TESTA Plus: More ways to involve undergraduates in assessment and feedback design

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Introduction

This paper presents the results of a pilot undertaken at the University of Brighton which explores new methods of including students in assessment and feedback design. A team from the University of Brighton worked with staff and students from an undergraduate BSc course to expand the TESTA method (Jessop, el-Hakim, & Gibbs, 2011) to incorporate three extra activities. These were the identification of a group of key assessment and feedback events, a card organisation activity that was used with students in focus groups, and a multiple choice questionnaire presented to a whole year cohort. These activities generated a rich set of data around student involvement in feedback design and the role of emotion in assessment and feedback. The paper explores these methods, discusses their strengths and weaknesses as an extension to TESTA, and makes suggestions for how the different aspects of the project can contribute to course development.

Assessment and feedback practices have come under increasing scrutiny in recent years as part of a recognition of the importance of assessment in driving students' learning. There has been an increasing emphasis on student experiences of assessment (Gibbs & Dunbar-Goddet, 2009; Jessop, el-Hakim, & Gibbs, 2011), and encouraging students to engage with the feedback given to them (Nicol, 2013; Nicol & MacFarlane-Dick, 2006; Sadler, 2010; Winstone, Nash*,* Rowntree, & Parker, 2016). The role of emotions in mediating approaches to assessment and feedback has been identified (Falchikov & Boud, 2007) and has focused on recognizing the importance of students' previous learning experiences (Shields, 2015), their positive and negative emotions on receiving feedback (Small & Attree, 2015) and 'emotional backwash' (Pitt & Norton, 2016). This draws on earlier work (e.g. Hattie & Temperley, 2007) which suggests markers should focus their feedback on the task rather than the individual to mitigate negative emotional responses, and on the increasing literature on the negative impact of assessment on student wellbeing (National Union of Students Scotland, 2010; Universities UK, 2015; Williams, Coare, Marvell, Pollard, Houghton, & Anderson, 2015).

There are two areas within these debates which are yet to be fully explored. These are how to gather data on emotions relating to assessment and feedback more easily (Crossman, 2007 p. 316), and increasing student involvement in the decision making around the type, timing and content of assessment feedback (Boud & Molloy, 2013), and in curriculum design generally (Brooman, Darwent, & Pimor 2015; Healey, Flint, & Harrington, 2014). The focus of this paper is an initial exploration of these issues in a practical pilot involving an undergraduate, vocational, BSc course

at the University of Brighton, using the TESTA method of course development as a starting point.

The TESTA method
The TESTA method was developed within the context of the focus on assessment for learning. It originated in Gibbs' work on programme-level assessment (Gibbs & Dunbar-Goddet, 2009) and was originally a research project that looked at the programme-level assessment practices of eight undergraduate courses (for example, BA History), in 4 institutions in the UK. It was unique in taking a student view of the course, looking at the assessments from the core and most popular option units to create a picture of a student's assessment 'diet' (Jessop, El-Hakim, Gibbs, 2014a). The TESTA method collected quantitative and qualitative data from staff workshops, course documentation, oral and written feedback, a student questionnaire (the Assessment Evaluation Questionnaire (AEQ)) and student focus groups (Jessop, El-Hakim, & Gibbs, 2011). This was then analysed to reveal information on student effort, feedback practices, student understanding of goals and standards, and the depth of student learning. The approach encouraged the identification of patterns in assessment practice that reveal a nuanced picture of the student experience associated with particular disciplines (Jessop & Maleckar, 2016).

At the same time as the research was being undertaken, the TESTA resources were being developed to allow staff at other universities to undertake TESTA on their own courses. These are now freely available on the TESTA website ([www.testa.ac.uk)](www.testa.ac.uk), and have been increasingly used in course development by over 100 courses in 40 universities in the UK and around the world, for example in periodic review (Jessop, El-Hakim, & Gibbs, 2014b). The student perspective guaranteed by the assessment 'diet' approach, the use of AEQ data, and the student focus group material means that TESTA is particularly student focused, and is a key way that student engagement with course design is being promoted in many universities.

The project
This project uses TESTA as a course design tool and develops it in two ways. The TESTA method involves analysis of emotion through looking at, for instance, motivations for student learning, and highlights issues that lead to anxiety, for example around clear goals and standards. This project develops this approach by considering how patterns of emotional responses to assessment and feedback can be captured, what they mean to student learning, and how they can be articulated into changes of practice. The project also considers how students' in-depth consideration of feedback practice generated during the focus group work can be translated more directly into practical recommendations to course teams.

Based on this, the aims of this project were:
1. To investigate these new approaches to emotion and feedback planning
2. To explore the strengths and weaknesses of modifying the TESTA process
3. To contribute to the range of course development tools offered at the University of Brighton

The project used the TESTA method, which typically involves the following activities:

1. a staff workshop to discuss patterns of assessment
2. a desk-based analysis of course documentation
3. two student focus groups
4. an analysis of the quantity of written and oral feedback
5. completion of an AEQ by one cohort of students
6. a final workshop with staff.

Several new data collection points and activities were added to this familiar method to explore the aims of this project (Table 1).

Table 1 Data collection and activities

New data collection/activity	Activity in TESTA method where new data collection/ activity took place
1. The identification of a group of assessments and feedback that was particularly important in the assessment journey of the course as the basis for further exploration.	Staff workshop, desk-based analysis of course documentation, first student focus group with 3rd years.
2. A card based feedback planning activity at the end of one focus group.	Second student focus group with 2nd years.
3. Multiple choice questions about emotions relating to assessment and feedback, added to the AEQ.	Completion of AEQ by 2nd year students.

The new data collection points and activities
The identification of a group of assessments and feedback
While TESTA takes a course level approach to analysing assessment, it became apparent in the planning stages of the project that the discussions around emotions and feedback planning needed to focus on one group of assessments and feedback to generate meaningful suggestions to the course team. Identifying this group was done through analysis of the course documentation, responses to questions at the initial staff workshop, and data from the first focus group.

Before the initial staff workshop, a review by the team of the course documentation identified three assessments as potential loci for the groups of assessments to be studied:

i) the very first assessment of the course, as this was an unusual and unrepeated assessment type (a leaflet);
ii) the first practical exam at the end of semester 1 in year 1, as it was evident that this received a lot of preparation in the curriculum;
iii) a cluster of assessments at the end of semester 1 of year 2, as these were assessments in a mandatory unit (i.e. must pass) assessments before students could go out on placement in semester 2.

During the staff workshop a direct question about the most important assessments also singled out the students' first practical exam. Information on important assessments and feedback was also drawn out in the student focus group, through responses to questions about particular assessments, and through analysing which assessments were referred to unprompted by students in more general questions. In response to a question about the very first practical exam the students did not follow up the question with any discussion, however 5 of the 6 focus group participants contributed to a discussion on the first anatomy exam, for example:

> *for me it was anatomy, well I failed the first anatomy and I went to see my tutor afterwards who'd marked it, and just to, so that she would like explain what I did wrong and how to improve it…. Just like getting me to just remember stuff. (Focus Group 1 A3).*

> *it didn't go that well because we thought we had to memorise it rather than understand it and then later on we came to the conclusion that we need to understand the anatomy rather than just memorise it (Focus Group 1 A4)*

Students also recounted similar experiences about the very first assessment of the course, the leaflet. Given that the leaflet, the practical exam, and the anatomy exam all took place in the first semester of the first year, it was decided to focus on these assessments. To these were added the two other assessments submitted during this period: an online multiple choice quiz and an essay.

The Card-Based Feedback planning activity
The identification of the form and timing of the group of assessments as the focus for the study was the first step in devising the activities that would generate students' contributions. The card-based feedback planning activity took place at the end of the second focus group. A series of cards was printed, with each card representing one assessment and feedback event (figure 1). The cards were created in PowerPoint (four cards to a slide), and coloured brown for formative assessments, and blue for summative. The formative cards included feedback that had been formally documented, such as draft submissions, and also the in-class or online activities where feedback from peers or tutors had been given which was perhaps not in the course documentation. Blank cards were also created to be completed during the session where necessary.

Figure 1 The cards organized to show order of submission, from left to right

The cards acted as an *aide-memoire* and allowed both the facilitators and the students to understand quickly which assessment was being referred to in the discussion. The first part of the activity was pairing cards into summative assessments and formative assessments, to clarify what preparation that involved students getting any kind of feedback had taken place before each of the summative assessments. As a result an extra card was added that described a feedback event before the related summative assessment. A general discussion on emotion and expectations about marks had taken place during the focus group, and this discussion continued using the cards. The cards were then reorganized based on hand-in dates, and then on when the feedback for each assessment was received. Each reorganization generated significant discussion, focused on the strengths and weaknesses of the way the assessments were currently organized. The discussion then moved on to ways that the assessments could potentially change. Ideas about changing the assessments focused on anatomy, with suggestions including adding a practical exam as well as the written exam, and on the timings of all the assessments after the Christmas break, for example:

when we came back in January we had all of January just stressed because you knew that at the end of January you had to hand in everything and you had your exams. So for me I think I found it difficult whether to make further adaptations to my essays and spend more time on that or start practicing for my exams and separating my revision time out (Focus Group 2 P1)

Multiple choice questions added to the AEQ
The card activity aimed to give a small group of students a mechanism to contribute to a detailed planning exercise which generated a rich discussion. The multiple choice questions were devised to include as many students as possible, partly to avoid the issues of self-selection of the focus groups, and to offer a different point of comparison with the other data collected during TESTA. The obvious way to do this was through adding extra material to the AEQ that the 2nd years would complete. Five multiple choice questions about the group of assessments were developed.

Two of these related to questions about emotion that paralleled discussions in the focus group, one was about reusing feedback, and two were about feedback planning. The first three questions were:

1. Which of these assessments did you feel most anxious about completing? (one choice out of the five summative assessments)
2. Which of these assessments did you feel most surprised by your mark because it was *lower* than you expected? (one choice out of the five summative assessments)
3. Which assessments did you go back to the feedback and reread it, or use it to improve other assessments? (tick as may responses as necessary out of 5 summative assessments and five draft submissions).

The first question was developed to create a comparison with the course team and focus group data on the issue of assessment and anxiety. The second was an attempt to track a mismatch between student's understanding of their achievement, and the reality (Molloy, Borrell-Carrio, & Epstein, 2013). How students react to this kind of disappointment is an indicator of their sense of self-esteem (Young, 2000) and, for those with low self-esteem, of disengagement (Weaver, 2006; Wingate, 2010). The third question was about reuse of feedback to gain an indication of the total amount of return visits to feedback, as well as the feedback type that was most often returned to. Students were asked to give free text explanations to all three responses, and these were also coded and analysed.

The two final questions gave students the opportunity to contribute to feedback planning on two different assessments. The questions were written to avoid having an obvious option that students would choose, i.e. "more feedback, faster". So, for example, the option that proposed a faster return time on feedback also included students doing an exercise to show how the feedback would be used. This approach worked in that responses were distributed across the options, but there were still clear messages that could be reported back to the team.

Discussion
The project was evaluated through observations made by the facilitators during the workshops, focus groups and activities, and through an email survey to staff that accompanied the final report. All 2nd year students were also given the opportunity to read a shortened version of a report that was linked to a survey, and the focus group participants also gave feedback via email. Twenty percent of the cohort (eight of approximately forty students) completed the survey. Although this submission rate is fairly low the results provided invaluable student insights that form the basis for further study. The discussion is organised around the three aims of the project.

To investigate some new approaches to involving students in course development
The new approaches (identifying a group of assessments and feedback to target, the feedback planning activity using cards, and exploring ways of capturing student emotions around assessment and feedback) were all devised to give students new opportunities to contribute to the course development process.

The identification of the group of assessments and feedback seemed to be a fairly straightforward activity, with a clear overlap between staff responses, student opinion, and the course documentation. However, in the evaluation, the 2nd year students were asked if they thought this was the right set of assessments to focus on, and almost all the respondents stated that they considered the group of 'must pass' assessments in the second year as the most important. This was revealing, as the 3rd years in the first focus group did not dwell on this period at all. The explanation for this may be that the 2nd years responding to the questions about anxiety were waiting for the results of their recent assessments, which is clearly a situation with a significant level of uncertainty.

Despite this, the identification of a group of assessments to examine in detail seems to be a useful route into a deeper understanding of problematic areas of the course, and can reveal a nuanced picture of "multiple, situated and dynamic" emotional experiences (Falchikov & Boud, 2007). In the future, it would be useful to directly ask students to identify this group of assessments, rather than to identify it by extrapolating responses about individual assessments.

The cards activity received positive feedback from the focus group participants. As a facilitation technique it freed up some of the challenges of remembering names of assessments, and was a way of making the session much more active. Observation during the session suggested that students immediately understood what the cards represented and feedback from participating students was positive. The card activity was very successful in generating discussion, although the 30 minutes allocated to it was too short to fully explore its potential in planning feedback. In terms of its success in engaging students, while students had lots of opinions on feedback, moving on to alternatives to the current way they received feedback required more discussion time. The activity certainly warrants a separate, dedicated session, perhaps replacing a traditional TESTA focus group, or it may equally work as a longer, standalone activity.

Including extra questions at the end of the AEQ was a relatively straightforward technique that created a clear mandate to report back to staff. In particular, the first three questions relating to emotions really opened up new pathways to exploring the other data collected in TESTA. These questions helped target interventions, for example, an assessment where formative feedback had been used but marks were lower than expected highlight a clear issue with feedback and student understanding of standards. All the students who responded to the evaluation said they understood what the questions meant, but feedback from staff suggested that in the next iteration adding further questions on more positive emotions such as motivation could add a further dimensions to this. This approach begins to move the discussion about student emotional well-being away from student support (National Union of Students Scotland, 2010) or practical implications such as timing or location of feedback (Molloy, Borrell-Cario, & Epstein, 2013) to one which considers how the curriculum can respond to student emotion.

When asked about these questions on feedback in the evaluation the most popular response (n=4) to a range of statements on feedback was "If I have a choice in the way I receive feedback, I am more likely to use it and return to it later". Because of

the low returns this can only be an indication of student thought, but suggests that this could be area for further investigation.

The strengths and weaknesses of modifying the TESTA process
Overall, the modifications to the TESTA process worked well because they aligned well with TESTA's strengths on focusing on grouping assessment and feedback events, generating in-depth data with a small group of students, and consulting widely with much larger groups. There were some challenges however. One of the strengths of the TESTA method is that it is a very straightforward tool that is designed to be easily transferred between courses, by people with little experience in gathering and analysing quantitative and qualitative data. TESTA is structured around the two meetings with course teams at the beginning and end of the project, with the other activities taking place in whatever order that is practical in between. Adding any activity that requires another activity to have taken place beforehand starts to add extra practical challenges to timing, for example, the gaps necessary between activities to analyse data will have knock on effects on finding suitable slots for focus groups and whole cohort meetings for the AEQ completion. Adjustments could be made to the approaches piloted here to retain the TESTA flexibility, for example, instead of consulting on which group of assessments and feedback to look at in detail, using a group of assessments with known issues. However, collecting data secure in the knowledge that you are acting on the results of student consultation weighs against those challenges.

All the recommendations to the course team in the final report related to the group of assessments and feedback that were the focus of the new activities. If the data collection had stopped with the TESTA method, one of the recommendations would have probably related to an assessment in this group, but otherwise the recommendations would have been much more general, on the lines of 'consider how students understand what they should do in assessments'. This would suggest that the close scrutiny of this time period did encourage more focused solutions to surface. However, by focusing more directly on particular assessments, the recommendations become more directive rather than discursive, with less opportunity for staff to consider how to apply the findings themselves. A balance in the recommendations therefore needs to be struck between not losing the supportive space for staff discussion that high level guidance creates, with the more detailed observations on particular assessments that may reduce staff ownership of the findings.

To contribute to the range of course development tools offered at the University of Brighton
All of these new approaches will be taken forward for further investigation at the University of Brighton, as part of the institution's interests in student wellbeing, student engagement with feedback, and co-construction of the curriculum.

What comes through strongly in these observations about involving students in course development and in the discussion around modifying TESTA is that different approaches have different strengths and weaknesses, and that no one approach to engaging students may be appropriate for all courses. So, for example, losing some

of the flexibility of the TESTA process may be worthwhile if it increases student engagement in identifying the group of assessments to look at in detail. In other courses, focusing on groups of assessments rather than the whole course may result in less staff reflection on the course as a whole, but may identify high priority, achievable tasks. And it may be that the group of assessments looked at could be decided by other data such as module feedback or poor attainment, or respond to institution level concerns around first year retention.

The original idea of adding further activities to TESTA process was to exploit the rich discussion and broad data collection that the method generated. It seemed like the right preparation to move the discussion to these more detailed activities. However, some of the activities may warrant further dedicated sessions to really explore issues in depth. It may even be that activities that are more focused on planning such as the card activity may be better placed at a different point in the course development cycle than with TESTA.

Concluding comments
This pilot project has investigated some new ways that the TESTA method can be developed, and has considered their impact in terms of student engagement in course design. By modifying the TESTA method it has offered some new insights on the TESTA process itself that will contribute to other institutions considering using TESTA. These are just starting points for fully exploring the versatility of TESTA, and demonstrating how it can be adapted to current institutional priorities, and the needs of particular course teams. The project has shown that there are many ways that students can participate in curriculum design activities. The activities presented here raise many questions about aligning these activities to the needs of individual courses, and suggest that there are many productive avenues of research into student engagement in course development to be pursued.

References
Boud, D. & Molloy, E. (2013) Decision-Making for Feedback. In D, Boud. & E, Molloy. (Eds.). *Feedback in Professional and Higher Education*, (pp.202-218). London: Routledge.

Brooman, S., Darwent, S. & Pimor, A. (2015) The Student Voice in Higher Education Curriculum Design: Is There Value in Listening? *Innovations in Education and Teaching International*, *52*(6), 663-674.

Crossman, J. (2007) The Role of Relationships and Emotions in Student Perceptions of Learning and Assessment, *Higher Education Research & Development*, *26*(3), 313-327.

Falchikov, N. & Boud, D. (2007) Assessment and Emotion: The Impact of Being Assessed in D, Boud. & N, Falchikov. (Eds.), *Rethinking Assessment in Higher Education: Learning for the Longer Term* (pp.144-155). London: Routledge.

Gibbs, G. & Dunbar-Goddet, H. (2009) Characterising Programme-Level Assessment Environments That Support Learning. *Assessment & Evaluation in Higher Education*, *34*(4), 481-489.

Hattie, J. and Timperley, H. (2007) The Power of Feedback. *Review of Educational Research, 77*(1), 81-112.

Healey, M., Flint, A. & Harrington, K. (2014) *Engagement through Partnership: Students as Partners in Learning and Teaching in Higher Education*, York: HEA.

Jessop, T., El Hakim, Y. & Gibbs, G. (2014a) The Whole Is Greater Than the Sum of Its Parts: A Large-Scale Study of Students' Learning in Response to Different Programme Assessment Patterns. *Assessment & Evaluation in Higher Education, 39*(1), 73-88.

Jessop, T., El-Hakim, Y. & Gibbs, G. (2014b) Testa in 2014: A Way of Thinking About Assessment and Feedback. *Educational Developments, 15*(2), 21-24.

Jessop, T., El-Hakim, Y. and Gibbs, G. (2011) The Testa Project: Research Inspiring Change. *Educational Developments, 12*(4), 12-16.

Jessop, T. and Maleckar, B. (2016) The Influence of Disciplinary Assessment Patterns on Student Learning: A Comparative Study, *Studies in Higher Education, 41*(4), 696-711.

Molloy, E., Borrell-Carrio, F. and Epstein, R. (2013) The Impact of Emotions on Feedback in D. Boud, & E. Molloy. (Eds.), *Feedback in Higher and Professional Education*, (pp.50-71). London: Routledge.

National Union of Students Scotland (2010) *Silently Stressed: A Survey into Student Mental Wellbeing* (Report). Edinburgh: National Union of Students Scotland. Retrieved from NUS: http://www.nus.org.uk/PageFiles/12238/THINK-POS-REPORT-Final.pdf

Nicol, D. (2013) Resituating Feedback from the Reactive to the Proactive in Boud, D. and Molloy, E. (Eds.), *Feedback in Higher and Professional* Education, (pp.34-49). London: Routledge.

Nicol, D. J. and 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.

Pitt, E. and Norton, L. (2016) 'Now That's the Feedback I Want!' Students' Reactions to Feedback on Graded Work and What They Do with It, *Assessment & Evaluation in Higher Education*, 1-18.

Sadler, D. R. (2010) Beyond Feedback: Developing Student Capability in Complex Appraisal. *Assessment & Evaluation in Higher Education, 35*(5), 535-550.

Shields, S. (2015) 'My Work Is Bleeding': Exploring Students' Emotional Responses to First-Year Assignment Feedback. *Teaching in Higher Education, 20*(6), 614-624.

Small, F. and Attree, K. (2015) Undergraduate Student Responses to Feedback: Expectations and Experiences. *Studies in Higher Education*, 1-17.

Universities UK. (2015) *Student Mental Wellbeing in Higher Education: Good Practice Guide*, London: Universities UK. Retrieved from http://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2015/student-mental-wellbeing-in-he.pdf

Weaver, M. R. (2006) Do Students Value Feedback? Student Perceptions of Tutors' Written Responses. *Assessment & Evaluation in Higher Education, 31*(3), 379-394.

Williams, M., Coare, P., Marvell, R., Pollard, E., Houghton, A-M. & Anderson, J. (2015) *Understanding Provision for Students with Mental Health Problems and Intensive Support Needs*, Bristol: HEFCE. Retrieved from http://www.hefce.ac.uk/media/HEFCE,2014/Content/Pubs/Independentresearch/2015/Understanding,provision,for,students,with,mental,health,problems/HEFCE2015_mh.pdf

Wingate, U. (2010) The Impact of Formative Feedback on the Development of Academic Writing. *Assessment & Evaluation in Higher Education, 35*(5), 519-533.

Winstone, N. E., Nash, R. A., Rowntree, J. & Parker, M. (2016) 'It'd Be Useful, but I Wouldn't Use It': Barriers to University Students' Feedback Seeking and Recipience, *Studies in Higher Education*, 1-16.

Young, P. (2000) I Might as Well Give up': Self-Esteem and Mature Students' Feelings About Feedback on Assignments. *Journal of Further and Higher Education, 24*(3), 409-418.