

Developing journal writing skills in undergraduates: the need for journal workshops

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Abstract

In recent years, journal writing has become a popular tool for assessing student learning in Business Studies courses throughout UK universities. The writing-to-learn literature is full of the benefits of journal writing, not just as a means of assessing learning but as an essential part of the learning process itself. (Barclay, 1996; Borasi & Rose, 1989; Emig, 1987; Hogan, 1995; Holly 1987; Yinger & Clarke 1981, etc.). In the personal experience (as tutor) explored in this paper, however, journal writing failed to live up to expectations, both as a means of assessing the acquisition and application of subject specific knowledge, but also and more importantly, as a means of developing high level cognitive skills, such as reflection, analysis, critical thinking, evaluating, and hypothesising.

In this paper I explain why journal writing failed to develop high level skills amongst a group of first year undergraduates in 1996. I then evaluate the effectiveness of a journal writing workshop designed to address high level skills amongst two similar groups of students in 1997.

The authors

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Developing journal writing skills in undergraduates: the need for journal workshops

Introduction

I have been a tutor on a Systems Analysis module of various Business degree courses since 1994. There have been many improvements to the module over the years, including the introduction of a form of reflective journal writing as a means of assessing 60% of the course. I considered this to be a particularly positive innovation, firstly because it would provide the opportunity for students to gain credit for explaining their problem solving processes, rather than just for presenting the end product of this process, e.g. a correct answer. Second, I felt that it would help students develop other high level skills and, third, it would provide valuable insights into the learning experiences of the student and an opportunity for giving and receiving feedback. A review of the writing-to-learn literature convinced me that students and tutors would reap these and other benefits.

Benefits of journal writing

1. Experiential learning

Journal writing has been used for many years in a variety of academic and work based courses as a powerful tool for encouraging students to reflect on and make sense of their experiences. Indeed, Bruner *et al* (1966), Emig (1977) and Yinger *et al* (1981) maintained that writing is unique in that it requires the writer to use all three modes of learning, doing, modelling and symbolising, simultaneously. The writing process forces the writer to recall, reflect on and make sense of new information and experiences, the written product providing the basis for conceptualising, identifying improvements, modelling and planning for future application of ideas and theories. Thus the process and product of reflective writing act as catalysts in the experiential learning cycle (Kolb, 1984), a principle on which I base most of my teaching practice.

2. High level skills development

The writing process is also believed to stimulate the use of high level cognitive skills, associated with Marton and Saljo's (1984) notion of deep learning, such as analysing, reflecting, evaluating, hypothesising and synthesising. Luria *et al* (1971) explained how and why this occurs:

Written speech is bound up with the inhibition of immediate synpractical connections. It assumes a much slower, repeated mediating process of analysis and synthesis, which makes it possible not only to develop thought, but even to revert to its earlier stages, thus transforming the sequential chain of connections in a simultaneous, self-reviewing structure. Written speech thus represents a new and powerful instrument of thought.

Yinger *et al*, Borasi, *et al* and Hogan (1995) reported many examples of the success of this 'powerful instrument of thought' as a means of stimulating and developing problem-solving skills, critical awareness and evaluation amongst their own students in a variety of contexts. In addition, these advocates also identified the importance of journal writing as a vehicle for giving and receiving feedback.

3. Information and feedback

Student journals can provide valuable information about them as learners, their understanding of the subject, and the effectiveness of the teaching and learning strategies. By reading

journals at regular intervals during rather than at the end of a course, tutors can evaluate and give timely feedback on students' strengths, weaknesses and progress, diagnose and remedy errors and misconceptions, and generally get to know their students individually. They can also respond more rapidly to comments and suggestions students make regarding the structure, procedures and teaching of their courses and change or flex them accordingly. (Borasi et al. op cit. pp. 358-9).

Journals also provide opportunities for dialogue between student and tutor. Gopen and Smith (1990) make the point that the journal should become a source of regular interaction between students and their tutor. Indeed they emphasise that "the instructor's responses to the earliest attempts are crucial for achieving success" (p.5).

Powell and Ramnauth (1992) illustrated how this interaction or dialogue could be achieved using 'multiple entry logs', a specific form of reflective writing, noting, in particular, that:

Along with augmenting self-confidence in writing and thinking abilities, multiple entry logs establish a unique line of communication between students and instructor or tutor. From his first exchanges with Powell, Ramnauth sensed that Powell seriously considered his thoughts as expressed in his logs (Powell and Ramnauth,1992, p16).

And while Powell and Ramnauth found that the insights revealed through this exchange of ideas enabled Powell, the tutor, to:

..more accurately infer what feedback to provide to trigger the awareness of students and thereby help them to augment their mathematical knowledge. (Powell and Ramnauth,1992, p16),

this was not necessarily restricted to dialogue between tutor and student, but that other forms of interaction could be adopted.

However, though these occurred during office hour sessions, such discussions can be part of a classroom environment and, more specifically, can occur as students respond to each other's multiple entry logs . (Powell and Ramnauth,1992, p16).

The importance of feedback in the learning process cannot be underestimated. Recent studies into students' perceptions of good teaching have shown that 'helpful feedback' was mentioned more frequently than any other feature of good teaching (Ramsden, 1992, p. 99). Journal writing provides an opportunity for providing regular and timely feedback.

The writing-to-learn literature convinced me that the introduction of journal writing into the Systems Analysis module would result in significant improvement in students' performance and understanding. Furthermore, the use of journal writing as a form of summative assessment would mean that at last the exercise and development of high level skills would be rewarded.

The use of journal writing in the Systems Analysis module

The aim of the Systems Analysis module was to develop a range of basic skills and techniques used by practising analysts and consultants, for the development of business information systems. Students would gain an insight into the world of the systems analyst by carrying out a feasibility study and producing a requirements specification for a real organisation, thereby demonstrating understanding of various tools and techniques, such as data flow diagrams, critical path analysis, logical data structures, etc. This project would be assessed by oral presentation.

In addition, students were advised to keep a simple journal about their project and the tutorial/self study exercises throughout their study, to record questions, plan actions, make constructive comments, and reflect on what they had learnt. At the end of the module, students were required to summarise these journals and present them as a individual report for the second assignment.

Students were informed that for stating their contribution to the group project, they may be awarded up to 15% of the marks for Assignment 2, 15% for summarising what they had learnt about group and project management, and 50% for inserting their completed tutorial exercises. In addition, tutors could award another 20% for the 'quality' of the report and for analysing journals 'in appropriate ways' (IT1106 Module Guide, 1997, WBS p13). Additional assessment guidelines to students suggested that:

Descriptions in the report should be comprehensive but concise, and be simple and clearly worded, etc. The report should show analysis and insight. What you say should be supported by evidence. We are also looking for originality, perception and ideas.

An excellent report is one that shows insight and imagination, as well as careful and well supported analysis. In addition, it will be structured and presented so that it is a pleasure to read.

I was initially encouraged by this innovation and hoped that it would bring about an improvement in grades, as well as an increase in understanding, but it failed to live up to my expectations and the claims of the writing-to-learn movement. The reports did not demonstrate significant development of high level skills, such as analysis, neither was there evidence of perception, insight and originality. On further analysis and reflection, I conjectured that this lack of improvement was the result of two pedagogic weaknesses.

First, emphasis was placed on the acquisition of low level skills to the exclusion of high level and journal writing skills development. This emphasis is reflected in the assessment weightings, some 65% being awarded for a piece of descriptive writing and a set of answers, and only 35% for analysis, originality, perception, insight, evidence, imagination.

Second, no thought had been given to how the journals would be used in practice, i.e. to give and receive feedback, to diagnose errors, to expand ideas and interests, etc. Students would not benefit from timely formative feedback. The journal was simply used as a tool for summative assessment, providing only limited information, too late.

Testing the conjecture on pedagogic weaknesses

1. Emphasis on acquisition of knowledge and low level skills

A closer examination of the syllabus, the teaching and learning materials and the assessment guidelines, showed an emphasis on the acquisition of subject specific knowledge and low level skills, in which students were required to demonstrate competency, rather than understanding and application in the real world.

The syllabus indicated that nine of the available fourteen weeks of the module would be devoted to practising skills and techniques, while only two weeks would be set aside for project work. The remaining three weeks would be swallowed up by module administration and assessment. There were thus no tutorials to help students explore the subject, find meaning and reconstruct knowledge through their own writings, and, in any case, there was no recognition of or any need to do so.

I considered this an inappropriate allocation of time, given that many of the techniques covered are considered outdated in practice and superseded by computer modelling. Seely-Brown *et al* (1989) confirmed this view:

It is quite possible to acquire a tool but be unable to use it. Similarly, it is common for students to acquire algorithms, routines and de-contextualised definitions that they cannot use and that, therefore, lie inert....People who use tools actively rather than just acquire them, by contrast, build an increasingly rich implicit understanding of the world in which they use the tools and of the tools themselves. (p33)

The tutors' marking notes, produced at the end of the module, were further evidence that the product of these nine weeks of exercises was all that would be assessed. Evidence of thinking would not be required. The following extracts from the marking notes, illustrate this point:

This is an individual assignment BUT the tutorial tasks are group exercises. Students can submit IDENTICAL answers.... (IT1106 marking notes, 1997).

The notes continue with a list of what each answer should include, for example:

- b. Project Management
 - Students do not need to use INSTAPLAN. (It is optional – see page 20)
 - 1. Network diagram. Any approach is acceptable.
 - 2. Duration and float
 - 3. GANTT chart
 - See attached hand drawn answer.
 - All parts are needed. Students found this difficult. Give some marks for trying.
 - (IT1106 marking notes, 1997)

So long as the answer contained the above elements, marks would be awarded. No explanation of how the task was tackled was required of the students, and as students could submit identical answers, there was no way of knowing how, or indeed, whether, the student had contributed to the task, making the allocation of 'marks for trying' virtually impossible. Furthermore, I would argue that, due to the acknowledged difficulty of the task, there was even more need for students to explain their problem solving processes. Indeed, Borasi, et al (1989) recommended that:

While writing about their struggle with the course material, students can also become more aware of *how they do mathematics*....[original italics]. Possibly for the first time, they became aware of their own problem solving procedures and difficulties; with them reported on paper, the students could then reflect on their merits and shortcomings, and retain or change them accordingly (p.356).

This emphasis on knowledge and technical skills not only reduced the time available for high level skills development, it also limited the time available for coaching students on journal writing skills. The only formal piece of advice on journal writing was given in the module guide as follows:

It is useful to take notes during lectures, when reading, and during tutorials as a record.....A suitable way of doing this would be a simple "log book" with a line or two for each session (date, topic, questions/actions, comment)..(Module guide, 1997/8, p6).

Such limited information was contrary to the advice in the writing-to-learn literature. Lindeberg (1987), for example, recommended that:

Students need explicit instructions at the outset and monitoring and reinforcement along the way in order to make adjustment to working with a journal (p. 119).

Wayward (1982), supports this, setting out the following guidelines for incorporating journal writing into the curriculum:

Our experience has led us to the following general and pragmatic conclusions about implementing journals;

- (1) A clear understanding of what is intended by "keeping a journal" must be communicated to the students.
- (2) Class and homework time has to be given over to supporting the use of journals.
- (3) The journal must be seen to be valued as highly as more traditional aspects of mathematics learning: journals need to be assessed and reported on.
- (4) Ideally journals need to be introduced at the level of departmental policy. (p.40)

Analysis confirmed the conjecture that the emphasis on the acquisition of knowledge and low level technical skills reduced the opportunity for learning high level and journal writing skills. As a consequence, students took a surface approach to their learning (and journal writing) rather than a deep approach, normally associated with reflective writing programmes (Hogan, 1995; Powell *et al* 1992; Yinger *et al*, 1981).

2. Formative feedback

Scanning the scheme of work and session plans for evidence of time-tabled opportunities for giving and receiving feedback on student learning, yielded no formal review or monitoring sessions throughout the module.

Students were expected to write journal entries each week yet tutors would only see and comment on the summarised versions at the very end of the module. Students therefore received no regular feedback on their journal writing skills, nor comment on their understanding and application of the subject, again contrary to the literature. Ramsden (1992) would have considered this practice to be 'unprofessional teaching' and 'cheating the students'.

The absence of any formal arrangements for teaching or giving feedback on students' journals seemed to confirm my conjecture. I am convinced by the literature that journal writing can help develop high level skills and encourage deep learning, but that to achieve this, the journal writing process must be fully supported. Barclay (1996) concluded that:

...learning logs should not be given to learners and just 'left to get on with it.' It is a developmental technique which requires good support.... A system or network of support should be designed when introducing logs or other 'portfolio' approaches, and managers should recognise their key role in providing appropriate learning opportunities and in offering guidance and feedback to learners (p. 41).

The Study

Having confirmed both conjectures, I decided to adopt the principles of Action Research and construct a general plan consisting of a series of action steps. I hoped these would address the weaknesses I had uncovered in the current module, would encourage more effective use of journal writing and result in the development of high level skills.

Action Research presented itself as an appropriate methodology because it addressed my personal needs both as a researcher and a practitioner. My main objective for doing educational research is to understand how people learn, why they have difficulties and to search for ways to facilitate learning. As a practitioner I believe that my research should contribute to the quality of teaching and learning in my own institution and to the quality of life of individual students. Action Research addresses these needs in three ways. First, it aims to understand and improve a social situation through 'experiential' techniques. Second, it empowers the practitioner to make changes in situations that are important to her/himself, and, third, it requires the changes to be implemented and evaluated in the real world, rather than validated independently. (See Elliot, 1991).

For the same three reasons, Action Research also seemed appropriate for this particular study, but in addition, it allowed flexibility and choice of research strategies and methods. It was reassuring to have the flexibility to alter the research plan or change the focus of the research, in case of unforeseen events, or unexpected findings. I had planned to use both qualitative data in the form of the journals, interviews, questionnaires, my own post session evaluations and field notes, and quantitative data, such as comparison of grades, etc. Action Research accommodated this mix and match approach.

My general plan consisted of three main action steps, including the design and integration of journal writing workshops into the syllabus, thereby moving the emphasis away from knowledge and techniques. Feedback from tutors and peers would be a regular feature of the workshops, as would more formal guidance on aspects of journal writing, such as its purpose, how to structure and organise journals, deciding what to write, how to analyse and reflect on experiences, how to write more effectively, etc.

I intended to avoid imposing a set of rules on students, preferring instead to negotiate them. As recommended by Wayward (1982), I set aside time during workshops for students to write up part or all of their journals. I prepared handouts and slides to support these activities but, more importantly, made time for *their* questions and discussion of *their* ideas:

Helping students make progress in discussing: (original italics) At all levels oral work can be used as a precursor of written work. Use plenty of group work; get

students to speak to, and annotate, examples; require a written or spoken analysis of mistakes... In particular encourage students to play with formal language: stress the use of implication and set tasks that require definitions.....(Wayward, 1982 p. 40)

I planned to measure the effectiveness of the workshops by comparing the assignment grades from my two tutor groups, one of which I treated as an experimental group for whom I ran the extra journal writing workshops. I taught the control group according to the existing teaching and learning strategy with no additional assistance with their journals. I had intended to use the existing marking scheme to identify and grade the high level skills demonstrated by both groups but found this to be inadequate because of the emphasis placed on rewarding low level skills. Instead, I developed a new marking scheme which described and weighted high level skills elements within the existing marking scheme components. This "new" marking scheme would be applied to both groups' assignments and the grades awarded would indicate effectiveness of the workshops. I anticipated that the experimental group's grades would be higher overall because first, the workshops would develop previously neglected skills, and second, the marking scheme would reward these. The cross marking process would corroborate these data.

Towards the end of the module a short questionnaire given to both groups would find out whether they felt journal writing had been effective in deepening their understanding of the subject and in encouraging a deep approach to learning. Samples of the experimental group's journal entries and other writings would be collected to find out how effective they felt the feedback had been and to gain further insight into the student's perception of the workshops.

Additional detailed information about the methods, materials, the things that worked well and those that did not, group dynamics, etc. would be provided by my own post-session evaluations. From all of this information, I hoped to shed light on the particular strengths and weaknesses of the workshops in developing high level skills and deepening understanding.

Analysis and Discussion

Did the workshops help improve performance in the assessment?

I had expected the grades from the experimental group to be significantly higher than those for the control group, thereby indicating that the workshops had been successful. A comparison of the grades, however, did not substantiate this assumption. Students in the experimental group achieved a higher percentage of A and B grades than their peers in the control group and I attributed this difference in performance to the effect the workshops had on the experimental group. I could not, however, find an explanation for the higher percentage of E grades in the experimental group.

On reflection, I realised that my research design was flawed and that I had made a number of errors and inappropriate assumptions that rendered these results quite meaningless. For example, the overall grade had been used as an indicator of improvement in high level skills development and as a measure of the effectiveness of the workshops. This turned out to be too crude a measure from which to draw conclusions. Another mistake had been to expect that the experimental group would perform better overall than the control group, even though the workshops focused exclusively on high level and journal writing skills. Fortunately, the methods and marking scheme I had used allowed me to analyse the overall grade according to the marks awarded for each component and skills element of the assignment, thus providing some insight into the effectiveness of the workshops.

Did the workshops help develop high level skills?

A break down of the overall grade into marks awarded for the level of skill demonstrated produced more useful, yet surprising, results. I applied an alternative marking scheme to both groups' work, in order to distinguish and appropriately reward high and low level skills and I was not surprised to notice that the experimental group had demonstrated their ability to reflect more than the control group. I attributed this to the emphasis I had placed on reflection in the workshops. Neither was I surprised that the experimental group's descriptive skills were on a par with their peers, because I placed little emphasis on descriptive writing during workshops, considering it to be a relatively low level skill which both groups would have developed over many years. The results for 'Analysis' did surprise me, however. I had treated this skill with emphasis equal to that of reflection, yet the experimental group appeared to be weaker than the control group in this aspect. (See figure 1 below.)

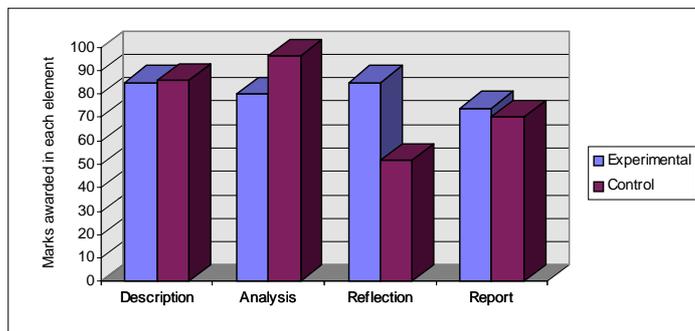


Figure 1. Comparison of the marks awarded in each skills element

At first sight this appeared to indicate that the workshops had had little impact on the development of this high level skill, and had possibly hindered development. A further breakdown of the marks awarded for 'Analysis' in each component of the marking scheme shed more light on this result. (See figure 2 below.)

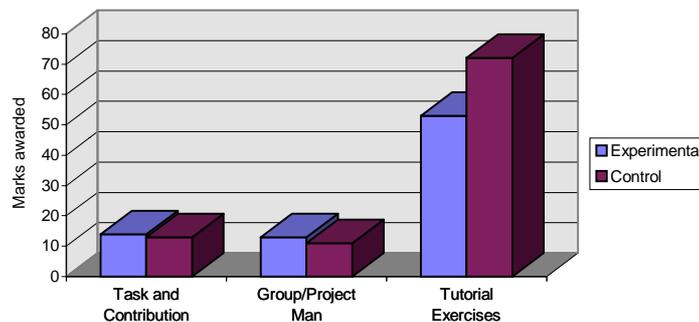


Figure 2. Analysis of marks awarded for 'Analysis' by marking scheme component

Figure 2 shows that the control group had been awarded higher marks for the 'Analysis' in the 'Tutorial Exercises' component, than either of the other two components. This can be explained by the fact that I switched from applying the alternative marking scheme, to applying the original marking scheme for the 'Analysis' element of control groups' assignments. This had been done because I realised, during marking, that the control group would be unfairly disadvantaged otherwise. The alternative marking scheme gave little credit for accuracy and completion of the tutorial exercises on which the control group had been encouraged to focus, the original marking scheme gave high marks for completion. This flaw in research design meant that the experimental group would be the only group to be assessed on their analysis of the processes used to tackle the tutorial exercises. This awkward but necessary measure, unfortunately, nullified the comparison between the development of analytical skills in this component between the two groups.

Comparing the marks awarded for 'Analysis' within the remaining components of the assignment, i.e. "Task and Contribution" and "Group and Project Management." it seemed that workshop sessions, designed to develop this skill, had little or no effect on the experimental group. To shed more light on this issue I referred back to my post session evaluation notes. These revealed a number of weaknesses and problems:

Reaction to this section was a bit mixed. I think some students knew instinctively what was good and poor analysis but were unable to explain why...There are 6-8 students who are very bright and want to debate and engage but many others shy away from discussion. The students are quite relaxed with each other now but some tensions are arising over the group assignment....

The materials I used are not brilliant. Some of the sentences are a bit too contrived and if I'd had more time I could have come up with better examples with each one making separate points...(C. Hockings, 1997)

I believe that the negative atmosphere within the group and my lack of attention to this, together with the use of weak, untested materials and my eagerness to press on regardless probably obstructed development of any high level skills during this session.

Overall my analysis of the performance on the assignment suggests that the workshops made little impact on students' descriptive and analytical skills, although the evidence presented in Figure 1 suggests that they were more effective in developing their ability to reflect. The flaws in my research design had, so far, prevented me from drawing any firm conclusions from these data, however my qualitative data provided more meaningful evidence.

Did the journal writing workshops deepen understanding?

I wanted to find out the students' opinions on how effective journal writing had been in deepening their understanding of the subject, and to see whether there was any difference in the perceptions of journal writing between the two groups. I asked both groups to complete a simple, open-ended questionnaire, and then looked for evidence in their journals to corroborate the questionnaire responses. I also referred to my own post-session evaluations as another means of triangulation.

What the questionnaires revealed

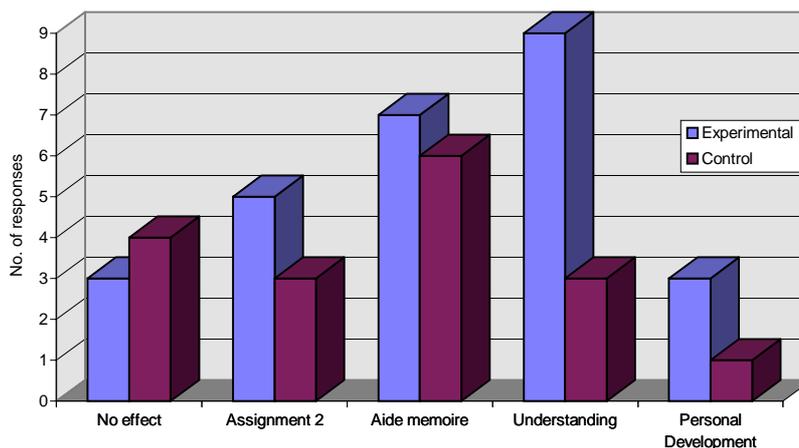
I wanted the students' evaluation of journal writing in particular because they had actually used this tool in practice and were uniquely qualified to judge its strengths and weaknesses. It would be reasonable to infer whether or not the workshops had made any impact on students'

perceptions of journal writing as a means of deepening understanding, from the differences in questionnaire responses between the groups, and in the differences in their journals.

From approximately 30 students in each group I received 18 questionnaire responses from the experimental group and 15 from the control group. The responses to the question "What effect did keeping a regular journal have on your understanding of the subject?" fell into five categories. Students who felt they derived no benefit from keeping a journal were grouped into the 'No Effect' category. The graph below shows that there was a minority in both groups who felt this way. The next group of responses that emerged related to students' use of journal writing as a means of preparing for Assignment 2, the individual report. Both groups expressed this as a specific reason for keeping a journal, although many said that the journal also helped them to remember what they had covered in class, hence the category 'Aide Memoir.'

I considered that students who had used their journals only in the ways described above would not have deepened their understanding of the subject, although they may have acquired and retained some of the subject matter. While both groups had used their journals in these ways to some extent, it can be seen from Figure 3 below that fewer control group students used their journals as a way of making sense of the subject matter and reconstructing it as their own knowledge. I interpreted comments, such as the one below, as evidence that students had felt that the journals had helped their 'Understanding.'

Although many students found journal writing time consuming and tedious, a few students indicated that they would be happy to continue writing journals and would refer to them in future studies. This demonstrated an awareness of the value of journal writing to their 'Personal Development' as well as showing a mature attitude to learning. The fact that more of the experimental group used their journals as a means of deepening understanding may be due to the fact that they were encouraged, through the journal writing workshops, to do so, whereas the control group were not. Finally, I would conjecture that students whose responses fell into these last two categories would have gained a deeper understanding of the subject than those who used the journal as a simple descriptive record of events.



(NB. Some responses fitted into more than one category and have therefore been counted more than once)

Figure 3 Did journal keeping deepen understanding?

What the journals revealed

Having analysed the questionnaire responses I turned my attention to the students' journals for additional evidence of the effectiveness of the journal writing for deepening understanding. The following extract describes how one student in the experimental group reflected on what and how he had learnt, and identified what was particularly significant about this learning experience:

The lecture and video seemed straightforward enough and I thought I had understood all I had read in the Participant's Pack but, I was confused when we came to the practical drawing of the critical path diagram. I had confused the 'earliest' start times with the 'latest' start times, which resulted in a wrong total time for the activity. However, through volunteering an incorrect answer and questioning the lecturer, I learned from my mistake and mastered the technique.

He later reflected:

Even with two examples, explained in the lesson, it is difficult to actually express what was absorbed in a given period of time. Often knowledge may only re-surface days after the initial acquisition, when I come across a situation where it is applicable.

By comparison, the control group example below lacks reflection and analysis.

3.2. What I have learnt about project management?

- Apply systems ideas to an organisation
- Explain the importance of information systems
- Carry out a preliminary analysis of an IS using a block diagram

I have learnt to draw:

- Block diagrams
- Information Flow Diagrams
- Gantt Charts

This student simply lists the contents of the syllabus without commenting on what was easy or difficult, what procedures were adopted, etc. There is no reflection, or analysis. Indeed, one could even infer from the mix of topics and techniques included under the heading of project management, that the student does not understand the difference between systems analysis and project management.

Apart from the journal writing workshops, both groups had been treated as identically as possible. The difference in the two pieces of writing above, and the questionnaire results, led me to conclude that the workshops must have had a positive effect on some students in the experimental group. However, there were some students within this group for whom journal writing had been a waste of time. Further research is needed to understand why this should be the case, although my initial conjecture is that these students would prefer to adopt a surface approach to learning, characterised by memorising facts, practising techniques, following set rules and procedures, etc. Deep learning techniques, such as journal writing, probably would seem unproductive, unnecessary, and simply means to an end. It is unlikely, I would argue, that these students would be ready to accept an alternative approach to learning, particularly as they would have enjoyed success over a number of years with more traditional methods, through the normal education and public examination systems.

Did the workshops provide opportunities for giving and receiving feedback?

Each week, throughout the module, I collected a few of the students' journal entries. The purpose was to give feedback on learning and to find out how students perceived the workshops. Students were also encouraged to evaluate and give feedback on each other's journals during and after the workshop sessions. This form of feedback was designed to encourage discussion of the subject amongst students in their own language. As it was not possible for me to give individual feedback to every student, every week, I had hoped that peer feedback would also provide an immediate and effective alternative. Unfortunately, my plans for giving and receiving feedback were not particularly effective, for a number of reasons.

a) Giving feedback to students

In spite of attempts to encourage students to submit journals to me, few students actually took this opportunity. Those that did fell into two categories: those who wanted to know if they were "on the right lines" and those who seemed to want to express their ideas and feelings. Few sought clarification on specific points, nor asked questions and although, in my written feedback I asked them questions, none of the students responded. Only one student commented on my feedback specifically, saying that it had "produced much thought." This was disappointing but I attributed this to the lack of individual, face-to-face contact I had with these students, compared to that of Powell and Ramnauth (1989), for example. For more dialogue, it seemed that there had to be more time.

As I was aware there would be limited time available for individual feedback, I had planned a number of whole group discussion sessions specifically designed to address common issues or questions arising from student journals. Again, I failed to get these sessions going for three reasons. First, I deliberately ignored some of the common problems, e.g. confusion over critical path diagramming, because I considered this would be unnecessary for students to master this 'long hand' technique, so long as the underlying principles were understood. In practice, this project planning tool is so efficiently and so accurately performed by computer that it seemed pointless to spend weeks mastering it. Second, a number of the normal tutorial sessions overran and students were not prepared to stay on to discuss what they perceived as someone else's problems. Third, some students were not prepared to reveal their difficulties, problems or misunderstandings in a whole group setting.

In spite of my failed attempts to make feedback more regular, timely and effective, some students still seemed to be quite satisfied at least with the level and quality of my feedback, as the following journal extract illustrates:

A good aspect of the sessions is that after nearly every task there is a feedback session. This helps to clarify and sometimes identify problems occurring. When there are times I don't understand, Chris is very approachable and never lets you leave without feeling that she knows you understand. (Student in experimental group)

b) Giving and receiving peer feedback

My attempts to encourage students to give written feedback on their journals to one another met with a lukewarm response. Students seemed to lack confidence in giving written feedback and recipients seemed not to pay much attention to it, preferring instead to seek "approval" from me. It seemed that students did not perceive peer feedback to be an effective alternative to tutor feedback, either because it was not critical feedback or because students

have been socialised through the traditional education system, that the teacher is always right and his/her feedback is all that matters.

c) Feedback on the subject, the course and the journal writing workshops

Although limited in number, I found the information revealed to me weekly very helpful. Because only the same few students regularly submitted journals, it was impossible to know the views of the majority, however, they provided me with information about aspects of the course enjoyed by some students, and also about the perceived weaknesses. The following extracts are examples of the journal entries that were particularly helpful:

No help on how to summarise which is a major part of the journal. Could have given more techniques on how best to summarise, because there was plenty of help with other areas but not on summary. (Student E1, Journal Entry, April, 1997)

The hardest part I found of the learning journal was summarising and the word limit was so short, it defeated really everything I learnt about reflection and analysis, as I could [not] put everything I learned. (Student E8 Journal Entry, April, 1997)

The continuous 'journal' approach for recording the weekly seminars, lectures, practical and group activities, is an ideal aid for this project. However, it then leads to an excess 'word count' that must be edited down to the required length. Knowing what information to retain and which to discard is a daunting task' (Student E7, Journal Entry, April, 1997)

It is obvious to me now, from reading these journals, that the major omission from the journal writing programme was the skill of summarising. Some students had raised this concern with me during the sessions and I can recall *telling* them how to go about searching for significant information from their journals and collating it into the report structure.

On reflection, however, I conclude that this was an inappropriate approach to this concern, and realise that I should have taken the opportunity to explore this using experiential methods. Students would have learnt more if they had, for example, used the session to cut sections from their journals, paste them into a draft report structure, and then rewrite the section of the report. I could have taken this session in one of the computer labs. and incorporated it into the session on effective writing. Peers could have evaluated each section and, as a whole group, we could have drawn out of this exercise the principles of good summary writing.

Another journal entry made me realise that there was still much confusion over the requirements of the assignment, in spite of my attempts to clarify these:

Assignment 2, based loosely around a journal format, is largely an unknown and unquantifiable variable within the course. I feel that the guidelines are far too lax, and would prefer them to be more stringent and detailed. This would allow me to fulfil the lecturer's required objectives, that the present journal format, be it allowing for 'creative genius or not, is more of a 'stab in the dark', as there are no specific requirements and more general details...(Student E9 Journal Entry, April, 1997)

Possibly, this student was confused by the different messages provided, on the one hand, by the module guide, and, on the other by me during the workshops. In any case this has been a valuable piece of information which came to light through the medium of the journal.

There were a few students who rarely submitted written journals, but who nevertheless gave verbal feedback on their perceptions of the course. The most significant of these occurred after the workshop session on Reflective Writing. Two students approached me to express how useful the sessions had been, particularly the "little exercises to help with the assignment." Their comments were particularly poignant because they had been reluctant students of the subject, who had changed their attitude and approach towards it because of their experiences in the classroom which they saw as positive.

This evaluation of the journal writing workshops has revealed a number of weaknesses which should be addressed in the next cycle of improvements. These can be summarised as:

- Little improvement in the overall analytical skills of the experimental group compared to the control group because:
 - a) group problems hindered learning during the session;
 - b) materials were not effective in establishing the principles of good analysis;
 - c) vague definition of 'good analysis' was probably confusing to students.
- Limited written dialogue between tutor and student.
- Lack of appropriate methods for developing summarising skills.

There are also several questions that require further research and development:

- What impeded some students from developing high level skills and deepening understanding?
- Why did some students depend on and/or prefer tutor rather than peer feedback?
- How can we achieve regular and effective individual dialogue between individual student and tutor in a mass higher education institution?

Implications and discussion

Becoming a social constructivist teacher

When I embarked on this project I was concerned about teaching methods, student learning, high level skills development. As a change agent I had to encourage others to adapt to new ways of teaching, learning and seeing things. What I failed to realise, until the implementation of the workshops, was that I, too, had to change. I had to be more flexible and sensitive to students' needs and be prepared to deviate from the planned session to deal with student problems arising from their journals. I did not encourage them to ask questions and discuss the subject because I was too concerned with the content, that is, getting them to develop journal writing skills.

My mistake was to rush through the material I had prepared for the workshops, taking a mechanistic, "how to" approach to writing journals during the workshops, imposing my own ideas rather than encouraging, supporting and facilitating experimentation and development of students' own ideas and questions. I realised that my concern for the workshop content had become more important to me than my original aim of helping students to learn. As an advocate of social constructivist approaches to teaching and learning, I am surprised how easily I abandoned my principles and reverted to the very behaviour I had tried to change in others.

I had inferred from the literature, that journal writing would be a fairly natural process, which once the principles were established, would reap many benefits for both student and tutor.

Through this experience, I discovered that the process of journal writing is much more complex than I had expected and that students (and tutors) need *time* to develop an understanding of what journal writing is.

Teaching and learning

A lot of the formal 'how to' explanation from the workshop programme can be removed to allow more time for students to develop their own journal writing skills. Teachers like myself need to adapt to less structured sessions in which students have greater control over their own learning. I shall monitor these sessions closely and use the regular feedback from student journals to evaluate this change of approach.

Journal writing

Since completing this project I consider myself more able to experience the journal writing process from the point of view of the student. By keeping my own journal, I have begun to appreciate the difficulties students encountered in writing about their experiences, in particular in the analysis of my experiences. I feel more empathy with students and therefore in a better position to facilitate when they need guidance on journal writing.

In conclusion, this project has been a useful first step towards understanding more about how journal writing can be used to develop high level skills and deepen understanding. The study has highlighted the importance of timely, regular and individual feedback on journals, and has revealed some areas for staff development, such as adopting a more flexible, student centred approach to journal writing development. The study raised a number of pedagogic and political questions, such as how can we support journal writing effectively in a mass higher education environment? It is hoped that these and other questions raised in the study will become the focus for future research and development.

In spite of my, somewhat, disappointing attempt at developing high level and journal writing skills amongst the experimental group, I remain convinced that, with appropriate time, support and feedback systems in place, journal writing is an ideal means for students to develop high level skills, deepen understanding, and a fair and effective medium through which they might demonstrate these.

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