A multi-facetted formative assessment approach: better recognising the learning needs of students

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Abstract

Students are increasingly subject to a series of learning pressures that prevent effective engagement in assessment. Thus, the aim of this study was to create a multi-facetted formative assessment approach that better enabled students to engage in the assessment process. A formative assessment approach, consisting of six key initiatives, is outlined and shown as being useful in helping to improve student engagement with the subject area of environmental governance. The effectiveness of the assessment approach was assessed via analysis of written student feedback that facilitated analysis of student perceptions of the assessment process. The paper argues that for formative assessment to be more widely embraced, and made more effective in encouraging learning, greater recognition must be accorded the strategies that can be adopted to facilitate the uptake of formative assessment. A reduction in summative assessment burden and the recognition of the need for better 'information' on the aims and objectives of assessment, and subsequent discussion of these, are highlighted as having played their role in facilitating the uptake, and effective implementation of, formative assessment.

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Introduction

It has been said that *'reflective learning is essential to the research work of any self-respecting academic'* (Brown *et al*., 1997: 3). It is out of this spirit of academic endeavour that this paper was born. Following the delivery of the postgraduate module; 'Environmental Policy and Governance', it became apparent that a significant percentage of the cohort, studying for a taught masters programme in Environmental Management, had failed to effectively engage with and understand the subject content of the module (38% of the cohort achieved a failure grade [1]). As a result, the module tutor (the author of this paper) decided to reflect on how the subject content of the module was being delivered in an attempt to encourage more effective engagement with the subject through the use of formative assessment, which is associated with improved academic achievement (William *et al*., 2004; Hargreaves, 2005; Covic and Jones, 2008).

To facilitate discussion of the multi-faceted formative assessment approach outlined in this paper, the paper has been divided into four main sections. The first section seeks to inform the reader about formative and summative assessment approaches and some of the barriers that serve to limit the uptake of formative assessment. As a result of this discussion, consideration is then given to discussing how these barriers can be overcome and how the associated learning experience of students can be improved. This discussion allows for the emergence of a multi-faceted formative assessment approach developed to improve the student learning experience. The second section of the paper then focuses on detailing how student perceptions of the new assessment approach was solicited and subsequently analysed. The paper subsequently details

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[1] Within the United Kingdom, at taught postgraduate level a fail is widely considered to be a mark below 50%.

student perspectives of the assessment process. In particular, written student feedback is drawn upon to solicit insights into how the new assessment approach was received. The paper then draws to a close with a discussion and conclusions section. In particular, it is concluded that if formative assessment is to be embraced greater consideration needs to be given to reducing summative assessment levels to create room for more formative assessment in the curriculum.

Towards a multi-facetted formative assessment approach

Assessment types and the need for supporting assessment information

Assessment is crucial to any area of academic endeavour. Assessment strategies such as the writing of essays and reports, the carrying out of practical procedures, or discussing issues verbally, are all concerned with sampling what a student may or may not know (Brown *et al.*, 1997; Biggs, 2003). Assessment is also used in *'selecting students, controlling or motivating students, and to satisfy public expectations as to standards and accountability'* (Biggs, 2003: 141). From the perspective of this study, it is the assessment approach of the 'essay' that has proved so difficult for students to engage with effectively. Yet, essays are one of the main ways to assess knowledge of a subject area (Brennan, 1995). With the appropriate use of such terms as 'outline', 'discuss', 'evaluate', and 'critically discuss', an essay can be used encourage the development of language skills, knowledge development, and a deeper and more critical understanding of issues (Chanock, 2000; Anderson, *et al.*, 2001; Biggs, 2003; Covic and Jones, 2008).

Assessment can take one of two forms: 'formative' and 'summative'. Student and teacher alike need to know how learning is progressing, with feedback being used to

improve the learning experience of the student (Biggs, 2003). Therefore, formative assessment aims to improve the learning experience of the student by furnishing the student with ideas on how they can improve what they are doing (Brown *et al*., 1997; Yorke, 2003). As Brown *et al.* (1997: 4) comment, the feedback provided has to be useful to the recipient and in doing so has to be '*specific, accurate, timely, clear, focused upon the attainable and expressed in a way which will encourage a person to think, and if he or she thinks that it is necessary, to change'*. In contrast, summative assessment can be used to establish the learning ability of a student which can then be used to accredit their knowledge development to a particular programme of study (Biggs, 2003). As a consequence of the positive role formative assessment can play in the development of a more effective and successful learning style (e.g. Hargreaves, 2005; Miller, 2008), a formative assessment approach was adopted.

Despite the above discussion, formative and summative assessment should not be viewed as a dichotomy. In reality, the distinction between the two is less clear. For instance, summative assessment also serves to generate feedback on student performance that can be used to improve future work (Sadler, 1998; Covic and Jones, 2008). However, within the context of this study, formative assessment was embraced to generate feedback on student performance in a timely manner that afforded the student the opportunity to respond to feedback before submitting the final version of an assignment (Sadler, 1998; Covic and Jones, 2008). As a consequence of this additional opportunity for dialogue, the student should be better able to self-regulate their learning and more effectively meet the learning outcomes of assessment (Pintrich and Zusho, 2002; Nicol and Macfarlane-Dick, 2006).

As well intentioned as formative assessment is, the effectiveness of it is reduced if the student is not appropriately informed of what they are expected to demonstrate a knowledge of. While some studies in the area of formative assessment seem to gloss over this crucially important point (e.g. Covic and Jones, 2008; Ellery, 2008; Miller, 2008), other researchers have commented on the importance of providing the student with information that serves to clarify the aims and objectives of assessment (e.g. Rust *et al*. 2003; Nicol and Macfalane-Dick 2006; Bloxham and Boyd; 2007). Indeed, the provision of information is central to the creation of an effective and efficient learning process (Bloxham and Boyd; 2007). Such information should be viewed as helping to reduce the likelihood of the learner wrongly interpreting assessment and subsequently handing in an assignment for formative feedback that wrongly addresses the question set (Rust *et al*., 2003). Therefore, the purpose of the 'information' element to assessment should be to make clear what is expected of the student during the assessment stage of learning, and in doing so maximise the utility of formative feedback.

Acknowledging the need for information that clarifies the aims and objectives of assessment is of increasing importance, particularly as participation rates in higher education grow. All students need to be better informed of what is expected of them, particularly at the assessment stage, and if one accepts that as the teacher we are encountering an ever widening spectrum of academic abilities. If one recognises this reality, the duty of the teacher must surely be to respond appropriately and ensure that everyone has the opportunity to effectively engage with the learning and assessment processes. Therefore, from the perspective of this study, the need for detailed guidance on the aims and objectives of the assessment was achieved by issuing

students with briefing notes on the assignment in written form and an oral briefing and discussion in a dedicated tutorial.

Learning and assessment practices that reflect a pressured environment

It is widely acknowledged that formative assessment can play a central role in shaping and improving the effectiveness of the student learning experience (Yorke, 2003; Covic and Jones, 2008). Yet, there are many issues that conspire to limit the impact of formative assessment on learner experiences, and the adoption of a formative assessment stage within the assessment process.

The ability of the student to take on board the advice offered by formative assessment is crucial to feedback having an impact on the ability of the learner to improve. Students are subject to learning pressures derived from the amount and variety of reading they are required to undertake, the assessment processes they are expected to engage with, and the amount of time they are expected to commit to their studies (Kasworm, 1990; Millsap, 1996; Harris, 1997; Biggs, 2003). Mindful of these problems, all readings for the module 'Environmental Policy and Governance' were brought together in a 'reader'. This sought to chart a carefully defined programme of self-study for the student. The reader was designed to help reduce the time involved in identifying suitable materials to support independent study. From the perspective of this study, the author has been unable to identify any specific literature that attempts to reflect on, and qualify, the effectiveness of 'subject readers' in allowing the student to engage with a subject area more effectively. As a result, and in an attempt to further the adoption of readers in other subject areas, this study has sought to evaluate the usefulness of a reader in shaping the learning experience of the student.

Covic and Jones (2008) have acknowledged that a formative stage to assessment may not be possible in the current higher education environment due to funding constraints and ever growing student staff ratios and workloads. The time pressures students experience should also not be forgotten, as this effects how they engage with their studies (Chambers, 1992). As a consequence of this growing concern over assessment strategies and associated student satisfaction, the National Union of Students (NUS)[2] have published a set of principles to guide effective assessment. Of relevance to this study is the statement that assessment should be of a manageable amount for both tutors and students (Attwood, 2009). In particular, while it is acknowledged that assessment should play a central role in learning, for it to be effective neither the student nor the teacher should be overburdened (Attwood, 2009). The NUS further argues that assessment approaches should encourage dialogue between students and their tutors and that this in turn will help to ensure that teacher and student share the same definitions and ideas around standards (Attwood, 2009).

Therefore, as discussed previously, formative assessment can serve to increase the dialogue between student and teacher and in doing lead to more effective approaches to learning and assessment being created. However, as noted above, this may not be possible within the confines of the current higher education environment. Therefore, the decision was taken to reduce the number of assignments students were required to submit to pass the module 'Environmental Policy and Governance. This in turn allowed a formative stage to assessment to become a permanent feature of the module. Associated with this change in assessment, was the reconfiguring of attitudes towards the acceptability of assessment as somehow being related to number of words

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[2] The National Union of Students is based in the United Kingdom and is a voluntary organisation that seeks to represent the interests of students studying in further and higher education.

written. Therefore, the validity of assessment was reconsidered in relation to the estimated number of hours it would take a student to complete the assessment.

Assessment and Learning Information

In order to successfully pass the 15 credit point module 'Environmental Policy and Governance, the estimated total study time for this module was 150 hours. This comprised of 14 hours of lectures, 2 hours of tutorials, and 119 hours for guided learning via independent study. Independent study was guided via a module guide that contained all the key readings needed to meet the learning outcomes of the module. Assessment preparation was accorded 45 hours. With respect to the assessment, students were expected to complete a 2,000 word assignment that was subdivided into two 1,000 essays and accounted for 100% of the module mark. At the start of the module, all students were informed that the module was to be assessed by one assignment only and that they would have the opportunity to submit a 1000 word outline of their assignment following a tutorial. Feedback was subsequently provided to the students within 5 days of submission of their outline to allow them a further three weeks to address feedback given. For those students unable to attend the tutorial, notably part-time students, detailed notes of the assignment tutorial were posted on the e-learning pages for the module, thereby helping to ensure equality of learning experience and greater learner flexibility. Assignment guidance focused on making sure the students knew what issues were expected to be covered in their assignment, that reference to the readings contained in the module reader were central to 'acceptable' answers, and what was meant by key generic essay terms such as 'outline' and 'critically discuss'. Assignment outlines and final assignments were marked by the author of this paper.

It is acknowledged that the above approach is somewhat prescriptive and could stifle student creativity, inhibiting what Barnett (1999) refers to as 'epistemological pandemonium'. Providing students with detailed guidance of what readings and issues their assignments should draw upon does appear to undermine the idea of 'compounding supercomplexity', which Barnett (1999) argues universities should be encouraging not discouraging. However, Barnett also argues that universities should enable us to live in an increasingly chaotic world. Therefore, in the context of this study, the assignment and tutorial guidance is serving to equip students with the core knowledge and skills they need to live in an increasingly chaotic and complex world. In a chaotic world, universities can both compound supercomplexity and help achieved a form of organised anarchy. These aims should be seen as mutually exclusive goals (Barnett, 1999). Therefore, it is argued, that providing students with detailed guidance on an assignment serves to temporally simplify reality and in doing so serves to equip students with the core knowledge and skills they need to make sense of an increasingly complex world.

Assignment Outline Submission and feedback

Following the on-line submission of an outline of the assignment, all students were provided with 'individual' feedback that focused on ensuring the proposed subject content of their assignment was correct. In particular, student feedback served to remind the student about the aims and objectives of the assignment and encourage them. In particular, in line with the comments of Rowntree (1987) and Harlen (2006), students were praised for the correct aspects of their work to maintain motivation levels. However, they were also informed of the potential weaknesses of their work and the readings they should consider to help them address these weaknesses. This

was done so as to help the student better regulate their learning (Nicol, and Macfarlance-Dick, 2006).

As others have acknowledged, the effectiveness of formative feedback partly rests on the ability of the student *'to perceive a gap between where they are, and where they should be'* (Covic and Jones, 2008: 76). Therefore, this was one of the driving reasons behind an assignment based tutorial. The tutorial afforded students the opportunity to discuss their approach to the assignment once they had read the accompanying assignment notes. This opportunity served to help clarify their understanding of the assignment as it facilitated dialogue between the teacher and their peers. The effect of this 'multi-party' dialogue was to break with what Higgins *et al*. (2001) refers to as the 'linear transfer of knowledge', with this being viewed as somewhat simplistic and sometimes ineffective in delivering feedback that is understood by the student. The subsequent submission of an outline of the assignment then allowed the student to further check their understanding of the assignment.

Where a student was felt to have clearly disregarded the guidance given during the assignment tutorial and/or assignment tutorial notes, it was strongly pointed out to the student that they were in danger of failing the assignment and thus the module. Such a strong response, in the opinion of the author, served to address the problem of a student being willing to alter and subsequently address a gap in their learning. This approach served to make clear the potential consequences of a students' actions (Covic and Jones, 2008).

.No mark was awarded for assignment outlines. The author felt that this was not appropriate for the submission of work that only served to give an indication of whether or not the student was addressing the assignment along the correct and anticipated line of learning enquiry. All feedback was provided via the e-learning study environment for the module. This allowed the turn around time on feedback to be reduced. In particular, it meant students did not have to come into the university to collect a hard copy of the feedback which in turn served to increase the speed at which feedback was received by the student, which is central to the provision of effective formative feedback (Ellery, 2008)..

Final assignment submission

Students submitted the final version of their assignment on-line via the e-learning pages for the module. Students assignments were subsequently assessed in line with the generic Faculty marking system and guidance (Distinction 70+%; Merit 69-60%; Pass 59-50%; Fail 49-40%; below 40%). A cross section of the final assignments was then moderated in accordance with University Policy. Students were provided with brief overall feedback via the e-learning environment for the module. Feedback focused on the content of the assignment, the synthesis of information, use of recommended reading, and their approach to writing i.e. grammar and structure. Student scripts were not commented on. However, all students were invited to discuss their feedback further if they so wished. This step was taken to speed-up the marking process.

In summary, the preceding discussion has highlighted a series of issues that need to be addressed when seeking to make formative assessment as effective as possible

(Miller, 2008). As a result, the multi-facetted formative assessment approach developed within the context of this study is distinguishable by six key initiatives. Firstly, to encourage focused and time efficient independent study, a subject specific reader was created. Secondly, the assessment process was re-focused around hours involved and not the number word produced. This approach acted as an alternative means by which to ascertain the validity of assessment. Thirdly, to facilitate the introduction of formative assessment, the number of summative assignments was reduced in order to free-up time for tutor feedback on an outline assignment. Fourthly, the assessment process was accompanied by detailed guidance notes on the assignment. Fifthly, student preparation for the assignment was supported by an assignment based tutorial. These two initiatives were embraced in an attempt to make independent study more effective by increasing the opportunity for student teacher dialogue to check if their understanding of an issue was correct. Finally, an e-learning environment was embraced to facilitate rapid submission and feedback on assessment.

Student perceptions and analysis

Student perceptions of the learning and assessment approach adopted for the module, 'Environmental Policy and Governance', were evaluated in two main ways. Firstly, student views were identified via the open comments section on the standard module evaluation form used for evaluating student satisfaction of modules taught on the MSc in Environmental Management. Secondly, an additional series of questions that sought to ascertain the specific views of students on the new assessment approach were posted on the e-learning pages for the module. In particular, questions focused on ascertaining if they found the module guide reader useful in allowing them to engage with the module and the assignment, and if they found the assignment tutorial

and/or assignment tutorial notes useful. They were also asked if they felt less pressured by having to submit only one assignment and if this increased the likelihood of them taking advantage of formative assessment. Students were also asked why took advantage of both the assignment tutorial and tutorial notes. The analytical data collected for this study focused on ascertaining student perceptions of the formative assessment approach. Students undertaking the module 'Environmental Policy and Governance' were studying other modules at the time and were thus in a position to provide feedback on the assessment approach, as they were, or had been, subject to differing assessment approaches.

Data focusing on student perceptions and/or ratings of academic courses is the subject of much debate. For instance, Greenwald and Gillmore (1997: 743) have commented that such data has *'been both praised as being valid and efficient and criticised as being insensitive and misleading'*. However, in line with what Greenwald and Gillmore (1997) state, student perceptions are considered to be useful in affording the researcher an opportunity to evaluate the impact of formative assessment. Indeed, it is argued here, that not to solicit the views of students and accord them validity, no matter how misleading they sometimes maybe, would be representative of a failure to create meaningful student teacher dialogue. Such dialogue is crucial to improving how such groups interact and learn from each other, and thus how we as teachers can improve student engagement in our subject areas.

The written comments, obtained from the 'open comments' question of the module evaluation form were analysed by the author of this paper, with key themes being looked for to help organise the data collected. The frequency of themed comments

was also identified. The additional series of questions that students studying the module were asked to answer, were analysed by simply ascertaining how many of the respondents agreed or disagreed with the question asked.

Student responses to the formative assessment approach

17 students completed the generic module evaluation form, with 10 students choosing to provide written comments on the module. These were determined as being characterised by three main themes: the role of the module guide in aiding study; the usefulness of the assignment tutorial and tutorial notes; and the assignment as a learning opportunity. In particular, six students commented that the module guide helped to reduce the time needed to source relevant readings for independent study. In particular, it was cited as providing a clearer understanding of what they had to read for the assignment:

> The module guide provided was particularly excellent […] it provided a very clear base for the assignment

> Having the papers all printed out was VERY [student emphasis] useful.

> The provision of reading resources and most especially the tutorial was very helpful

> The materials provided were very useful because it aided the use of quality materials in the assignment and also reduced the amount of time needed to source for materials

> Great documents and reference materials

> Module contents were selected wisely

With regard to the assignment tutorial, and the accompanying tutorial notes, five students commented that it allowed them to confidently tackle the assignment set:

[The tutor] gave unambiguously clear tutoring, and provided strong guidelines for the assignment. Without those the assignment would perhaps have been overwhelming, as it required such depth of knowledge and learning to achieve.

The guidance notes were fantastic and helped focus one on what were very broad questions.

Having the VERY [student emphasis] clear tutorial direction was also VERY [student emphasis] important for me because of my lack of previous knowledge. Also as a returning student – it was such a long time since I have done this type of exercise – so all the help was appreciated.

Tutorial support was excellent, and I hope other tutors can learn and follow his style of support for assignment that may help all students' especially international students to prepare for assignments confidently.

[The] tutorial class was very helpful […] It will give a better result to the international students if the other teachers follow the same style in respective tutorials.

However, when it came to the module being assessed by one assignment, the comments received were more split, with four students raising the following concerns:

The assignment shouldn't come in one piece, there should be spacing enough to give time for proper in-depth study and general understanding of the module

> The approach of having one assignment made me feel less pressured, but I felt it was a bit 'all or nothing'.

> I possibly would have liked the assignment to be split as I did struggle to keep focused

> A very tough piece of work, as so few words allowed to describe a huge subject; to cover many concepts so succinctly has been very challenging.

However, on a more constructive note, one student did comment that the assignment helped to engage them with the reading for the module:

> It started as a daunting amount of material on a subject that I knew nothing of. The assignment really got me stuck into reading and evaluating the papers. By the end I really felt that the hard work had been worth it.

Additional feedback

12 students took the opportunity to answer an additional series of questions, posted on the e-learning pages for the module, which sought to ascertain the specific views on elements of the new learning and assessment approach. With regard to the usefulness of the module guide reader in allowing students to more effectively manage their reading via independent study, 11 out the 12 students agreed that it was beneficial in allowing them to more effectively manage their study. With regard to the second issue, that of the assignment tutorial allowing the students to effectively tackle the assignment, 11 students felt that it was effective, with 10 students agreeing that the assignment tutorial notes also allowed them to tackle the assignment effectively. The vast majority of the respondents, 10 out of the 12, found both the tutorial and the resultant assignment guidance notes of equal benefit. In relation to the question of a

reduced number of assignments increasing the likelihood of students taking-up the opportunity for feedback, only 6 students felt that it had increased the likelihood of them submitting an outline of their assignment. Finally, 7 students felt an increased pressure to pass the assignment because there was only one assignment upon which successful completion of the module depended. Therefore, there appears to be a high level of support for the claim that subject 'readers' help students to more effectively manage their study, and that a tutorial on the assignment had a positive impact on the ability of students to effectively tackle the assignment. It is worth noting that a reduction in the number of assignments did not necessarily lead to an increased willingness to submit an outline assignment for formative feedback.

Out of the 32 students enrolled on the module, 25 students attended the assignment tutorial. Of these students, 2 were classified as part-time (hence the need for notes to be made and distributed to the part-time students via the e-learning environment for the module). 22 students subsequently submitted an outline of their assignment for comment. Of these students, 20 had already attended the assignment tutorial. As to why students took advantage of both the tutorial and assignment tutorial notes, the 12 students responded that they did this because they wanted to ensure they were addressing the question correctly, as exemplified by the following comments:

I needed affirmation that I was heading in the right direction

To be sure I was on the right path

To ensure I was going in the right direction

Discussion and Conclusions

This study has evaluated a multi-faceted formative assessment process that has sought to better meet the learning and assessment needs of students. The approach discussed in this paper has placed the student at the centre of the learning experience in an attempt to improve student understanding and engagement with assessment, as typified by the 'essay'. The multi-faceted formative assessment process outlined here consisted of six key initiatives. Firstly, a subject specific reader was created to more clearly focus independent and assessment based study. Secondly, the assessment process was re-focused around hours involved and not the number of words produced. Thirdly, the number of assignments was reduced. This subsequently facilitated the introduction of formative assessment that involved an outline assignment being submitted for tutor feedback. Fourthly, the assessment process was supported by detailed guidance notes on the assignment to help create a more effective self-regulated study environment. Fifthly, an assignment based tutorial was introduced to facilitate student discussion of the assignment that served to break down the linear transfer of knowledge from teacher to student and in doing so enhance dialogue that serves to improve the effectiveness of learning. Finally, an e-learning environment was also embraced to facilitate rapid submission and feedback on assessment, which is fundamental feature of effective formative assessment.

In comparison with other modules on the taught masters programme on environmental management, the multi-faceted assessment approach, developed for the module 'Environmental Policy and Governance', was found to have been positively received by the student cohort. Central to the formative assessment approach discussed in this paper, has been the recognition of the need for detailed information

on the aims and objective of assessment to be provided to the student, and which appears to have been ignored by some, but not all studies focusing on formative assessment (e.g. Yorke, 2003; Covic and Jones, 2008; Miller, 2008). This stage is crucial to the student being made aware of what they need to study and how they need to tackle assessment. A failure to recognise this stage, and develop appropriate responses, threatens to impede the effectiveness of formative assessment. This study has indicated the development of a module reader as being useful in helping students to better engage with the subject area under consideration. It has also been found that an assignment tutorial and guidance notes on the assignment allowed students to better engage with assessment. Therefore, it is subsequently recommended that other subject areas seek to adopt the use of readers, and assignment based tutorials and guidance notes, to improve student engagement with the learning and assessment process. As a result of this recommendation, this study breaks with the focus of past studies that have neglected to acknowledge that a variety of learning and teaching approaches and technologies have to be embraced to make formative assessment efficient and attractive for staff and student alike. For instance, the author also chose to reduce the summative assessment loading to make time for formative assessment. All too often these issues, more precisely appropriate responses, have been neglected by studies focusing on formative assessment (e.g. Yorke, 2003; Covic and Jones, 2008; Miller, 2008).

When changing assessment patterns, the teacher must keep in mind that attempts to address the learning pressures experienced by students, in particular the time students have available to engage with a subject area, can in turn give rise to new and unanticipated pressures. From the perspective of this study, students felt under

increased pressure to pass the assignment set because failure would in turn result in a failure of the module. Therefore, the provision of a tutorial on the assignment, and assignment guidance notes, were designed to help ensure students feel supported and less worried about failure. However, the study neglected to measure if students felt more or equally confident in their ability to tackle the assignment as a result of these initiatives. From a more speculative angle, it could be argued that this concern accounted for the reason why so many students submitted an outline of their essay despite all the guidance that had preceded this point in the learning and assessment process. Nevertheless, the issues touched upon here are important, particularly if formative assessment is dependent on the teacher making time available via a reduction in summative assessment.

With concerns about the work loads of staff and student very much apparent in higher education (e.g. Entwistle and Tait, 1990; Chambers, 1992; Covic and Jones, 2008), does a reduction in summative assessment justify its replacement with formative assessment From the perspective of this study, it can be argued that a reduction in summative assessment is justified so long as its replacement with formative assessment serves to enhance the knowledge and understanding of the student. Reductions in summative assessment should not be seen as a means by which to free-up time for research and scholarly activity. To follow this path would undermine the process of learning that is dependent upon feedback that serves to inform and guide the student during their studies. A reduction in summative assessment, without an increase in formative assessment, would serve to remove an opportunity for feedback that is of fundamental importance to the wider learning experience of the student. Therefore, to facilitate the increased use of formative assessment, it is suggested that

formative assessment should not been viewed as an additional burden on the teacher, but as a replacement for summative assessment that may be unnecessary, particularly if the purpose of it is to provide feedback to the student. Viewing formative assessment as a replacement, and not as an additional burden, as this study has done, could help to facilitate the uptake and embedding of formative assessment in Higher Education.

Note on contributor

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