learning and assessment for validation often leads to a neglect of the former (Black & Wiliam, 1998, p. 18). Assessment must be for learning since the claims are that learning is at the heart of the aims of higher education. Without dismantling current quality and assessment procedures, it is now possible to do this. The solution proposed in this article fits into the summative-assessment-driven paradigm currently dominating higher education. Research on student learning, Sadler's theory of formative assessment and Taras's version of student self-assessment, provide coherent, working examples of how to integrate theory and practice in order to work towards achieving our aims. If the means are available, universities should support their staff with time and staff development options so that implementation is possible, and perhaps it is our duty as educationalists to provide it and the students' right to expect it.

Notes on Contributor

MADDALENA TARAS is Senior Lecturer in the School of Education and Lifelong Learning at the University of Sunderland. She was awarded a two-year teaching fellowship to promote the use of student self-assessment across different Schools at the University. *Correspondence:* Maddalena Taras, University of Sunderland, FORSTER Building, Chester Road, Sunderland SR1 3SD, UK. E-mail: maddalena.taras@sunderland.ac.uk.

NOTE

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