An Examination of the Factors Influencing Student Participation in Collaborative Approaches to Examination Preparation

Abstract

The term 'collaborative (or 'peer) learning is used to describe learning environments that encourage students to 'learn with and from each other' (Boud, 2001, p. 3). Collaborative learning is employed in a variety of contexts. This paper examines the use of collaboration for examination preparation. It is based on an on-going piece of action research into the use of collaborative approaches to examination preparation on a third year undergraduate module at Edge Hill University. Previous cycles in the action research process highlighted: (a) the need to take more account of the students' values when introducing collaborative learning; (b) the benefits of helping students establish a network of peers who they can link up with for collaborative purposes; and (c) the need to develop the students' ability to work in groups. As a response to these issues the students have been introduced to the theory and practice of group work and collaborative learning during the first year of their degree. These interventions appeared to improve the students' ability to work in groups and also raised the level of collaborative learning that the students engaged in. There remain, however, a significant number of students who do not participate in the collaborative learning process when preparing for their examination. The research for this paper focused on the factors influencing the level of student participation in the collaborative process. It found that three key issues acted as barriers to student participation in collaborative approaches to examination preparation. The paper ends by examining how the barriers to collaboration can be overcome. It discusses whether the advantages of collaboration and the requirement to develop interpersonal skills and the ability to work in groups (see QAA benchmark standards) justify compelling students to engage in collaborative approaches to examination preparation. The paper also considers offering additional targeted support to particular types of student. Finally, the paper discusses the measures and support mechanisms that might be put in place to help students manage their studies more effectively so that they are more likely to engage in collaborative activities.

Introduction

The term 'collaborative' (or 'peer') learning is used to describe learning environments that encourage students to 'learn with and from each other' (Boud, 2001, p. 2). According to David Boud these learning environments should be:

mutually beneficial and involve the sharing of knowledge, ideas and experience between participants. It can be described as a way of moving beyond independent to interdependent or mutual learning. (ibid., p.3, italics in original)

At Edge Hill University collaborative learning was introduced into a compulsory final year module 'Managerial Decision-making' (MDM) on the BSc. Business and Management programme. It was initiated because of concerns about students failing to obtain a sufficient grasp of the material they were provided with for examinations. The rationale for this approach was a belief that through a process of group dialogue a more in-depth understanding of the examination material could be obtained (see for example Boud, Cohen and Simpson, 1999; Falchikov, 2001; McGraw and Tidwell, 2001; Bourner, Hughes and Bourner, 2001). For example, Bourner *et al.* (2001) argue that through group discussion individuals are more likely to be 'involved in 'deep' (rather than 'surface') approaches to acquiring knowledge' (p. 20). Therefore, in the MDM module students were provided with pre-examination material (often case studies) and were encouraged to work together on these materials as part of their examination preparation. The students were not compelled to work together and could choose whether or not they wanted to engage in a collaborative approach to examination preparation.

This paper will focus on the factors influencing the level of student participation in collaborative learning and how barriers to student engagement in the process might be overcome. The paper will begin by providing an outline of the research methodology employed. It will then consider issues affecting the level of student participation in the collaborative process and how we have attempted to overcome these. The paper ends by identifying issues that should be taken into account by others considering introducing collaborative approaches to examination preparation and other forms of assessment.

Research Methodology

This study began in 2001 when collaborative learning was first introduced on to the BSc. Business and Management programme, and then using an action research approach, its effectiveness evaluated. The process of action research entails a continuous cycle of planning, action, observing/evaluating and reflection (see for

example McNiff, 2002, pp. 41-57). This type of research can be differentiated from other forms of research by its focus on action and change (Kemmis and McTaggart, 1982) and its attempt to resolve practical problems by trying ideas out in practice (Carr and Kemmis, 1986). In this study a 'collaborative' or 'participative' approach to action research was adopted (see McTaggart, 1991; McNiff, Lomax and Whitehead, 1996; Greenbank, 2007). Therefore, the students were involved in evaluating collaboration in the assessment process through questionnaires, focus groups and class discussions. Lecturers were also interviewed about their experience of introducing such methods. In addition, 'critical friends' (McNiff and Whitehead, 2006) and 'group forums' (Berg, 2001) comprising of lecturers and employers representatives were used to validate the results of the research and provide additional insights. The evidence or input from these various sources was used to inform changes that were implemented in each new cycle of the action research process. As Christenson *et al.* (2002) argue 'researchers need collaboration on many fronts to insure solid research methodologies and interpretations' (p. 272).

The MDM module is usually studied by between fifty and sixty students who are allocated to three seminar groups. I deliver the lectures and usually take two of the three seminar groups. As the module leader I am also involved in any 'difficult situations' that arise. Therefore, my role as a 'participant-observer' also provides useful insights. As McNiff and Whitehead (2006) argue these 'informal encounters', which are outside the formal research process, present an opportunity for obtaining additional information. Records of these, and my reflections upon them, were recorded in a diary.

Collaborative Approaches to Examination Preparation

The evidence from the initial stages of this research indicated that we should take more account of the students' values when introducing collaborative approaches to examination preparation. The need to develop the students' ability to work in groups was also identified (see Greenbank, 2003 for a more in-depth discussion of these two issues). Finally, the early stages of the research highlighted the benefits associated with helping students establish a network of peers who they can link up with for collaborative purposes.

As a response to these findings the students on the first year of the BSc. Business and Management programme are now provided with an introduction to the theory of group work and the rationale for introducing collaborative forms of learning. Students are also given the opportunity to discuss and resolve any issues that may concern them about such forms of learning. For example, the students are often very individualistic and therefore resistant to the idea of working in groups. Discussions which focus on the desirability of developing group working skills and the way in which collaborative learning.

The first and second years of the degree also involve substantial amounts of group work which enable the students to develop networks of peers they can work with on collaborative activities. In addition, the students are required to reflect on their ability to perform in groups as part of a process of skills development. These initiatives are now firmly established on the BSc. Business and Management programme. It is difficult to evaluate the success of these initiatives because cohorts of students differ from year to year. However, the evidence (though questionnaires, student evaluations, discussions and the monitoring of results) indicate that the students' ability to work in groups has improved and the level of collaborative learning the students engage in has risen. Nevertheless, a significant number of students still choose not participate in the collaborative learning process when preparing for their MDM examination. Three key reasons for this have been identified and each of these will be analysed below.

The Opportunity and Ability to Collaborate Varies from Student to Student

As discussed above, MDM is a compulsory module on the BSc. Business and Management programme. It is also offered to students from other courses, e.g. BA. Business with Law and BSc. Information Systems. In addition, the module includes students who have transferred from other programmes, such as foundation degrees. This can create problems because the students on the BSc. Business and Management have been introduced to the concept of collaborative learning from their first year and have developed their skills in group working during the first two years of their degree. Feedback from students from other degree programmes indicates that they feel disadvantaged because of their unfamiliarity with group work and collaborative learning. As one student commented, 'People have done this sort of thing before. You feel a little out of it, and I don't know, you feel that you are behind in some way'.

By the third year many of the students on the BSc. Business and Management have also established a network of peers who they can link up with for work involving groups. This is important since the majority of students studying at Edge Hill are what Marks (2002) refers to as 'commuter students' because they live at home with their parents and travel into university on a daily basis. For example, three-quarters of the students studying the MDM module in 2006/07 commuted to Edge Hill University from home. It can be argued that these students maintain social networks where they live, which means they do not feel the need to establish relationships with their fellow students. However, many of the students indicated in questionnaires and in focus groups that the group activities in the first year (especially those carried out independently of tutors) helped them to form long-lasting friendships and establish social networks. According to the students, such activities are significant in helping to establish relationships that meet both academic and wider social and emotional needs.

Students joining the third year MDM module from other programmes are less likely to have such contacts and will probably know very few (if any) of those studying the module. This means there is a greater likelihood that they will not participate in collaborative approaches to examination preparation. This is illustrated by the comments of an Information Systems student who felt marginalised by the collaborative process:

Because I'm not from the business degree I don't really have any friends to ask. I am too shy to ask other members of the class. I felt I would have learnt more from group work - it just wasn't easy to get done. I felt left out.

The fact that some students have little experience of working in groups and may not have the contacts to engage in the collaborative process may mean certain students require additional support. There is, however, a reluctance amongst academic staff to identify students as needing special help. This is because there is a belief that students will feel they are being unfairly labelled as 'different' and 'inferior'. As a result, support is often offered to all students rather than particular individuals or groups. Thomas, Webber and Walton (2003) have been critical of these generic approaches, arguing that they fail to meet the needs of students. Phillips (1999) goes further arguing for 'equality *through* difference' (p. 25, italics in original). She suggests that generic approaches that attempt to ignore differences may actually result in the unequal treatment of some students because they are expected to be able to adapt when in reality they may need significant levels of support to do this.

The evidence from this research indicated that many students felt unable to ask for help because they were embarrassed to admit they did not have networks or that they lacked the skills to engage effectively in collaborative learning. Moreover, discussions with the type of student this is more likely to affect (i.e. those from other degrees) suggested they would not be offended by the offer of additional support - provided they are given a rational explanation for being targeted. Therefore, in the 2006/07 academic year the students from degrees other than Business and Management were offered additional support.

These interventions, however, achieved mixed results. There were often enough students from other degrees to form teams for in-class group work and for an assignment that involved group assessment. With the provision of additional support the majority of these groups appeared to function effectively. In contrast, our attempt to integrate one student into a group was unsuccessful. This person appeared to be very introverted and as a result found it difficult to mix with other students. In the end, we had to provide him with an alternative piece of work to the group assignment and he did not engage in the collaborative learning process to prepare for the examination. As Buffee (1999) contends certain students may not yet have sufficiently well developed social skills to work with other people. It is also the case that we do not have an adequate understanding of the psychological make up of students such as this, nor do we have the skills to help them.

Negative Experiences of Group Work

There are students who have access to networks and the skills to enable them to engage in collaborative activities, but they favour individual rather than collaborative learning. These students make comments such as: 'I prefer to work alone', 'I think I work better as an individual' and 'I simply prefer individual learning'. Yet the decision to work alone does not appear to arise out of an inherent preference for more individualistic forms of learning but out of negative experiences of group working. For example, these students said that in the past some people did not turn up to pre-arranged meetings and groups spent too much time socialising instead of working. One student said 'sometimes work gets abandoned in favour of socialising'. Another student justified working alone with the following comment:

I didn't feel group collaboration would be one-hundred per cent useful because it would turn into a social gathering. When working in groups nothing gets done. That's why I have a preference of working individually and a belief that I am more productive as an individual than as a member of a group.

Therefore, rather than being positive, the experience of working in groups could be negative and lead to a general dislike for collaborative activity. For instance, one student admitted that doing badly in a group assignment meant she now had an aversion to group work of *any* kind:

I prefer to revise for the exam alone. Other group work that has been carried out didn't work so well, so I didn't think it would be beneficial to collaborate for the exam.

Some students also believed that other members of the group would benefit more from the collaborative process than themselves. One highly motivated student, who ultimately obtained a first class honours degree, said:

Whilst I might get something from it [collaboration] - and I know this sounds big headed - the others are going to get more from me and I'm not prepared to just give them this, if you like knowledge, and these sort of insights that I might have.

This student was therefore concerned that the benefits of collaboration were not equally distributed. Other students were worried about those students who made little or no contribution to the collaborative process. For example, one student was adamant that 'free-riders' were not going to benefit from her efforts:

I have not, and will not, be completing this group work. I prefer to work alone as members of groups sometimes put very little work in and sponge information from more committed and prepared members.

As Boud *et al.* (1999) argue, students 'can resent others gaining credit for what they perceive as their contributions, particularly within the context of a competitive course' (p. 421). Yet, whilst those who raised this as an issue were very vociferous (as demonstrated by the quote above), only a minority of students identified this as a major issue in the course of this research. In contrast, studies elsewhere suggest that it is a more significant problem (e.g. Bourner *et al.*, 2001; Mills and Woodall, 2004). At Edge Hill we have emphasised from their first year that students have a moral responsibility to other members when carrying out group work. The students also draw up agreements that set out individual responsibilities to the group - and if students contravene this when carrying out group assignments they can be penalised in the marking system. This approach seems to have been successful in creating a culture of collective responsibility which minimises (but does not eliminate completely) the free-rider problem. It must, however, be stressed that the process is carefully managed to avoid individuals being victimised.

Time, Approaches to Study and Satisfying Behaviour

The level of participation in collaborative activities to prepare for the MDM examination has increased over the years. Nevertheless, the majority of students still choose not work in groups as preparation for their examination. For example, in the 2005/6 academic year only 22 of the 65 students (33.8 per cent) studying MDM engaged in the collaborative process. This was despite 66.2 per cent of the students indicating an intention to work in groups and the vast majority (over 85 per cent) stating that they felt collaboration was useful. Typical comments from students about the benefits of collaboration were:

Collaboration broadens my horizons and views and helps me to form a better understanding of the case study. Talking about questions, I feel, enables a better understanding. You get to hear other people's opinions and ideas to add to your own and this gives you a chance to let other people hear your ideas.

The main reason provided by the students for the gap between intention and practice is pressure of time. Working in groups is considered by the students to be very time consuming and they feel that the time taken up commuting to university from home and working long hours in term-time jobs makes collaborative activities difficult to engage in. The students also said they found it difficult (mainly due to employment commitments) to arrange mutually convenient times to meet their peers.

In the 2006/07 academic year we surveyed the MDM students to find out more about how these factors affected the students. Fifty seven students completed a questionnaire and the results revealed that 82.1 per cent of them were engaged in term-time employment, with 78.6 per cent working an average of 11 or more

hours a week. However, nearly 80 per cent of this work was carried out in the evenings and at weekends. The survey also showed that 73.7 per cent of the students lived at home and commuted into university. Some students had a long distance to travel. As one student said, I live away from Ormskirk [the nearest town to Edge Hill University]. It would take approximately one hour each way to meet up [with fellow students]'. Whilst another student wrote in a questionnaire: 'It costs me £10 every time I come into university and it takes two hours'. However, the average time taken to travel to Edge Hill by students was just under half-anhour, with only six students taking an hour or more.

It would therefore appear that a lack of time may not be as important as the students suggest. When the students were asked about this they admitted that they were reluctant to come into university because they preferred to work at home. We also found that this unwillingness to travel to Edge Hill is exacerbated by the availability of remote access to the university's learning resources. The idea that pressure of time may hide more important reasons for not engaging in collaborative activities is also supported by the fact that in recent years class time has been made available to enable students to get together during periods they would normally be timetabled. At first this was closely controlled, with students working in groups under the supervision of lecturers. The classroom environment was not, however, conducive to discussion because it was crowded and noisy. Some of the students also felt constrained by the presence of lecturers. Therefore, the groups were allowed to meet in locations outside the classroom. Yet as soon as the students were given the responsibility for organising their own collaborative learning many students utilised the time to engage in what they perceived to be more pressing activities. Therefore, in 2005/06 these students used the time allocated to collaboration to finish their dissertation and other assignments. As one student said:

We do actually intend to work in groups in the near future, but as yet it has been difficult to organise a time when all our group members can meet. This is due to other commitments such as the dissertation and assignments ... The motivation and pressures to meet up are not as high just yet due to the exam still being six weeks away.

A desire to tackle each piece of work in turn (a 'serial' approach to study), rather than working on different assignments/examinations simultaneously, was an almost universal characteristic of the way students approached study. Discussions with the students also indicate that they left it too late to organise a time when they could all get together. The students seemed to genuinely believe there were benefits to collaboration but they did not appear to have the drive or organisational skills to arrange it. For example, one student stated:

I personally feel working in groups aids my learning. Talking about the questions I feel enables a better understanding. I wanted to work in a group but did not get around to asking people. Nobody I am friends with mentioned about meeting so I never mentioned it either.

This lack of motivation also seems to be linked to an underlying tendency for students to adopt 'satisfying' rather than maximising behaviour. As lecturers we may try to motivate the students by arguing that collaborative approaches will help them to obtain higher marks. However, if the students are already achieving what they perceive to be satisfactory grades, there will be no incentive to engage in the extra work collaboration involves.

One approach would be to go back to more directive methods. Indeed, the students said they would prefer it if the lecturers organised and monitored their meetings for them. It was felt, however, that this would be counterproductive to the development of autonomous learners. As Boud *et al.* (1999, p. 416) contend:

Peer learning involves a group of students taking collective responsibility for identifying their own learning needs and planning how these might be addressed.

Accordingly, attention in the last academic year (2006/07) has focused on improving the students' study and time management skills. Particular emphasis has been placed on commencing preparation for examinations earlier and working simultaneously (rather than 'serially') on assignments, especially in respect of the dissertation.

However, the students strongly resisted the idea that they needed to change their approach to study. A number of them pointed out that 'this is the way we've always worked' and argued that they were 'doing okay'. It quickly became apparent that the final year students had generated group norms relating to what was 'acceptable behaviour' and it was not acceptable to be seen as too enthusiastic. Therefore, 'swotty' (their word) behaviour - such as preparing for examinations very early - were openly derided by the students. These

group norms encourage students to adopt satisfying behaviour because 'doing okay' (but not too well) is acceptable. Similar comments are made by Thomson and Falchikov (1998) who discuss the role of group norms in influencing students to adopt behaviour regarded as 'cool' by their peers.

In such an environment it takes a very strong willed individual to resist the pressure to conform. It is also, as we and other researchers have found (e.g. Thomson and Falchikov, 1998; Kember, 2001), difficult to influence the values underpinning such norms. Yet our experience over the last academic year suggests that using certain values that students possess to supplant those that we regard as undesirable can be quite effective. For example, the desire to obtain a 'good' job appears (not unsurprisingly) to be a particularly powerful motivator amongst final year undergraduates (see Ottewill and Macfarlane, 2001 for similar comments). Therefore, emphasising the need to obtain better marks because of the increasingly competitive nature of the graduate labour market - and highlighting the role collaboration can play in helping students achieve this - seems to be a more effective approach than stressing the benefits to learning of collaboration, or simply saying it leads to better marks. I must admit to having reservations about adopting an approach that uses the instrumentality of students to influence their behaviour. Yet this strategy seemed to encourage more students (44.1 per cent in 2006/07 as opposed to 33.8 per cent in 2005/06) to engage in the collaborative process when preparing for their MDM examination. However, care has to be taken in interpreting such trends because cohorts of students are not homogenous. Furthermore, the submission date for the dissertation was rearranged to provide more time for the students to prepare for their examinations and this will undoubtedly have had an effect on the students' ability to engage in the collaborative process.

Conclusion and Implications for Others

The action research process has enabled us at Edge Hill to identify and tackle problems influencing the level of student participation in collaborative approaches to examination preparation. As a result, we have seen improvements in the level of student participation in these collaborative activities. The key lessons learned and issues requiring further consideration are summarised below.

First, this research identified the need to address the question of equity in access to collaborative learning. This is a key factor - both educational and morally - and it should therefore be seriously considered by all those introducing collaborative approaches to examination preparation (and other forms of assessment). As such, this paper suggests that additional support ought to be offered to students who may potentially be disadvantaged by collaborative activities. There remains, however, a good deal to be learnt about how to manage such support. It is therefore essential that interventions are managed sensitively and are reflected upon in order to learn from practice.

Second, there are students who are capable of working collaboratively but do not want to. This is problematic because the ability to work in groups and collaborate is regarded as a key skill, particularly on courses related to business (see QAA, 2007). Yet the general feeling amongst all those participating in this action research project (students, lecturers and employers) is that it would be impractical and unethical to force students to collaborate for something as crucial as a final year examination, especially if they are able to develop their group working skills elsewhere on the course. Therefore, strategies that encourage rather than force students to participate in collaborative learning for examination preparation should be adopted. Moreover, everything possible should be done to make group work a useful and enjoyable experience so that students develop a positive attitude to this type of learning.

Finally, there is a concern about the gap between the intention to collaborate and the extent to which this occurs in practice. It is tempting to blame this on the students' lack of time. Yet this research indicates the factors contributing to their lack of engagement in collaborative approaches to examination preparation are more heavily influenced by issues such as poor organisational/study skills and satisficing behaviour. The initial phase of this research focused on the student's values in relation to collaboration and group working. However, the later stages of this research have identified the need to take account of values that indirectly influence the students' attitude to collaboration. As a result, some attempt has already been made to use the instrumentality of students to improve the level of student participation in the collaborative process. This approach has had some success but it needs to be developed and its effectiveness evaluated more comprehensively.

References

Berg, B.L. (2001). Qualitative Research Methods for the Social Sciences, 4th edition, London: Allyn and Bacon.

Boud, D. (2001). Introduction: making the move to peer learning, in D. Boud, R. Cohen and J. Sampson (eds.) *Peer Learning in Higher Education – learning from and with each other*, London: Kogan Page, 1-17.

Boud, D., Cohen, R. & Sampson, J. (1999). Peer learning and Assessment, Assessment and Evaluation in Higher Education, 24, 4, 413-426.

Bourner, J., Hughes, M. & Bourner, T. (2001). First-year undergraduate experiences of group project work, Assessment & Evaluation in Higher Education, 26, 1, 19-39.

Bruffee, K. A. (1999). *Collaborative Learning-higher education, interdependence and the authority of knowledge*, 2nd edition, London: The John Hopkins University Press.

Carr, W. & Kemmis, S. (1986). Becoming Critical – education, knowledge and action research, London: The Falmer Press.

Christenson, M., Slutsky, R., Bendau, S., Covert, J., Dyer, J., Risko, G. & Johnston, M. (2002). The rocky road of teachers becoming action researchers, *Teaching and Teacher Education*, 18, 259-272.

Falchikov, N. (2001). Learning Together - peer tutoring in higher education, London: Routledge Falmer.

Greenbank, P. (2003). Collaboration in the assessment process – an initial evaluation of collaboration on an undergraduate business and management course, *Teaching in Higher Education*, 8, 3, 317-331.

Greenbank, P. (2007). Utilising collaborative forms of educational action research: some reflections, *Journal of Further and Higher Education*, 31, 2, 97-108.

Kember, D. (2001). Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education, *Studies in Higher Education*, 26, 2, 205-221.

Kemmis, S. & McTaggart, R. (1982) *The Action Research Planner*, 2nd edition, Victoria, Australia: Deakin University.

King, A. (2002). Structuring peer interaction to promote high-level cognitive processing', *Theory into Practice*, 41, 1, 33-39.

Marks, A. (2002). 2 + 2 = 'Access': working towards a higher education and further education overlap to facilitate greater adult participation, *Teaching in Higher Education*, 7, 1, 113-116.

McGraw, P. & Tidwell, A. (2001). Teaching group process skills to MBA students: a short workshop, *Education and Training*, 43, 3, 162-170.

McNiff, J. (2002). Action Research: principles and practice, 2nd edition, London: RoutledgeFalmer.

McNiff, J. & Whitehead, J. (2006). All You Need to Know About Action Research, London: Sage.

McNiff, J., Lomax, P. & Whitehead, J. (1996). You and Your Action Research Project, London, Routledge.

McTaggart, R. (1991). Principles for participatory action research, Adult Education Quarterly, 41, 3, 168-187.

Mills, P.C. & Woodall, P.F. (2004). A comparison of the responses of first and second year veterinary science students to group project work, *Teaching in Higher Education*, 9, 4, 477-489.

Ottewill, R. & Macfarlane, B. (2001). Understanding learners, in B.

Macfarlane & R. Ottewill (eds.) Effective Learning and Teaching in Business and Management, London: Kogan Page, 16-28.

Phillips, A. (1999). Which Equalities Matter?, Cambridge: Polity Press.

QAA (2007). Subject Benchmark Statements - General Business and Management 2007, Gloucester: The Quality Assurance Agency for Higher Education.

Thomas, W., Webber, D. J. & Walton, F. (2003). School effects that shape students' intentions to stay-on in education, Research in Post-Compulsory Education, 8, 2, 197-211.

Thomson, K. & Falchikov, N. (1998). "Full on until the Sun comes out": the effects of assessment on student approaches to studying, *Assessment & Evaluation in Higher Education*, 23, 4, 379-390.