

# THE DEVELOPMENT OF TRANSFERABLE SKILLS IN BUSINESS STUDIES DEGREES

Chris McLean, Carol Reid and Fred Scharf\*

## Introduction

At a recent conference of the Confederation of British Industry (CBI), the Education Secretary, David Blunkett informed the delegates "that the government planned to build more employment skills and work experience into the higher education curriculum" (Tysome, 1998). He added the warning that the new Quality Assurance Agency would monitor developments and identify "failing" institutions. In his opinion, this approach had already proved effective in implementing government policy in the primary and secondary school sectors.

This emphasis on closer links with industry is a continuation of policies developed under the previous Conservative government. It dates back to 1987 when the Secretary of State for Employment launched the Enterprise in Higher Education (EHE) initiative. Its main aim was to "assist institutions of Higher Education develop enterprising graduates in partnership with employers" (Training Agency, 1988). In response to this, the University of Ulster established an Enterprise in Higher Education Unit with the objective of developing an institutional framework which would afford every student the opportunity to develop the requisite competencies. The results of these early activities were disseminated at a conference at the University and in a special edition of this journal.

As a consequence of all this, changes occurred both in the content and delivery of modules. It is the aim of this article to examine the outcomes and perceived value of the use of group work in teaching and assessment in several modules in the School of Commerce and International Business Studies. Within this broad aim several specific objectives will be pursued. These are to evaluate:

- students' attitudes to group work;
- students' attitudes to peer and self assessment;
- the development and use of skills involved in group work and assessment;
- the impact on group work of factors such as gender, entry qualification and year and level of study.

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\* The authors are lecturers in the School of Commerce and International Business Studies at the University of Ulster at Coleraine.

## Personal transferable skills

Bailey (1993) provides the following explanation of a term which has undergone several changes of meaning during the past decade:

Enterprise skills or personal transferable skills are those competencies which enable and assist students to be successful not only throughout their student career but also in their subsequent personal and professional work lives. Today's student needs to be able to translate theory into practice – not just “know how to” but to actually perform. This requires not only academic training but also life skills training. Industry, Business and Commerce are interested in the development of personal transferable skills and recognise the key role that higher education plays in this process.

In the following, the term “transferable skills” will be used in order to avoid confusion. In the opinion of the authors this is currently the term most widely used. It also encapsulates most accurately their understanding of a particular set of skills which, once acquired, can be transferred to a variety of work situations.

Closer examination of the range of transferable skills, as outlined by Brown & Pendlebury (1992) and Heywood (1994), suggests a breakdown into four broad areas:

- cognitive skills – solving problems, using information, evaluation, thinking creatively;
- social skills – working with others as leader and team-members, communicating;
- self-management – flexibility, independence, initiative, risk-taking;
- learning to learn – knowing how one learns in different contexts and being able to identify and apply the appropriate style(s) of learning.

Within these four areas, more specific skills can be identified. The Association of Graduate Recruiters (AGR) (1995) reports the results of a survey, carried out by the Personal Skills Unit at the University of Sheffield, in which the ten most important attributes which employers seek from graduates are listed as follows: 1) oral communication; 2) teamwork; 3) enthusiasm; 4) motivation; 5) initiative; 6) leadership; 7) commitment; 8) interpersonal skills; 9) organising; 10) foreign language competence.

Some of these attributes are obviously very closely linked with the character and personality of a person but others are clearly skills which can be taught. The two skills which were considered to be most important in this survey, communication skills and teamwork, are widely seen as essential tools for today's graduates. John Robinson, chairman of the CBI's Technology and Innovation Committee repeated the demands of his members when he said:

Businesses are not remedial educators. We do not expect young people to come out of education unaware of the world of business and lacking key skills such as communicating and team working (Tysome, 1998).

Teaching these skills to undergraduates is in many ways a recent development in the sector. It might be useful, therefore, to examine some of the relevant theoretical foundations of teaching and learning and the role which assessment plays in this context.

## Teaching, Learning and Assessment

The last two decades have seen dramatic change in the thinking about learning, firstly to a view of the learner "as an active processor of information" (Brown & Atkins, 1988) and then a movement towards a "deep approach" (Entwistle, 1992) universally known as active learning. More recently the idea of independent learning has gained ground. Denicolo, Entwistle & Hounsell (1992) outlined four of the distinctive features of active learning as " a search for meaning and understanding; a greater student responsibility for learning, a concern with skills as well as knowledge; and an approach which looks to wider career and social settings."

In comparing students who adopt this active or deep approach with those who follow a surface approach, Biggs (1987) states that a student who adopts a deep approach:

- is interested in the academic task and derives enjoyment from carrying it out;
- searches for the meaning inherent in the task;
- personalises the task, making it meaningful to his/her own experience and to the real world;
- integrates aspects or parts of the task into a whole (for instance relates evidence to a conclusion), sees relationships between this whole and previous knowledge;
- tries to theorise about the task, forms hypothesis.

On the other hand, a student who adopts a surface approach:

- sees the task as a demand to be met, a necessary imposition if some other goal is to be reached (a qualification for instance);
- sees the aspects or parts of the task as discrete and unrelated either to each other or to other tasks;
- is worried about the time the task is taking;
- avoids personal or other meanings the tasks may have;
- relies on memorisation, attempting to reproduce the surface aspects of the task (the words used, for example, or a diagram).

In order to encourage the adoption of a more active and independent approach to learning, it is essential that assessment procedures and systems keep pace with these developments. Indeed, the assessment process must be an integral part of the teaching and learning strategy. There is increasing evidence as to the value of students taking an active part in this process. Mathews (1994), Stefani (1994) and Conway *et al.* (1993) have provided much food for thought as well as practical help and guidance on this issue.

The involvement of the student in the assessment process can be managed through the introduction and use of self and/or peer assessment systems. In either case, this will involve the development of criteria or standards and an evaluation of either one's own or one's peers' performance against these standards.

One of the biggest concerns with regard to the involvement of students in the assessment process is the reliability of their marking. There is a widespread belief that

marks awarded by students should not be used in the formal grading of students' work, because these marks would not be accurate enough. However, the findings of a number of studies in this area, such as those by Hughes and Large (1993), Stefani (1994) and Falchikov (1995), have shown either a positive correlation between the tutor's mark and the peer or self-assessment marks, or slightly more stringent marking by self and peers.

The introduction of self and peer assessment can also be shown to increase motivation and critical processing. Stefani (1994) claims that, when students became involved in the assessment process, there was generally a higher degree of motivation and a noticeably increased level of interest during large classes. She found that "almost 100% of the students said that peer and self-assessment procedures made them think more and 85% said it made them learn more than traditionally assessed work".

## **Group Theory**

It is not within the scope of this article to deal with every aspect of group theory in detail. It is proposed instead to take a pragmatic view and comment only on issues which proved to be relevant in the group projects which formed the basis of this investigation.

### ***Characteristics of Groups***

According to Gaskell & Seal (1976) and Mullins (1996), groups are not merely an agglomeration of people but have:

- observable interpersonal relations;
- shared norms;
- common objectives;
- concrete, dynamic interrelations and interdependence;
- definable membership;
- the ability to act in a unitary manner.

There is a general consensus that group behaviour is determined by three main factors:

### ***Structures of the Group***

These include size, membership choice, time, location, rules and communication patterns.

#### ***Size***

Size is very important to the effective functioning of a group. If a group is too small for the task in hand, participants may feel overburdened by the roles they must play and the workload; after all, one of the advantages of working in a group is the potential division of labour. Alternatively, if a group is too large, there is a tendency for members to split into sub-groups, which can dilute the synergy effects of group work, cause difficulties with communication, or it may have a negative effect on the performance levels of

individuals in the group. Brown (1996) points out “the larger the number, the greater the possibility of idlers loafing and shy violets being over-shadowed by the more vociferous and pushy members of the group”. The optimal size of a group is, of course, also very much dependent on the requirements of the task set. Brown suggests a number of six or seven, Vernelle (1994) considers twelve members to be the maximum.

### *Membership Choice*

The element of choice as to whether or not individuals may join a group will have a major impact on their perception of, and performance in the group. Also whether membership is closed (i.e. if someone leaves, no new member will join the group) or open will have an impact on group performance. Vernelle (1994) suggests that “if a group is to have a limited life, then closed membership ensures continuity”.

### *Influences of individual members*

Every individual brings his/her own personality, knowledge and experience to the group, thereby affecting the group’s dynamics and operation. Several aspects are worth noting:

- Roles in the group
- Behavioural differences
- Response to group pressure
- Attitudes to authority
- Hidden agendas

### *Group Processes*

Most of the research carried out to investigate group processes has established the existence of stages or phases in the development of groups, with differing actions or results at each of these stages. Several of these stage theories are listed below:

	Garland, Jones & Kolodny (1972)	Bass and Ryterband (1979)	Tuckman (1965)
STAGE 1	Pre-affiliation	Developing mutual acceptance and membership	Forming
STAGE 2	Power and Control	Communication and decision-making	Storming
STAGE 3	Move to intimacy	Motivation and productivity	Norming
STAGE 4	Differentiation	Control and Organisation	Performing
STAGE 5	Separation		

Despite the different nomenclature, the processes and activities are very similar across all these models. They all identify the same issues at the setting up of a group, members getting to know each other, finding out the initial boundaries, and the rules of the group. This is followed by a stage where members start considering the task, discussing and evaluating everyone's viewpoints. This can only happen as the group becomes comfortable and relaxed with its own membership. This is also a stage where conflict may arise and have to be resolved, or where disagreement may be encouraged to promote discussion. Next comes a stage where the group feels more like a complete operating unit, where work can be started, group norms are adhered to and there is an increased feeling of kinship. This leads into the final organisation and performance of the tasks set, where performance will be enhanced if the group has formed effectively. Finally, some theorists identify separation as a fifth stage. This can be a traumatic experience for some members as a close relationship may have developed between individuals in the group.

### **Group work methods – The Syndicate**

The group technique used with all the students who were monitored in this project was the syndicate-based method, first introduced by Collier (1983). In this method, students are divided into 'syndicates' of 4–8 students, and the bulk of the work consists of a series of assignments carried out on a co-operative basis by the syndicates, acting as teams, for much of the time in the absence of the teacher. Collier suggests that "syndicate based methods have been evolved to create conditions of study which promote a fuller development in respect of the higher level outcomes than customary lecture/discussion techniques". In his investigation of students in groups he found that

the majority of students felt that, compared with the usual lecture/discussion course, they had worked harder, but felt less pressure because of their involvement; that they had used books more effectively; and only one fifth felt that they had learned less in regard to academic content.

When using syndicate methods, as with other group techniques, there are a number of aspects to consider. The most important ones are selection of the group, evaluation of the group and preparation for group work.

#### ***Selection of the group***

There are several ways of selecting group members:

##### ***Staff decision***

This is an effective method if the staff member has a good knowledge of the students, so that a specific composition of a group may be devised. It is also the selection method which tends to mirror the 'real work' situation most closely, where people are often left with little choice as to whom they work with as members of a team.

### *Student choice*

If students are responsible for the composition of their own group, they are normally more committed and the group can function more effectively in a shorter space of time. Usually they have a better knowledge of those who will contribute to the desired unity of purpose or who will complement their own particular strengths. The compatibility of the group members which is the ultimate objective in group selection may not just be concerned with the ability to work together or with social friendship; it may also be affected by factors such as ease of access for the members for group meetings or a common interest in a particular topic area. In common with groups selected by staff, self-selected groups may mean that groups are divided into distinctly strong or weak groups. Lyn and Taylor (1993) point out that

...there is a tendency for enthusiastic and talented students to get together to form some strong teams while their less effective and more apathetic colleagues form teams that are weak. Experience with this process indicates that there is invariably trouble later in the year because of lack of interest and motivation on the part of the students in the weak teams.

However, students in the very early part of their course may find it difficult to cope with self-selection because they do not know each other sufficiently well. At this stage, staff do not know the students either. The third method might be preferred in such a situation.

### *Random allocation*

Students are allocated to a particular group through some random system. The difficulty here is that students may be appointed to groups where there is a problem of compatibility and this can lead to conflict within the group. Conflict in these situations is more difficult to resolve, since members are not in the group by choice or even for an explicit reason.

### *Evaluation of the group*

The evaluation of groups and group work is a complex issue and the most common method of evaluation is based on assessment of the outcome of the group work. This, however, does not give a reliable indication of the way the group processes worked or whether skills were significantly enhanced. This is an area which merits further research in order to improve our understanding of these processes.

One aspect of group evaluation which has received considerable attention is that of determining the contribution of individuals to the group outcome. Usually some element of peer and/or self-assessment is involved in this process. Mathews (1994), in his evaluation of groups, advocates three methods: tutor's knowledge of the group; any factual evidence provided by the group; peer (and self) evaluation.

When using peer and /or self-evaluation techniques, there are three methods which are commonly employed.

*Ranking* – each member of the group is required to rank him/herself and his/her peers in terms of contribution to the final outcome. This may be difficult for students to do, in that they are sometimes unable to differentiate sufficiently between certain group members; it may also be divisive and hard to interpret.

*Itemised rating scale* – students are asked to rate every member of the group using a pre-determined scale e.g. excellent, average, unsatisfactory. Again, this type of evaluation can cause problems of interpretation for the lecturer as these scales might have a different meaning for each student.

*Constant sum technique* – each group is allocated a specific score or value and group members are asked to distribute that overall score among the group members, based on their overall contribution. This method allows the evaluation of relative inputs perhaps in a more reliable way than the two mentioned above.

A further consideration in the use of peer and/or self-evaluation is the question whether the evaluation should be completely open or whether it should be carried out anonymously. The difficulty with face-to-face evaluation is a potential reluctance to downgrade group members. With covert evaluation, on the other hand, there is a risk that members could abuse the scheme i.e. marking down one or several members of the group which would result in a higher score for themselves and/or their friend(s).

The final decision which the tutor has to take is the question of weighting of the marks derived through peer assessment. Simply using these marks without any counterbalances carries with it a high risk factor. Based on their own experience, the authors would strongly advocate some element of moderation of peer-assessed marks by the module tutor. It is important, however, that the assessment procedures are communicated to the students in full at the beginning of the semester and that the assessment process remains transparent throughout.

### ***Preparation for group work***

It is essential that students are adequately prepared for group work. Some of the issues discussed above are a useful indicator as to the possible content of a structured preparatory programme. Students need to have an understanding of group dynamics, of potential problem scenarios and, most importantly, they must be aware of appropriate strategies to deal with these problems. Where possible, students should be given an opportunity to apply this knowledge in a group environment, where the outcome of the task set is not formally assessed, before they progress to graded group work. Similarly, the complexities of peer assessment have to be explained and relevant criteria developed. An adequate level of preparation is crucial for the successful outcome. Collier (1983) warns that “for students a massive adjustment of outlook is necessary. None of the usual structures of directed learning are present and students are apt to feel they are lost in an uncharted open space”. In the final part of this article the responses to group work of several cohorts of students in the Faculty of Business and Management will be discussed.

## Research Methodology

It was felt to be important that students from various year groups were involved in this survey since, as current research indicates, students' approach to learning changes as they progress through their course of studies. Each of the selected cohorts had used group work extensively in one of their modules of study. They were:

- year 1 undergraduate students taking a 'Business Organisation' module – 300 students;
- final year undergraduate students enrolled in an 'International Marketing' module – 54 students;
- Postgraduate students studying a 'Marketing and Exporting' module – 57 students.

In each case, students were asked to undertake a group project which, on completion, had to be presented in a plenary session. The presentation was assessed by the class and the tutor. In addition to the oral presentation, a written report had to be submitted. In the case of the first year group, students were selected at random by the tutor, as the students did not know each other sufficiently well. In the other two groups self-selection was used since these students were more mature and knew each other better.

Each of the groups received three preparation workshops, one each on group work, presentations skills and peer assessment issues. Students were also asked to develop a set of five criteria against which their presentations would be judged. Group sizes ranged from 3–6, depending on the size of the class and the year group. Each group was asked to assess individual contributions using the constant sum technique. They were also required to provide a detailed breakdown of the roles played by individuals in the group.

In order to obtain an accurate representation of students' views both quantitative and qualitative methods were used. The quantitative element consisted of a detailed questionnaire<sup>1</sup> which had been pre-tested on a small group of 25 students. The final version was administered to all student groups, immediately after they had completed their group project. The questionnaire was self-administered and returned anonymously. The response rate was high; 95% of respondents returned a valid response.

This was followed by a series of focus group interviews which provided a qualitative cross-check and an effective way of gaining relevant information in addition to the quantitative data. Three focus group interviews were conducted, each one representing one of the three modules involved in the survey. Participants were selected at random from the three year groups and all agreed to participate in the discussion. The sessions were videotaped so as to ease interpretation and analysis. The focus group discussions provided a suitable forum for in-depth discussion of issues raised in the questionnaires.

Empirical data was analysed, using SPSS. T-tests were also carried out at the 1% and 5% levels to identify any significant relationships between the dependent variables

such as attitudes to group work etc. and the following independent variables: gender; entry qualification; year of study.

## **Main findings and discussion**

The results of the survey will be presented as the total number of responses of the three student groups. This will be followed by a discussion of the significance of the independent variables listed above.

### ***Previous experience in group work***

The majority of students in all three cohorts claimed to have had previous group work experience; only 4% of students claimed that they had not worked in groups before. Of those students who had previous experience, many had this in more than one setting. The majority of experiences, however, had been in an academic setting i.e. school (55%) and/or university (60%). A large proportion had also experience of groups within a work setting (68%). This high level of previous experience is interesting, as in all the focus groups the students still expressed difficulties in understanding and managing groups. They felt that the assignment had been the first time they ever had to plan their group work in such depth. While they were working on the assignment they felt they were beginning to understand the dynamics of groups and how group activity should be organised in order to maximise outcomes.

### ***Student attitudes to group work***

Sixty-five per cent of students were happy or very happy about working in groups; only 2% felt very reluctant about becoming a group member, but 23% were unsure. However, in the focus group discussions it was found that some students had had negative experiences in groups in the past and that this led to suspicion or reluctance to participate.

When questioned about the ease of working collaboratively in the group setting, 69% were comfortable, and only 4% found it very difficult. Evidence from the focus groups suggests that most difficulties occurred due to differing personalities, role conflicts, or a lack of organisation, direction and leadership. Although these were aspects addressed in the preparation sessions, students obviously only appreciated the difficulties fully when they are actually in the group setting. Those students who had experienced difficulties were able to recognise why they had arisen and, in most cases, were able to offer solutions to their problems.

With regard to the learning environment, the students seemed to have responded well to the group work setting; 66% felt that they had learned more through interaction with others; 67% that the sessions helped them learn; 46% felt that it had increased their level of performance; 43% felt that they understood the subject matter better than if it had been a conventional assignment; 47% learned a great deal from the other members

of their group; and 58% felt that it had enhanced their motivation and interest levels. Only 18% of students felt that they would have learned more if they had worked alone.

Aside from these influences on learning and performance, there were also a number of secondary outcomes. The group work was found to be enjoyable (55%); to make students feel more capable (47%) and to help them integrate better with other students (78%). The last is of particular importance for first year students. It is worth noting that a significant number of students, 33% and 39% respectively, were unsure about these outcomes. Again, this can be linked to the operational difficulties which some groups experienced.

Indeed, in response to all questions there was a substantial proportion of students who were still unsure about their attitude to group work. This was more clearly articulated in some of the focus group sessions. Many felt less confident about doing well in a group-work situation because, as a form of assessment, it was a new experience for them. This is understandable in that final year and postgraduate students at the University of Ulster, to date, are likely to have been used to more traditional approaches to assessment. Thus students had to cope with a different system, learn how to organise and operate effectively in a group, as well as answering the assessment question set. In this situation, because of the inherent difficulties which may occur when first starting in a group, suspicion or uncertainty can be expected to be high.

Despite these reservations, it is interesting to note that 61% of students stated that they would recommend this type of work to others. The consensus of opinion in the focus groups was also that, on reflection, group work had been beneficial, but students felt they needed to be exposed to it more often in order to feel comfortable with it and more proficient in its use. That is not to say that they wanted to see group work in every module; rather, they would have liked to see more of a balance between individual and group work.

### ***Student attitudes to assessment***

Students appeared to have had more difficulties with the whole aspect of assessment, in particular having to evaluate the individual contributions of their own group members. Most students (55%) felt that peer assessment was fair and correct (30% unsure, 15% unfair) and that they were fairly confident (46%) about using the criteria (35% unsure); only 29% felt uncomfortable about assessing other groups (25% unsure). Only 14% actually resented being assessed by other students (29% unsure). In general, the level of uncertainty about assessment was comparatively high. This was further reflected by 62% of students either feeling unsure (38%) or agreeing (24%) that standards would fall if peer assessment became standard practice; that 66% felt unsure about developing the assessment criteria; and that 44% preferred not to assess individual members of their group, with 22% being unsure about this. Interestingly, 90% of students were happy with the proportion of marks allocated to peer assessment; and 63% felt that the experience had increased their ability to assess themselves and their peers.

The issues raised by the questionnaire also emerged in the focus group discussions. Students' major concern was that they were not 'qualified' to judge the work of others or even their own work. They even worried about the anonymity of the whole exercise, being concerned that other students would know who had awarded what marks. This attitude was particularly prevalent when students were asked about the assessment of their own group members. Some indicated that they would prefer not to place a mark against each member. Rather, they would prefer to discuss, individually, the level of contribution of themselves and others with the tutor and let the tutor decide what marks should be allocated to each group member. That way they would be seen as being less responsible for the outcome.

With respect to the anonymity of the system, students were totally in agreement that it remain a secret evaluation. They felt that open evaluation would have a very detrimental effect on relationships within the class. When questioned further about this, they agreed that in the 'real' work situation criticism and evaluation would have to be much more open. Naïvely perhaps, they felt this would be easier as there would not be the same personal relationships and that in a work situation everyone would 'pull their weight' anyhow. Whilst students also had difficulties when asked to assess the other group presentations, this was more related to their perceived inexperience as markers. They did express strong support for the idea in principle, both within the questionnaires and in the focus groups. They said they liked to be involved, but that they needed more experience.

### ***Skills used during group work project***

Students were asked about their use of skills during the project. Reading (70%); listening (69%) and giving opinions (52%) were used most frequently. The skills that were cited most frequently as having never been used were arguing (47%) and criticising (22%).

### ***Improvement in skills***

More important than the use of skills is the perceived level of improvement in skills gained through the exercise. The results indicate that across all the skills listed, there had been at least some improvement for the majority of students. In fact, in many cases the improvements had been good or considerable.

The three areas that were perceived to have improved most were communication skills (83% good or considerable); teamwork skills (80% good or considerable); subject knowledge (79% good or considerable); presentation skills (79% good or considerable).

Apart from the considerable benefits in the area of transferable skills, there was also a notable improvement in subject knowledge. This, of course, is the core objective of each module and must be met.

**TABLE 1: Use of Skills**

SKILL	HOW OFTEN USED		
	Never	Sometimes	Often
Explaining	1%	48%	51%
Questioning	7%	52%	41%
Responding	4%	45%	51%
Directing	8%	61%	30%
Organising	3%	48%	49%
Criticising	22%	65%	13%
Arguing	47%	41%	12%
Giving Opinions	3%	45%	52%
Defining	5%	68%	27%
Presenting	3%	52%	45%
Reading	2%	28%	70%
Listening	1%	30%	69%

**TABLE 2: Level of Skills Improvement**

SKILL	LEVEL OF IMPROVEMENT				
	Considerable	Good	Some	Little	None
Problem Solving	6%	42%	39%	9%	4%
Leadership	10%	50%	31%	6%	3%
Research	24%	52%	20%	4%	0%
Study Skills	10%	48%	32%	8%	2%
Communication	31%	52%	13%	3%	1%
Time Management	21%	39%	30%	9%	1%
Presentation	33%	46%	16%	3%	2%
Peer Assessment	14%	45%	32%	6%	3%
Self Assessment	15%	42%	32%	8%	3%
Subject Knowledge	35%	44%	18%	3%	0%
Teamwork	34%	46%	15%	3%	2%

### ***Group membership and selection***

Sixty-two per cent of the students surveyed felt that the group should be selected by the tutor. When discussed in the focus groups, first year students were still strongly in support of tutor or random selection as they did not know the other students well enough to select an effective group. While some of the final year and postgraduate students favoured student selection, a number still preferred staff selection. Students favouring selection of their own group members felt they knew with whom they could work best. The latter group who preferred staff selection felt that, if they had to select their own group, friends would expect to be picked; however, they did not always want to work with their friends as they feared conflict and problems. Another concern which some of the final year students had with student selection was that, even though they knew the other class members well, they had little or no experience of working with them in a group.

### ***Group work in the future?***

When asked whether they would like to see more group work in other modules, most respondents (65%) strongly favoured the further use of it. Practice and timing were seen as being imperative to the success of group work. Final year students felt that they would need more exposure to group work in earlier years, so as by final year, when every mark is crucial, they would be able to use these techniques more effectively.

### ***Group work and gender***

There were very few differences identified between males' and females' responses. In the case of postgraduate and final year students all the differences related to assessment of others, but there was no clear pattern as to whether males or females were more uncomfortable with this. In response to some of the questions males appeared more uncertain, whereas in others it was females. Thus, there is no conclusive evidence to suggest that gender had any impact on the group work in this setting.

### ***Group work and entry qualifications***

The principal leaving qualifications amongst participating students are BTEC HND, 'A' Levels (Northern Ireland) and Leaving Certificate (Republic of Ireland). Comparing the BTEC students' responses to those of candidates coming from the more academically orientated background of 'A' levels and Irish Leaving Certificate, no differences in attitudes, skills improvement or use were identified among the first year students. The only differences related to decisions about group membership and even these did not prove conclusive. When looking at the final year students only one difference was identified; as would be expected, given the HND emphasis on group work, BTEC students found it easier to work collaboratively.

### ***Group work and year of study***

T-tests were carried out comparing the difference between first year and final year students; first year and postgraduate students; and final year and postgraduate students. In all cases there were numerous differences. Indeed of all the influencing factors addressed, the year of study had the greatest impact on attitudes to the group work project and its outcome.

#### *First Year. vs. Final year and Postgraduates*

Twenty four attributes were identified as being statistically significant, when comparing the results of first and final year students, while nineteen were significant in the case of first year undergraduates and postgraduates.

In the category of attitudes to group work, first year candidates had a consistently more positive attitude to group work than those in final year in both the ease and enjoyment of group work and the learning and social outcomes. It is perhaps understandable that they would appreciate the social and integrative aspects of working in groups more. After all, most of the final year students have known each other for at least three years and have well developed social relations, whereas, for first year students, (especially as the exercise took place in their first semester), it did provide an opportunity, or even 'force' students to get to know each other. This message came across strongly in the focus groups. Some of the first year group members even recounted that the presentations had turned into an excuse for a social occasion. After each presentation the class would get together to celebrate or commiserate with the group who had given the presentation that day. This meant that social groupings were formed much more quickly and easily than they would have been under the more conventional lecture or seminar situations.

First years were much more open to group work and benefited more from the group setting; they claimed that it was easy to work collaboratively, that it had helped them to learn and that they had learned more through interaction with others. Final year students were less open to this style as they have become increasingly conditioned by a system that still places much emphasis on knowledge transfer. First year students, on the other hand, do not have any preconceived notions. They view group work with a totally open mind as they do not know what the 'norm' at University is.

As far as assessment is concerned, only one aspect was viewed differently by the two groups, this was the belief that standards would fall if peer assessment became standard practice. Here again, final year undergraduates were more unsure perhaps for the same reasons as detailed above.

The use of skills during group work was more prevalent among the final year students possibly due to the fact that they know each other better and would be more comfortable when using the skills identified, i.e. explaining, questioning, arguing, giving opinions, directing, etc. With respect to improvement in skills, only two were

identified as having a statistically significant difference in their response; these were research and study skills. In both cases improvements were greater for first year students, probably due to the fact that they would have less exposure to and experience of these skills within an academic setting. Final year students, on the other hand, would have had to use them for every assignment and examination in their University career.

Finally, there were a number of differences when looking at the issues of group selection and group membership. As previously discussed, first year students preferred tutor selection. With regard to group membership, first year students were more strongly in favour of a mix of ability and gender than those in final year. When this was raised in the focus groups, it was found that the difference occurred because, in their final year, students were primarily concerned about their marks. While some felt that their performance had been enhanced through group cohesion/pressure, others felt that more consideration should be given to ensuring that the groups had a very homogeneous mix of abilities, so classification levels could be maintained. Not surprisingly it was also found that first year students wanted to see more group work in their modules than their counterparts in final year. As would be expected when comparing first years and postgraduates, the results were very similar to those detailed above, except that self-assessment skills and subject knowledge were also more improved for first year students.

### *Final Year vs. Postgraduate Students*

Judging by the similarity of results between first and final year undergraduates and postgraduates, it might have been expected that there would be minimal differences between undergraduate students in their final year and postgraduates. However, whilst there were no significant differences with respect to attitudes to group work, opinions did differ with respect to assessment, the use and improvement of skills and the selection of groups.

Final year students were less certain about the introduction of peer assessment. This may have been due to the greater confidence that postgraduates would have in their own abilities because, firstly, they already hold a recognised University qualification, and secondly, all the students in the postgraduate class held an upper second class honours degree or better. The group members were thus more self-assured and had a greater belief in their own ability. These differences were noted in the focus groups when assessment was discussed. While many of the same concerns were expressed by each group, the postgraduates were more confident about their ability to assess themselves and others, though it must be noted that they still demonstrated a degree of wariness about this.

The skills of ‘criticising’ and ‘defining’ were more often used by final years, again perhaps for the same reasons as stated earlier. Most of the postgraduate students would only have known each other for one semester. This would also explain why final

year students still had a greater preference for student selection of groups. Improvement in presentation, self and peer assessment skills were also greater for final year students than for postgraduates. This may be due to the higher base level in the case of the latter.

## Conclusion

In this article we have attempted to give an account of the major issues involved in the use of group work as a learning, teaching and assessment method, and students' perceptions of it. In our experience, the single most important factor for the successful outcome of group work is the level of preparation which students receive before the formal start of any project. This necessitates a higher than average degree of collaboration between module co-ordinators in order to provide continuity and avoid repetition throughout the students' programme of study.

The outcome of the study confirmed the positive experience which a group setting provides for the participants. If students are less enthusiastic about aspects of group and peer assessment, this should not be seen as a reason to abandon these methods. They are, in our opinion, essential elements in the successful completion of the assessment of outcomes of group work. Feedback from graduates in various work settings provides perhaps the greatest incentive for us to continue with this approach to learning and teaching. Previous cohorts of students who are now in employment comment very positively on the value of the skills acquired in group work and their use in employment. This, however, is based mainly on anecdotal evidence at present and further research is required to substantiate these views.

## Notes

1 A copy of the questionnaire is available from the authors on request.

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