## **Proposal to the Learning & Teaching Development Fund 2010**

# **Sustaining Writing for Results**

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## 1. Summary

The Writing for Results (WFR) website, with the related 'feedforward' sheets, was initiated last August specifically to address the improvement of writing skills across the whole student body. This is clearly a major graduate attribute. The motivation recognises that traditional methods of formatively assessing written work using tutor/lecturer are expensive, and also that there is little consistency across the university, or even within a department. Students find this frustrating.

Even in its pilot year, the WFR on-line resources and the associated feedforward marking sheets (so-called because students should use the sheet and the site to improve their skills ready for the next assignment, in line with Mastery Learning practice) have been recognised as going some way to addressing writing skills problems. Complete exercise sets have been developed for five departments with around 1,000 exercises so far created, all derived from errors found in real student writing and specialised for the individual departments. Staff and student feedback has been very positive.

Despite this success, any L&T innovation suffers the danger of not being incorporated into ongoing practice. This second proposal for WFR is principally aimed at exploring how its early success can be effectively sustained more widely in the university. As an example of this, the balance between the need for specialist staff against existing departmental staff in the development of new materials will be evaluated. This second year will see: WFR rolled out further across the university using a number of different models; the site improved in the light of staff and student feedback; full integration with AWSP with consequent effects on retention; a comprehensive field study measuring improvements in student writing; and a full report delivered on the entire programme to date and how it may be taken forward beyond this initial phase.

#### 2. Aims and Outcomes

The broad aim of this proposal is to further embed the WFR programme into department writing assessment processes, to improve the WFR system in the light of feedback and to explore sustainability models.

### Specific aims

- 1. To trial a range of sustainability models to determine how much of the WFR setup work can be done by departments and how much of it requires external staff
- 2. To further embed WFR into departmental writing assessment processes through expanded use of the feedforward sheet
- 3. To expand student knowledge of and use of the website (to which every student in the university can have access)
- 4. To improve the technical aspects and content of the WFR site in light of feedback
- 5. To further evaluate the effects of WFR on student writing/reviewing skills
- 6. To explore the link between the adoption of WFR and the use of peer critiquing processes

#### **Outcomes**

- 1. At least six more departments on board (but see also outcome 4 below).
- 2. Full integration of WFR into the Arts Writing Skills Programme, to acquaint all students with the WFR process on entry to the University
- 3. Wider use of WFR within existing departments every student can benefit
- 4. Incorporation of new features within the system in light of student feedback
- 5. As a model for sustainability, adoption of WFR via various levels of departmental commitment in terms of finance/staff time
- 6. Promotion of greater understanding of the technical and professional writing skills required to set up a subject specific section within WFR
- 7. Analysis of a large scale field study of improvements in students' writing attributable to use of WFR, along with extensive student feedback
- 8. At least one use of the WFR programme in conjunction with reciprocal peer critiquing
- 9. A report on potential for system integration with the university Moodle system
- 10. A comprehensive report on the entire two-year programme

### 3. Previous Work

Last year, our proposal highlighted the problems in developing writing skills, and cited research into personalised feedback (e.g. Anania, 1983) and Master Learning (ML) strategies (Bloom, 1984). We based our linked feedforward sheet / website model on this research, together with extensive staff/student experience and a fundamental belief that all students can improve their writing ability, in line with Dweck's mindset research (Dweck, 2006).

The headline outcomes of the pilot year are:

- The development of a system extension to Moodle that supports the creation and presentation of writing skills exercises in a range of formats
- The creation and use of WFR Moodle courses, based around the new extension, in consultation with 5 departments (Computing Science, English Literature, Earth Science, History and Philosophy). These run on a Moodle server hosted in Computing Science.
- The analysis of hundreds of student essays to produce around 1000 exercises
- The production of feedforward sheets tailored to each departmental use of WFR
- One controlled trial and focus group has been carried out with positive feedback and improved outcomes, and two more similar trials in different subject areas are ongoing

The day-to-day activities required to deliver these outcomes are as follows (note that each different department requires different levels of engagement with each activity):

- Identify departments willing to commit to the project. (Easy no department said no!)
- Prompt departments to confront possible shortcomings in writing skills marking. Most were pleased to be forced to do this.
- Work with departments to agree on specifics, e.g. referencing systems and essay formatting, so that students would no longer be confused.

- Engage in detailed discussions with each department as to the precise writing skills problems of their students.
- Set up the website for each department, with categories, sections and feedforward sheets reflecting departmental styles and idiosyncrasies. This specialisation to each department was a key selling point to staff.
- Develop/improve the Moodle system on an ongoing basis.
- Author clear and informative general descriptions of writing skills problems, specialising these with department-specific examples. These were particularly valuable to students.
- Collect dozens of anonymised essays and construct exercises from examples of writing skills problems found in those essays.

We believe the current bid builds on a largely proven concept, as the feedback from both staff and students attests. Tellingly, one tutor said that the feedforward sheets stimulated 'fairer and more focused marking', which is a crucial attribute in any university (LTSO 6). Another tutor had two questions: 'a) where has this been all my life, and b) when can we roll this out?' Another said: 'The sections on muddled phrasing and meaning are particularly useful, but all of it looks good to me. It really addresses a lot of the problems I saw time and time again this year in my [first year] essays'. Other staff members have been equally positive, with all agreeing that this project addresses a key concern in a way that appeals to staff (it saves time and promotes consistency), and students (it promotes consistency and addresses a key worry).

Student feedback has been very interesting, with a clearly expressed feeling that there is a 'lack of writing skills teaching' (Focus Group, 2010). For one student, the site was 'a lifeline because ... the moment I started working on the exercises, I realised I had some wrong notions about some things, so ... I would say it was more than helpful' (Focus Group, 2010) Some feedback was very specific. For example, in a questionnaire, one student wrote: 'I gained knowledge of essay structure, what's in an intro and conclusion, when to use single or double quotation marks, types of referencing style and looking for wordiness/sentence structure.'

# 4. Methodology

The WFR concept has, therefore, been well received by both staff and students during its pilot year. As with any learning enhancement, however, a pressing issue is the sustainability of the concept – so many great educational initiatives fail to be incorporated into ongoing learning and teaching practices. A key question is: how much of the work that was undertaken by specialist staff in the pilot year (Grant and Saffrey) could in fact be undertaken by departmental staff, were they to be given suitable time to do so?

In this second WFR year, we aim to thoroughly explore this question. As in the first year, Grant will be the key worker on the project, having accumulated significant experience of working with departments, categorising student writing errors and developing writing skills exercises. However, instead of Grant doing all the work, we propose offering a range of options to departments who wish to adopt the WFR model, as follows:

- Development of a WFR Moodle course specialised to the department's subject area, undertaken entirely by Grant, with appropriate interaction with departmental staff (this was the only model offered in the first year of operation)
- Development of a WFR Moodle course specialised to the department's subject area, undertaken by departmental staff with appropriate training and support from Grant.
- Reuse of an existing WFR Moodle course by a related department, with appropriate training and support from Grant.

We recognise the limited resources for LTDF-style initiatives and so are not asking for Grant's full salary. Instead, we will be asking departments to part-fund whichever option they choose. In relation to the three options above, we would expect departments to contribute £2500, £1000, and £400 respectively. If this model proves to be successful, in future years, we would expect to raise these amounts to enable Grant to be fully funded without additional university support.

When assisting departments that choose the second or third options, we will be carefully evaluating how much effort is required for departmental staff to adopt the scheme, in order to better understand the sustainability issues – for example, where is Grant required, where can existing staff do the job and how much effort is required? We particularly note that where departments opt for the middle option, we will urge them to find well-motivated staff and provide significant time to undertake the task, as we are confident that the development process cannot be completed 'on the cheap'.

To assess the enthusiasm for a scheme of this nature, we will be advertising widely to departments. We intend to start this process at the April Learning and Teaching Conference, so that should funding come through, we can start working with departments as soon as possible in order that the scheme is properly integrated into assessment processes right from the start of the first semester. As soon as funding arrangements are in place, we will capitalise on the June-September period to get signed-up departments prepared.

We will also use the summer months to fully exploit the extensive feedback we have gained from students and staff about the system during the pilot year. We have a prioritised list of extensions to the system ranging from student self-testing and ranking of exercise difficulty through to improved exercise-editing interfaces.

As well as bringing new departments on board, Grant will be working with the five existing departments to explore how the system could be used more widely within each department. During the pilot, final year students who used the system indicated that, had they had access to the site in earlier years, they would most likely have ironed out the majority of their problems by now. This fits with the mastery learning model – students will be able to improve steadily over many iterations of the feedforward process. Furthermore, on the basis of successful use this year, we hope that departments will be keen to extend their sites. For example, the current sites are predominantly useful for essay writing technique, but it is clear that students would value support in the areas of report and dissertation writing as well.

The WFR system was not ready early enough in the pilot year to be incorporated into the Arts Writing Skills Programme (AWSP). This year, feedforward sheets will be used in the first assessments of all incoming students involved in the AWSP. In the long term, we aim to set students' expectations as early as possible on how they should make use of feedback (ie by working directly with it to improve future performance), while also encouraging them to recognise that writing skills development is an ongoing process and there is always room for improvement. In passing, we note that the AWSP is entirely complementary with WFR. The AWSP provides a necessary boost for a significant number of students whose writing skills are demonstrably weaker than the norm. WFR on the other hand can be used by any student at any stage to incrementally improve their skills – indeed this aspect was highlighted by students in our evaluations who rated themselves as having good skills already.

During the pilot year, three controlled trials will have been run both to assess the overall scheme and to gather fine-grained student feedback. One trial is complete and has demonstrated an improvement in writing skills using before and after tests. The other two are in process at the time of writing. Whilst the initial results are positive, our controlled trial only approximates the learning gains derived from authentic use of the system. In this second year, we will recruit departments to take part in a field study where anonymised before and after student essays from live courses will be independently assessed and correlated with logged use of the associated WFR Moodle course. In this way, we hope to gain a much more accurate overall assessment of the value of the whole programme.

On our expectation that the system will gain in popularity, we will work during the year with the Learning and Technology Unit to explore how the extension to Moodle that is required to deliver WFR courses can be incorporated into the University-wide Moodle system.

One of the original motivations for the WFR programme was to train students to be more effective at critiquing their own and their peers' writing. Whilst peer critiquing systems were in use by some of the project leaders, some students' understanding and appreciation of good and bad writing was not sufficiently advanced to enable them to engage effectively with the process. In the pilot year, the WFR system was not ready early enough to be able to be integrated with ongoing peer critiquing exercises. However, in the second year, we intend to incorporate both the WFR scheme and peer critiquing within at least one course and evaluate the effect that WFR has on the quality of the peer-based work.

Both WFR staff and departments will keep detailed records of development activities so that we fully evaluate the range of issues involved in the development and operation of the scheme, with a view to being able to make recommendations on how it should proceed.

# 5. Potential Applicability/Transferability

WFR could be used by every school/department in the university. There is no student to whom writing skills are not relevant and no tutor for whom the feedforward sheet would not be useful. We have demonstrated this both in arts (History, English Literature) and in science (Computing Science, Earth Science).

Longer term aims are to have the whole university participating building on the sustainability model trialed in this proposal, with Glasgow widely publicised as a university that takes active steps to improve the writing skills needed

by every student for success in both their undergraduate and postgraduate life. This would be attractive to domestic and foreign students alike.

With the huge exercise bank and specialised information, there is also the possibility of inter-university commercialisation.

#### 6. Dissemination

Dissemination of the project's outcomes would be through LTC events, internal seminars and external peer reviewed publications. With the project up and running, Grant can report to the broader press on this University of Glasgow initiative.

#### 7. Evaluation

We will gather and maintain a wide range of information about the overall programme (continuing work already ongoing) so that a thorough evaluation can be made of its operation and effectiveness.

This will include:

- logging data for the site
- · uses of feedforward sheet for essays
- student questionnaire feedback (courses involved in the program will be required to include questions about WFR use and operation
- more student focus group feedback (from new departments)
- focus group feedback with staff to consider: the materials; how easy they are to use; the quality of feedforward they feel is being given.
- · keeping track of shifts in student skills and attitudes

Additionally, a major aspect of this proposal is the field study to assess the effect on students' writing skills in fully authentic contexts.

#### 8. Timetable

April onwards

department enrolment development of Manual for departmental use

June onwards (if funding confirmed)

work with departments to set up sites develop feedforward sheets system improvements

## Sept – Dec

semester 1 use further work to set up sites for departments coming on board in semester 2 evaluation (probably with Philosophy) development of WFR with peer critiquing

#### Jan - March

semester 2 use analysis of results of evaluation further development of WFR with RPC

#### April – July

major report writing system improvements further development of manuals in light of year's experience

# 9. Budget

A major objective of this proposal is to determine whether departments are willing to support this initiative to improve students' writing skills. As such, only around 60% of Grant's salary is being requested from LTDF funds.

Staff: Katie Grant: Grade 6, Spine Pt 30; 13 months @ 4 days/wk	
This would be £31,894. We aim to raise at least £12,000 from	
departments/schools, hence cost to project	19,894
Studentship for system evolution, Summer 2010	1,500
Studentship for software support during session	1,500
Studentship for system evolution, Summer 2011	1,500
Experimental costs – focus group engagement and transcription costs	1,000
Hosting of the on-line system for one further year, gratis Dept of Computing Science	e 0
Total	25,394

## References

Anania, J. (1983). "The influence of instructional conditions on student learning and achievement." Evaluation in Education: An International Review Series, 7:1, 1-92.

Bloom, B.S. (1984). "The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring", Educational Researcher, 13:6, pp. 4-16

Dweck, C.S. (2006). Mindset, New York: Random House (2006).