

Engaging Students in the Learning Process: the learning journal

CHRIS PARK, Lancaster University, UK

ABSTRACT This paper explores the usefulness of the learning journal as a means of actively engaging students in the learning process, based on a case study of a third-year undergraduate geography course. After briefly reviewing the literature on journal writing in different contexts, the paper outlines the approach adopted in the new geography course, in which students were given guidelines on how to write a journal that would be assessed as part of the course. Extracts from students' journals for this course are used to illustrate how they approached the task, and how they viewed the experience. It is concluded that the learning journal has good potential to increase student interest in and engagement with course material, to encourage and empower students to take more responsibility for their own learning, to be more reflective in their study, and to allow them to have a voice and provide valuable feedback to the teacher.

KEYWORDS Learning journal, active learning, reflection, writing skills.

Introduction

Students who actively engage with what they are studying tend to understand more, learn more, remember more, enjoy it more and be more able to appreciate the relevance of what they have learned, than students who passively receive what we teach them. As teachers, therefore, we are presented with a huge challenge, which is how to encourage and enable our students to engage in the learning process.

Interest has grown in recent years in what is sometimes referred to as the Learning-Centred Paradigm (McManus, 2001), because it situates learners at the centre of the experience, empowers and motivates them to assume responsibility for their own learning, and adopts teaching and learning strategies designed to encourage students to see themselves as active thinkers and problem-solvers. As Clinchy (1995, p. 100) puts it, in conventional teaching–learning situations too often we pressure students to "defend their knowledge rather than exhibit their thinking". King (1995) argues that students need to learn how to think critically by continually questioning everything around them.

ISSN 0309-8265 print/ISSN 1466-1845 online/03/020183-17 © 2003 Taylor & Francis Ltd DOI: 10.1080/0309826032000107496

To him, "good thinkers are good questioners. Whatever they see, hear, read, or experience, they are constantly analysing it, puzzling over its significance, searching for explanations, and speculating about relations between that experience and what they already know" (King, 1995, p. 13). Most teachers would agree with Seeler *et al.* (1994, p. 8) that "educational strategies which take students out of the passive role and place them in an active, thinking mode should be used".

If the challenge is to encourage our students to actively engage in the learning process—and through that to develop their ideas, think more critically and become better equipped to solve problems—a key question is 'How do we do it?'. How do we invite our students into the process of learning, so that they assume responsibility for their own learning, and adopt a much more self-conscious approach to *how* they learn as well as *what* they learn?

Journal Writing

A journal is one type of writing assignment that requires the writer to think about something, and to record his/her thoughts about it. As Hedlund *et al.* (1989, p. 108) point out, "As a literary form, the *journal* falls roughly between the diary and the log: it consists of regular, though not necessarily daily, entries by which the writer focuses and reflects upon a given theme, or a series of events and experiences".

Different authors use different terms to describe what we are calling here a *learning journal* (Walden, 1988; Morrison, 1996). It is variously referred to as a personal journal (Stanesco, 1991; Dart *et al.*, 1998), a student journal (Hyers, 2001), a learning log (Stanesco, 1991), a topical autobiography (Hedlund et al., 1989), or just simply a journal (Hettich, 1976; Khan & Gee, 1999; Cantrell *et al.*, 2000; Connor-Greene, 2000).

Learning journals have been used with students of all ages and many types—including schoolchildren (Yinger, 1985; Cantrell *et al.*, 2000), undergraduates (Connor-Greene, 2000), trainee teachers (Strausbaugh, 1995; Dart *et al.*, 1998), higher degree students (Morrison, 1996), and amongst adults (Carroll, 1994) and teachers (Voss, 1988). They have been used in a number of subjects, including psychology (Hettich, 1976; Connor-Greene, 2000; Cantrell *et al.*, 2000), medicine (Khan & Gee, 1999), language (Carroll, 1994), and geology (Stanesco, 1991).

It is claimed that the learning journal offers many useful benefits to both the teacher and the learner. It has been welcomed as a learning tool (Yinger, 1985) and a tool to promote lifelong learning skills (Walden, 1988), and it is widely recognised as one way of communicating the importance of writing (Yinger, 1985) and of actively engaging students in learning (Connor-Greene, 2000). Amongst the claims, it is argued that a learning journal offers an autobiographical approach to learning (Hettich, 1976), a way of improving learning (Cantrell *et al.*, 2000), a way of improving knowledge and learning (Dart *et al.*, 1998), a way of developing reflective practice (Morrison, 1996), and a help to developing the course of one's own learning (Carroll, 1994).

Previous writers have emphasised the ways in which journals, by focusing on the process of learning rather than the product of learning, provide valuable educational benefits (Table I). Writing a learning journal makes students more aware not only of what they learn, but also how they learn (Voss, 1988). Dart et al. (1998) found that students' insights became more profound as their journals progressed, and the nature and quality of thinking and reflection, as well as their influence on practice, also developed.

TABLE I. Summary of the main benefits of using a learning journal.

Allowing students to make sense of their own personal histories (Hedlund et al., 1989)

Allowing students to assimilate and integrate new information (Hedlund et al., 1989)

Encouraging students to learn to think more about the knowledge they have or are acquiring (Hedlund et al., 1989)

Encouraging students to learn to use new knowledge (Hedlund et al., 1989)

Promoting long-term retention of course concepts (Croxton & Berger, 2001)

Increasing student test and exam grades (Connor-Greene, 2000; Hyers, 2001)

Stimulating critical thinking amongst students (Hettich, 1990)

Giving students opportunities to express themselves and develop effective means of self-expression (Hettich, 1990)

Helping to build trust between teacher and learner (Lohman & Schwalbe, 1996)

Providing formative evaluation for the teacher and thus help to identify the need to adjust teaching strategies (Lohman & Schwalbe, 1996); as Carroll (1994) puts it, "the data in the journals inform teachers about what is occurring in learners' heads"

Helping students to understand their own learning process and 'learn how to learn' (Lohman & Schwalbe, 1996)

Providing students with developmental feedback on their learning (Hettich, 1990)

Helping students' cognitive and affective development (Lohman & Schwalbe, 1996)

Helping students to improve their writing by focusing on processes rather than on products, emphasising expressive and personal aspects, and serving as a record of thought and expression that is available for rereading (Yinger, 1985)

Case Study

Intrigued by the claims made about the benefits of learning journals in enhancing student engagement and learning, I decided to adopt the learning journal in a new final-year undergraduate option course I was developing. None of the students taking my course had any previous experience of writing a learning journal, and I was interested in finding out how they found the experience, and in exploring whether or not they felt it helped their learning on this course.

A number of previous studies have explored the use of learning journals in geography degree schemes, including Sublett (1991), Cook (2000), Fouberg (2000), Haigh (2001) and Hyers (2001). This approach to learning builds upon and extends traditional uses of field notebooks in geography, which require students to reflect, synthesise and evaluate (Kent *et al.*, 1997). A recent example, in which UK students were required to keep a reflective field class diary every day during a trip to Los Angeles and Las Vegas, is described by May (1999). There is also untapped potential for using learning journals in the context of work-based learning (Clark & Whitelegg, 1998). With careful thought and provision of an appropriate framework and guidelines, learning journals could probably be used to great effect in most geography courses.

The course

My new option course—Approaches to Environmental Management—first ran in the autumn term of 2001–2002, with 88 students electing to take it. The course evaluates some current and emerging approaches within environmental management [1], in order to explore how different approaches ask different questions, focus on different themes, adopt different methodologies and seek different solutions to environmental problems. My two key objectives in this course—spelled out in the Learning Outcomes (Table II)—were to encourage students to actively engage with the information and concepts

TABLE II. Learning outcomes of the course.

On successful completion of this course students should have:

Knowledge and understanding of the main ingredients of contemporary approaches to environmental management

An appreciation of some important ways in which environmental issues are framed and discussed, based on different presuppositions, perspectives and values

An ability to think critically about different ways of framing environmental issues, and to relate this to contemporary events and to media coverage of environmental issues

An ability to compare and contrast different approaches to environmental management in an informed and reflective way

Experience of reflecting on their own learning experiences through the course.

rather than being passive recipients of it, and to reflect on their own learning experiences (in effect, to learn more about how they learn). This made a journal approach particularly suitable. The content of the course—examination of different approaches, perspectives and ideologies—also made a reflective approach appropriate.

The teaching/learning strategy adopted for the course is based on lectures as the key mode of delivery, and a structured reading list. Lectures were prepared and delivered using PowerPoint presentations, and a dedicated website was constructed to support the course [2].

Assessment

The assessment strategy for the course was tailored to the learning outcomes, and driven by the two key objectives. I particularly wanted students to study material from throughout the course, rather than concentrate on reading material only for assessment. I also wanted them to keep a record of their reactions to, reflections on and understanding of the material they were being exposed to in lectures and through reading (print and online sources). This meant that a traditional end-of-course unseen exam would not be appropriate, and assessment was based on an extended essay (worth 50%) and the learning journal (50%). Both assignments were to be submitted 4 weeks after the end of the course (after the Christmas vacation) to give students time to complete the reading and writing tasks; they had been working on dissertations until just before Christmas.

The learning journal was assessed mainly because it is highly likely that students would simply not have committed that amount of time and energy to the project without such an incentive. Students were given guidelines about the standard departmental grade point descriptors (Table III) that would be used to inform marks given. They were also notified in advance what criteria would be used in evaluating the journals (presentation, format and language, content, reflections, reading and use of literature, bibliography and overall quality). Table IV shows an example of the written feedback given to students using these criteria.

Guidelines for the Learning Journal

At the start of the course, students were told (verbally in the first lecture, in the course handbook, and on the course website) that they were expected to keep a journal of their learning experiences through this course (up to 10 000 words). The journal was to have entries written weekly, and to include reflections on each of the lectures, some

TABLE III. Grade point descriptors—essay and jearning journal.

Mark (%)	Comment
80–100	An <i>outstanding</i> essay/learning journal, excellent in every respect: showing extensive knowledge and understanding and an outstanding ability to analyse, synthesise and evaluate evidence of very extensive reading and study beyond the course content well presented in a very well-organised manner
	exhibits a high level of insight, marked originality as good an answer, or even better, than the course tutor could produce
70–79	An <i>excellent</i> essay/learning journal in most respects: evidence of extensive knowledge and understanding and very good high-level cognitive skills evidence of substantial reading and study beyond the course content well organised, sharply focused and well balanced contains good insights and possibly originality
	comprehensive grasp of course material, breadth and depth of outside reading consideration of almost all the salient points
60–69	very good ability to analyse, synthesise and evaluate the relevant material A <i>good</i> essay/learning journal: well argued
	evidence of wide reading, good knowledge and understanding of relevant course material covers most of the relevant points in satisfactory depth well focused on the question well-structured arguments
50–59	lacks the originality and insights of a first-class answer An <i>adequate</i> essay/learning journal: shows reasonable knowledge and understanding of course content little or no evidence of outside reading beyond basic recommended sources may contain some errors or omissions only about half the relevant points are covered
40–49	may not focus directly on the question weak use of examples possibly weak organization too A deficient or weak essay/learning journal: shows limited knowledge and understanding of the topic may contain errors and omissions
35–39	attempts to answer the question but misses important points poor use of examples and poor organization may lack focus, be poorly written, short or incomplete shows very little evidence of background reading A pass degree standard answer: lacks substance and understanding extensive omissions and errors
25–34	may seriously misinterpret or avoid the topic set possibly also poorly organised and presented A very poor, inadequate, possibly very short essay/learning journal with little material of
1–24	relevance to the topic and possibly also serious errors and omissions An exceptionally poor and totally inadequate answer with very little or almost no relevant
0	material A mark of zero would normally be reserved for non-submission

commentary on and critique of at least two articles they read each week (one per lecture), and reflections on how their understanding of the subject of the course changed through taking the course. Students were also given guidelines about what the learning journal should include and how they might set about writing it [3]. They were expected

TABLE IV. Example of feedback on the learning journal provided to students.

Presentation	Neatly word-processed, logically structured, clearly presented		
Format & language	Clearly written, good grammar and spelling		
Content	Appropriate blend of description and reflection; sound length and detail; each lecture covered; balanced treatment of material; useful comments on how you found the course overall		
Reflections	Interesting and appropriate reflections on how you dealt with the various topics in the course; helpful 'confessions' where you found material difficult to understand; useful tying together of reading and lecture material		
Reading and use of literature	Evidence of regular reading of appropriate material, and of useful reflections on it and its relevance		
Bibliography	Useful details of material read—as a full bibliography or for individual lectures; material is given in the proper format, and is complete		
Overall	You have succeeded in producing an informative and appropriate learning journal, which clearly shows how you engaged with the material from the course (including the regular sessions of reading). Looks like you gained a great deal from the exercise.		

to write journal entries after each lecture or at least each week, in a style and format of their choice, and the journals would not be looked at or collected in before the end of the course.

Extracts quoted below are from learning journal entries produced by the students during 2001–2002, the first year this course ran. Quotations from individual learning journals illustrate the many different ways in which completing this task helped the students to assume more responsibility for their own learning, and to engage more actively with the material covered in the course. The quotations given below are representative of the range of students' view for and against the learning journal, and students speak in their own voices.

How the Students Approached the Task

Although they were provided with guidelines, students were deliberately given considerable freedom in deciding how they would go about writing their learning journal, with discretion over issues such as precise content and format, style and approach.

Most wrote their journal entry within a day or two of the lecture, and soon after carrying out the associated reading—the difficulties of faithfully recollecting their thoughts, feelings and reflections well after the event had been stressed to them at the very beginning of the course.

A typical length of entry was about one A4 page, single-space word-processed, but length varied both from student to student, and from entry to entry within a particular journal (they were encouraged to experiment with different formats, foci and levels of detail). Most students produced journals within the 10 000-word guideline; one epic ran to 12 800 words. There was no obvious correlation between length and quality, though the more reflective entries tended to be longer than the merely descriptive ones.

Structure

No template structure was suggested for the journals, and students made their own decisions within the guidelines given. A few started their journal with some overarching

introductory comments, often expressing anxiety about the difficult task ahead, and uncertainty about their ability to carry it out properly. One typical such entry from Student A announces, somewhat wistfully, "This is the first time I have ever been requested to write a learning journal. My initial reaction was one of curiosity, as although I have written many essays using a critical approach, I have seldom had the opportunity to write in such a subjective manner." Those students who wrote an introductory statement usually closed their learning journal with some reflections on the process.

Within each individual journal entry the structure adopted varied a great deal from student to student. This made it more interesting for me to read all 88 learning journals, but—more importantly—it also allowed the students to make their own decisions about what was important, how to express it and how to package the whole product. They got credit for doing that, in the marking scheme (see Table III).

Some students adopted an integrated approach, writing seamlessly about the lecture material and what they had read; others structured each entry into lecture material, comments on what they had read, and overall reflection for that theme. A framework favoured by a number of students was to summarise the main points of the lecture (sometimes as a series of bullet points), followed by some reflections on the particular reading done on that theme (most looked at 1–2 articles per lecture topic), closing with a brief reflection on the theme (lecture and reading together).

Content

As with structure, students were given great freedom in their choice of what content they thought most appropriate. Common ingredients in many students' entries on particular lectures/themes were what they found interesting (or not) about it, what was new within it (and where it built upon previous learning/courses/reading), what thoughts it triggered in their minds both at the time (during the lecture) and subsequently (after the lecture, after thinking about the lecture material in the light of the reading they had done that week), and things that surprised them about it (such as an unusual model, example or approach).

Many students included quotations and extracts from what they had read, to illustrate the focus of their journal entry but also as proof that they had actually read the material! It was not uncommon to read entries that explained why the student had chosen particular items to read. Some journals included an overall comprehensive bibliography at the end, and most included references in the text (sometimes as footnotes, but more often as a reference list at the end of each theme/entry).

Students were encouraged to identify where they disagree with writers of work they have read, and to defend how and why they disagree. Many found this difficult to do, and many avoided trying to do it. But for those who did, it allowed them to weave interesting narratives through their reflections on lecture and reading materials. The most interesting (to me) and useful (to them) entries tended to be those in which the student was able to step back from the immediate details of the course and adopt a broad perspective on the theme, without feeling constrained by a particular disciplinary viewpoint or agenda.

One of the most useful ingredients of many journals, to both the writer (student) and the reader (teacher), was feedback on the lectures. Students were instructed not to simply summarise the lecture, but rather to record their reactions to it: what was interesting; what was new; how it built on other courses; how well they understood the material;

what thoughts it prompted in their minds. I found this feedback extremely useful, because it illustrates the range of students' views of lectures. It also revealed, sometimes in quite uncomfortable ways, the differences between what I thought I was pointing them towards and what they thought they were seeing! Amongst other things, this gave me very useful detailed feedback on which lectures had generally been clearly understood and which ones need revising and clarifying (recall that this was an entirely new course, running for the first time).

An unexpected but often revealing ingredient of many journals was what we might call 'confessional' material: students revealing things about themselves and they ways they learn/study which would otherwise remain hidden. In this sense writing the learning journal offered scope for catharsis, by voicing fears and then moving on past them. One of the more plaintive entries of this type was from Student B, who confessed, "At this stage I worry about how I will cope in terms of understanding some of the subject-specific vocabulary because I have found this to be a problem in the past. (I was never good with 'big' words. The concepts can be difficult enough without expressing them in a language that cannot easily be understood.)"

Style

Like structure and content, style varied a great deal from journal to journal. Almost all students wrote their entries in the active voice—they were strongly encouraged to do so and most did. They were also encouraged to vary the format as appropriate, and not to feel compelled to maintain one style or approach through the entire learning journal. Some got to halfway through the course, looked back on their earlier learning journal entries, and realised that they had changed form/format through time. These tended to be the more interesting journals, because they preserved evidence of active engagement with the course material, growing self-awareness of changing views and understandings and greater sensitivity to the benefits of keeping the journal.

Honesty was one of the more surprising dimensions of many entries, because many students took the opportunity to be absolutely truthful and 'tell it as it is'. Sometimes this honesty was directed at themselves. Student C, for example, recalled how "At nine o'clock in the morning, it's hard enough concentrating on eating your breakfast let alone concentrating in a lecture with a hangover ... after a particularly big night out with the darts team Still I made a promise to myself that I would be attending all my lectures this year and that was what I was doing." At other times the honesty was directed at me, the teacher. Student D, for example, expressed concern about the "First lecture, oh my word, a lot of reading to do and a lot of learning to do".

Learning Journey

The learning journal is much more than just a log of what was being covered in the course, because producing it is a learning experience in itself. As one student (E) thoughtfully suggested, it is "a learning journey more than a learning journal". Like much of life, it is about the journey perhaps as much as the destination—the very act of writing the journal is much more important (certainly to the writer) than the finished product. Some of the more interesting journals made a virtue out of this, by documenting how the student's thoughts and understandings changed through time.

Students were encouraged to review their learning journal halfway through the term, to look back through what they had written, reflect on it and perhaps jot down some

reactions to it all. Student F records, in a mid-term reflection on her journal, "So far, writing the learning journal has been a learning process in itself The first few entries are very random; I had trouble using the library and finding readings each lecture, therefore I would read whatever I could find I have struggled with writing the responses after lectures and readings." Four weeks later, the same student could write "I feel now that my learning journal will become more organised and hopefully I will be able to grasp more information now that I can see how things are organised. I only wish I had realised this earlier. I almost feel that I should redo the journal because it is all so jumbled and random, but I guess that would go against what the journal is trying to show, a progression of ideas and knowledge."

Students were invited to revisit but not revise earlier entries. They were specifically discouraged from rewriting material afterwards, just as they might revise a draft essay, because they would then lose the sense of immediacy, the time-specific nature of their reflections and the sense of an unfolding story or emerging awareness. The discontinuities, sudden changes in direction, emphasis or viewpoint, the unanswered questions and the reminders to self to look something up or check something out are all key landmarks on this journey of discovery and exploration. The learning journal is not meant to be a seamless and perfectly structured piece of writing, rather it is meant to capture thoughts, feelings and impressions as they emerge. The most interesting ones displayed interesting evidence of these processes at work.

Students' Views and Reflections

The journals themselves provide a rich source of information on how students approached the task of writing the journals, what they thought were the good and bad points of the exercise and how useful they found it. The following narrative is a collage of many different journal entries, designed to throw some light on the positive and negative aspects of the student experience.

Initial Prospect

Most students found the idea of having to write a learning journal, and keep it up to date throughout the 10-week course, very daunting. They had no previous experience of journal writing, and many were initially very unsure what it was or how to set about writing one. However, most quickly developed their own way of doing it, often very successfully.

Initial discomfort was voiced in a number of ways. Sometimes it reflected uncertainty about what was required—Student G, for example, noted at the start of her learning journal "I'm still confused as to what a learning journal is". Sometimes the concern centred on whether or not they would be able to stick with the task. Student D reported "To be completely honest, the thought of keeping an academic journal for the next ten weeks or so is very daunting I expect to stick to the learning journal for the first few weeks and then to find myself working overtime to catch up and hand it in before the deadline."

In most cases, this initial apprehension gave way to a more positive perspective, as the early experience proved not as intimidating as originally envisaged, and more useful than they thought it would be. After the first week of the course, for example, Student I wrote

"I can already see that through writing notes on how my understanding changes through this course will be useful, just between the first two lectures and reading. This journal will act as a means of consolidation of learning, tying together themes from lectures and raised by the readings." Student B goes even further: "Some [difficulties] remain but others have been clarified through the process of writing this learning journal. Whilst I had major reservations about the usefulness of the process at the outset, some of these have since been dispelled. The process has provided me with an incentive to widen my reading in an attempt to formulate opinion and strengthen my understanding."

Positive Aspects

Unsolicited, students offered a range of reasons why they thought the learning journal was offering them a very positive experience. The most common were:

- Ownership: One key benefit was ownership of the learning process, because the task of writing the journal required them to take responsibility for their own learning. Student I, for example, recognised that "The skill of taking my learning into my own hands has been valuable and has improved my ability to not only understand, but also be critical of the course material."
- Awareness of learning: Ownership, and the responsibility that comes with it, in turn helped the students to be more self-aware of how they learn (as well as what they learn). Having to be reflective in their journal entries encouraged students to think more carefully than perhaps they normally would about how they study, and how that affects their learning. Some of these revelations were quite negative—Student J, for example, confesses "Either I was asleep in Monday's lecture or I really made a mess of taking notes." Others were more positive; Student D records how "Something that I noticed was how my opinion of a journal article can reflect the mood that I was in." Student K could write, simply but informatively, "I think I have learnt more through writing this journal than I would otherwise have done."
- Self-confidence: some students reported a growth in their self-confidence, as they realised that they were capable of embracing this new learning tool. Student B, for example, noted how "Even at this stage [halfway through the journal] I am still not convinced that I have produced what has been expected of me, but ... [I] have gained in confidence in terms of being more critical of research and approaches used." More expansively, Student M records how writing the journal was "a real test of exploring what one has learnt or wishes to learn ... [because they] actually had to write what they learnt and at times this process could be a confidence boost, knowing that you have come out of the lecture and you have for sure learnt something new or furthered your knowledge on a topic that one had basic knowledge of [previously]."
- Regular reading: The journal required students to read much more regularly than they normally would, and across the whole range of material covered in the course rather than just for a specific essay. Some students regarded this as a downside, a few welcomed it, and most simply got on with it! Student J, for example, notes how "I promised myself I would keep my learning journal up to date so I persuaded myself to dig into the literature and get reading." Some surprised themselves with their reading. A good example is Student N, who noted "I think I can safely say I have never read around one particular subject so in-depth. The result of this is a much wider

appreciation of the implications of environmental management and the contemporary issues surrounding it." The views of Student H, who wrote "This [doing more background reading for each lecture] not only improved my knowledge but also proved useful for my essay" and Student O, who felt that "Extra reading helped me make better sense of lecture material and put the material into real-life situations", were typical of many.

- Focus on the whole course: By undertaking more (and more regular) reading, by having to write down their reflections on the lecture material and on what they had read, and by having to prepare for an essay which required them to review the whole range of material covered in the course, students had many more reasons than normal to focus on the whole course, rather than just focus on selected parts of it. Student K reported that "through writing the journal it has meant that I have been revising as I have gone through the term. It has meant that I have a better understanding of the course as a whole, than a specific area of it, which an essay would ensure." Student P noted how "If the object of the learning journal is to force students to look more carefully at the course material, it has succeeded, at least with me." Focusing on the whole course also encouraged students to pull threads together and construct their own synthesis of the course material. Student H, for example, noted how "the learning journal made me reflect on the lectures and link ideas together from past lectures."
- Engagement with the material: Doubtless one of the key benefits of the journal approach is the way it encouraged students to engage with the material covered in the course. They were encouraged—indeed, empowered—to think about the material in an active way, rather than just receive it in a passive way, and they were rewarded for doing so if that was reflected in an informative journal. Many journal entries recognised the value of engagement, and recognised that it was happening; some illustrative examples will suffice. Student Q noted how "The idea of the learning journal prompted me to engage more fully with the topics, rather than simply learning in rote, in preparation for examinations. The course made me engage [with] and think about issues in a way that no other courses have done." Student U recorded how "as each week has passed I have found myself examining my viewpoint and telling myself 'I never thought of it that way before". Student R offers an honest insight as to how "Over the last ten weeks this learning journal has been surprisingly useful to me as it made me think about what I am learning. Often I go to the lectures and learn the material, but having to produce the journal I thought about what I was learning and created opinions of my own, which I hope have been illustrated in my entries."
- Reflectivity: an important cause and consequence of engagement with the course material is a much more reflective attitude by many of the students. This reflectivity was apparent in the journal entries in two senses—many were more critically reflective of the work of others whose work they had heard or read about, and many (often the same ones) were more self-aware of their own understanding and how it has changed through time in the course. Illustrative of the first sense is the comment by Student E that "I certainly do not take things at face value as much as I did in the past and am able, when reading the work of others, to not simply accept what they say but to examine their motivations and the language that they use." Student H illustrates the second sense: "It is interesting to read back through my learning journal as to how my knowledge has not only expanded but also changed throughout the course."

Negative Aspects

Alongside these positive comments, students noted a number of negative aspects of the learning journal experience. The most common were:

- Difficulty of the task: a recurrent theme in many journal entries was difficulty, which reflected a range of factors. The task required focus and commitment in attending the lectures and carrying out regular reading each week (especially during the term in which they were completing dissertations), and some students voiced concern over whether they could sustain the effort over the whole length of the course. This is true of Student L, for example, who commented "This course has been a challenging one I found it hard to read all that I did, but I am pleased that I have done and am proud of my work." Student M reported how "It was a challenge to discipline vourself to keep the journal up to date, but I think it was just a matter of getting into routine". Some students found it difficult to express their thoughts and ideas clearly. because writing in their own voice about themselves was a new and at times uncomfortable experience. Student S clearly struggled with this: "I found the whole process very hard, it has been difficult to get down on paper all of the ideas and thoughts that I had in a clean manner. At times the ideas have not been generated and the learning journal became a real problem to write." Another source of difficulty was the expectation that the students would be willing and able to adopt a critical approach in their journal. The views of Student O—"I have found it hard to be critical, but I tried my best to illustrate my feelings on topics and learn some of the critiques of paradigms"—are perhaps more widely shared than came through in many of the journals.
- Constraints: a small number of students felt that the word limit defined for the learning journal created a straitjacket for their task, which constrained what they could try to do. Student F noted "I think that this learning journal could have been double the size and maybe would have been easier to do ..." and Student A confessed that "the length of my learning journal is well over the recommended 10 000 words, but I felt that it would be pointless to restrict my feelings to any particular length". Some students also felt that time was a serious constraint, in two ways—the time it took students to carry out the reading and write the journal entries each week, and shortage of time to reflect on the material and the readings before they were expected to write commentaries on it and give reactions to it.
- *Uncertainty*: many students expressed uncertainty over whether their journals had been properly done and met the requirements. Student T recorded how "Even after finishing the learning journal I am not sure if what I have written is what is needed ...", and Student A emphasised how "Looking back, there are aspects that I could have improved in the journal, but I decided that it was better to leave the entries alone rather than go back through and start making changes".
- Assessment: Some students were concerned that the learning journal is formally assessed, and one or two even commented that they would have preferred a formal unseen exam at the end of the course. No doubt when the exam season arrived they had a somewhat different view! A few students expressed a preference for a more traditional, more sharply focused form of assessment, such as a defined essay title, rather than an assessment strategy that made them work with material from across the module, in a format that was unfamiliar to them. This concern was clearly expressed by Student C: "When starting this course and being told about the learning journal that would have to be completed as part of the coursework, it seemed at first a very

daunting task. Having no original perception of what a learning journal was and what it would entail, the prospect of it contributing to half of the mark for the coursework was very scary."

Overall Student View

Writing a learning journal was a new experience for all students on the course. Some found the exercise difficult and challenging, and a few quite simply hated it and tolerated having to do it. Typical responses were "I found the whole process ... very difficult" (Student T), and "quite an arduous task" (Student U).

Some emerged with mixed views. For example, at the end of her learning journal, Student C wrote: "I think this form of learning through a journal has allowed my thoughts and emotions to fully formulate, and although I have found it challenging, boring, tedious and painful at times, I can now see the merit that it holds." Student V notes how "At first I was sceptical about the idea of a learning journal, but looking back on the entries it is quite satisfying to see how ideas have developed and how my learning has progressed".

Most students recorded that they felt that this was a useful thing to do, valuable to them in a number of important ways. Typical reflective comments include "a most beneficial exercise" (Student N), "a worthwhile exercise" (Student W), "rewarding, and at times quite enjoyable to do ... an effective tool for learning" (Student F), "a good experience" (Student M), "a revolutionary approach to an interesting subject" (Student A).

The tone of most students' reflections on their experience of completing the learning journal was typically much more positive than negative, but one should bear in mind that their learning journals were not anonymous and this may well have compromised what they wrote about the experience. After the course was completed, and the learning journals had been marked and returned, all students were sent an email asking for feedback on the learning journal as a learning tool, and the replies were even more positive—but, again, not anonymous. A third means of examining students' perceptions of the learning journal was afforded in the annual course review questionnaire that we routinely distribute to all students at the end of each course. This is anonymous, and it allows students to make comments about anything in the course they would like to. Very few commented on the learning journal *per se*, but those who did tended to highlight more positive than negative dimensions of the experience (Table V).

TABLE V. List of comments that students made about the learning journal in the annual course review.

[&]quot;should be organised so that you don't need to comment on each lecture, rather just do reading and do one entry per class/reading (making it not so repetitive)"

[&]quot;not much info on how to write it, or how it will be assessed; makes you read"

[&]quot;the journal is a great idea"

[&]quot;the learning journal made me think"

[&]quot;the learning journal is good but is worth too much"

[&]quot;the learning journal is a good idea but needs refining and I'm not sure it should be worth 50%"

[&]quot;learning journal is OK"

[&]quot;learning journal is a quality idea, but perhaps it is not as easily understood as it could be"

[&]quot;learning journal v v good at learning. Don't know others' views, but I think it is v. good"

[&]quot;Did actually mean I did the extra reading to write journal; improved my understanding a lot"

Discussion

The evidence from this brief case study supports claims that learning journals help to engage students in the learning process, make them more self-aware of how they learn as well as what they learn and enhance the overall learning experience for them. Not all students viewed the experience in a totally positive light, because as Lohman and Schwalbe (1996) point out some students do not want to reflect on their learning experiences, it is unnatural or forces them to 'think too much' or in a different way.

It does seem that the learning journal approach does encourage independent thinking by the students, and it also encourages them to take responsibility for their learning. In this way, it makes them more autonomous and more active learners. The key issue is active engagement.

From a staff perspective, the learning journal provides invaluable feedback on how students coped with different parts of the course. More importantly, it provides extremely useful insights into how students study, how they handle this type of material and what they think of it, how their understanding changes through the course, and how they take responsibility for their own learning. The downside, of course, is the extra workload required to read, mark and provide written feedback on 88 long learning journals as opposed to the same number of much shorter exam scripts [4]. Some of the additional marking time is compensated by the more interesting task, the useful feedback and the reward of discovering the students' engagement with the course—but those considering adopting a learning journal in their course must not overlook the time commitment.

I concluded that the use of the learning journal in this course has been a successful innovation, and one to build on in the future. Keen to further develop the usefulness of the learning journal as a learning tool for students, I plan to introduce several changes in the course for the coming year. The course is being moved into the second term, to give students more time (after dissertations have been completed and submitted) to do the required reading and reflection, and more time in which to write their journals on a regular basis. I intend also to revise the grade point descriptors (see Table III) and the marking criteria for the learning journal (see Table IV), to clarify precisely what dimensions of the task are most important and to give students clearer guidance and more detailed feedback. The class is too large, and my teaching time too constrained, to allow traditional in-course tutorials or seminars in which the students' experiences of writing the learning journal can be explored and discussed, but I plan to provide a more interactive framework for students by introducing Virtual Learning Sets-run by students for students, using a course online chat-room. The large class size and time constraints also make it difficult for me to collect in the students' learning journals early in the course, read them and provide formative feedback, but I hope that the Virtual Learning Sets will provide opportunities for students to set up self-help groups and share experiences together. I also plan to require (not just advise) students to review their learning journal halfway through term, and to provide written reflections on their approach and experience, in order to encourage them to think more clearly about the process of learning, not simply the topic they are studying. One reviewer suggested that it would be useful for students to compile an index of their learning journals, to facilitate ease of cross-referencing and navigation through the documents, and I will build this into the requirements for the coming year.

Perhaps one of the most positive aspects of the learning journal is the comment by some students that they found the experience so useful that they intend to adopt the

journal approach voluntarily in their future courses (even without the incentive of gaining marks for work done). Student N showed more enthusiasm than most, in writing "I feel it is a most beneficial exercise, one I feel which will continue to work in the future, especially with regard to triggering further reading and thinking about it". A more reserved Student K volunteered "Although I can still see a place for essays as they are more specific and focus in depth on a subject, I would not mind doing a journal for other modules"

Acknowledgements

The author is grateful to Clive Agnew and two anonymous reviewers whose useful suggestions have greatly helped to sharpen the focus, enhance the clarity and increase the usefulness of this paper.

Correspondence: Dr Chris Park, Department of Geography, Lancaster University, Lancaster LA1 4HN, UK. Email: c.park@Lancaster.ac.uk

NOTES

- [1] The four approaches explored in the course are the Environmental Risk Paradigm, the Ecosystem Management Paradigm, the Sustainable Development Paradigm, and Social Construction of Nature. This course is an elective for senior-level undergraduates.
- [2] The course web site is at: http://www.lancs.ac.uk/staff/gyaccp/374/default.htm. The course website contains online versions of the PowerPoint lectures (to allow students to revisit the material any time they like), downloadable text versions of the lectures (so that they can print out lecture-notes in advance of the lectures, and annotate them and listen more carefully to what is said in the lectures), hyper-links to online readings and sources of appropriate material, and related learning resources.
- [3] Full details of the Learning Journal are available at available at: http://www.lancs.ac.uk/staff/gyaccp/374/learning%20journal.htm
- [4] A rough estimate is that marking the learning journals took between four and five times the time it would have taken to mark the equivalent number of exam scripts, but that differential will vary from person to person.

REFERENCES

ANGELO, T.A. (1995) Classroom assessment for critical thinking, *Teaching of Psychology*, 22, pp. 6–7. BONWELL, C.G. & EISON, J.A. (1991) Active learning: creating excitement in the classroom (Washington DC, George Washington University).

BROOKFIELD, S. (1990) The Skilful Teacher (San Francisco, Jossey-Bass Publishers).

Cantrell, R.J., Fusaro, J.A. & Dougherty, E.A. (2000) Exploring the effectiveness of journal writing on learning social studies: a comparative study, *Reading Psychology*, 21(1), pp. 1–11.

CARROLL, M. (1994) Journal writing as a learning and research tool in the adult classroom, *TESOL Journal*, 4(1), pp. 19–22.

Charlesworth, S.M. & Foster, I.D.L. (1996) 'Water and environmental systems': achieving student-centred learning objectives with an undergraduate journal, *Journal of Geography in Higher Education*, 20(1), pp. 45–54.

CLARK, G. & WHITELEGG, J. (1998) Maximising the benefits of work-based learning: the effectiveness of environmental audits, *Journal of Geography in Higher Education*, 22(3), pp. 325–334.

CLINCHY, B.M. (1995) A connected approach to the teaching of developmental psychology, *Teaching of Psychology*, 22, pp. 100–104.

CONNOR-GREENE, P.A. (2000) Making connections: evaluating the effectiveness of journal writing in enhancing student learning, *Teaching of Psychology*, 27(1), pp. 44–46.

- Соок, I. (2000) 'Nothing can ever be the case of "us" and "them" again': exploring the politics of difference through border pedagogy and student journal writing, *Journal of Geography in Higher Education*, 24(1), pp. 13–27.
- CROXTON, C.A. & BERGER, R.C. (2001) Journal writing: does it promote long term retention of course concepts? [available at: http://www.ntlf.com/html/sf/journal.htm].
- DART, B.C., BOULTON-LEWIS, G.M., BRLWOLEE, J.M. & MCCRINDLE, A.R. (1998) Change in knowledge of learning and teaching through journal writing, *Research Papers in Education: Policy and Practice*, 13(3), pp. 291–318.
- FOUBERG, E.H. (2000) Concept learning through writing for learning: using journals in an introductory geography course. *Journal of Geography*, 99(5), pp. 196–206.
- GOLD, J.R., JENKINS, A., LEE, R., MONK, J., RILEY, J., SHEPHERD, I. & UNWIN D. (1991) *Teaching Geography in Higher Education: a manual of good practice* (Oxford: Basil Blackwell and the Institute of British Geographers).
- HAIGH, M. (2001) Constructing Gaia: using journals to foster reflective learning, *Journal of Geography in Higher Education*, 25(2), pp. 167–189.
- HEDLUND, D.E., FURST, T.C. & FOLEY, K.T. (1989) A dialogue with self: the journal as an educational tool, *Journal of Humanistic Education and Development*, 27, pp. 105–113.
- HETTICH, P. (1976) The journal: an autobiographical approach to learning, *Teaching of Psychology*, 3(2), pp. 60–63.
- HETTICH, P. (1990) Journal writing: old fare or nouvelle cuisine?, *Teaching of Psychology*, 17, pp. 36–39. HYERS, A.D. (2001) Predictable achievement patterns for student journals in introductory earth science courses, *Journal of Geography in Higher Education*, 25(1), pp. 53–66.
- KENT, M., GILBERTSON, D. & HUNT, C. (1997) Fieldwork in geography teaching: a critical review of the literature and approaches, *Journal of Geography in Higher Education*, 21(3), pp. 313–341.
- KHAN, K.S. & GEE, H. (1999) A new approach to teaching and learning in Journal Club, *Medical Teacher*, 21(3), pp. 289–293.
- KING, A. (1995) Inquiring minds really do want to know: using questioning to teach critical thinking, *Teaching of Psychology*, 22(1), pp. 13–17.
- Langer, A.M. (2002) Reflecting on practice: using learning journals in higher and continuing education, *Teaching in Higher Education*, 7(3), pp. 337–351.
- LOHMAN, L.L. & SCHWALBE, K.A. (1996) Learning from learning journals, presented at the STLHE Conference in Ottawa [PowerPoint presentation available online at: http://aug3.augsburg.edu/depts/infotech/learn/tsld001.htm].
- MAY, J. (1999) Developing fieldwork in social and cultural geography: illustrations from a residential field class in Los Angeles and Las Vegas, *Journal of Geography in Higher Education*, 23(2), pp. 207–225.
- McManus, D.A. (2001) The two paradigms of education and the peer review of teaching, *Journal of Geoscience Education*, 49(5), pp. 423–434.
- MORRISON, K. (1996) Developing reflective practice in higher degree students through a learning journal, *Studies in Higher Education*, 21(3), pp. 317–332.
- Newsome, G.L. (2000) A review of some promising approaches to understanding and improving thinking skills, *Journal of Research and Development in Education*, 33(4), pp. 199–222.
- O'ROURKE, R. (1998) The learning journal: from chaos to coherence, *Assessment & Evaluation in Higher Education*, 23(4), pp. 403–413.
- Park, C.C. (1995) Reflections on the role of textbooks in the undergraduate teaching of physical geography in the British university tradition, *Journal of Geography in Higher Education*, 19, pp. 345–348.
- SEELER, D.C., TURNWALL, G.H. & BULL, K.S. (1994) From teaching to learning, Part III: Lectures and approaches to active learning, *Journal of Veterinary Medical Education*, 21(1) [available online at: http://borg.lib.vt.edu/ejournals/JVME/V21–1/Seeler1.html].
- STANESCO, J.D. (1991) The personal journal as a learning and evaluative tool in geology field-trip courses, *Journal of Geological Education*, 39(3), pp. 204–205.
- STRAUSBAUGH, A. (1995) Journal writing is beneficial to teacher instruction and student learning (US, Ohio), 13 pp.
- Sublett, M.D. (1991) Incorporating student logbooks into geography classes, *Journal of Geography*, 90(2), pp. 50–53.
- Voss, M.M. (1988) The light at the end of the journal: a teacher learns about learning, *Language Arts*, 65(7), pp. 669–674.

Engaging Students in the Learning Process

WAGNER, Z.M. (1999) Using student journals for course evaluation, Assessment & Evaluation in Higher Education, 24(3), pp. 261–272.

WALDEN, P. (1988) A learning journal as a tool to promote lifelong learning skills, *Feminist Teacher*, 3(2), pp. 14–17.

YINGER, R. (1985) Journal writing as a learning tool, Volta Review, 87(5), pp. 21–33.