lecturers and the students in IT opportunities and capacities was pinpointed. Achieving the sustainability of electronic educational and educational resources, introduction of new teaching systems, rational use of ICT tools, existence of technical support, and professionalism of teachers serve as the key to the modernization of higher education in Uzbekistan.

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An Investigation into Students' Perceptions of Group Assignments

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The collection of student feedback is a central strategy to monitor the effectiveness of teaching and learning at educational institutions (Meyer, 2010). This paper analyses the feedback and findings from a recent questionnaire survey of students' experience and perceptions of group work at the University of Bedfordshire at both undergraduate and postgraduate levels. The main objective of this study is to raise practical issues that teachers need to consider in designing and carrying out group assessments. This is aimed at overcoming the drawbacks, while amplifying the benefits, of group work, and improving students' engagement and performance in this type of assessment.

The following are the key findings from analysis of the questionnaire replies:

- a) Group assignments were indeed valued by students despite the perennial problem of perceived unequal contribution from group members. Respondents recognised the benefits of group assignments as well as the drawbacks.
- b) A wide variety of communication strategies had been employed between students for working on group assignments, as well as individual assignments when seeking input and support from peers.
- c) Students had developed a number of strategies for dealing with team members who did not 'pull their weight', and it was suggested that some of these could be formalised, such as requiring minutes to be taken of key meetings.

A comparative analysis was also undertaken of the difference in responses between the undergraduate and postgraduate student groups. Overall, the research underlined the utility of group assignments, and suggested a number of ways in which the potential drawbacks can be mitigated.

As group work is a common approach for education institutions in teaching and learning activities, the outcomes of this study should contribute to a better understanding of students' feelings and perceptions about these, and to a better designed approach to overcome the drawbacks of group assignments.

Keywords: students, group assignment, questionnaire survey

Introduction

Group work at education institutions is now considered as one of the best approaches for developing students' communication skills and acquiring knowledge. This agrees with the results from the study by Smith and Bath (Smith & Bath, 2006) who revealed that interaction of members engaging in group assignments would develop generic skills, such as communication and critical thinking. Group work appears to offer teachers an effective way to engage students, to increase the complexity and challenge of the tasks that students gain experience of working on, to offer students the opportunity for collaborative working, and to offer the possibility of reduced marking loads (Gibbs, 2009). However, not everything is positive, and making group work fully effective is challenging.

This paper analyses the feedback and findings from a recent questionnaire survey of students' experience and perceptions of group assignments at the University of Bedfordshire (UoB) at both undergraduate and postgraduate levels. The purpose of this study is to raise practical issues that teachers need to consider in designing and carrying out group assessment with a view to overcoming the drawbacks, and amplifying the benefits, of such work, and to improve students' engagement and performance in these activities.

Literature Review

The benefits to students of group work have been demonstrated both in general (Johnson *et al.*, 1991) and in specific contexts. For example, Mello (1993) identifies major benefits of group work: (1) 'students can gain an insight into group dynamics'; (2) 'they can tackle a more comprehensive assignments'; (3) 'interpersonal skills can be developed'; (4) 'students are more exposed to others' points of view'; and (5) 'be more prepared for the commercial world'.

A comprehensive review on the implementation of small group learning within individual discipline areas also shows very positive impacts on student performance, marks, attitudes towards learning and persistence or retention (Gibbs, 2009). For example, Springer *et al.* (1999) reviewed 383 studies and found evidence of 'widespread implementation of small-group learning' at undergraduate level in the three disciplines studied. Problem based learning (PBL) also uses learning in groups and meta-analyses of studies comparing PBL with other pedagogies show consistent benefits to student learning processes and outcomes from PBL (Dochy *et al.*, 2003).

JISC (2008) recognises the benefit for academics/tutors in setting group work tasks in that these can significantly reduce [staff] workload. However, JISC also reports work by Kennedy (2006): '...there is evidence to suggest that students undertaking such projects express concern about the way in which marks are awarded for outcomes produced by the group collaboratively'.

Some of the findings from analysis of literature on key factors affecting group assignment (Meyer, 2010; Kennedy, 2006; Barfield, 2003) can be summarised as follows:

- a) Group structure Ensuring that group members recognise the mixed talents within the group, and hence scope for assigning different roles to different members to perform specific tasks.
- b) The issue of individual domination Emphasising the need to respect different points of view, and not have one or a few individuals dominate the group.
- c) Fair contribution 'Ensuring equal and active participation of each group member'.

 d) Evaluation of individual contribution – This is difficult, but can be assisted by 'anonymous 'peer review', 'individual reflective report'; and/or 'tutor involvement'.

A review of relevant literature shows that there are studies on the general topics of group work and group assessment as discussed above. For example, there are case studies that were designed to address problems with the assessment of groups. However, there have been limited publications that have empirical evidence to inform the design decision of group assignments (Gibbs, 2009). It is hoped that the outcomes of this study can contribute to this.

Background of group work to this study

At the UoB where this study was conducted, we use group-based assignments for most units, and for both formative and summative assessments to enable students to benefit from one another's knowledge and experience. Group assignments include case studies, oral presentations, and group written reports, sometimes with a statement about individual contributions. The essence of the group assessment is that undertaking the assessment constitutes a learning experience in its own right.

The weight of a group assignment within a summative assessment varies between different courses, and different units within the same course – normally between 30% and 60%.

An assignment group usually consists of 3-6 members depending on the nature of the assessment. The students can form their own assignment groups, but are encouraged to mix with peers with different experiences and different culture backgrounds. Sometimes, the tutor in charge helps students to form their groups, especially in the first term of their study at the university.

For some group assignments, each member of the group submits an anonymous statement of his/her perception of the contribution by each of the group members (including himself/herself). In other cases, the group reaches agreement about the contribution by each member and submits one form which is signed by all. Some tutors conduct oral interviews on the group assignments to make sure that each student is given a fair grade for the group work.

Research Methodology

A questionnaire survey was used for data collection for this research. The areas covered in the questionnaire were fairly broad, including student preferred type of assignment; degree of peer support; working styles; strategies for fair contribution; communication tools; skills needed for group assignments; and the perceived benefits and drawbacks of group assignments. The survey also obtained additional comments from respondents about specific problems encountered, as well as suggestions for assignment improvement. The survey was carried out at the end of the academic year 2010/11 among two groups of students. One group was Level 1 undergraduates, and the other MSc students, in the Business School. Participation in the survey was voluntary.

In total, 140 questionnaires were distributed in the last class at the end of the second semester, and 106 were completed and returned, of which 30 were by MSc students and 76 by Level-1 undergraduates. This represented an acceptably high return rate of 75 per cent.

Data Analysis and Findings

Data analysis was conducted using Microsoft Excel. This section presents the key results from this survey in the sequence of questions in the survey form.

Question 1: What do you prefer, individual or group assignments?

It is interesting and perhaps even surprising, to see that the preference of students between group and individual assignments is very close – 51per cent to 49 per cent. Note that the level of the course (Masters vs. Level 1) and the preference for group work are statistically independent.

Questions 2 and 3: Which of the following do you do with your peers on an individual/group assignment (tick all that apply)?

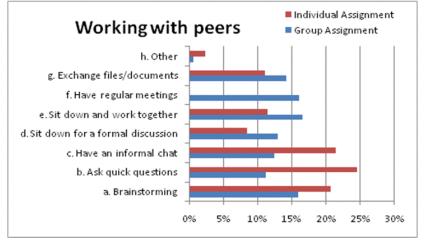


Fig. 1 Working with peers on individual and group assignment

As indicated in Fig 1, it is understandable the students tend to do all the activities for their group assignments. On individual assignment they work with peers to some extent. However, possibly worryingly, some students exchange files/documents with others on an individual assignment, and this suggests further investigation

Question 4: Which do you prefer when working on a group assignment — splitting up the work or working together?

In terms of workload strategy for group work, the preference between 'splitting up the work' and 'working

together' was exactly 50:50 per cent. The preference for group/individual assignments and for splitting the work/working together are not independent at the 5 per cent level: Students who prefer individual assignments prefer to split up the work; and students who prefer group assignments prefer to work together.

Question 5: Which strategies do you use to encourage fair contribution from all members to a group assignment?

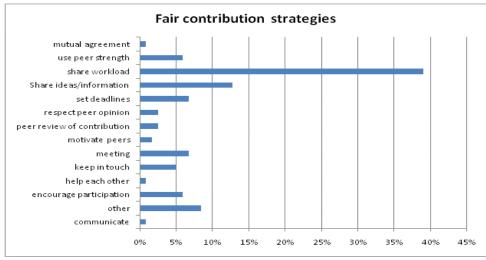


Fig. 2 Strategies for fair contributions

On this important issue, students were asked to list their strategies. Fig. 2 indicates that 'share workload' stands out with a very high percentage of the total choices (39 per cent), followed by 'share ideas and information' (13 per cent), 'set deadlines' and 'have meetings' (7 per cent

each), 'use peer strength' and 'encourage participation' (6 per cent each). Surprisingly, 'mutual agreement', 'better communication', and 'help each other' were not considered as key strategies for encouraging fair contributions.

Question 6: How do you feel about contributing more than your fair share (tick all that apply)?

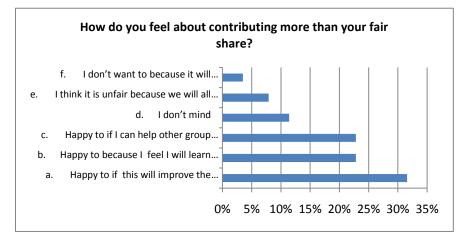


Fig. 3 Perception of contribution of more than fair share

We were very pleased to see that nearly 80 per cent of the participants in the survey felt that they are happy to contribute more than their fair share to the group work with the explanations: 'if this will improve the work and therefore the grade' (over 30 per cent), or 'because I feel I will learn more from this experience' or 'if I can help other group members' (both over 20 per cent). Some chose they 'do not mind' (over 10 per cent), and about 4% chose: 'I don't want to because it will increase my workload'. So it seems that if the students can see the benefit, they are generally happy to make a 'more than fair share' contribution to the group assignment (see Fig. 3). However, one respondent commented: 'Sometimes it is annoying when your group mates take it for granted and assume that no matter whether they contribute or not, you are going to do their part of work as well. This reduces your interest and concentration.'

Question 7: Which communication tools do you use for group communication if you are not physically together? To this question, three choices were given – a. Tools provided by the university systems (e.g. tools on BREO, the university's virtual learning environment); b. Other tools (e.g. Facebook, MSN, Skype); c. Other (please specify). There were about one-third of the respondents for each of the three choices (34 per cent, 32 per cent and 34 per cent respectively). When students were asked to specify 'other' in the third choice 'c', 35 per cent said 'phone only', 28 per cent 'phone and messaging', '18 per cent 'messaging only' and 10 per cent each went for 'email only' and 'email and other tools'.

Here it is worth noting that as many as 66 per cent of the respondents use many social networking systems for collaborating on their group work that were not provided by the university. These included phone calls, texting, personal e-mails, Skype, Blackberry messaging and so on.

Question 8: On a scale of 1 to 5, how do you feel about assignments which require you to work together but then submit individual work?

Surprisingly, as many as a third of the respondents love/like working together but submitting individual work, while 39 per cent do not seem to mind doing so,

but nearly a quarter do not like the idea of working together but submitting individual work.

Question 9: Do you tend to keep a record of what each member has done for peer-review purposes?

For this question, more than half (55 per cent) of respondents do not keep a record for peer-review purposes. Preference for group/individual assignments and 'keeping a record of contribution for peer review purposes' are not independent at the 5 per cent level. Students who prefer individual assignments do not keep a record; fewer students than expected who prefer group assignments keep a record.

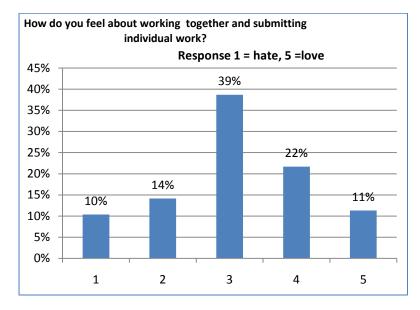


Fig. 4 Working in group but submitting individual work

Question 10: How do you grade a group member whose contribution was considerably poor compared with other group members?

To this question, we were very pleased to see that 71 per cent of the respondents selected the choice: 'I give students grades that truly reflect their low contribution', while 29 per cent chose 'I give everyone similar grades regardless of their contribution'. This suggests that tutors may need to work with students to discuss the value of peer assessment and the eventual long-term benefit to poor-contributing students which may be gained from honest grading.

Question 11: Which do you prefer? A. Each group member submits an anonymous peer review form and B. The group reach an agreement and submit one peer review form.

To this question, 57 per cent of students indicated that they prefer submitting an anonymous peer review form, and the rest prefer the group reach an agreement before they submit one peer review form.

Question 12: Do you feel that you can learn more by doing group work and why?

Three-quarters of the respondents feel that they can learn more by doing group work, while 16 per cent do not agree, and 8 per cent were not sure. Interestingly, 30 per cent of respondents who prefer individual assignments felt that they can learn more by doing group work and give the reasons as follows:

- Because ideas are shared and can be argued;
- Because some stuff I might not know, [and] I can see them doing it;
- Group can conduct more research on the topic;
- Having conflict forces deeper thought;
- Because I can see other people's opinion;
- You can pick up skills from other members.

Question 13: What skills do you feel you can develop when you work on a group assignment?

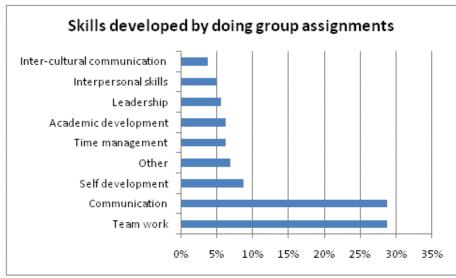


Fig. 5 Skills developed by doing group assignments

To this question two skills stood out – 'team work skills' and 'communication skills' which add up to over 50 per cent of the total responses. Other skills students developed by doing group assignments are: selfdevelopment, time management, academic development, leadership, interpersonal and intercultural communication. In addition, the words frequently mentioned include: listening, sympathy, patience, adaptability, tolerance, reliability, confidence, responsibility, empowerment, motivation, intellectual, numeracy, research, critical thinking, creative thinking, courage to defend a point of view, dealing with people of different views.

Question 14: What do you feel is the biggest benefit of working on group assignments?

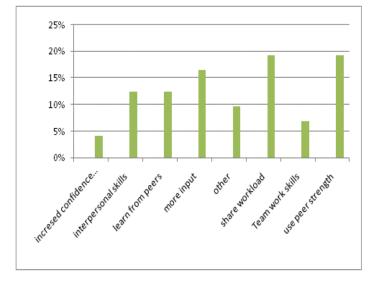


Fig. 6 Biggest benefit of working on group assignments

To this question the respondents gave various answers, and Fig. 6 gives a summary of the key benefits. These include: use peer strength, share workload, more input, develop interpersonal and team work skills, learn from peers, and increase self-confidence. Some of the respondents gave details of the benefits of group work which can be categorised as: A. Good team-work skills. For example, some students mentioned the following:

- 'Working in groups prepares us for real team work for our future career';
- You learn how to work with other people as in many actual workplaces team work is required.

B. Shared workload and ideas, and improve grades. For example, some students mentioned the following:

- A chance to split the work, feel more relaxed;
- Opportunity to listen to other points of view;
- Different ideas, can work together and make assignment look good and get a good grade;
- Good team work help improve the grade;
- Some people may have more knowledge on that particular topic than yourself which could ultimately raise your grade than if you were work by yourself.

C. Other skills. For example, some students mentioned the following:

- 'Group assignments are good as it provides us experience of listening to different ideas';
- It is amazing that working in a group allows us to know each other's experiences, learning skills, their cultures & behaviour.

• 'Group work is a good learning process'.

The key benefits can perhaps be best summarised using one of the respondent's comments: 'Share information, share ideas, less workload, more input and ideas, more resources, help each other, more adaptable, more confident, can communicate with people of different culture, can exchange ideas, opportunity to understand and learn from others, become more knowledgeable, build up relationship and make new friends'.

Question 15: What do you feel is the biggest drawback of working on group assignments?

Of course the respondents also saw the drawbacks of working on group assignments. Fig. 7 summarises the key ones, which include: uneven contribution, rely on others, poor commitment and attitude, poor time management, low ability and contribution, and so on.

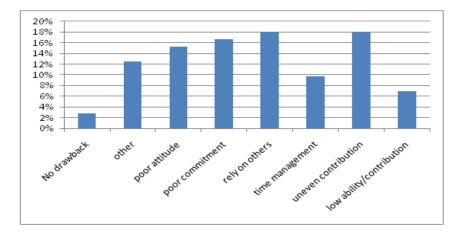


Fig. 7 Biggest perceived drawbacks of working on group assignments

Some respondents also listed other drawbacks of group work which can be categorised as:

A. *Poor motivation and commitment*. For example, some students mentioned the following:

- Difficult to co-operate if people are not well motivated;
- Difficult to bring people to the common interest;
- People not attending or working up to standards;
- Some tend to rely on others, are not on time, and waste time:
- People get distracted very easily;
- Some members take it easy and feel relaxed;
- It may take longer for tasks to be completed due to availability of members.

- B. Uneven/unfair contribution. For example, some students mentioned the following:
- Some people do not contribute as much as others, and you end up doing most of the work;
- There are some who do not do any work where as others do all the work;
- Some people may not do equal amount of work which is unfair for the rest of the group;
- People uses others and contribute less for the assignments;
- Some in the group might not put in any effort into the work and bring down your grade.

Question 16: Do you have any suggestions and/or comments for group assignments?

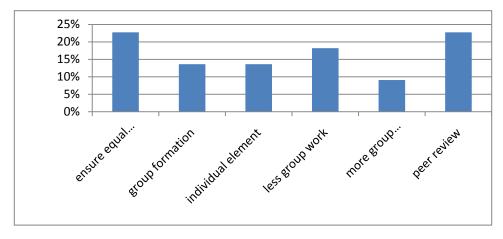


Fig. 8 Suggestions for group assignments

Fig. 8 illustrates the main suggestions from the respondents to improve the effectiveness of doing group assignments. These include: peer review, ensure equal contribution, less group work, group work with individual elements, help with group formation, and more group meetings.

Here are some examples of comments from the respondents:

- 'Group assignments in principle is very good and helps to know course mates better, but the challenges are sometimes overwhelming.'
- 'Group work can be annoying at times because not everyone does the work.'
- 'Group work can be hard if you are working with the wrong people.'
- 'Group work can be good but sometimes you may feel that you can't learn anything. Doing individual assignments can be more effective as it's easier to learn what to do.'
- 'Group assignments are good and it is a different experience of having different ideas.'
- 'Working in groups prepares us for real team work for our future career.'
- 'Working in a group allows us to know each other's experiences, learning skills, their cultures and behaviour.'
- 'It is really good to do work in group as it helps at the professional level.'
- 'It does have its advantages and disadvantages. However, I believe that the experience looks very good on CV and will be helpful in the future.'

Conclusions

Group assignments are indeed valued despite perennial problems such as unequal contribution from group members. The key findings from this study are:

- Regarding student preference of the type of assignment, the split between like group and individual work is roughly equal, so there are no strong likes and dislikes.
- b) To encourage fair contribution and improve team performance, students have developed a number

of strategies: encourage participation, have group meetings, use peer strength, share ideas, share information, share workload, and set deadlines.

- c) A wide variety of communication strategies have been involved for working on group assignments, and also for individual assignments when seeking input and support from peers. This suggests that the university should also explore and facilitate the use of these systems.
- d) Students do see both benefits and drawbacks of group work. While the biggest benefits frequently mentioned are: use peer strength, share workload, more input, develop interpersonal and team work skills, learn from peers, and increase selfconfidence, the biggest drawbacks are: uneven contribution, poor commitment, poor time management, and low ability and contribution.
- e) The majority of the respondents feel that they can learn more by doing group work, especially in terms of the development of team work and communication skills.

In follow-on research, a comparative analysis will be undertaken to analyse the differences in responses between the undergraduate and postgraduate student groups. Also, the findings about students' perceptions of group assignments will be investigated in more detail through interviews with individual students randomly selected from the survey participants.

As group course work is a common approach for education institutions in their teaching and learning activities, the outcomes of this study should contribute to a better understanding of students' feelings and perceptions about these, and to a better designed approach to overcome the drawbacks of group assignments. It is recognised that the survey was conducted among students of one university only and it might have had biased results. However, as students generally have common characteristics it is believed that the findings from this study should be applicable to students groups of other education institutions.

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Book Reviews

Thinking Out Loud on Paper Lil Brannon, Sally Griffin, Karen Haag, Tony Iannone, Cindy Urbanski, and Shana Woodward Heinemann (2008)* Review/Commentary by Jennifer P. Gray

Thinking Out Loud on Paper discusses the use of the writing classrooms. 'davbook' in These six writers/teachers/researchers collaborated to share their experiences and their rationale for using the daybook in their writing classes. The authors describe the daybook as 'a tool that we use in our daily lives with our students, as teacher researchers, as writers' (p. 1). The daybook is a 'hardcover notebook with stitched-in pages' that are difficult to remove, which allows students 'to gradually let go of the perfectionism they have learned to expect of themselves' (p. 12). Teacher/Researcher Ralph Fletcher describes daybook contents as 'stuff' that 'defies description' that students can repeatedly revisit as 'readers, writers, and thinkers' (p. 12). The authors indicate that the daybook is more than a diary or journal focusing on 'just the students' personal and often private thoughts' (p. 12). Instead, the daybook is designed to be a place for 'freely sharing writing, ideas and language' that can provide writers with a place 'to think and develop' (pp. 19, 23). The six writers collectively stress the need to 'nurture natural curiosity and questioning to create a nation of thinkers and give people the power to make and question meaning' (p. 127). The daybook is one of the tools these writers use as they strive for this goal.

The authors provide readers with practical suggestions concerning the use of the daybook in the classroom setting as well as the theoretical explanations behind these practical techniques. Readers will find examples of ready-to-use successful classroom activities with student sample responses, and the theoretical reasons behind why these activities help writers. Teachers can pluck activities from the pages of this text and have a clear understanding of the theory behind the practice. The six writers have different backgrounds, varying from university professor to elementary school teacher, and they each share how the daybook can be used in a variety of situations, from fourth-grade classes to a senior-seminar class to teacher professional development meetings. One commonality the authors share is participation in the University of North Carolina at Charlotte's National Writing Project.

The text begins by discussing what a daybook is, how to use it, how to introduce it to students, and why writers benefit from their encounters with daybooks. There are chapters that discuss digital daybooks and how to assess daybooks. The assessment process, also called a 'daybook defense,' shows readers how to provide meaningful feedback and evaluation that gives 'students ownership over the assessment of this important work through reflection' (pp. 85, 89). In this case, assessment is more than just surveillance or checking for completion; students and teachers are co-participators in the assessment process that encourages critical and self-reflective thinking. Five of the writers provide commentary about their experiences with daybook assessment, and they even include sample assessments completed by their students. Readers will find daybook assessment plans for classes including college writing courses, high school English, and elementary school interdisciplinary subjects.

A special chapter highlights the importance and empowerment of teacher research and how the daybook can become a 'place for teachers to record experience and change practice' (p. 111). Teachers are