

# chapter 5

## FACILITATING: SMALL-GROUP TEACHING

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*Of a good leader when his task is finished, his goal achieved, they say, we did that ourselves (Lao Tzu, c. 600 BCE).*

In this chapter, we explore the significance of small-group learning in higher education. Drawing on a wide range of theories and practices of small-group teaching, we examine key aspects of group teaching, including the overall purposes of groups, group leadership and phases of groups. We then carefully explore how different types of group activity might address the learning issues raised by the critical matrix, providing a diverse range of possibilities and activities for achieving the different outcomes which teachers may have established for the students on their courses.

### INTRODUCTION

Lao Tzu's ancient observation resonates with many contemporary ideas in teaching in higher education. Earlier, we discussed the importance of innovation theory in course design, and a key aspect of this is encouraging our students' sense of ownership in the learning process. We have also suggested that learning is more a process of change than of assimilation. In other words, learning is innovation.

In today's context, however, Lao Tzu's words may seem manipulative, even coercive. Are we setting up our students to do what we want them to

do, rather than helping them develop a strong sense of responsibility for their own learning? Are we helping them view their programmes as a joint venture with their teachers, rather than as a course of study imposed upon them? The reality is we must be sensitive to our own tendencies to transmit in group work; otherwise students will hardly feel they did it themselves.

The opportunity to come together in small groups to change conceptions and explore theories and insights provides students with one of the most important learning experiences higher education has to offer. Research has shown that small-group work can help students construct meaning more deeply; enhance critical thinking skills; provide opportunities for feedback and self-reflection; promote social and emotional development; enhance awareness and acceptance of diversity; and even lessen student attrition (Cooper and Robinson, 2000a). Interacting with their peers can help students develop and construct their own conceptions – partly by having to think through and even defend their own ideas, but also when they question or clarify the views held by others (Webb and Mastergeorge, 2003). When worked into large classes, small-group activities can also reduce anonymity and promote student accountability (Yazedjian and Kolkhorst, 2007).

Small-group work can also develop the interpersonal and collegial interactions among students; promote leadership, teamwork and collaboration; and enhance practical problem-solving, decision-making, presenting and other professional skills. Research on millennials has suggested that students entering college today are more team-oriented than ever before, having gone through their youth and adolescence moving from one structured team activity, project or sport to the next, winning or losing as a team, not as individuals (Howe and Strauss, 2003; DeBard, 2004). This generation of students is said to be more rule-abiding and compliant than previous generations, and are comfortable with (and may even expect) learning situations that stress co-operation and collaboration over competition (DeBard, 2004).

While there is a strong student demand for teaching through tutorials and seminars, and other forms of small-group learning (Bligh, 2000b), not all students, or the faculty who teach them, are satisfied with the experience. Teachers may find teaching in small groups to be demanding, particularly if they have not learnt strategies for engaging their students effectively. This may also be the case for our students who, despite years of primary and secondary education aimed at developing interpersonal skills, express the same kind of feelings prevalent years ago: ‘Classes are purgatory for [faculty] and purgatory for us. They’re boring because everyone just sits

there and everyone else's silent and I feel it's incumbent on me to speak but I don't like to unless I am sure of myself. I don't like to express half-formed ideas' (Cox, 1976: 40). We might say that expressing half-formed ideas to develop in dialogue with others is an important part of the whole learning process, but our students may still need to be convinced.

Teaching in small groups is not without its challenges. Issues, such as domination by individuals, a lack of trust among group members, hidden agendas and private aims can subvert what the group is trying to do and pose substantial problems for achieving learning. They also include distractions that may be much more than a healthy form of testing out and/or 'scapegoating', which can not only ruin the atmosphere of a group but also prevent any understanding of the underlying problems (McKeachie, 2006).

Teachers, too, may be sceptical of small-group work for other reasons as well. For many, employing small-group activities may mean that they must reject lectures, an approach they would not want to abandon. Others may assume that using class time for small-group work means they must sacrifice time to cover important material, while others may question how well students learn in small-group contexts. Still others have resisted small-group work for reasons related to the perception that learning is a solitary venture; the idea that students must be adequately prepped to work in groups; perceptions of student resistance to group work; real or imagined negative reactions from fellow faculty members; and simply the perception that classroom logistics are ill-conducive to small-group work (Cooper et al., 2000).

In this chapter, we first explore some of these general problems and issues and consider the roles and purposes of group work. Then we give the practical dimension in terms of how they apply to the different areas of the matrix and what might be done to improve teaching in these areas. Unfortunately, problems within groups are not solved by reading advice, no matter how useful. Changing behaviour in this context involves some deeper assumptions, expectations and even values that do not change easily through acquiring a little extra knowledge.

A serious difficulty is the discrepancy between expectations and what actually happens. Usually when we come together in groups, as distinct from crowds or audiences, for instance, we do so either to seek pleasure in other people's company, in a pub or at a party for example, or because we need to join together to do something or to produce something. On the one hand, students may expect to experience a sense of belonging and enjoyment, and to share ideas and experiences. Alternatively, when a group is really nothing more than a collection of individual learners, even when some learning happens, students may feel threatened by the group experience. If individuals

Table 5.1 *Small-group work and the critical matrix*

<b>Intellectual</b>	<b>Personal</b>
Developing cognitive understanding	Providing opportunities for practice in self-expression
Appreciating other perceptions, points of view	Developing self-awareness
Changing conceptions	Encouraging autonomy
Questioning assumptions	Encouraging commitment
Developing oral and written skills	Weakening defensive attitudes
Providing feedback to faculty	Improving attitudes to the subject
<b>Social</b>	<b>Practical</b>
Encouraging co-operation and an awareness of others	Developing teamwork skills
Developing a sense of social identity	Developing entrepreneurial skills
Developing a sense of belonging and community	Solving practical problems
Enhancing communication	Carrying out specific tasks
Developing leadership	Creating artefacts or designs
	Writing reports
	Collecting samples
	Describing environments
	Presenting/reporting knowledge

feel that they have not engaged with, or meaningfully contributed something to the group, they may feel frustrated, powerless or even alienated. Understanding the nature and dynamics of the small-group experience can do much to enhance learning.

## GROUP WORK

### Purposes

In Table 5.1 we present some common purposes of group work, which we frame within the categories of the critical matrix. As with any genre of teaching, great skill and determination are needed to see these purposes achieved.

Many faculty believe that the essential purpose of teaching in small groups is to ensure that students understand what they try to convey in lectures, although this view may be changing (Bogaard et al., 2005). Careful questioning, some argue, may bring out the major misunderstandings and difficulties, which then can be clarified by the teacher. Given that teachers often feel extreme pressure to cover ground effectively, this view is understandable. Yet, if this purpose is pursued vigorously, other purposes of group work may be ignored or actively discouraged, to the detriment of student learning and professional development.

When they leave the formal supportive structures of higher education behind them, students will likely encounter new structures in the workplace, but may have little ability to cope with new learning contexts. Many professionals, for example, now find themselves working in teams, and an important function of group work in higher education is to enable students to work both independently and co-operatively within a team. Such teams may or may not have formal leaders. Moreover, students entering the workplace are unlikely to encounter the leadership style of the traditional seminar leader who controls the activity of the class in such a way that students may not feel any sense of responsibility for what happens in the group.

The group experience can, in fact, be extremely important in achieving freedom from dependency if the students learn to play a variety of roles in the group and begin to develop a sense of responsibility for the group's success or failure. In the process of learning these roles they will need to develop more acute self-understanding; to become aware of their own inhibitions, defences and assumptions; to be able to recognize the difficulties that other students experience; and to begin to help themselves to overcome these difficulties. In learning to become more sensitive to different points of view and ways of thinking, and to work co-operatively with others using the varied skills of the group, they may begin to develop a surer sense of social identity and a feeling of belonging and commitment. This can not only encourage enthusiasm in the subject but also a willingness to reveal abilities, which are frequently hidden, even from themselves. Students' oral skills, moreover, are unlikely to develop very much simply in response to probing questions.

There needs to be a genuine sense of opportunity for self-expression and this may be difficult in a context where the main object is to increase understanding and correct misconceptions and faulty reasoning. Such a restricted conception might limit other important uses of small-group work, such as enabling staff to understand more about how students respond generally to their educational experience.

Most faculty would agree that it is important for them to know why their students are taking their courses, and what sort of deeper satisfaction and disappointments they are experiencing. This will depend on the quality of the personal relationships established with the students but, if the roles played by the students and faculty in their group work are highly restricted, it may be difficult for good personal relationships to develop.

It is important to note, however, that students may not necessarily perceive the value of group work in the same way as their teachers. Bogaard et al.

(2005), for example, found that many instructors did believe that small-group teaching was important for building students' communication skills and helping them acquire the confidence to express their ideas. Less important was their need to disseminate more information to their students, or to lecture during the small-group session. Interestingly, while students enrolled in those classes agreed that developing their communications skills was important, they valued the small-group sections because they allowed them the opportunity to clarify lecture points, improve their understanding of the material and receive help with their written work.

### **Leading groups**

Student participation in small groups has frequently been described in general terms that look something like personality characteristics: the 'friendly helper', the 'tough battler' and the 'logical thinker'. Their respective worlds might be described as mutual love, affection, tenderness and sympathy; conflict-flight, assertiveness; and understanding, logic, knowledge and systems. They will have different task-maintenance behaviours, different ways of evaluating others and different methods of influence, and suffer from different personal threats (Kolb et al., 1994).

Many student roles will, in this respect, be dependent upon the leadership styles that teachers adopt, so it is especially important for teachers to recognize both 1) the range of different leadership styles they might effectively employ to improve student learning; and 2) that they are not personally limited to a small range of styles. Indeed, as will become apparent in the next section, teachers may need to alternate leadership styles as a group progresses.

In a now classic study based on Kurt Lewin's work on small groups (Lippert and White, 1961), for example, teachers were asked to run a group teaching session, each teacher employing three very different leadership styles – autocratic, democratic and laissez-faire. While the democratic style was deemed most effective in the teaching context of the study, it was also found that, despite their different personalities, the teachers were all capable of operating the three leadership styles effectively.

Figure 5.1 provides a useful way of mapping leadership styles with respect to two general dimensions: a directing dimension which describes the degree to which a leader is telling the group what to do (learn) and how to do it; and a supportive dimension which describes the degree to which the leader is supporting the group member in doing what they are doing (learning).

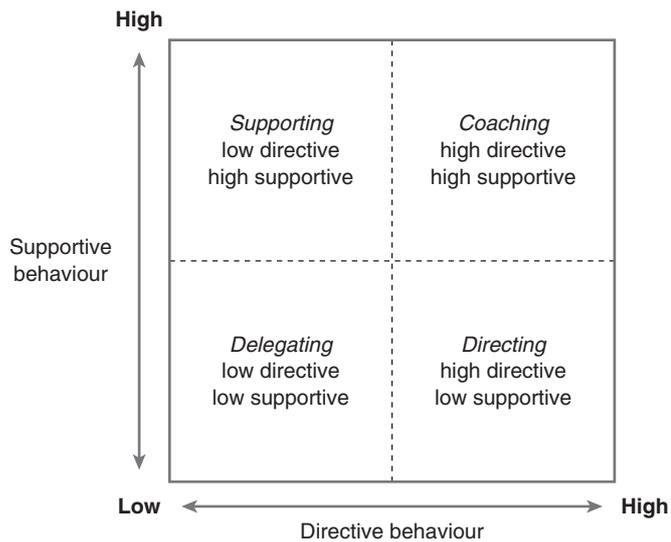


Figure 5.1 *Group leadership styles*

The traditional role of the teacher in a small-group setting is that of a directive leader – exhibiting differing degrees of support – who initiates proceedings with a short statement or summary, and then tries to draw out students’ thoughts, periodically linking those perspectives together, redirecting the content of the discussion as appropriate. Students and teachers may come to depend on this process, in which the teacher retains the voice of authority and expertise. While this may seem effective, since the instructor may be able to elicit the precise responses she is looking for, this process may inhibit the creativity and originality of the group. To counteract this dependency on the instructor, this role has recently included fewer directive styles of the teacher as facilitator, in which she encourages interaction without dominating the group (Curzan and Damour, 2006).

Within the structure depicted in Figure 5.1, leadership styles can include a wide range of roles, suggesting a range of teaching behaviours or strategies that teachers might display in small-group work. They might include ‘devil’s advocate’, ‘chairperson’, ‘consultant’ and ‘counsellor’, the latter indicating a concern for the social and emotional needs of students. In addition, the teacher may sometimes need to be an observer or commentator or, at other times, if the group is divided into subgroups, even a ‘wandering minstrel’.

Heron’s (2001) ‘six category intervention analysis’ offers a useful way to understand the variation in instructor behaviours across the range of these leadership styles and roles (see Table 5.2). These may be arranged along

Table 5.2 *Teacher behaviours in groups*

	<b>The teacher can</b>	<b>Related verbal behaviours</b>	
Inform	PRESCRIBE	Provide a topic or raise an issue Re-route the discussion	Teacher-focused
	INFORM	Direct the student's responses Summarize, inter-relate, clarify	
	CONFRONT	Give knowledge and information Challenge by direct question Disagree with, correct, critically evaluate student statement	
	RELEASE TENSION	Raise student consciousness about material Arouse laughter Stimulate emotional response to topic	
	ELICIT	Draw out student opinion/knowledge/problem-solving Facilitate student interaction Encourage self-directed learning	
Elicit	SUPPORT	Approve, reinforce, affirm the value of student contributions	Learner-focused

Source: Adapted from Heron, 2001

polar axes from teacher-focused behaviours, in which the teacher informs and tightly prescribes and directs the discussion, to more learner-focused behaviours where the teacher uses discussion to elicit and support students in the development of their own knowledge and contributions. It is worth noting, as Bligh (2000a) suggests, that the omission of these latter behaviours in discussion groups can also contribute to the persistence of interpersonal barriers between students.

### Phases in groups

It can be important for teachers to realize that groups, like people, have life stages with important implications for leadership. Some group behaviour can be very worrying for a teacher unless they realize it is normal for it to be happening at various phases or stages. There is considerable agreement on how to describe these phases with, however, some interesting differences (Chidambaram and Bostrom, 1996; Jaques and Salmon, 2007). Research on groups suggest that they may work either sequentially or non-sequentially (see Table 5.3).

Tuckman's classic study (1965/2001), for example, describes the sequential phases as:

Table 5.3 Comparison of models of group development

Sequential model		Non-sequential model
<b>Tuckman <i>Without teacher facilitation</i></b>	<b>Johnson and Johnson <i>With teacher facilitation</i></b>	<b>Gersick <i>Without teacher facilitation or group leader</i></b>
<p><i>Forming</i> Members meet Test limits of acceptable behaviour</p> <p><i>Storming</i> Conflict within the group Expression of individuality – resistance to group influence</p> <p><i>Norming</i> Members accept group Develop more cohesiveness, more comfortable with one another Able to express opinions</p> <p><i>Performing</i> Task-related work increases as group supports grows; more constructive activity</p> <p><i>Adjourning</i> Can create anxiety; disengagement with group</p>	<p><i>Defining and structuring</i> Identifying procedures Becoming oriented</p> <p><i>Conforming</i> Getting acquainted Conforming to procedures</p> <p><i>Trust building</i> Recognizing mutuality Building trust</p> <p><i>Rebelling and differentiating</i> Student or group may challenge authority of teacher</p> <p><i>Committing and owning</i> Committing to goals of group 'Owning' group and other members Dependence on other group members Personal commitment to the group experience Reliance on group members</p> <p><i>Producing</i> Functioning maturely and productively Increased commitment to the group Controversy handled constructively Problem-solving through consensus Shared leadership Harmonious division of labour</p> <p><i>Terminating</i> Potentially sad/upsetting Collaborative groups will feel sense of accomplishment</p>	<p><i>Alternating periods of inertia and inactivity; revolution and conflict; stability and productivity</i> Stability accentuated by abrupt changes in group behaviour</p> <p><i>Midpoint realization</i> No universal pattern, but activity level might change at midway point of process</p> <p><i>Producing</i> Group realizes it must complete task at hand Committed to finishing task Still may have intermittent bursts of inertia or conflict</p> <p><i>Completion of project</i> No uniformity in group separation</p>

Source: Adapted from Tuckman, 1965; Chidambaram and Bostrom, 1996; Feather, 1999

- forming;
- storming;
- norming;

- performing; and
- adjourning.

Tuckman's research, however, was based on groups with little or minimal facilitator interaction; the groups essentially lacked guidance and had to figure out how to work together on their own. Other sequential models might work differently when a facilitator is more directly involved with the groups. Johnson and Johnson (cited in Feather, 1999) describe the phases as:

- defining and structuring;
- conforming to procedures;
- trust building;
- rebelling and differentiating;
- committing and owning;
- producing; and
- terminating.

While groups may intend to work towards more co-operative and functional way of operating, they can get a fouled up on the way. They may even break up if the hostility, storming or rebellious phase is too dominant. Some groups do not experience storming or a great deal of hostility, but it certainly seems to be the case that there is an important time of greater emotion which may come about a quarter of the way through the expected life of the group. With a group which is together over a long period, this might come much nearer the beginning.

These models are similar in their linear and sequential progression towards completion, but the points of conflict and conforming occur at different times. In a one-week course for general practitioners, for example, we found that, on the second or third day, participants were more emotional. The course leaders capitalized on this by introducing the more emotional-oriented learning activities of the course – such as role-play and dealing with patient hostility or bereavement – at this time. While it did result in some very emotional interactions and even tears, the activities would not have been so engaging and useful in the learning process if they had come on the first day or even on the last.

A group could also develop non-sequentially, as in Gersick's model (Chidambaram and Bostrom, 1996). This might occur if students have no clear leadership for their group, either from the teacher or a strong peer. Although there are no uniform phases or stages in this type, groups usually will spend the first part of their allotted time in alternating periods of inertia/inactivity or

rebellion/conflict, before realizing at the midpoint that only half their working time remains.

For example, students in a business class may know they have a month to work on a project which asks them to research and present a formal marketing report to the class. Without guidance, it may take the group a while to settle on their topic and the means for gathering preliminary data. In early meetings they may spend a lot of time talking aimlessly, arguing or challenging one another's approaches. At the midpoint, they may suddenly realize the project is due in two weeks. At this point, they may begin more earnestly to produce, but there may still be intermittent stretches of inactivity or bursts of conflict without any guidance.

It is important that the earlier dependency phases are not prolonged. It is also important that the opening phase, where it appears to be necessary to give a great deal more direction, does not set a pattern for the rest of the life of the group. Expecting students to be independent when they are uncertain both about themselves and the group might create serious difficulties. On the other hand, when a teacher is very directive at the beginning, this can be a learning phase for the group indicating that their role is to sit and listen. Setting ground rules for the group at the beginning may be particularly important where there is a danger that students might develop the wrong expectations about how they should proceed and behave.

### **Ground rules**

If the ground rules for working in groups are neither written nor discussed, students are likely to imagine their own. They may, for example, begin by assuming that:

- they should leave it to the teacher to lead, direct and summarize the discussion fully;
- it is the teacher's job to determine the objectives and procedures;
- one should not express one's feelings openly;
- one should not interrupt someone making a presentation;
- a period of silent reading for the whole group is inappropriate; and, even
- breaking into smaller groups or writing is disruptive.

Ground rules which are simply imposed, on the other hand, may have little influence on group behaviour. If the group has a relatively long life, working them out with the students can be helpful and can encourage commitment

(Lieberg, 2008). Ground rules that are worked out with the group or class might include:

- treating one another with respect;
- listening to one another;
- considering each student's opinion;
- tolerating each other's viewpoints;
- being polite when challenging each other; and
- in the case of sensitive topics, agreeing to keep one another's opinions and comments within the confines of the classroom (Davis, 2001).

Ground rules might also include that students come to the class or group prepared and ready to engage in the work.

Giving students some choice and control may make them less inclined to endure 'purgatory' and feel they have responsibility for modifying rules and developing them during the life of the group. Sometimes, individual students may become overly preoccupied with their own behaviour and the group processes, which can distract them from the main group activities. This issue will need to be carefully considered by the teacher. On the other hand, where it is of particular interest for the group to understand better how groups function, learning from direct experience of the group can be much more effective than being told about it or simply working it out intellectually.

We have raised a number of key general points about group teaching. In the discussion below, we will develop these points further – in terms of the learning matrix – in order to consider in more detail how different approaches can be related to the different purposes of working in groups. Box 5.1 illustrates several of these principles in practice.

**Box 5.1** *Facilitating small-group work in a lab setting*

Chris regularly works with six advanced undergraduates and postgraduates in his chemical engineering lab. While he has been satisfied with the overall productivity, he has wondered from time to time if his team works together as effectively as they could, and whether his students, especially his undergraduates, would be able to apply their skills to new contexts. He also wondered if his postgraduates should be getting more leadership and supervisory experience necessary for their careers either in academia or in industry.

This year, he restructured his labs so that his two postgraduates were each in charge of guiding and training two new undergraduates working in the lab. To support their interpersonal development, each week the lab held a 'journal club' in which undergraduate–postgraduate pairs took turns leading a discussion about a relevant recent article they had all read. Together, they discussed the research, pulling apart the structure of the article better to acclimate the whole lab to the professional expectations and requirements of the field. To develop their independence, he had them take turns presenting different aspects of the research findings and process to one another. The undergraduates were also involved in writing up the results for professional papers and conferences.

## THE INTELLECTUAL DIMENSION

### Supportive teaching

We have suggested that using small groups primarily to cover material, to increase understanding and to correct misconceptions and faulty reasoning may overshadow other important purposes of small-group work. Yet, in large groups, teachers find it difficult to explore and understand student problems in coping with difficult parts of the course. Small groups can offer teachers an opportunity to learn more why students may be having the problems and how they might help solve them.

The first of our intellectual purposes might be approached through essentially supportive teaching, selecting tasks for the appropriate level and exploring where students have misconceptions which prevent them from progressing. If this is the dominant pattern, however, the result may be intellectual dependency and a failure to develop as creative, independent learners and productive team members. Teachers can be quite directive in terms of group processes and enabling students to understand these without telling students what to think or doing their work for them. Clarifying criteria and resources will help indicate how teachers can support their students' independent and interpersonal learning.

We suggested in Chapter 3 that prior reading could be a very important way of covering the content without wasting the learning potential of interacting in small groups. In many disciplines, teachers have integrated active learning activities into their classes by expanding their lecture notes to provide the content previously covered by lectures and used class time to break their students into small groups to solve problems associated with these notes and other key course readings (Bligh, 2000a). These small groups and the lecturer can, then, look at the strengths and weaknesses of the diverse solutions generated, engaging one another in higher-level dialogue and discussion. Mazur (1997) describes the comprehensive development of just such an active learning method called peer instruction. Originally pioneered in physics at Harvard and aimed at engaging students in science (Rosenberg et al., 2006), it has been widely used in a range of disciplines and types of institutions (Fagen et al., 2002).

### Promoting discussion and debate

Traditionally, small-group teaching was designed to enable the student to 'think for himself [*sic*] and work on his own' (Hale, 1964: iii). But small groups can also help students to:

- co-operate and work in teams;
- develop, articulate and share their ideas as individuals;
- challenge the ideas of others;
- learn to assess their own strengths; and
- critique the strengths and weaknesses of their peers and themselves as a group.

Teachers have developed a wide range of techniques (Cooper and Robinson, 2000b; Smith, 2000) to ensure that students are exposed to alternative perspectives, which students learn to evaluate, without assuming they will find the right answer.

### ***Discussion***

To ensure that the whole group is involved in discussion, students must be encouraged to do more than simply express their ideas in response to probing or challenging questions from the teacher. Early on, students will need to know that they are expected to respond to each other (constructively) and to develop a sense of responsibility for the group. The kinds of questions that are most effective for generating discussion and critical thinking are usually open-ended ('how' and 'why' rather than 'what' or 'who'), and they do not presume a right or wrong answer, or ask the students to 'guess' the discussion leader's point of view (Curzan and Damour, 2006).

In effective discussions, too, students can be asked to generate solutions or counterpoints to their peers' points of view. Occasionally stopping to summarize key ideas or what has been learnt so far is another effective strategy, as are helping students view their own gaps in their understanding and make larger connections between ideas (Curzan and Damour, 2006). Students can also take turns generating discussion questions and leading discussions, either individually or in small groups.

### ***Debate***

Holding a debate can be another effective way to provide support for learning, to encourage independence and to foster the interpersonal. A debate might consist of small groups who are asked to tackle different sides of an issue. They may have to prepare ahead of class, doing research or reading, and develop not only their own argument but also identify points to counter the arguments of their opponents. They may not know the group they will be in ahead of time, or be asked to take the opposite perspective of what they would like to argue, to ensure that they can grasp the alternative point of view more fully (Lieberg, 2008). Other students can take different roles, serving as the moderator, the audience, panellists, etc., to ensure that two students do not

dominate the discussion and that many students will have the opportunity to express themselves.

***Think-pair-square-share (also called pyramiding, snowballing or progressive doubling)***

Another way to engage students in a conversation is by first introducing a problem or task and then asking the students to jot down their thoughts before the discussion begins ('think'). After a few moments of quiet reflection, students will then share their thoughts with a classmate seated near them ('pair'). This ensures that quieter students are not dominated by their more assertive peers. They may then join another pair ('square') or return to the full group and discuss their ideas ('share') (Cooper and Robinson, 2000b). The ideas of individual students are then more likely to be followed through on their merits rather than through personality and domination. Students can gradually be introduced to alternative ideas and have the ability to compare them with their own and perhaps to see a gradual development of these within the group.

The change process, which we have emphasized in earlier chapters, can become a real practical possibility. The progressive doubling structure is also particularly helpful in creating a more personal and co-operative atmosphere and so enabling us to integrate ideas into a wider understanding rather than only progressing by eliminating the apparently weaker ideas. It is often effective to put the ideas of the four or sometimes eight on to flip charts and spend part of the session assisting students to understand the variation between the different solutions and integrate them into a richer and more complex approach.

***Buzz groups***

This is another method which works informally to get students to share their opinions and ideas with their classmates, supporting the interpersonal. Here, students simply talk to four or five students who sit near them – a particularly useful strategy for using small groups in large lecture settings – to discuss a problem quickly. For example, they may be asked to generate a potential solution, anticipate results or hypothesize an application. They may have to come up with one idea that they can then share with the rest of the class (McKeachie, 2006).

***Sharing in rounds***

A somewhat less developmental way of introducing independent thinking is to ask for a 'round' where the teacher goes around the group encouraging students to express their ideas and comments individually. This can be

threatening unless it is made clear that there is no obligation on the students to say something every time. They may simply pass which is, generally speaking, completely acceptable.

Like progressive doubling, rounds are a useful method of enabling quieter students, especially students whose first language is not English, to contribute. Rounds can offset the limitation of otherwise stimulating and lively discussions, in which there are often no pauses between contributions, which, again, can be particularly difficult for those students who are less assertive or less sure of their own linguistic and intellectual abilities.

These activities address the concern that academic interaction is frequently conducted in an adversarial style, in which ideas are perceived as being in perpetual competition. De Bono (1994), for example, criticizes this style of academic interaction and the overly critical ways of thinking it often inspires. He points out that this style does not always allow us to arrive at the best of different perspectives and suggests that discussion will be enhanced by engaging in processes of 'parallel' thinking, keeping open a range of parallel ideas and drawing from them. Yet, each of the processes described above allows time for ideas to be developed, but also enables them to be consolidated into new ways of thinking.

### **Collaborative learning**

Encouraging interdependence through collaborative forms of learning can still be focused on ideas and the intellect. Enabling students to interact within groups of different sizes is important both for intellectual expression and for learning to appreciate the way people can interact, co-operate and collaborate productively. Early research with leaderless groups indicated that, while the distribution of talk in groups of three and four is not shared equally, it is not particularly wide. As soon as there are more than four or five people in a group, the distribution starts to change, with just one or two participants contributing more than the others. Even with relatively small groups of eight, there start to be a number of participants whose participation is very small (Bligh, 2000a).

The dynamics of this finding are addressed rather easily. The simple process of dividing groups into smaller groups of three or four will guarantee that almost all the participants will have a good opportunity to contribute. For the teacher, this can also be a much easier task than continually trying to encourage reluctant students to participate in the larger group or preventing more talkative students from dominating the discussion through a range of gestures or even direct verbal intervention (Davis, 2001).

Research has shown, too, that students learning or receiving assistance from peers who are near their own educational level or level of development encourages both student achievement and positive attitudes towards learning (Swarat et al., 2004). Similarly, a recent study of peer-facilitated discussion, in which students enrolled in introductory science, maths and engineering worked substantially with peers who had previously taken and achieved in the course, showed that this helped improve student performance and retained under-represented groups in the sciences (Drane et al., 2005).

### ***Syndicate or peer-managed learning***

This method features a team-based system of learning, where students are divided into teams or syndicates (McKeachie, 2006). This division can be spontaneous, in response to a very animated discussion, or it can be deliberately planned, as where a task is introduced and materials are either provided or referenced for students to explore themselves either in libraries or electronically.

The tasks for these groups can be designed to cover areas of the syllabus in which the selection of materials is central. They are, however, more effectively presented through individual and group processes than directly transmitted by the teacher. The group, then, has a responsibility for planning peer activity, for sharing individual reading and for communicating and initiating discussion of the results of this individual work. The final communication can be given in written form or presented orally in a presentation.

As with the progressive doubling, this offers an excellent way to enable students to work on alternative solutions and learn to combine different perspectives and develop the skills of working together. A variation of this method is called jigsaw but, in this case, the groups do not present to the entire class but, instead, each group member represents and presents their work to a new task group. In this way, every student can learn from all the other students (McKeachie, 2006).

### ***Games and simulations***

The use of carefully constructed games and simulations can also help address material a teacher may wish to cover in a course. For example, a professor of Spanish and Portuguese created 'bingo'-style games and versions of popular television shows to help familiarize her students with common vocabulary, without having to resort to repetitious memory exercises. Similarly, a professor of history requires his students to play a complicated game of 'Lords and serfs', where students take on different medieval avatars and seek to survive the Crusades, the plague and other medieval events.

Such activities can be highly motivating and compelling, but can also introduce ways of dealing with a changing dynamic context. It is very difficult to teach students the ability to make decisions in the context of change and uncertainty, without them having actually to be in these situations. Merely telling students about how others have coped may not develop the flexibility required to live and work in our changing world.

## THE PERSONAL DIMENSION

### **Creating supportive group-learning environments**

The most important issue here is for the teacher to establish a supportive and secure environment – a safe space in which students can learn and thrive (Lieberg, 2008). As in any learning context, students may feel concerned about expressing their ideas, but this may be more common in small-group settings. As one student once remarked: ‘I’ve always resented making an idiot of myself’ (Cox, 1976: 45).

As we suggested above in our discussion of ground rules, the fear that students experience, even in apparently friendly peer groups, may not be dispelled by simply saying ‘we are friendly... please feel free to express half-formed ideas’. With many groups, the emotional learning might take much longer than the intellectual learning. As the French poet, Paul Valery, has observed: ‘Long years must pass before the truths we have made our own become our living flesh.’ Some approaches for establishing a supportive environment follow.

### ***Making connections with students***

Intellectual change is often delayed or prevented by emotional resistances which may stem from early experiences. Teachers can find themselves being treated as parent figures where independence becomes the issue rather than an intellectual problem. Students can be very anxious and ambivalent about both control and support, and many students, particularly in the first years, feel that university life is impersonal and would welcome a closer relationship with lecturers similar to that they had with their teachers in secondary school (Cox, 1987; Light, 2001).

University students, however, are adults and part of being an adult at university is relating to the teachers as equals in a way not possible at school. This does not mean that, intellectually, students are on the same level as their teachers, but it does mean that, in talking about more personal matters, it can be a more balanced relationship.

### ***Locating alternative learning environments***

Geologists and botanists often comment, for example, on how they get to know their students better and relate more fully on field trips. Although it is more difficult for teachers in other subjects to do this in the same way, there are, nevertheless, ways of relating outside the seminar room. These might be combined with visits to exhibitions, museums or even outside lectures and, for arts students, theatres and galleries can be obvious ways of combining intellectual with personal interests. Some programmes include residential short courses and these can be especially useful in breaking down barriers.

### ***Responding with empathy***

In Chapter 3 we mentioned reflective triads which can help students to personalize what they have been learning on their courses. Here, teachers build upon a student's idea without taking it away and making it purely their own. Empathy, the key characteristic, provides students with the sense of real participation in a very personal way. Similarly, asking students questions, which they can actually respond to, might help.

Often students are intimidated by questions that may seem appropriate to the teacher but which require both conceptual levels of thinking and a broad range of knowledge that are inappropriate. For example, a group of first-year students were asked to relate the Hegelian theory of tragedy to a difficult line in a complex Samuel Beckett play. The silence that ensued was predictable. On the other hand, asking questions which simply require short, right or wrong answers may make students feel they are being interrogated, rather than taking part in an intellectual discussion.

As mentioned above, if students are asked open-ended questions, they can then reply in a way that is more closely related to their personal concerns, but not be clearly 'wrong'. Gentle encouragement to continue, moreover, can help students to take more risks, especially if they are not immediately corrected when they make a mistake.

### ***Encouraging self-knowledge***

One of the elements of the deeper approach to learning is relating what we have learnt to our own personal experience, but sometimes students feel this is not a legitimate thing to do within a serious seminar, so it may need to be encouraged. An important aspect of learning is that experience is valued. This is especially true with more mature students who can feel rejected when they think their experience is ignored. Independent thinking

can be more risky in larger groups and the opportunity to talk in pairs or threes, as we have stressed, can be particularly important for beginning to explore ideas that are more independent.

Encouraging self-knowledge is an important feature of group work, and reflecting on the impact of our words on the other people in the group can be very helpful. Providing space in a session to take time-out from the topic and engage in activities in which the topic is dropped, and examining various issues of the group process and its impact on individuals intellectually and emotionally, is still rare in higher education. Yet such strategies can be extremely useful in supporting learning. It may be emotionally risky or difficult for the teacher, but as it becomes part of the normal way of working in groups, supported by ground rules, it can be an important aid for developing student independence.

### ***Role-play***

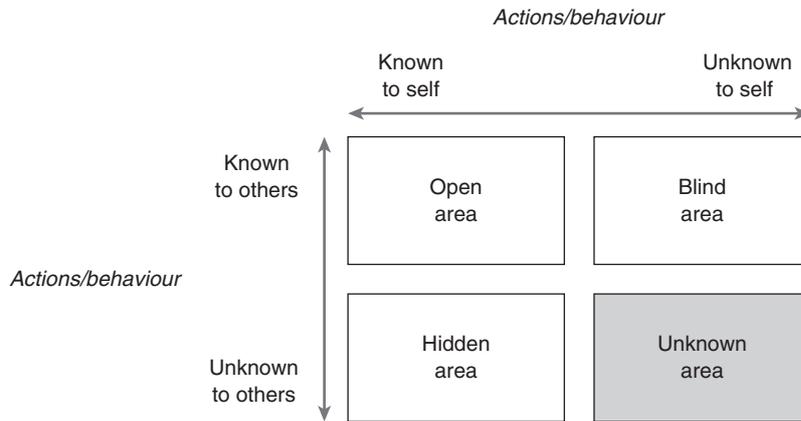
Another activity where students can take risks in expressing other aspects of themselves, often those which are guarded and concealed, is role-play. This activity can be incorporated into many types of classes, not just those subjects concerned with personal relationships. The purpose is to help students reflect individually on a specific perspective with an assigned role, and to extend creative thinking to the character's attitudes, opinions and responses (Lieberg, 2008).

When students take risks in this way it is important to have debriefing sessions which enable the students to work through any embarrassing anxiety they may have had as well as relating role-play to the learning issues. Role-play can be very enjoyable as well as challenging and, if students enjoy learning, they are likely to become more independent as well as more highly motivated.

### **Interpersonal knowledge**

Discussing interdependence within the context of small-group teaching could include almost anything that makes the group function more effectively. We want to emphasize, however, that such a heading involves developing self-knowledge. This is a general aim of education but it can be particularly helpful for developing effective group work.

Giving students opportunities to observe themselves as part of a group can be essential for developing their self-knowledge. As observers, students will begin to see the nature of their own role in a learning session – how far, for example, they may be serving themselves rather than the needs of the group.



**Figure 5.2** A classification of behaviour in groups

Source: Adapted from the Johari window (Luft, 1984)

The reports on them as the observed in the group activities, on the other hand, can assist them in becoming aware of qualities and ways of working – blindspots – which they were not aware of in themselves. These areas have been referred to in a renowned framework for classifying group behaviours – the Johari window – as the ‘blind’ group behaviours (Figure 5.2).

In the ‘blind’ category, other members of the group can help individuals see things about themselves which they did not know about. At the same time there is an opportunity for hidden behaviours, known to themselves but not to others, to become more public and to offer the opportunity for constructive learning. The area, which is both unknown to the self and unknown to others, is normally not the province of group work in higher education and is best left to a different, perhaps more therapeutic context. A few methods of observation follow.

### **Fishbowl**

One way of encouraging this is to set aside time for individuals or groups to observe the group as it works. For group observation, a fishbowl arrangement is useful. The group is divided into two, an inner group doing task-orientated work related to the course, and an outer group focusing on the process, observing the way the group is working. The groups can switch, to maintain student interest and enthusiasm (Lieberg, 2008). Providing students with an observer rating form can be useful (see Chapter 9). This cultivation of self-knowledge, together with understanding how groups function, might also be encouraged by watching videotapes of the whole group in action.

**Peer teaching**

Another way of encouraging students to develop self-knowledge can be provided through opportunities to peer teach, with feedback from the group and a chance to reflect (Boud et al., 2001; Swarat et al., 2004). This may be effectively accompanied by watching videotapes of the session. As the old adage suggests: 'To teach is to learn twice.'

Given the opportunity to teach their peers, students report gains across all four categories of the critical matrix. Micari et al. (2005), for example, report student gains on a large peer-facilitation programme in the sciences which include:

- intellectual growth in terms of consolidating knowledge in the discipline, enhancing conceptual understanding and developing problem-solving skills;
- interpersonal growth in terms of communication skills;
- practical growth in terms of pedagogical skills; and
- personal growth in terms of increased confidence.

**THE SOCIAL DIMENSION****Establishing a welcoming environment**

The beginnings of group life are often very important for establishing the supportive atmosphere. Traditional introductions with a simple round of each participant giving a brief self-description can be somewhat tense and perhaps boring. Instead, individuals can talk to their neighbour, find out a few interesting details and then share what they learnt as a means to introduce one another to the group. This can be both more engaging and more useful as a way of introducing each other since it involves both listening and talking. These functions are important in group work and this way of beginning sets up expectations about the way the group will be run; participants will be expected both to talk to and listen to their peers and not merely listen and respond to the teacher.

It is important to organize the layout of the room carefully. Ideally, the students will all be able to see the instructor and each other and to maintain eye contact which, in turn, fosters good interpersonal communication. Many classrooms do not permit everyone to see each other, when the class is particularly large or the physical structure is hard to change. Certainly, this is another side-effect of poor teacher-student ratios. Breaking into smaller groups can help significantly here.

Yet, eye contact is not the only issue. Everyone might see each other but the teacher might be seated behind a big desk – an indication of distance and/or of a detached authority relationship that can inhibit student participation. The relationship between students that are more talkative and quieter students is also a feature in encouraging and enhancing even more participation within groups.

In a broad discussion about group participation, Bligh (2000a: 176–7), for example, reports research indicating that students across from one another are more likely to respond to one another and those side by side less likely. A teacher sitting opposite a talkative student may make it more difficult for others to participate. In a now classic study, Abercrombie (1966) found another expression of the importance of environment. Two groups were working independently in separate rooms and one group had red chairs, the other green. When they came together in another room a circle of chairs was set out with alternating red and green chairs. When the two groups came together, each group – without realizing – sat on its own colour chair, but talked to their own group across the other group. This rather surprising finding illustrates how subconscious influences can be important within groups, in particular when bringing smaller groups back into a larger-group discussion.

Finally, the supportive side of the social dimension may also be enhanced through generating enjoyment, on the one hand, and a lack of anxiety about what might be happening on the other. It needs to be said, however, that while the lack of clear group guidelines might generate anxiety, a degree of confusion or puzzlement, as we suggested earlier, is often a good starting point for the achievement of understanding. The issue here is that guidelines should not become a straitjacket and clear expectations not a recipe for dullness.

### **Working with ambiguity and confusion**

A sense of ownership in the group may, indeed, be generated out of working this sense of confusion through into constructive co-operation. We saw in discussing phases in the groups that effective working is often preceded by intra-group hostility, but confidence is often a condition for independent work. Overcoming difficulties is frequently important in achieving a sense of ownership of one's learning. The autocratic style did not leave much scope for this, but neither did the laissez-faire style. Democratic and/or coaching styles of leadership can be important in generating a real sense of independence within the group.

## Encouraging peer interaction

As mentioned above, peer teaching may be one of the best ways to encourage interpersonal and social skills. Teachers often say they have learnt things most effectively when teaching, but rarely give their students a chance to do the same – to learn by teaching. Problem and task-based learning approaches to teaching involve both teaching by students and the need to work in an interdependent way. It is important, however, to give our students a full range of different tasks and structures so that what they learn in this respect is more easily transferable to new situations. In addition to peer-teaching experiences, what is learnt may also be reinforced by serious reflection on, and evaluation of, the process of learning.

One learning activity which may have more general application in this respect is the *consultants and assessors* game (see Chapter 8 for a full description). Briefly, a task/problem focused on the course or session topic is given to different groups of students who act as teams of consultants developing solutions. They will need to draw upon course materials as well as using their own initiative to hunt down others which they share with ‘colleagues’ to produce a solution. These are presented to a student group of assessors who devise criteria for evaluating the quality of the solutions and decide how to apply these to the consultants’ reports or presentations. This can raise interesting issues of inter-group and intra-group relations in conditions of success and failure. In the process it also raises issues of giving and taking criticism in the context of developing their own assessment and evaluation abilities. It has the important advantage of directly addressing substantial areas of course content.

More broadly it should be noted that peer interaction is essentially a product of meaningful *learning communities* in which students take a high degree of ownership. These communities come in various shapes and sizes and may include the kind of peer-facilitated workshops reported above (Swarat et al., 2004; Drane et al., 2005); first-year seminars often linked to writing courses; and course-linked and/or clustered learning communities (MacGregor, 2000; Smith and MacGregor, 2000). They also include informal peer study and friendship groups which students form outside class. Indeed, in his study of students at Harvard, Light (2001) reported that students appreciated, even enjoyed complex and challenging homework assignments if they were permitted to co-operate and collaborate with peers in completing them. Many felt that such ‘assignments increase both their learning and their engagement with a class’ (2001: 9).

## THE PRACTICAL DIMENSION

### Supporting practical skills

Much of what has been said already is in fact about the practical dimension of encouraging students to work effectively within groups. It was suggested that field trips and other practical work can provide a very good context for exploring teamwork and interpersonal skills and the quality of the relationships can often be very much better than that in the seminar rooms. Working in teams may, for example, also help develop such practical skills as rehearsal, practising, writing, reporting and presenting, although such skills will vary in different disciplinary contexts.

The rich variety of ways of relating in practical work needs to be exploited. This is best done by a combination of quiet individual reflection, often with reflective diaries, and in the sharing of these with the help of teachers who can encourage students to integrate these experiences into a coherent framework. Within this dimension, a balance needs to be achieved between helpful direction and freedom to explore, to take risks, to fail and to learn from these experiences. Strenuous attempts to avoid risk and failure may undermine independent and deeper, long-lasting learning.

The nature of the practical task given to a group, Bligh (2000a) reminds us, will have a significant influence on the dynamics of the group. Members may, for example, have serious differences about how to proceed, or conflicting values guiding their decisions. These plus a sense of urgency, which may be imposed from the outside, can play havoc with group performance. He suggests that students in such practical groups need to be aware of the difference between the group task goals and the group maintenance goals, and spend time addressing both: 'groups that spend longer on group maintenance achieve more. That is to say, discussions about group processes accelerate achievements on content. Why? Because groups that don't maintain themselves spend much longer disagreeing' (2000a: 121).

## CONCLUSIONS

Small-group teaching in the past has often promised much but achieved far less. It is popular in theory but often unpopular in practice, even if not universally considered 'purgatory'! It can be difficult, however, for teachers who have been appointed primarily for their ability as thinkers and writers to develop interpersonal skills and understanding of complex and often disturbing group processes. Part of the problem for teachers is that many

of the social conventions, which can have a deep-seated influence on our behaviour, are contrary to what teachers believe needs to be done to achieve efficient practice.

If we were to suggest that a dinner party be split into groups of three or four to record interesting points of conversation on a flip chart or to reflect on a video-recording of their interacting, we would probably have to find new guests for our future parties. If, on the other hand, we prevented our guests from forming small groups of two or three, again future parties would be rare. Similarly, if our seminars have absolutely nothing of the friendly smiles, the sensitive introductions, the attention to the importance of values, beliefs and diversity, they, too, might begin to dwindle and disappear, especially as there is rarely anything to eat or drink, and absolutely no music!

In other words, groups are groups wherever they come together. Mere collections of individuals may learn something together, but may lack the personal involvement that can be both memorable and lead to a change of behaviour. In their social lives outside the university, teachers are generally very sensitive to behaviour that can enhance social relationships as well as behaviour that can create bad feeling, hostility and withdrawal. It is not always clear that these skills are actually being transferred into their teaching.

If we want to transfer some of the important features of our enjoyable and interesting social lives to our group teaching, we need to be aware of not only the intellectual dimension but also of the personal and social activities and relationships which can make this possible. Parties are not obvious models for seminars but they do have features from which we can learn. Academics do not need books to tell them the key topics, skills and even attitudes which are all important in their discipline, but they may need to be reminded of the personal and emotional problems which can get in the way of students' learning.

Young people, and mature students, too, want to feel they are in a community of adults who relate to them as adults and not as parents or a remote intellectual elite that can undermine their own identity as adults or as developing professionals. Creating the conditions for them to engage in the variety of roles that are the context of adult life today is itself important for the role of lecturer. Group work has the potential to enrich the different roles that stimulate engagement and learning. It can give students a wide range of experiences, provided we are willing to go beyond the usual boundaries and encourage students to learn how to learn from observing the group and comparing the reactions, ideas and feelings generated by these experiences.

*Final questions:* the integration of content tasks with process tasks in small groups is often difficult and keenly resisted by teacher and student alike – but, with thoughtful encouragement, can itself become a valuable group task. What are my broad goals and expectations for this group work? Am I structuring my groups in such a way that my students will meet the more specific learning objectives? How will I ensure that the group process offers a meaningful and engaging learning experience for my students? Ideally, students should be able to look back on the experience and say, as Lao Tzu suggests, ‘we did that ourselves’ and be proud.