Concise paper

Time to Enjoy: Go with the flow

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ABSTRACT

The concept of 'Flow' that describes a condition of working that achieves excellence in an enjoyable environment was identified as a worthy goal. This study looked at techniques tutors used to reduce their workload that may be of benefit to others. Time saved could then be used to work in a more productive and enjoyable way - Flow. At the end of the period under study, overhead associated with creating new ways of working, meant the amount of time saved was not significant. However, in future, the time saved could be significant as the overhead would no longer be such an issue.

1. INTRODUCTION

Like it or not, most people are under pressure to 'achieve more with less'. This seems to be as true in the world of government funded education as in the 'real' commercial world. For tutors at the 'chalk face' the end to this pressure seems further away then ever; when will we break? Staffroom conversations reveal a sense of helplessness, of spiraling downwards to lower standards, low morale and ultimately looking elsewhere for career satisfaction.

A technique often used by counselors is to ask 'If you could have anything, what would you want?' Of course, we might have to put some limits on 'anything', but what I believe makes a big impact on whether you enjoy your work or not, is having a sense of achieving good things in a collaborative environment. Csikszentmihalyi, (1997) has introduced a concept called 'Flow' to describe the feeling that people attain when engaged in "exceptional moments…..the sense of effortless action they feel in moments that stand out as the best in their lives". This concept of Flow is picked up in the book 'Peak Performance' (Gilson *et al*, 2002) that has studied successful organizations that achieve at a high level. This study suggests that even while teaching Information and Communication Technology, we too can strive to experience Flow or optimal experience that "describes the calm and effortless flow of mind and body in synchronization with surroundings in the focused completion of complex tasks or actions toward the achievement of an important challenge".

All well and good, but are tutors already too busy to find time to achieve Flow? If this is the case, then we must create time. Numerous books have been published on how to save time (Gleeson , 2000, Kock, 1998 and Mackenzie, 1997), but finding specific information on how ICT tutors can save time is more illusive. It has been noted that experienced tutors have a large body of time saving ideas, which are often undocumented and may be lost as staff leave the institution.
Here at Wintec a low key approach was used to share ideas that had been shown to work in the Department of Information Technology. The initial aim was to individually recoup the hour 'wasted' by having a 'Flow' meeting. This paper discusses and documents the ideas raised and gives feedback on the issues of concern.

2. FLOW MEETING

2.1 Current Techniques

The group listed a number of techniques that tutors were already practicing and sub divided these into three broad areas of activities, 1) Setting and marking of Assessments, 2) Teaching preparation and 3) Non teaching. These are described as follows:

2.1.1 Setting and Marking of Assessments

- Do as much marking during class time, thus freeing non-timetabled time.
- Use a marking schedule.
- Do not accept a stream of late assessments.
- Use multiple choice questions.
- Mark the 'best' students first.
- Peer marking.
- Automated plagiarism detection (turnitin.com).
- Get test back from students to allow their reuse.
- Use of third party provided (Cisco) computerised tests.

2.1.2 Teaching Preparation

- Require students to print their own notes instead of providing printed notes.
- Use of third party text books (especially if they include lecture presentation slides).
- Online delivery of some aspects of course.

2.1.3 Non teaching specific

- Only read email twice a day (by keeping email application/notification off).
- Teach the same subjects each year (within reason).
- Ensure a fair workload.

2.2 Techniques to Try.

2.2.1 Dissemination of Skills

It was noted that experienced tutors were in a position to offer tailored mentoring to the less experienced tutors. It was thought that this would best work in a small group situation.

2.2.2 Increase Use of Technology

As to be expected from a group of IT tutors, the use of technology to save time was already being used, but there was also a desire to increase its use to achieve further gains. The ability to use e-learning tools to automate assessment (and hence marking) was seen as a major area that could be developed further.

Elearning environments also offer the ability to offer rich learning environments through prepackaged courses and in-house developed material such as 'Viewlets'. While students are engaged in these activities, tutors may be able to use the time for preparation, marking etc.

3. ACTION STATIONS

It is easy to talk, but there was a 'wasted' hour to recover. This section gives some feedback on what individual tutors did in an attempt to save time and how they got on.

3.1 Using Multiple Choice Questions

3.1.1 Activity

One tutor decided to use multiple choice questions for a test given to students taking the 'Object Oriented Programming (OO600)' module in the DipICTL6. Due to the low student numbers, an electronic version of the test was not created. A large number of the questions required the students to choose the answer from a common (large) table of possible answers.

3.1.2 Outcome

The tutor believed that the total time used/saved was neutral due to the small number of students.

3.1.3 Concerns and Discussion

Does the use of multiple choice questions lower standards? Multiple choice questions were only used for the test and students still had three assignments to complete which were not multiple choice.

3.2 Creating Online Tests using Moodle

3.2.0 Introduction to Moodle

The word Moodle is an acronym for Modular Object-Oriented Dynamic Learning Environment. In essence Moodle is an open source software package for producing internet-based courses and web sites. Such software is variously labeled course management systems (CMS), Learning Management Systems (LMS) or Virtual Learning Environments (VLE). In these environments tutors can create a range of activities, (for example assignments, chats, journals, quizzes) add a range of resources (for example, pre-prepared files, web-links and HTML pages) with only basic

computer skills.

3.2.1 Activity

One tutor decided to use Moodle to create online, self marking tests for the module 'Program Development (PD500)' delivered as part of the DipICTL5 course. He already had 3 versions of an assessment that he had been using largely unchanged for the past 4 years, delivered in paper format. Some of the questions were of the type where students had to match keywords with descriptions. Most of the other questions involved students creating diagrams or tables.

Moodle provides the following types of question format: Multiple choice, True/False, Short Answer, Numerical, Calculated, Matching, Description, Random Question, Random Short-Answer Matching and Embedded Answers (Cloze).

The Matching questions provided a direct method of implementing the matching questions that he was already using in the paper version of the test. However, it was not possible to create questions that would allow students to create diagrams (even from a limited selection of elements) on their own. Therefore questions were implemented as multiple choice questions, where the student was required to choose a diagram/table etc from a list of possible correct answers.

Although the tutor believed that some of the other types of questions offered by Moodle would be suitable for automatic marking for example: Numerical, Calculated and Short Answer, they did not lend themselves to the type of questions that had already been prepared for this course.

3.2.2 Outcome

The process of learning Moodle, converting the questions into multiple choice and putting the questions into Moodle probably took twice as long (eight days) as the marking would normally take (four days). However, the tutor believed that he could capitalise on the learning overhead by using Moodle for assessment in other courses.

At the time of writing, the tests have yet to be used, but further details will be given at the conference.

3.2.3 Concerns and Discussion

Moodle was not used for the delivery of the course and so the students were not familiar with the environment – they may have not even be able to log on! A practice test was created to be used as a dry run to try and eliminate any problems on the day of the test.

Are multiple choice questions a valid method of assessing students?

3.3 Limit Email Interruption

3.3.1 Activity

One tutor was already severely restricting the quantity of email access during the day, by keeping his email application (and notification) closed. Another tutor tried a similar approach by only checking email at natural interruptions to the working day e.g. before/after breaks and class contact.

3.3.2 Outcome

Although this has been shown to work for some, and hence its suggestion, the tutor who trailed this in this study was unable to get accustomed to limited email access - it seems that he has become too addicted to email and has contacts that expect a quicker response time.

3.3.3 Concerns and Discussion

This activity seems to suit some tutors more than others.

3.4 Group Assignments

3.4.1 Activity

Group assignments (for two or three students) were introduced into a course that had previously used individual assignments.

3.4.2 Outcome

The marking for this course was reduced dramatically, although due to the small number of students in the course, the absolute reduction in workload was not significant.

3.4.3 Concerns and Discussion

The tutor was aware of some of the possible problems that can occur with group assignments, e.g. a student being carried by the rest of the group. However, the tutor made it clear to the students that each of them would separately be required to explain a part (selected at random by the tutor) of the assignment. This seemed to have the desired effect of each student learning the material. Although the tutor may have been lucky

to not have major problems, he has been given confidence to implement group assignments in other courses delivered. The rise in popularity of Extreme Programming (Beck and Andres, 1999) which incorporates the idea of peer programming lends itself to using two person group assignments in this discipline.

A major concern is the quantity of group assignments that can be used and the quality of the experience for the students. Ford and Morice (2003) recently reported on a survey of students and academics that used group assignments. Issues raised included "timetabling and logistical problems…..inequality of contribution by different group members…..just over half said they preferred individual assignments".

4. ISSUES

Do some or all of these methods of saving time result in the lowering of standards? The use of multiple choice questions may well be a target of this question. Lister (2004) has argued that it is possible to create multiple choice questions that operate at the Comprehension level of Bloom's taxonomy (Bloom, 1956). Clegg and Cashin (1986) among others, suggest that it is possible to write multiple choice questions that assess at all levels of Bloom's taxonomy thus giving academic credence to assessing the course 'Program Development (PD500)' where students are required to show the ability to work at the Application level of Blooms taxonomy . Of course, it takes time, knowledge and effort to create such questions.

5 DISCUSSION AND CONCLUSIONS

The aim of this work was to reduce the time spent on some activities, and allow more time to be spent on activities that would contribute to achieving a state of 'Flow'. The first aim was to attempt to recoup the hour spent at the initial meeting. A number of activities were implemented, by a small number of the tutors. Most of the activities tried, did not succeed in saving a substantial amount of time but were overall considered to recoup at least the hour lost to the meeting. For many of the activities trialed, time was invested in 'overhead' and so although the time saved was not substantial in the first year, significantly more benefit is likely to be seen if the same courses are taught again.

Although not intended, the tutor who tried most of the time saving activities did increase their own level of job satisfaction. The activities that he tried, substituted some boring tasks such as marking, with more interesting skill building activities such as learning how to create multiple choice questions.

This study was based on the hypothesis that tutors were overworked and would welcome the opportunity to try ways and methods to reduce their workload. Although this seemed to be the case at the start of the study, turning the initial enthusiasm into actual practice turned out to be harder than expected.

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