



JISC Final Report

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Table of Contents

1	ACKNOWLEDGEMENTS	3
2	REPORT SUMMARY	3
2.1	PROJECT OVERVIEW	3
2.2	PROJECT OUTPUTS.....	3
2.3	IMPACT AND BENEFITS TO THE COMMUNITY	5
2.4	MAIN LESSONS LEARNT	5
3	MAIN BODY OF REPORT	6
3.1	WHAT DID YOU DO? (METHODOLOGY)	6
3.2	WHAT DID YOU LEARN?	11
3.3	IMPACT.....	17
4	CONCLUSIONS & RECOMMENDATIONS	19
5	IMPLICATIONS FOR THE FUTURE	20
6	REFERENCES	ERROR! BOOKMARK NOT DEFINED.

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a) Report Summary

o *Project Overview*

This project set out to find some solutions to the problems that both students and staff have identified regarding feedback in the assessment process. Students, as evidenced by the NSS and internal surveys, do not feel that they receive enough useful feedback. On the other hand teaching staff believe strongly that students do not make effective use of the feedback they receive.

To address these areas of concern, the project devised a 3 stage model for feedback (the SOS model, **S**ubject specific, **O**perational and **S**trategic) that was implemented across the entire first year cohort in the School of Life Sciences (350 students), involving all personal tutors (35 academic staff). 'The model is encapsulated in a process known as Making Assessment Count (MAC)'.

In the SOS model students reflect on feedback received (**S**ubject specific and **O**perational) in a learning journal shared with their personal tutor. The learning journal is then used to inform face to face tutorial meetings at which the tutor guides the student in determining actions for improvement (**S**trategic feedback). Integral to the reflection process is an online questionnaire (called e-Reflect) about the coursework that a student completes after receiving their marked work. Completion of the questionnaire generates a report that the student can use to guide them in writing in their learning journal.

The evidence suggests that the SOS model for making use of feedback, encapsulated in the MAC process, can be an effective tool within an overall assessment strategy at department level. As such the approach should be of value to the Higher Education community as a means of enhancing the value and effectiveness of feedback to students.

o *Project Outputs*

Systems/software

- Functioning and scalable Making Assessment Count process linked to student records

- [Service Usage Model](#) for Making Assessment Count (e-Reflect 2.0)
- Open source, self-authoring version of the e-Reflect questionnaire with integrated learning journal (e-Reflect 3.0) – *note to be made available via the project website from 1st December 2010*

Guides/handbooks

- [Student Guide](#) and support videos to using the Making Assessment Count process
- Making Assessment Count [Handbook](#) for Staff
- [Guide to reflection](#) for students
- Dissemination tools for staff (inc: PowerPoint slides, Posters & Flyers for e-Reflect 2.0)

Dissemination

- Project [website](#)
- Design Studio [project page](#)
- Student-developed [website](#)
- [Compilation video](#) of students talking about e-Reflect

Background information/evaluation

- A [summary](#) of current practice within the Biosciences provision in relation to feedback and its generation by staff/use by students
- [Project plan](#)
- Initial [review](#) of good practice in the use of technology to support student reflection/feedback on coursework
- [The SOS model](#) for the generation/management of feedback on coursework by students and staff
- Questionnaire on [staff perceptions of feedback](#)
- Questionnaire on [student perceptions of feedback](#)

Conference papers and presentations

Kerrigan MJP, Clements M, Nedelcheva Y and Saunders G.E-Reflect, a system for making assessment count through reflection. [University of Ulster's elearning conference 2010](#).

Kerrigan MJP, Clements M and Saunders G. Supporting face-to-face tutoring and enhancing the student experience of assessment & feedback - [A JISC funded project \(e-Reflect\).WEx Symposium 2010](#).

Kerrigan MJP, Clements M, Nedelcheva Y and Saunders G.E-Reflect, a system for making assessment count through reflection. [ePortfolio 4YF Conference September 2009](#), Organised by the ECs Leonardo da Vinci Programme.

Kerrigan, MJP., Oradini, F & Saunders, G. The use of RSS feeds in Blackboard to support student learning and academic interactions. [BBWorld 09, 2009](#).

Kerrigan MJP, Clements M, Bond A, Oradini F and Saunders G. eReflect - enhancing student support though a reflective online process. [BBWorld 09, 2009](#).

Kerrigan MJP, Clements M, Bond A Nedelcheva Y and Saunders G. University of Westminster, Making Assessment Count - A JISC funded project. [Association for Learning Technology. 2009.](#)

Kerrigan MJP, Clements M, Bond A & Saunders G. eReflect - Making Assessment Count. In: Proceedings of the Fourth International Blended Learning Conference. 2009. ISBN: 978-1-905313-66-2 pp.219-232

Kerrigan MJP, Clements M, Bond A, Oradini F and Saunders G. The use of Web 2.0 technologies to support student feedback and reflection. [E-learning 2.0. 2009](#)

Kerrigan MJP, Clements M, Bond A Nedelcheva Y & Saunders G. University of Westminster, Making Assessment Count - A JISC funded project. University of Westminster Teaching & Learning Symposium. 2009.

Kerrigan MJP, Clements M, Bond A Nedelcheva Y & Saunders G. University of Westminster, Making Assessment Count - A JISC funded project. SSHL – Teaching & Learning day. 2009.

Kerrigan MJP, Clements M, Bond A Nedelcheva Y & Saunders G. Making Assessment Count through e-Reflection. [JIF2010](#)

Kerrigan MJP, Clements M, Bond A Nedelcheva Y & Saunders G. The use of a Web 2.0 tripartite model of assessment feedback to support face-to-face tutoring. Association for Learning Technology 2010.

2.3 Impact and Benefits to the Community

Students have highlighted a number of benefits. These include the value of the Making Assessment Count (MAC) process in helping them to clearly identify their approach to coursework assignments (e.g. submitting early, getting a friend or family member to proofread the work, placing the work in the context of the whole course, allowing a realistic amount of time to prepare the work, focusing on the question, making better use of the help (including staff) available to them).

The project has also impacted on the working practices of some staff. Greater attention is now being paid by some staff to the manner in which they provide feedback (word processed versus handwritten) and the nature of the feedback (a clearer focus on suggested actions that the student should consider). A member of staff new to teaching and assessing large numbers of students used the SOS model as an overall framework for the marking of student work.

A significant benefit to stakeholders across the University has been the raising of the profile of feedback within the general institutional strategy for assessment. The project steering group is now incorporated as a sub-group of the institution's learning and teaching committee and will, through this mechanism, continue to promote the MAC process, and reflection on feedback generally, across the entire University reaching potentially all staff and students. In addition further development of the e-Reflect component of MAC is part of the ICT infrastructure plan, recently approved by the University's Information Strategy Committee.

2.4 Main Lessons Learnt

A significant outcome has been the establishment of a real difference in perceptions between students and staff regarding the use of feedback. Students have consistently stated they both read and value their tutors' comments whilst teaching staff felt there was little evidence that students acted on the advice given, representing a poor return on the time and effort expended. However, although more students than originally thought do indeed seem to read their feedback, evidence the project has gathered suggests that they find it difficult to contextualise and use the feedback strategically (note we are still analysing the very rich data we have obtained from students about how they utilise feedback. The project team is currently drafting papers for publication that will present and analyse the findings. Drafts of these papers will be made available on the project website and via the Design Studio as soon as available).

It seems reasonably clear from the research we have undertaken so far that the Making Assessment Count process can help some students to use their feedback in a more structured way. In addition the project team have evidence through interviews that some students see the reports generated during the process as something of significance that they can keep and show to others (not necessarily just their tutors). On the other hand it is also the case that some students see the reports as trivial and irrelevant. Although our evaluation is still incomplete, it is likely that these two extremes may derive from students who have been graded at opposite ends of the spectrum of the mark range with the poorly graded students more often not finding the process as beneficial as we would have hoped. In all, 95 students did not complete an e-Reflect questionnaire on the one module where its use was directly integrated into an assessment. Of those, only 39 progressed to the next academic year (41%). This is compared to an overall progression rate of 85% for the overall course cohort. This might suggest that Making Assessment Count (e-Reflect) is not assisting those most at need. Of the 39 students who did not engage with e-Reflect in this case, but did progress to the next academic year, over half of them (54%) scored between 50-59% on the module referred to above, whilst only 15% scored between 60 and above for the module. Further investigation is needed to ascertain whether students failed to engage as they felt they didn't require the help and support e-Reflect offered or whether other reasons were significant. We are currently exploring the link between use of e-Reflect and the wider student profile (age, background, entry qualifications).

b) Main Body of Report

3.1 *What did you do? (Methodology)*

What the project set out to do

At the outset, the main aim was to transform the student experience of assessment by engaging them in a process of reflection on feedback for learning and development. This reflective process was to be integrated into the personal tutoring scheme.

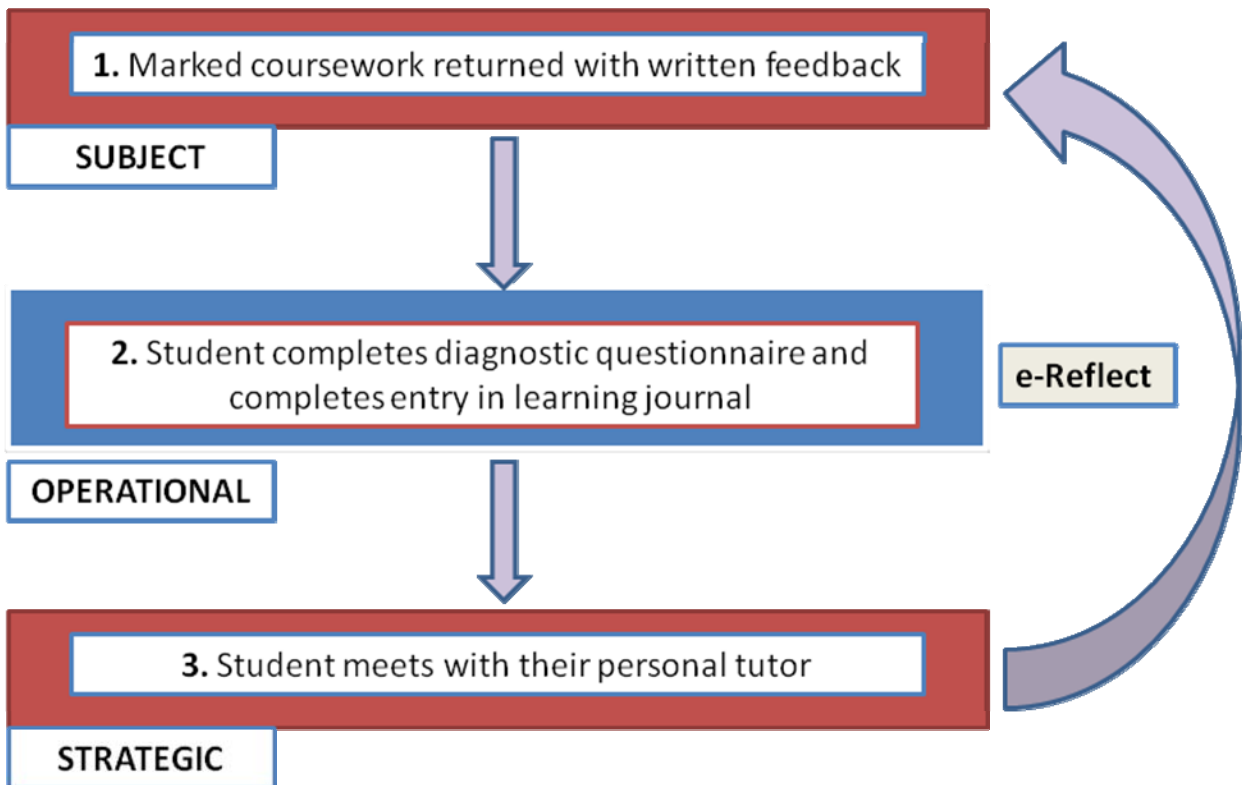
Specific objectives included:

- The development of a student centred process for reflection on feedback
- The effective use of simple online technologies to facilitate a process that is ordered, manageable, efficient and effective
- The support and enhancement of the face-to-face tutoring system
- Dissemination and transfer of the model for reflection and action on feedback to other subject areas.

In achieving the aim and objectives the intention was to develop students who act on the feedback they receive to improve their performance and achievement. In addition it was hoped that other stakeholders across the university would, through the dissemination activities, see how methods for e-feedback and formative assessment can impact positively on student performance.

When the project was funded the project team developed a detailed project plan based on the original proposal submitted. Whilst the main aim and objectives did not change, the precise mechanisms through which the objectives would be delivered were altered. In the original proposal it was envisaged that Making Assessment Count (MAC) process would be underpinned through using the blogging functionality integrated within the institutional virtual learning environment (Blackboard). Students would write in their learning journal (blog) as part of a structured process for reflection on feedback. As utilisation of feedback on coursework by students had been identified as a priority area of development by the School it was felt that this would be a straightforward approach, making use of available technology (within the VLE) to engage academic staff and students in transforming the assessment/feedback process. The intention was to devise a system that could be piloted in semester 2 of academic year 08/09 with a group of volunteer first year undergraduate students and their academic personal tutors.

Through the course of detailed project planning the team introduced an additional reflective element (for which the project coined the term e-Reflect) into the MAC process. This element comprised an online questionnaire, to be completed, by students prior to writing in their learning journal. On completion of the questionnaire the answers submitted were processed by the e-Reflect programme and a report compiled and sent by email to the student concerned. The report produced had common elements (e.g. a graph showing performance on all submitted and marked coursework) and individual elements of advice that varied according to the answers given on the questionnaire. The overall MAC process is summarized in figure 1 below.



SUMMARY OVERVIEW DIAGRAM OF MAKING ASSESSMENT COUNT

Figure 1

The purpose of the questionnaire was to focus students' reflections primarily on aspects related to the preparation and completion of their assignment and to provide them with some straightforward suggestions for improvement, that they could take forward either independently or through further reflection in their learning journal and/or by meeting with their personal tutor. For the pilot, the questionnaire was authored using the Blackboard survey tool with the questions initially devised by the project team and then revised in light of feedback from 2 students and 6 staff (other than the staff from the School who were part of the project team).

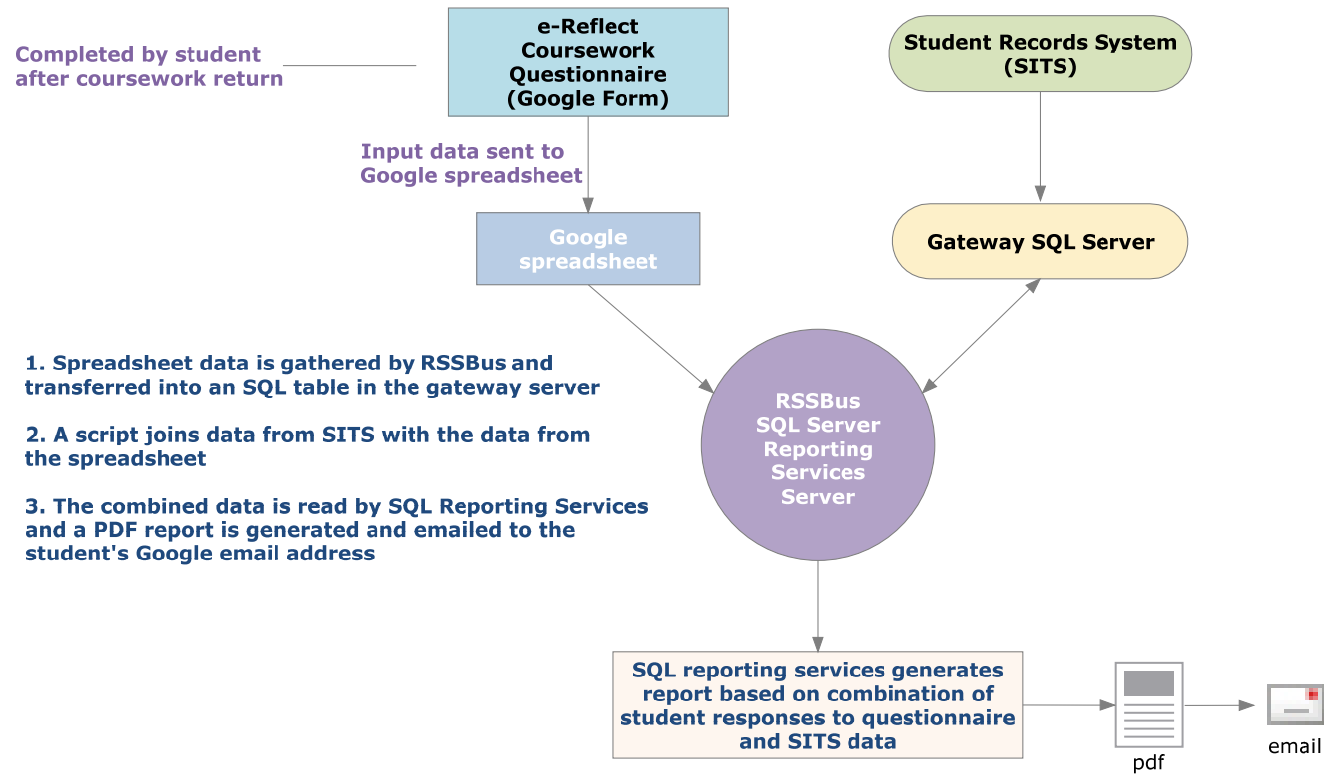
The pilot of the MAC process (named after the reflective questionnaire component of the process and known as e-Reflect 1.0) started towards the end of January 2009 and involved approximately 70 students and 10 academic staff tutors. All staff and students taking part in the pilot were given an induction into the process and respectively provided with a staff and student guide to the MAC process. The project team also provided a drop-in 'help' service for students which not only provided support to users but served to act as one mechanism through which users could report bugs and suggest improvements to the process. The pilot of the MAC process was evaluated, in line with the evaluation plan established (with the assistance of external consultants employed by the JISC) near the start of the project through a mix of questionnaires, focus groups and 1:1 interviews with stakeholders. Overall the feedback from the pilot was positive. There was a range of feedback from stakeholders involved in the pilot on the structure of the e-Reflect component (questionnaire) and on the content and composition of the report emailed to students on completion of the questionnaire. Staff and students were especially complimentary of the statistical information (profile of student coursework marks and estimated time a student should have spent on an assignment) generated on the reports. For fuller accounts of the outcomes of the evaluation

please see the [Making Assessment Count March 2009 Interim Report](#) and [Proceedings of the Blended Learning Conference, University of Hertfordshire 2009](#).

In light of the feedback from stakeholders the MAC process was re-designed in preparation for its use by all new undergraduate students in the School of Life Sciences for the academic year 2010/11. The fundamentals of the process remained the same and most changes were associated with the e-Reflect component. It was also agreed through discussion with the learning and teaching committee of the School of Life Sciences that all personal tutors would engage in the MAC process. The Dean of the School ensured that all staff were given a time allocation within their personal tutoring responsibilities to work with the system.

In the MAC (e-Reflect 1.0) pilot the data/answers submitted by students via the questionnaire was processed using Excel Macros. Whilst this system did the job, i.e. proof of concept, there were several interventions required by hand to ensure that the reports compiled contained all of the desired information (for example relevant details from the student records system had to be combined with questionnaire data manually prior to generation of the report). In addition emailing of the report to students required a manual trigger which meant that there was a time delay of up to 24hrs between a student submitting their questionnaire and a report being returned to them.

For the wider 'roll out' of MAC across the degree e-Reflect 2.0 was developed with central computing services engaged and using approaches to data transfer developed within another JISC project (TWOLER, Institutional Innovation Programme). In e-Reflect 2.0 the questionnaire was linked to an SQL database and student data from the student records system was integrated with that database using RSS feeds, enabling more efficient and effective questionnaire processing and report generation. So in e-Reflect 2.0, data from student records was automatically conjoined with the data submitted by a student via the questionnaire. In addition report generation and subsequent e-mailing of the report was automatically achieved within minutes. A diagram summarising the way that questionnaires were processed in e-Reflect 2.0 is shown in figure 2.



Overview of part of the e-Reflect process for automatic generation of operational feedback to students

Figure 2

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At the start of academic year 2009/10 the MAC process (e-Reflect 2.0) was introduced to all new undergraduate students in the School (approximately 400 students) and the intention was to use the MAC process with all assignments submitted (and returned with feedback) by students across the year. As agreed (see above) all 35 undergraduate personal tutors took part in the scheme and the MAC process became a formal component of the School's Academic Tutoring Scheme (ATS). By the end of semester 1 2009/10 some 311 students had used the system collectively generating over 1000 e-Reflect reports. Of the 311 students who had completed questionnaires a total of 232 went on to write reflective learning journal entries based around the e-Reflect report derived from the questionnaire. Out of the 35 staff taking part, 24 made comments on their tutee's learning journal (blog) reflections. Towards the middle of the second semester MAC activity tailed off as fewer assignments were going through the system and because preliminary feedback from users suggested that there was not that much to be gained from completing an e-Reflect questionnaire for every item of coursework returned.

The project adopted a continual approach to evaluation at all stages of the project and this had enabled (for example) a number of minor tweaks to the e-Reflect report as suggestions were passed back to the project team. However, as with the pilot of MAC (e-Reflect 1.0) the project team were able to fall back on the [evaluation plan](#) developed shortly after the project had started for the detailed evaluation of the wider roll out phase. This began in earnest in late December 2009/early January 2010. The project team used mainly [questionnaires](#) (to staff and students) linked to [focus group meetings](#) and 1:1 video recorded interviews with [students](#) and staff.

The project team had also devised a clear strategy for stakeholder engagement, within the School, the rest of the University and the wider academic community. With respect to the latter members of the project team have regularly presented papers at conferences, at staff development sessions at other Universities and at JISC events. Within the University, stakeholder engagement entailed a mix of formal and informal approaches. Informally the Project Manager and Project Assistant 'walked the talk', made easier by the physical proximity of the project office to the School concerned. More formally, meetings were held with key individual members of staff (e.g. School Learning & Teaching Director, School Senior Tutor, Dean of the School) as well as key groups such as the School Learning & Teaching Committees. Often meetings with key individuals were largely about 'smoothing the way' for the larger group meetings at which decisions could be taken. The project team also held numerous informal meetings with groups of staff to discuss e-Reflect development.

Similarly, within the School of Life Sciences, the project sought engagement actively with the students. The project was fortunate to obtain the support of two very keen students who not only served on the Project Steering Group but also did much other work to liaise with the wider body of students in the School.

At institutional level the project benefitted from the cross-institutional role of the Project Director. In his capacity as Director of Online Learning Development he was able to speak about the project at other School's Learning & Teaching Committee's and look for opportunities, when listening to the work of other Schools, to promote the options afforded by the MAC process and e-Reflect. In addition the project had the leadership of the Pro-Vice Chancellor for Learning and Teaching who chaired the Steering Group and actively disseminated the potential of the project at all levels within the University within the broader institutional context of assessment development.

Overall, although the project team produced artefacts commonly used in PRINCE2 project management (e.g. a GAANT chart), the project management approach was more Agile than

Project hashtag:
Version:
Contact:
Date:

PRINCE. The project team met regularly, at times every week, to briefly discuss what they had just done, what they were going to do in the next short period and any problems or issues they anticipated. The project team therefore focussed on the operational aspects of the project whereas the much less frequent meetings of the project steering group served mainly issues around strategy in relation to dissemination and sustainability.

3.2 What did you learn?

It is clear from parts of the evaluation that using the MAC process can lead to tangible benefits to students as they try to take on board feedback from initial pieces of coursework that they complete in order to try to do better in the subsequent assignments. Interviews conducted with individual students highlight a variety of straightforward benefits. Comments recorded include for example:

“After I got feedback from my tutor I have changed my approach to essays and the next essay was in class.....and I got much better result, for example on Cell Science I got 65% but then for Physiology and Anatomy I got 82%. I changed the way I wrote it. Instead of stating I gave more detailed information whereas in my first essay I gave too general statements”.

It has helped me especially on a couple of assignments where I’ve actually taken up the opportunity to see a module leader. One of my marks was quite low and this is not normally to my standard. The e-Reflect feedback suggested that I speak to the module leader and so I took this advice and made an appointment. I wouldn’t normally have thought to do this and it helped. He gave me ways I could improve and suggested a different way of approaching some of the subject matter. It has helped I think because since then my marks have shot up”.

“It helped me with a coursework where I got a low mark. I was very disappointed about my mark. Then I submitted my e-Reflect, I didn’t want to do that because it was a low mark but still I did it, and it gave me the feedback to go and see the module leader. I was scared of going there but still I went and I talked to the module leader and he told me what I needed to do to progress”.

“First of all when I fill in the questionnaire and I put a new entry in my learning journal I identify my problem which I was thinking of. And I see it more clearly when I put it as a blog. And basically when I get feedback that I can understand I can share my thoughts with my personal tutor in my blog and sometimes he will come back with something I didn’t think of”.

“For me personally it’s the way that I can see every piece of coursework that I’ve done. With the graphs it gives I can see where I’m falling down, where my strengths are and my weaknesses are. And also it was very helpful to get advice on how much time I should have spent on an assessment”.

“I think it’s probably helped me more than I thought it would. In terms of seeing how long to spend on a particular assignment I’ve found some things I’ve spent too long on, I should have perhaps spent less time and vice versa”.

When I entered I had submitted my coursework on the precise day it was due e-Reflect gave me the feedback that I should try to submit earlier to take some

Project hashtag:
Version:
Contact:
Date:

pressure off myself. And then I submitted my next coursework 2 or 3 days before the deadline and I felt that it did decrease the pressure on me”

“Well for me e-Reflect has helped me to workout exactly where I am going. I come from a previous degree which already set me high standards and with e-Reflect, the three that I’ve done so far have allowed me to see that actually I was slowly dropping but I can actually identify where I’m dropping in”.

“I’ve come into this course without any Science or Maths ‘A’ level and that has actually hindered me quite a bit. Seeing the e-Reflect grades, the percentages of where I am on the chart has helped me realise that I have to work on the Biology aspects unfamiliar to me and a little bit more on the Maths and Physics”.

“It’s made me think more about the assignments. Before if I got a good mark I just thought yeh that’s a good mark and left it at that. But now I’m actually going back and thinking about what I could have done better”.

“I’ve noticed that writing in my learning journal has helped me generally to improve my writing and I feel I am getting less negative feedback about the way I write”.

“All I used to do was put in all the information I could find about the assignment topic....some of which was not relevant to the question. The thing that e-Reflect has made me realise is that what I have to do is actually answer the question”.

Not everything that students told us about the MAC process was positive. There were numerous comments about the ‘technology bits’ (e.g. the traffic light system on the report was liked by some but not by others, the blogging interface in Blackboard was thought to be too unlike blogs in the ‘real World’ and the fact that they were hidden away in a Blackboard site with no alert mechanism for when a comment was left, made it hard for them as they had to continually remember to check their blogs). However, consistent amongst students who were interviewed was the view that the MAC process was only going to be ‘really good’ or ‘make a difference in the long run’ if the feedback received on work was understandable and potentially useful and if personal tutors regularly commented on students’ learning journals and spoke to students about their feedback at tutorial meetings. Some of the comments recorded around these two themes of the quality of feedback and tutor engagement with the MAC process were:

“I think e-Reflect it’s really great but its going to work only if we get proper feedback. Written, with good handwriting and with good points”.

“I just need some hints about where I went wrong. Some kind of directions not something like so and a question mark and that’s it”.

“Also the initial feedback. Sometimes the feedback on your essay might just be, ‘A good job’. Now that doesn’t really give me enough information to work with”.

“After submitting 3 or 4 e-Reflect questionnaires you remember what feedback is likely to come back. It’s nice but alone it can’t work, some tutors need to be continuously attached to it”.

Project hashtag:
Version:
Contact:
Date:

“To improve the system I think it needs the tutors to be lot more interactive with the student journals. Sometimes the journals are not looked at for periods of time”.

“Probably they might have started and if they saw they didn’t get any comments on their learning journal then that would probably be the reason they stopped using it. And some of them obviously can’t cope doing so many things plus e-Reflect and if its to choose between coursework due in 2 days time and e-Reflect then obviously they will focus on the coursework”.

“e-Reflect without tutor comments is useless. If I want to reflect alone I can use Word. The whole point of e-Reflect is to get tutor and tutee to engage more around the work I have done”.

“I think the tutors need to promote the system more, remind students that they should engage with it”.

All of the students who were interviewed and recorded had volunteered to do so in response to an email request. It is therefore of course possible that our sample of interviews is biased towards students who are perhaps either the ‘high achievers’ or the more ‘aspirational’ or more proactive and engaging. Whilst this cannot be ruled out (and all the students interviewed did have positive things to say) it was the case that none of the students interviewed were shy about providing negative feedback about the process. Across the 11 interviewed 3 achieved 1st class honours marks on average over the year, 5 achieved 2:1, 2 achieved 2:2 and 1 achieved 3rd class marks. There is no obvious difference in overall view of e-Reflect and its real /potential value between the 8 with 2:1 or above and the 3 with 2:2 or 3rd. A sample of the interviews can be viewed at this [location](#).

Questionnaire analysis also largely reveals a picture of positive student views of the MAC process. In the final evaluation questionnaire (completed by 65 students):

- 48% of respondents indicated that they had used e-Reflect either because it gave them extra feedback, helping to realise mistakes and prepare for other assignments or because they thought that it was a way to improve and keep track of their progress.
- 5% saw the process as a way to express themselves openly whilst 21% said they did it because it was marked (one coursework assignment in semester 1 contained a compulsory e-Reflect component that was worth a small percentage of the module marks).
- 9% said the process was time consuming and like an extra assignment.
- 9% indicated that e-Reflect was only helpful the first few times they used it.
- 13%per cent explicitly stated that e-Reflect was not very helpful to them.

Other less frequent comments included:

- Process not tailored for part-time students
- I stopped because my tutor did not comment
- Feedback (from e-Reflect) like ‘Speak to a member of staff’ not very helpful

Project hashtag:
Version:
Contact:
Date:

Potentially interesting was the fact that almost 50% of the respondents answered yes to the question 'Did using e-Reflect help you to do any more of the things you feel you should do when you get a piece of marked coursework returned with feedback'? Around 30% of respondents thought that using e-Reflect had helped them to build a better relationship/communicate more with their tutor.

It should be noted that only a small proportion of students who did not engage with MAC at all completed any of the evaluation questionnaires (either for the pilot phase or the wider roll out). Despite the project team's best efforts it has proved impossible to date to gather together significant numbers of such students to find out more for the basis of their lack of engagement. Certainly there is anecdotal evidence from academic staff that it was not just the high achieving students that engaged, although equally many staff felt that it was likely that the majority of the 'non-engagers' would be the students who probably needed help and support most. This is to some extent borne out by the emerging results of the project team's ongoing analysis of evaluation/research data (see 2.4 Main Lesson Learnt).

Generally the project team felt that academic staff were not as positive as students about the MAC process. However, staff did tend to express a wider range of views, in both questionnaires and in 1:1 interviews, and this may contribute to that feeling. A minority (1 out of 11 interviewed) thought that MAC was of no use whatsoever whilst others (outside of the project team and who were tutors in Life Sciences) stated that 'it clearly affected some students in a positive way' (3 out of the 11 interviewed). The rest of the staff interviewed held a view somewhere in between, feeling that any initiative to highlight to students the need to pay attention to their feedback was good.

Although almost all staff could see the potential of a system like MAC, and thought that it was something worth developing further, a significant number saw issues and problems. These ranged from not having the time to engage fully, through to significant doubts that the process would help the 'weaker' student (see above). Three staff (from the 11 so far interviewed) stated they thought the workload not to be significant and felt that just a couple of sentences written in student's learning journal could be enough to encourage a student. About the same number felt the additional work load was significant.

Two staff also stated that the existence of e-Reflect had impacted on the way that they approached provision of feedback and three members of staff cited the value in tutorial meetings of the graph on the e-Reflect report which showed their tutee's successive coursework marks/performance. One member of staff changed the way he instructed his teaching team to deliver coursework feedback influencing 12 members of academic staff, some of whom were not directly engaged with MAC. Collectively this course team agreed to focus more on providing students with 'actions' that they should consider in order to improve.

Collectively staff highlighted a number of features, especially around the e-Reflect questionnaire and report component, that they felt could be improved and would potentially make it easier for them to engage. A number felt that the traffic light system used on the reports was too simplistic and the feedback maybe too generic. In light of these comments the project team are developing e-Reflect 3.0 which will take into account many of the suggested improvements. Some of the comments from staff included:

"It is hard for us to know when a student might be doing their blog (reflective learning journal) – some form of reminder would be good so we know to go and look".

Project hashtag:
Version:
Contact:
Date:

“Students need a clear reward such as marks but this could mean no mark at all until the work is for example collected”.

“Need to find a way to engage the weaker/poorer students and in so doing raise their standard of achievement”.

“Reduce the number of questions on the questionnaire but delve more deeply into what the student has actually done to complete that piece of work”.

“For example instead of just asking them how many hours they spent on a piece of work ask them how much time they spent researching, writing, proofreading etc”.

Although over two thirds of the personal tutors read and either commented on or made use of their tutee’s learning journals at face-to-face meetings, it seems clear from the comments received from students that they felt learning journal entries went apparently un-read (in the sense that no tutor comments were immediately forthcoming). From evaluation questionnaires and informal chats it is clear that a proportion of staff (approximately one-third) did not read their tutee's learning journals because they felt they did not have the time. However it is worth noting that some academic staff whilst reading journal entries, clearly preferred not to comment on the learning journals but rather to discuss the learning journal content with their tutees when they saw them in tutorial meetings. However, given the significance that students have placed on receiving comments, and as some staff have pointed out that even very brief comments encourage students, it would seem sensible that the School considers making the commenting on learning journals an essential required task for the tutor.

The final evaluation questionnaire sent to staff also highlighted the degree to which staff see the potential for the MAC process with 10 out of 12 respondents agreeing that it is 'very good in principle'. However 33% highlighted a lack of student engagement as a real problem whilst 25% of respondents highlighted the value of the MAC process for monitoring student progress. Encouragingly, over half of the staff respondents thought that the MAC process had improved active dialogue between students and staff over student’s work and development and around 40% thought that the MAC process had impacted on the way in which they tutored and/or provided feedback to students with comments including:

“I have tried to give clear, concise and justifiable feedback on all work and embed corrections and tips for future work”.

“e-Reflect has enabled me to observe potential problems earlier and to give generic advice on how to help the students improve”.

“e-Reflect has enabled me to get to know my students better. It has made me think about the way I give feedback to ensure that it is clear to the students exactly what it is they need to improve by providing additional action points at the end of the work”.

Rather interestingly, questionnaire responses also showed how staff were polarised at extremes in some of their views of different aspects of the MAC process. An almost identical number stated that the student learning journal was the least valuable aspect of MAC as

Project hashtag:
Version:
Contact:
Date:

stated that it was the most valuable. This is a good illustration of the difficulty faced in developing a process/system sufficiently flexible to suit everyone.

During the course of the final evaluation both staff and students were asked to look ahead and consider how best feedback should be provided and how best students might be assisted in making assessment really count in terms of their continual development. Student views on this tended to be straightforward and fairly consistent. They highlighted the need for 'helpful feedback', that they could understand in terms of knowing what to do or try next. They consistently highlighted the problems encountered by the receipt of handwritten feedback which often was difficult to read, especially for students where English was not the first language. They were very positive about the use of technology in simple ways (e.g. typewritten feedback comments) and were also very supportive of the use of other technology based media to provide feedback (e.g. audio). All students we spoke to valued and treasured the face-to-face contact they had with their tutors. They also understood the role that simple technologies can play in giving them support when they are not able to meet with their tutor whilst at the same time having the potential to enhance face-to-face meetings.

Most academic staff were still inherently suspicious of the role of technology and in some cases saw its introduction as an approach by 'management' to replace face to face contact. They collectively felt very strongly that such a change, if real, would badly affect the weaker student. Most staff comments around how to help students learn more effectively from feedback centred around more rather than less face to face contact, with the need for smaller tutorial groups and more workshops on basic skills (e.g. literacy, numeracy). There was some support for withholding marks from students in order to 'force' them (and especially the weaker students) to see their tutor. One member of staff suggested setting students exams based specifically around the feedback they had received during the course of their first year.

Despite the Project Team's best efforts to promote the project as one that was not so much about technology but about people (tutors and tutees) and how they can best communicate, it is clear from the final evaluation (and was also clear during the roll out phase) that the 'suspicion' around technology is deep rooted. There are however some indications from a proportion of staff that views have been altered and some acceptance that the use of technology within MAC can help some students very directly and that in other cases the MAC process can assist in relationship building between tutor and tutee.

3.3 Impact

Before the project there was no formal mechanism through which students recorded reflections on the feedback they received on their coursework. The Academic Tutorial Scheme (ATS) in the School of Life Sciences naturally meant that a proportion of students would have discussed their coursework marks and feedback at tutorials with their personal tutor. However, the MAC process has not only provided a means for students to get additional automatic advice and feedback on their work, it has also led to the ATS scheme formally scheduling meetings with the express purpose of discussing a student's results. The Dean of the School of Life Sciences has adjusted the workload allocation model for academic staff to include a specific allocation of hours for staff to make use of the MAC process outputs.

Prior to the MAC process it was very difficult for a personal tutor to get a grasp of the overall level of performance of their first year tutee, as marks were often not recorded on the

Project hashtag:
Version:
Contact:
Date:

student record system sufficiently early for the tutor to see them. With the MAC process students record their mark and the pattern of marks over a number of courseworks is then rendered to both student and tutor in graphical form. This means (provided the students engage) that a tutor now has the potential to act possibly sooner in circumstances where a tutee may be floundering 'across the piece'. Similarly, through the student learning journal there is scope for a tutor to understand more about the kind of feedback their tutee has been receiving from teaching teams delivering the modules their tutees are taking (and on which the tutor may not necessarily teach). Overall the MAC process can make available, in a timely fashion, guidance and support to both tutee and tutor in order that the development of the student may be furthered and the work of the tutor be made more satisfying. There is evidence from interviews with some staff that the MAC process has allowed them to find out more about their tutees sooner than in previous years (3 out of 11 staff mentioned this) and significant evidence from a number of students who were interviewed that the MAC process has helped them to improve performance (8 out of 11 students interviewed stated that they thought using Mac had helped them to improve).

It is, however, too early to say whether the MAC process has had an overall statistical impact on cohort performance (e.g. reduced drop out). Even if a positive change in such indicators is seen it would be difficult to attribute this at this stage to the MAC process given the complexity surrounding the 'degree experience' in any one year. It will only be after a full 3 year cycle, with longitudinal studies undertaken, that we may meaningfully be able to attribute or not any impact of the MAC process on overall cohort performance. It is the intention within the School of Life Sciences to now go forward with the MAC process as a compulsory element at each year of the undergraduate degree. This means that last year's first year student will experience MAC in some way at year 2 and year 3. It will be essential for the University to continue to monitor in some way the students within Life Sciences that are now going into their second year, in order to build any concrete evidence for effect on performance/drop out as a whole (see section on sustainability below). In the latest NSS (2009/10) Westminster has improved its performance generally in the area of assessment and feedback. However this is likely to be due to a raft of other initiatives and new approaches that the different School's have piloted to collectively address this area of student concern.

The broader community within the University and across the sector has benefitted from the development of a transferable framework for feedback, the SOS model detailed above (see figure 1). The project team have widely disseminated the outcomes of the project and details of the model and how it could work in different contexts. The project team will in the near future work to derive within this framework, through drawing on the experiences of students and staff of the MAC project, a set of feedback principles for acceptance internally the University's Learning, Teaching and Student Support Committee. In addition the feedback principles will be made available via the [project website](#), the Design Studio and communicated through mail lists, continuing visits to other institutions and via the JISC.

The MAC process is one ideally suited to the use of e-portfolios and has the potential to markedly influence a significant component (academic development as well as wider skills) of a student's personal development plan (PDP). The School of Life Sciences, unlike other School's at Westminster, does not have a part of its course specifically focussed on PDP, preferring instead to embed PDP type activities across all modules. In this School therefore students use a learning journal (blog) for the online reflection part of MAC. However, other School's that do get their students to produce developmental e-portfolios, and have modules focussed on PDP, should be able to use the e-Reflect component of MAC to facilitate reflection by students on their academic performance as part of the evidence for their development presented through their e-portfolio. This applies equally to other Schools/departments in other institutions where there are specific modules (or other discrete

Project hashtag:
Version:
Contact:
Date:

components of a degree) that focus on PDP and have students presenting evidence of their PDP via an e-portfolio. Another area where the MAC process could have an impact in the future is that of feedback to students on examinations as opposed to coursework. Again the e-Reflect component of MAC could be of significance in such a process. However the widespread exploitation of the e-Reflect component of MAC, in the ways suggested above, will be dependent on a simpler, more easily disseminated and distributed version of e-Reflect than was used in the second year of the MAC process (e-Reflect 2.0). For this reason in the latter part of the project the project team began work with central computing services to develop an open source, easily transported version of e-Reflect (e-Reflect 3.0). This work was initiated after consultation with the JISC (through CETIS) established that an open source tool with the kind of functionality of e-reflect did not appear to exist.

Within the University of Westminster the project has raised the profile of feedback generally. Evidence for this can be seen from the extent to which learning & teaching committees (University and School level) have discussed feedback issues, with input from members of the project team requested at many of these meetings. This internal dissemination of the project and promotion of approaches to enhancing the feedback process has led to the discovery by the project team of other initiatives exploiting reflection on feedback (some individual academic led and some involving wider numbers of staff up to department level in one case). The project has been particularly successful at having an impact at University committee level with regular updates on the project being presented to all Deans of School and other senior staff at the University Learning Teaching and Student Support Committee.

The development of the e-Reflect component of the MAC process has, as an internal programming project, led to an unexpected debate as to how new online technology based initiatives can be supported by Central Computing Services. Within the MAC project the e-Reflect component (in e-Reflect 2.0) was derived as a consequence of the activities of another JISC project (TWOLER, Institutional Innovation Programme). However TWOLER used non-core technologies and further, flexible development of e-Reflect is difficult given the lack of relevant skills within the core Central Computing team. As a consequence the University is now experimenting with an approach (for the development of e-Reflect 3.0) that involves the use of external consultants building a system using technologies that are core and can be supported more readily internally, whilst at the same time being readily transferrable to other institutional contexts.

Finally in terms of impact, as Westminster has previously had very few JISC awards the existence of the MAC project has raised the profile of JISC as an organisation that does much more than provide the JANET network. Of specific note here is the extent to which senior staff showed interest in the feedback from JISC on the progress of the project. The impact of the external critique has proven instrumental in maintaining senior staff engagement and facilitating discussion around sustainability and broader impact.

c) Conclusions & Recommendations

The main conclusions are that the Making Assessment Count (MAC) process can:

- help some students to gain more from the feedback they receive on their coursework
- provide a framework (the SOS model) around which staff can implement a strategy for the provision of feedback to students
- lead to personal tutors becoming better informed of their tutee's progress, providing the potential to re-shape the nature of tutorial meetings to focus more precisely on academic achievement and development

Project hashtag:
Version:
Contact:
Date:

Additionally the project team conclude that it is very difficult, if not impossible, to devise a simple technology system that satisfies the needs or wishes of all staff within one subject area, never mind across subject areas. In addition the difficulty of achieving sustainable 'buy-in' from corporate services (most particularly Central Computing Services), given current resource constraints and competing corporate needs, should not be underestimated. Despite the significant support from senior institutional staff for this project, it has proven very difficult to develop a sustainable model for development (see below). A significant part of this problem relates to the first sentence in this paragraph:

.....the project team conclude that it is very difficult, if not impossible, to devise a simple technology system that satisfies the needs or wishes of all staff within one subject area, never mind across subject areas.

The diversity of views and wants as to how a system should work, often justifiable on pedagogic grounds linked to the subject area concerned, makes it doubly difficult for central services to provide what can essentially turn into 'unlimited demand for support'. The project team feel that the approach now being taken in the development of e-Reflect 3.0 is a good way forward in that it is using high quality external expertise to develop a product that is written in a way that can be supported by the institution. It is also sufficiently flexible (open source) to be taken up and adapted by other institutions and will be able to provide an e-Reflect component for a MAC process being rolled out School wide or by an individual academic for a single module or topic. We would recommend this approach to other institutions as a model for sustainable development.

The difficulties outlined above in developing something new involving technology and derived from the ideas of an academic or small group of academics, can only surely get more and more constraining as the sector adjusts to the financial crisis. We recommend therefore that future JISC funding should be more explicitly linked to individual University's (or group of Universities) own planned learning and teaching project developments. This might for example entail bidders providing clear evidence of the links between the project being proposed for funding and demonstrable institutional financial commitment to current corporate developments that would link to and underpin that project.

d) Implications for the future

There is strong evidence that the Making Assessment Count Process can help some students engage with, and make more of their feedback. It seems that a quite straightforward technology can be used to encourage students to think more about the feedback written on their work. However, more than this, the introduction of the 'technology bit' can potentially change the nature of a face-to-face tutorial system (such as that practiced in Life Sciences) so as to focus the tutee/tutor relationship more on academic performance. These two connected transformations are of clear significance and provided that groups of staff can be convinced of the payback, and MAC or some variant can be integrated readily into their support mechanisms, there is every possibility that students will benefit. From the presentations that the Project Team have done, at several Universities, it is pretty clear that there is 'face validity' in the approach and that the major barriers to wide uptake will be a collective will on the part of groups of staff to try something new.

One consistent message that the project team has received relates to the e-Reflect component of the MAC process. Already at Westminster we are seeing that different subject areas would wish to pose quite different questions on the questionnaire component to those used by Life Sciences. Indeed even within Life Sciences there has been extended debate

Project hashtag:
Version:
Contact:
Date:

around the number and nature of questions on the questionnaire. The version of e-Reflect used in the latter stages of this project, whilst scalable beyond Life Sciences, is fixed in terms of the questions without further programming support. It seems likely in the future that the myriad variations on the theme likely to emerge from departments and Schools would place an overhead on an already hard pressed Central Computing Service that they could not guarantee covering, in part due to competing pressures but also because the technologies utilised (derived from the TWOLER project) are unlikely to be mainstreamed in the immediate future. One possibility is of course for others taking up MAC to omit the questionnaire component entirely and to simply get students to reflect on their feedback in learning journals. However if one accepts that the e-Reflect component adds breadth and value to the process (and there is good evidence for this from students and staff) then a more flexible e-Reflect solution would be a sensible way forward.

The project team, in collaboration with Central Computing Services, is already putting in place a plan to devise a more sustainable and flexible version of the e-Reflect component of the MAC process (this is a self-authoring version known currently as e-Reflect 3.0). This version should both enable better sustainability at Westminster and wider applicability across institutions and subject areas. E-Reflect 3.0 will be available for distribution to any other institution that would like it and will essentially be 'open source'. Central Computing Services have undertaken to develop this self authoring version of e-Reflect utilising in-house resources and technologies that they feel are 'core' to their future model of support for the institutional corporate applications.

Within Westminster the School of Life Sciences have already planned a strategic approach for the future (from academic year 10/11) use of the MAC process across all 3 years of their undergraduate degree programmes. At institutional level the Learning Teaching and Student Support Committee (LTSS) has agreed that the work of the Project Steering Group will continue in the shape of a sub-group of LTSS. The sub-group will have a remit to disseminate and support best practice with MAC and 'MAC like' processes across the institution. The work of this sub-group should aid in ensuring that other School's take a strategic approach in the same way that Life Sciences have.

Finally the project team will continue to work to disseminate the outputs to the wider community which will be especially important when the more portable version of the e-Reflect component of MAC becomes available (we currently envisage 1st December for a *beta* e-Reflect version 3). We plan to use the Design Studio, coupled to the Cloudworks system, to both advance discussion around use of feedback by students through reflection and to distribute both software and future online guides.