

Using Groups Effectively in Collaborative Learning [\(1\)](#)

DRAFT

Several years ago, while attending a regional adult education conference, I overheard two participants walking out of a concurrent session which had just formed into small groups. Obviously distraught over the methodological turn the session had taken, one turned to the other and said, "Don't they just lecture anymore? I get so sick of this group stuff." Indeed, it is a standing joke within the field of adult education that among the first things an adult educator does are to move furniture and form groups. The comments of this conference participant, however, reveal the profound ambivalence that many educators and learners feel towards collaborative learning methods in general and group work in particular.

Unfortunately, many educators have approached the use of groups in teaching similar to the way many of us approach parenting. You just do it. Like parenting, however, we discover that working effectively with learning groups presents us with intellectual and emotional challenges for which we were ill-prepared. Using groups to foster collaborative learning involves far more than putting four or five students together and giving them a task or exercise to complete. The *process* of group work is as integral to the overall learning as specific task or work it is trying to complete. The ambivalence towards group work expressed in the conference participants' comments may reflect more *how* we approach group work in collaborative learning strategies than groups themselves.

The purpose of this chapter is to provide information about using small groups more effectively within collaborative learning strategies. A brief overview will be provided of the conceptual foundations for collaborative learning and the place of group work within this approach to learning. This section will be followed with a discussion on implementing and facilitating small groups within collaborative learning strategies. The chapter will close with an exploration of how collaborative group learning may be assessed in terms of both process and outcomes.

The Need for a Shift in our Educational Paradigms

In *Habits of the Heart*, Robert Bellah and Associates (1985) present in an eloquent and moving narrative of the tension we experience in the United States between a pervasive ethos of the individual and our desire to be part of a community. While community appeals to many as an ideal, it is "undermined by the fierce individualism and competitiveness of modern life" (Boggs, 1991, p. 79). Bellah et al (1985) argue that we lack a common language of community and the common good. This lack of a common language is also manifest in group learning. Many of the adult learners with whom I work struggle with the notion of a "group goal." In a group dynamics course, the refrain, "What *is* our goal, anyway?" takes on the appearances of a great Zen koan, not unlike "What is the sound of one hand clapping?" Invariably, group after group attempts to answer this question from the perspective of individual goals.

They seem unable to envision a form of learning which also focuses on the goals of the collective. This lack of grounding in a language of the common good is pervasive in the practice of education. As adult educators and learners, we attend professional development conferences with the expectation of learning something which will benefit us as individuals, rather than seeking to contribute to the learning of others or to our community of practitioners.

To make learning truly collaborative, both learners and teachers need to let go of long-held beliefs about what is to be learned and how. Simply asking learners to work in small groups does not mean that they will experience collaborative learning. They need to take ownership of another way of being and learning together, a kind of learning which flows from a sense of common goals, mutuality, and interdependence - in short, to experience a fundamental shift in their philosophical perspectives, in their paradigms. This shift in one's teaching and learning paradigm is at the core of successful collaborative group learning.

The importance of this paradigm shift is reflected in the experience of one small group with whom I worked. Composed of two women and one man, this group was part of a class studying dynamics of small groups. The group had formed as part of an assignment to study groups within a setting outside the class context. Their task was to develop a written report, based on their observations and analysis, and present their findings orally to the rest of the class. The group spent weeks trying unsuccessfully to plan and implement their project. With only about six weeks left to the semester, critical planning questions remained unanswered and all three members were becoming increasingly anxious about being able to satisfactorily complete this project. They sought resolution from me but, after listening empathically to their concerns, I suggested they keep working on their problem. Soon after, however, and with relatively little consultation with me, they had selected a practice site and a theory, and had identified several questions about this group they wanted to study. Their oral and written reports were, by far, the best of all the small groups in the class and part of me felt like a proud parent. The group project seemed a complete success.

It was only later that I learned, through their individual class journals, that all three group members were profoundly dissatisfied with the experience. They knew enough about group dynamics to realize that, as a *collaborative group* experience, the project had largely failed. As they became increasingly anxious about running out of time and concern for the grade mounted, the structure and processes of the group shifted dramatically. One person assumed control over the project, generating the ideas and plans, and the other two members went along with his leadership. Discussion and exploration of his ideas were not fully developed, disagreements were minimized, and potentially troublesome process and emotional issues, featured prominently in their individual journals, were simply ignored. Emphasis was on "getting the job done." They had, by all measures, a superior "product" but, from their written descriptions, it was quite clear that they had not learned much as a group. While they concentrated on developing their product, the group created a process profoundly miseducative within the intent and purposes of the project.

In the end, this group fell back on a traditional, process-product, educational paradigm. This paradigm emphasizes ends or outcomes of instruction. Activities and experiences are "designed" to most

effectively and efficiently achieve these intended outcomes and relatively little attention is given to the kinds of ends that emerge within the experiences themselves. *Intended* knowledge is the product in this paradigm and drives the rest of the educational activities. Knowledge is considered "outside" of or apart from our own personal and social experiences and is objectively determined or verified through measurement techniques. "Learning" is perceived as a phenomenon occurring within individuals, with each person considered ultimately responsible for his or her own learning. Learners have relatively little say in the design of their own learning experiences and are often given little real voice in what is to be learned. They are generally regarded, and regard themselves, as recipients of information dispensed by experts. Even though the "experts" may involve learners actively and experientially in the learning process, the students remain relatively passive relative to what it is that is to be learned. Despite the recent emphasis on active learning strategies, this paradigm continues to heavily influence teaching in adult education, exemplified in such practices as "profiling" a learner's academic strengths and weaknesses in adult basic education, needs assessments commonly used in the practice of Human Resource Development (HRD) to improve performance problems, and literacy audits within workplace literacy programs.

Collaborative group learning, however, reflects a much different paradigm of teaching and learning. It is grounded in *constructivism*, a psychological and philosophical perspective suggesting that individuals or groups, through their experiences, shape or construct what they learn and understand (Bruning, Schraw, & Ronning, 1995). In this approach, what is learned is bound up within the means or processes of learning - they are inseparable. When one specifies the means, the instructional ends are implicitly identified. Subject matter is viewed more as a medium to facilitate knowledge construction, rather than content to be mastered. Constructivist approaches to acquiring knowledge and skills stress the importance of learners interacting with specific situations or contexts. In the collaborative learning paradigm, learning is viewed as *contextual*. The learner's social environment is very important to learning. Working in groups and collaborating with peers are useful and effective ways for individuals to learn. The learner's interactions with others within the learning setting - teachers, peers, and others - as well as the broader social and cultural context of the learning experience itself, are assumed to be critical to the development of the desired knowledge and skills. In a constructivist learning environment, teachers do not emphasize the delivery of specific information to learners. Rather, they use a variety of resources with which learners then become actively involved by working with these resources through different means with their peers and teachers or facilitators. Students cooperate among themselves and with the teacher as they actively engage in the learning process and take ownership for their learning (Goodsell, Maher, & Tinto, 1992). Virtually all collaborative learning strategies employ structured group activities and seek to foster several kinds of skills within an integrated curricular framework, including social skills, intellectual inquiry, and mastery of academic content. One of the most important aspects of collaborative approaches to learning is their "multi-layered" nature. Teachers using these approaches recognize that each experience represents the potential for learning in a wide variety of academic topics, intellectual and interpersonal skills, and social and political issues (Dirkx & Prenger, 1996). This multi-layered approach to designing and facilitating learning experiences for adults represents a sharp departure from the rather single-minded perspective of the process-product paradigm.

Effective use of a collaborative approach to learning requires a shift in one's assumptions about the

nature of knowledge, and the roles of teachers and learners in acquiring knowledge. Letting go of product oriented approaches will require diligence, patience, support, and courage. It is necessary to build a broader context which is supportive of this view of learning among one's peers and administrative staff. It is also important to give oneself time, and permission to make mistakes.

Implementing Collaborative Group Learning

The previous section suggested that re-visiting, reflecting, and revising one's educational philosophy or paradigm is a critical step in making effective use of collaborative learning. Our own implicit theories about teaching and learning play a key role in implementing collaborative learning. In this section, however, I will discuss more concrete and specific issues that need to be addressed when using this approach within one's teaching. These issues include (a) attending to your organizational context, (b) preparing learners for group learning, (c) deciding on what form of collaborative learning you want to use, (d) forming groups, and designing and selecting learning activities.

Attending to your organizational context

As educators of adults, we work within specific contexts that serve to shape and influence what and how we teach. In addition to our own personal contexts and that of our learners, what we do is often significantly influenced by or organizational, socio-cultural, and political contexts (Merriam & Caffarella, 1991). In the previous section, we already explored how collaborative learning challenges the cultural ethos of individualism so prevalent in our society. This approach to teaching and learning can also challenge existing structures and assumptions within your particular organization as well. Many years ago, as an educator for a physician training program within a large, university-based hospital, I helped organize and facilitate a group experience for physicians-in-training (residents) around the theme of doctor-patient relationships. The purpose of the experience was to enable residents to recognize more effectively the feelings and emotions they sometimes experienced while working with patients within an ambulatory clinic setting, and to use this information to improve their interactions with these patients. It was case-based and intended to be collaborative. One hour each week was set aside within their busy schedules to participate in the group. Participants, however, would often miss meetings because of conflicts with other responsibilities, be paged out, or report numerous other reasons for not being able to attend. The project limped along, with tired, hassled, half-hearted participants attending sporadically until it literally faded away 25 weeks later. The residents seemed relieved not to have to work yet one more thing into their already over-crowded schedules.

While almost everyone directly involved with this project supported its overall purposes and the importance of the experience, support from the college dean and departmental chair was, at best, lukewarm. Many of the departmental faculty were overtly critical of what they considered to be a frivolous use of the residents' time. Many weeks later it became clear to us that what was being

attempted within the context of this small group was simply not supported by the overall norms, assumptions, and expectations of the broader organizational culture. For example, in almost every other experience within their training, these residents focused on diagnosing and treating "real" medical problems that were often complex and challenging - the more difficult, the better. Involvement with these experiences led to intellectual growth, increased diagnostic and therapeutic competence, and the rewards of seeing outcomes for one's efforts. Typical patient complaints they encountered in the ambulatory clinic, such as "feeling tired all the time," or "chest pain," simply did not command the intellectual excitement within this culture as did rare forms of cancer or infectious disease. Nor were they adequately addressed in the physicians' specialty board exams.

This example points to the importance of congruence between your work with collaborative learning and the broader values and norms of the organizational context in which you work. Effective and successful use of collaborative strategies are enhanced when the broader organizational culture supports the forms and ways of knowing reflected in this approach to learning. Getting administrators and colleagues to buy into and take ownership for the goals and purposes of collaborative learning is critical for this form of support. Clearly, educators can use collaborative learning within their own classroom or setting. Students, however, are more likely to fully embrace collaborative approaches when they are not receiving mixed messages from other teachers or learning experiences within the organization. When it is being implemented by one or a few persons and not supported by the organizational context, collaborative learning can be easily marginalized by both learners and the organization.

Planning to implement collaborative learning needs to be viewed within the broader socio-cultural and political context of your instructional setting. Cervero and Wilson (1994, paraphrasing Forester, 1989) suggest that, when planning instruction, ignoring the demands of the context is like walking across a busy intersection with your eyes closed. People, the organizational structure, and its culture are key contextual factors which influence our ability to effectively implement this form of learning (Caffarella, 1994). Simply being able to make this decision varies widely from setting to setting. For example, in my own teaching there are relatively few organizational factors which effect implementation of collaborative learning strategies. Indeed, there is widespread support within my college from administrators and colleagues for active, collaborative forms of learning. It was noted in our last accreditation report, however, that many students reported dissatisfaction with the use of group projects, indicating they are "inconvenient" and cumbersome to their own learning. ABE teachers whom I know are discouraged by their program supervisors from using group methods. Other ABE supervisors, however, strongly encourage the use of group and collaborative methods and encounter some resistance from their teachers. Collaborative learning has been increasingly stressed within the training and Human Resource Development literature. Many trainers, however, report structural barriers to effective use of these strategies, including scheduling and a pervasive "bottom-line" justification to everything they do. Again, however, more progressive companies not only support such approaches but ground their approach to organizational development within a collaborative approach ().

Thus, contextual factors within an organization - primarily power relationships and people's belief systems - play a significant role in the extent to which one can successfully implement collaborative learning. Administrators, colleagues, and students, as well as stakeholders external to your organization

will influence the extent to which collaborative learning can be adopted within your setting. You might think of this broader context as supportive, neutral, or opposed to implementing collaborative learning. Students and teachers will enjoy the most success with collaborative learning in organizations which are supportive. For example, in higher education, individual teachers are increasingly choosing to implement these methods within their own classrooms within organizations which often seem neutral or, at best, lukewarm to the idea. Their efficacy, however, would be greatly enhanced if the broader organizational culture was also philosophically aligned with this approach to teaching. Several professional schools, with programs in medicine, nursing, educational administration, and management education, have changed most or all of their programs to problem-centered approaches. Parenthetically, these curricular innovations have often had profound impact on professional certification examinations as well. There are also numerous examples of adult literacy programs which have adopted similar approaches to their curriculum and instruction. But change often starts with one teacher willing to push the edges of the organizational envelope. *Preparing Learners for Group Learning*

Many adult learners have relatively little experience learning in a collaborative mode within formal settings. Helping learners to work in groups can contribute to the overall effectiveness of collaborative learning. In effective groups, members know each other, know some things about group process and structure, and demonstrate relatively high levels of cohesiveness. Teachers can integrate simple activities into their group work that both contributes to group formation as well as to addressing the specific learning tasks assigned to the group. Team building activities (), such as icebreakers, can be used to help group members become more familiar with each other, develop knowledge about learning in groups, and, as a result, develop group cohesion. There are many examples of icebreakers available. In general, however, icebreakers work best when they are designed to contribute to the overall work of the group and not just as a "get acquainted" exercise. Icebreakers can also be effectively use to prepare learners for working in small groups (Imel, Kirka & Pritz, 1994). For example, group members can get to know each other by talking in pairs or triads about previous group experiences - the kinds of groups they belong to, what they like about these groups, and what they dislike. One way to help make this issue concrete is to ask participants to identify groups of which they were a member that worked well and not so well. The critical incident method is an effective way to approach this task and will result in powerful examples of individual and group behaviors that contributes to or detracts from group functioning. By thinking and talking about their experiences with and in groups, learners will become more comfortable with each other while learning about effective group process. The teacher can ask the different groups to share what they have learned from each other and help the learners name the different kinds of behaviors that detract from the effectiveness of the group work, such as dominating behaviors, digressing from the task, overpersonalizing the task, and other behaviors which can jeopardize the group's work, such as negative attitude, withdrawing, and defensive behaviors.

It is also important that learners understand how small group learning compares to and differs from more traditional forms of teacher-centered learning. This task can also be structured around icebreakers which provide additional opportunities for members to get to know each other better. Teachers can involve their learners in activities that develop awareness of how much they learn from their own experience and the experience and knowledge of their peers. Examples of this include asking them to identify what they have learned on their own, what they have learned from friends, and how they learned it. Learners

should develop some familiarity with group roles, including those most commonly observed in group learning, and why they are important to its overall functioning. For example, have group members identify and discuss the various task and maintenance roles that are important to effective group functioning. Members can also identify roles they play in groups outside of this experience as a good way to help them learn and understand the function of roles in the group process. As group work begins, each group should identify members who will initially play the role of facilitator, recorder, reporter. These roles should be rotated among the group.

Deciding What Kind of Collaborative Learning to Use

Adult educators considering the use of collaborative learning are faced with selecting from myriad of instructional strategies, such as buzz groups, case study, small group discussion and investigation, and peer teaching or coaching. These strategies emphasize different kinds of skill and utilize varying degrees of structure. For this reason, it is helpful to think of collaborative learning as representing a continuum of learning activities. The activities along this continuum vary according to the degree of structure used in their implementation, and the extent to which participants are encouraged to construct knowledge within the learning setting. Students with relatively little experience in group learning and who are relative novices within the area of study may require strategies that provide more structure. Other learners who are more experienced in both group learning and in the subject matter may require less structured activities and minimal supervision. , Thus, selection of a particular collaborative strategy depends on what it is the teacher is expecting students to learn within the experience, and the levels of support from and dependency on the teacher they need (Pratt, 1988).

Cooperative learning methods are usually highly structured and carefully orchestrated by the teacher. Examples include buzz groups, jig-saws, team learning, and roundrobin exercises. They focus primarily on mastering information presented to the learners through readings or other resources. Activities and tasks are carefully specified and detailed instructions are provided to learners to insure effective learning experiences. The learning task typically focuses on a particular objective selected by the teacher and is often addressed through the use of information provided by the teacher. The activity may last from a few minutes to several weeks, depending on the context. Most examples of cooperative learning within adult education, however, reflect the use of strategies that can be completed within a single meeting.

Cooperative learning strategies stress the interdependence of *all* members and activities are designed, through an emphasis on personal accountability and responsibility, so that each member contributes. Often roles, such as the group recorder, reporter, and so forth, are carefully assigned and explained. The tasks assigned are relatively unambiguous, circumscribed in scope, and addressed within distinct time frames. This form of collaborative learning is effective for helping learners consolidate their understanding of lecture material, mastering specific factual information from readings, solving multi-step problems in various subject matters, or for relating individual experiences to the topic at hand. Problem-solving, interpersonal, and teamwork skills are also developed through participating in cooperative learning activities.

Problem-centered methods represent a form of collaborative learning that is more contextual than cooperative learning, and deals more with highly complex, real-world situations that are usually simulated in the form of cases, problems, themes, or other representations. The problems may be selected by the teacher, the learners, or in a collaborative effort between the teacher and the learners. Typically, however, the teacher structures the process used to address the problems and provides or suggests resources to use in this process. These problems may require the group's attention anywhere from 15-30 minutes to several weeks, depending on the scope and complexity of the situation being presented. Subject matter and other resources are used in an integrated manner to develop a thorough understanding of the presenting problem and to address its challenges. For example, in adult basic education learners may make use of reading, math, and writing to address a particular problem being presented in the curriculum. The focus, however, is on addressing the problem and not mastering the individual subject areas. The case method is a common example of problem-centered instruction. A case is a vignette or narrative of a real-life situation in which problems or unresolved issues are presented for the students to analyze and address. They can describe a single event within practice or a composite of several events. They can vary in length but are probably most effective in adult education when they are limited to no more than several paragraphs. Well-designed cases are realistic and confront learners with "complexity, uncertainty, instability, uniqueness, and value conflicts" (Schon, 1983, p. 14), characteristics of problems in real-life practice. Cases can be used to foster specific professional skills, such as program or instructional planning, or more abstract knowledge, such as learning theory.

Another common form of problem-centered instruction is problem-based learning (PBL). While it emerged primarily within medical education, PBL has spread to nursing and management education, and the training of educational administrators. Problem-based learning is similar to the case method but usually involves the structuring on an entire program or curriculum around problem-based strategies. Within a collaborative learning format, small cohort groups of learners pursue problems that characterize typical practice within their field. The problems are usually sequenced and articulated to insure increasing complexity and difficulty, drawing on a broad array of disciplines and deeper levels of knowledge.

Theme-based instruction (Dirkx & Prenger, 1996) is similar to problem-based learning in that the curriculum is organized around a central topic or issue. Unlike PBL, however, theme-based instruction does not necessarily rely on problems of occupational practice. Rather, themes typically reflect the concrete, everyday lives of the learners. Grounded in the work of Paulo Freire, themes used to structure the curriculum can be identified by the learners, the teachers, or both teachers and learners working together. Themes may organize part or all of a single group meeting, or they may be extended across several group meetings. It is usually helpful to start with themes that can be addressed within a relatively short period of time. As the teacher and learners become more familiar with this process, broader, more inclusive themes may be used to structure more of the curriculum. Regardless of their scope and who selects them, themes need to be grounded in and directly reflect the concrete contexts and situations of the learners' worlds.

Simulated role plays are another example of a problem-centered approach to collaborative learning. This

strategy, however, is discussed elsewhere in this volume and will not be addressed here.

The main thing to remember about problem-centered approaches is that they make use of challenging, fairly ambiguous, real-world, life-like situations or scenarios that are open-ended, and only modestly structured by the teacher. They help develop higher order skills in critical thinking, problem-posing and problem-solving, learning-to-learn, and creativity, as well as interpersonal and team skills.

Peer teaching or coaching is a process of learners teaching their fellow learners. It probably represents the oldest form of collaborative learning in American education (Godsell, Maher, & Tinto (1992). Much of the research on peer teaching has been done with public school students or learners in higher education settings but a variety of forms and models of peer teaching (Whitman, 1988) have been adapted for use in adult education settings. For example, peer coaching has been effectively used in staff development for teachers and many adult basic education programs use peer facilitators or peer trainers in their teacher training and staff development activities. Some ABE and literacy programs also use peer mentors among their students as well. While much emphasis has been placed on using peer teaching as remediation or rescuing students who are struggling, other practitioners have stressed the value of peer teaching for all forms of adult learners. For example, peer mentoring is often used in adult basic education as a way of helping certain students who may need additional assistance but peer training might be used in the same program to train all new teachers, or to introduce an innovation or change in practice. Peer teaching is less structured than the other forms of collaborative learning discussed earlier but it provides for a strong, nonauthoritarian, supportive environment for learners. Some authors, such as Madeline Hunter, have discussed methods or protocols for guiding the peer teaching process but others prefer a more loosely structured, open-ended process because of its responsiveness to the learners' particular needs as they arise.

Discussion groups are perhaps the most widely-known and least structured form of collaborative learning in adult education. Brookfield (1986) describes the discussion method as uniquely suited for the "development of adult learners' critical faculties" (p. 137). It is a powerful context in which learners can reflect on the meaning of their experiences. Characteristic of this form of collaborative learning is dialogue among teachers and students around particular topics, issues, or problems of meaning to the participants. Within the dialogue, teachers and learners engage in free exchange of diverse information, ideas, opinions, and conclusions within a supportive and nonthreatening environment. Discussion groups provide for both an analysis of existing ideas and the emergence of new ideas among its members. In this context, learners can carefully and thoughtfully examine, and possibly revise their own beliefs and values regarding the topic under discussion (Christensen, 1991).

Uses of the discussion method vary in terms of their structure and teacher-directedness. Some descriptions of the discussion group call for open-ended and relative unstructured agendas, in which the questions, ideas, or issues arise from within the membership of the group itself. In this situation, the teacher is largely a process facilitator, but does not impose or suggest his or her own ideas for discussion. Others advocate a more structured and directed approach, in which the flow and content of discussion is controlled more by the teacher. But most approaches reflect a commitment to purposeful and deliberate dialogue around a topic of mutual interest and participation by most or all of the group

members. Brookfield (1986) suggests that the effectiveness of the discussion method can be improved by (a) establishing procedural or ground rules as the group is forming, (b) giving careful thought to the materials and questions used as a focus for the discussions, (c) being well prepared as a discussion leader in the topic as well as skilled in and knowledgeable about group dynamics, and (d) attending to the development of reasoning skills by emphasizing reflective and critical thinking within the discussion process.

Thus, the educator of adults who is considering the use of collaborative learning strategies has before her or him a wide array of possible approaches. Selecting a particular approach should reflect the overall aims of the instructional process, the kinds of knowledge and skills being developed, the skills, willingness, and readiness of the learners, and the overall context in which the learning is taking place. Central to all these approaches, however, is the use of learning groups. Getting adults together within collaborative learning exercises represents more than just a technical strategy for achieving one's instructional objectives. Most of us who have either facilitated or participated in group learning resonate to Brookfield's description of adult learning groups as arenas of "psychodynamic struggle and fields of emotional battle" (p. 139). The short vignette from my own teaching practice underscores Brookfield's characterization. Care needs to be given to how these groups are formed and to fostering their on-going development.

Forming Collaborative Learning Groups

When forming groups for collaborative learning, it is important to consider both the kind of group needed and how members will be selected. Collaborative learning groups may be formal or informal (Imel et al, 1994). *Formal* groups have a defined structure, are asked to perform complex and challenging tasks, and meet together over a period of time. They are usually required for cooperative learning strategies but many of the other collaborative approaches discussed earlier also require formal groups. *Informal* groups are usually formed quickly and spontaneously to work on limited tasks for brief periods of time. Following task completion, they are usually dissolved. Examples of the use of informal groups are buzz groups, brainstorming, and decision-making. In general, you will want to use formal groups for tasks or assignments that complex, ambiguous, or multi-faceted. Use of informal groups, however, is a great way to introduce collaborative learning to students, to help them get to know each other better, and to allow them to develop skill in group or team work. It is also a helpful way for teachers to get quick information on how much they need to prepare learners for this form of learning.

How groups are formed and the individual members that make up a group are important considerations in collaborative learning strategies. These issues are more important when using formal groups but are often less important in the use of informal groups. While many teachers often rely on the learners to form their own groups or use some kind of random process, collaborative groups should be formed using fairly explicit criteria which will produce fairly heterogenous groups. Formation of collaborative learning groups depends heavily on what the groups are expected to do. The particular activities appropriate for these learners and the nature of the material that can be effectively covered in the small

group format will influence who is put into which group, when the groups form, and how they should work together. Groups that are student-selected generally do not work as well groups that are put together by the teacher, when the teacher gives consideration to age, race, sex, achievement levels and so forth. When students are allowed to spontaneously form their own groups, the groups tend to be more homogeneous with respect to these important characteristics.

When forming collaborative groups, it is also important to attend to the desired size of the group. Group size will depend on the nature of the task and the activities in which the group is expected to engage. In general, however, groups should consist of no less than three members and no more than eight members. Groups in which you are looking for quick feedback or the creative generation of ideas (e.g. buzz groups) should be smaller, so that all members can participate extensively and the no one member can dominate the generative process. Groups that are engaged in more complex problems (case studies, problem-based learning, discussion groups) will require different kinds of group roles and more members are desired for these kinds of groups.

Groups in their early phases of formation are also influenced by subtle, often unexpressed needs of their members. These needs may be psychological, informational, or interpersonal (Forsyth, 1990). For example, some members will feel a strong need to be included as part of and accepted by the group (need for inclusion). Others may feel a need to control the group's content or process (need for control). Still, others may be seeking warmth and support within the group (need for affection). Some members may feel a need to compare themselves to the others in their group, particularly they are uncertain about the appropriateness or validity of their positions or beliefs (need for information). Learners may also use the small group context as a form of social support, lessening their general sense of stress or painful emotions that may stem from feeling lonely. While it may not always be practical or feasible, at times it is helpful to consider what needs are present among your learners and then to form groups in which complementary needs are present and competing needs are avoided. Individuals will also weigh the costs and benefits of being part of a group. Such an analysis may influence the degree to which they fully engage and enter into the work of the group. Learners may quickly develop a sense of the extent to which a particular group will be able to provide for or address the particular needs they expect from the group. When they perceive that their needs might be met, learners are usually more willing to become involved with and a part of the group process.

Finally, a consideration of goals is paramount in the successful formation of collaborative learning groups. One of the most important and perhaps difficult ideas for learners and even teachers to grasp is the notion of a collaborative goal structure. Collaborative group learning is based on cooperative goal structures, as opposed to independent or competitive goal structures (). Goal structures are critical in understanding what goes on in a small group and how it approaches its assigned task. Even though a great deal of group work is used in various settings of adult learning today, the underlying assumption guiding this work is that each learner has his or her own learning goals and needs and this "group learning experience" should be directed and guided by these individual goals and objectives. Talk of a group goal, one which is common to all group member and not reducible to the goals of any single member, often is met with glazed over looks or the suggestion that the teacher has less than a firm grasp of reality. It seems that modern education remains one of the few social institutions in current society

which remains fiercely structured around independent or competitive goal structures. Family, community, and even work groups are either implicitly or explicitly structured around cooperative goal structures but when we join an educational group, we apparently leave our collaboration at the door.

Planning Group Assignments and Activities

Collaborative learning requires teachers to give careful thought to what it is they are asking the groups to do, how they will do it, and what resources they will use to address the assigned task. Selecting, structuring, and assigning group tasks are important aspects of insuring effective collaborative group work. Students sometimes have difficulty perceiving the relevance of certain activities and assignments to the content of the program, or their reasons for participating. When students see group activity as not clear, relevant, or trivial, they will be less committed, excited, thorough, and comprehensive in their approach to the learning task. In these situations, students tend to focus on "getting the job done" rather than immersing themselves in the experience of learning. Learners intuitively know when the instructional means are disconnected from their ends.

Keeping in mind several common-sense suggestions can help increase the likelihood that students will find the activity meaningful and relevant.

1) The learning assignments should be clearly structured and their implementation carefully organized. Insure that the instructions for the assignment are clear. As a workshop participant, I have often found myself in a small, collaborative group with none of us clear as to just what it was we were supposed to do.

2) In general, assign one task for the group to work at a time. Multiple tasks are another source of confusion within collaborative learning groups and their use should be avoided. Groups that are more mature and are working over longer time frames are usually capable of focusing on more than one question or problem but these situations should also be carefully followed to insure there is little confusion over the assignment. Multiple tasks should be avoided with groups that are more time-limited, such as within a session timeframe. If you are structuring the group assignment around questions or problems, give the group one at a time. If you are using case studies, limit the number of cases assign to the group to fewer than four. 3) Emphasize learning within the collaborative learning group rather than the completing of a particular task. Be realistic about the time you expect the group to complete its work and be flexible enough to allow for more time, if it is needed. Time frames that are too short tend to perpetuate an attitude of "get the job done" rather than a true spirit of learning and inquiry. Allow sufficient time for learners to explore with one another various aspects or facets of the task. Often they will bring in their own experiences related to the task and want to share these experiences with fellow group members.

4) Structure the group assignment so that it is difficult, if not impossible for students to work on it independently and still complete the task. Students often quickly determine if the task can be most

effectively achieved through a "division of labor" approach. This approach is evident in a group in which members work independently, in silence, on the assigned task. A division of labor mentality is an indication of troublesome process issues within the group. Among these are a dominant member directing the work of the group, perceptions that the task is not really all that relevant to the needs of the learners in the group, or that inter-dependence has not been achieved in the group assignment. Collaborative learning environments should be noisy places and quiet-working groups are a good sign that task inter-dependence has not been achieved.

5) If you are using a group approach that extends across meeting times or sessions, allocate regular portions of the large group's meeting time for work within the small collaborative learning groups. Do not expect the group to do most or all of its work outside of your regular meeting times. Students with whom I work frequently report great difficulty getting together outside of session meetings. Providing "in-class" time for meeting with their group helps address this difficulty and also communicates to the learners that you value this group work.

Facilitating group development and change

If a learning group meets over a period of time, it will demonstrate predictable changes in its structures and dynamics. These changes are usually most evident in groups that meet over a period of days or weeks but change may be evident even in groups that work together as part of shorter workshops or within single class sessions. Viewing these changes from a developmental perspective provides a framework that facilitators can use to guide their interactions with the group.

Moving the group through dependency issues. As they are just beginning their work, members of learning groups often behave very tentatively and politely. Communication is often stiff, centering mostly on the exchange of factual information or talk about topics outside of the scope of the group's work. Disagreements, if they occur at all, are relatively superficial and there is little evidence of overt conflict in these initial periods of the group. Generally, members are anxious about being part of the group. Concerns for personal safety, acceptance, and inclusion are usually very high. Members readily comply with instructions and conform freely to perceived group norms, but they are often unclear why they are doing the tasks assigned or what the goals or purposes of the activities in which they are engaged. Members depend heavily on the leader for direction, structure, and goals. The reflective and problem-solving ability of the group during this time are limited and the level of work performed is relatively low.

During this time, the facilitator needs to help members learn to work in groups by providing them information regarding such things as common group roles, how they might communicate with each other, and the kinds of feelings and emotions they might be experiencing. Members should be encouraged to introduce each other and the facilitator should help the group develop a set of ground rules which they can use to guide their behaviors. Participation may often be dominated in these early stages by a few members so facilitators will need to encourage a broad level of participation by

encouraging more quiet members to engage with the group. Finally, the facilitator will need to help the group stay on task. This may be done by clearly identifying the group's task or assignment, repeating it during the course of the activity, and asking for questions. The facilitator can monitor the group's progress by observing their interactions and even occasionally providing some input. As the members begin to work together, they may experience an increased sense of cohesion, participation, and involvement. The group may request clarification of their task or assignment, as well as some feedback on they are doing.

Helping the group face conflict. Eventually, many groups begin to experience disagreement and conflict over goals, tasks, and values. As the members experience an increased sense of safety, feelings of dissatisfaction and dissent emerge within group discussion. Anger among some members may be evident and feedback from the group is often highly critical. Gradually, members may begin to challenge the designated leader, question the group's goals, and express suspicion with the value of the entire group enterprise. During this phase of group life, participation may increase dramatically and members who rarely talked before begin to express their opinions. As a result of the increased sense of conflict and the emergence of differing values, conformity and cohesion may decrease during this period. Subgroups often develop, with one subgroup articulating dissatisfaction with the status quo while another subgroup defends its overall value. The group makes relative little progress on its task, as the level of work continues to be fairly low. The group, however, is working on *process issues* and this kind of work, although not explicitly related to the assigned task, is critical for the future of the group's work. It is precisely in this area where the group from the group dynamics class described earlier did not adequately address the conflict which emerged in their work together. Instead they "stuffed it" and proceeded with the task at hand. At this point, the group essentially ceased to exist and became a boss and his two helpers who produced the final product. This period of group life is a time that tries the souls of facilitators. Much of this conflict initially emerges in an apparent attack on the structure of the learning experience and its agenda and overall goals. This attack often leads into a direct questioning of the facilitator's competence in running the group. Needless to say, these criticisms can easily be interpreted as an attack on the person of the facilitator. It often evokes a strong desire on the part of the facilitator to rush in and "fix" what was wrong, thereby decreasing his or her anxiety that this period often elicits. Attempts to fix the group are usually manifest by efforts to provide more structure, take more control, or exert more authority.

Interpreting this period of group life as a personal attack, however, is not usually the most efficacious response to the group's struggle at this point. Realizing that such behaviors are often indicative of the normal development of a maturing group may help make this feel less personal. From this perspective, facilitators can encourage the group to examine nonproductive group processes. The facilitator should encourage exploration of the group's problems and help members frame what these problems are. The members should be challenged to examine ways in which the group's work is being distorted by some group members. During this stress period within the group, the facilitator has to remain flexible and responsive to the developmental needs of the group as well as the individual needs of its members.

Several years ago, I facilitated a group of ABE practitioners who were studying the problem of student retention within their program. The group's task was to study information obtained from their program, identify possible factors influencing retention, and to arrive at possible interventions that address these factors. For the first three meetings, the group seemed to rely extensively on me, as the project's research director, for information gathered on their program, as well as direction this research project might take. Then, early in our fourth meeting, the practitioners began to extensively criticize the whole project, finding a number of problems with its design, and feeling almost hopeless about being able to successfully implement its objectives. The criticism evoked defensive feelings within me, as if my leadership of the project was being attacked. For a while the project felt doomed and a part of me wanted to jump in, take control, and rescue what remained of a good idea. Yet, it appeared to me that the group may be moving through a normal developmental phase. In this phase (what Tuckman refers to as "storming"), the power of the designated leader becomes redistributed more equally throughout the group, and the group as a whole seeks to assume more ownership for its work. During this discussion, I listened and paraphrased their concerns and attempted to answer any factual questions that I could. Eventually, the pervasive pessimism gave way to possibilities, and the members began to suggest ways in which the group might approach some of these difficulties. By the end of the meeting, the group had re-affirmed its commitment to the project and had made substantial progress on sketching out its experimental design.

The group needs to be carefully guided along the fine line between exploring its processes in the service of its overall task, and literally falling apart as a group. It is often a tough time in the life of learning groups and many simply back away from the perceived conflict and emotional stress associated with this period of group life. Avoiding the issues which surface during this phase, however, marks the psychological, if not the literal end of the group. Cohesion will continue at low levels, and members may give only half-hearted efforts to completion of their tasks.

Letting the group work. If members are able to face the dragon during conflict period, the group may experience increased levels of trust and cohesion. As the group becomes increasingly task oriented, however, cohesion may decrease somewhat. Members seem more satisfied about being in and part of a group experience. Cooperation among members increases and individual commitment to the group's goals and task are very high. The group becomes more clear as to its goals and its behaviors and communications become more task oriented. Division of labor is sometimes used to address aspects of the group's tasks. Communication patterns become more flexible and more complex, as additional members begin to regularly participate and members talk more to each other. The group will likely continue to experience conflict but there is a greater sense of its overall value to the group and a perception that the group can successfully handle conflict.

Successful resolution of the period of conflict is also an "authorizing" act. That is, the group now can legitimately claim authority for its own destiny. Some of the facilitator's power is re-distributed throughout the group so now the group turns as much to itself for leadership and direction as it might the designated leader. The facilitator's role often changes after this phase to more of a resource person and less of an authority figure. Leadership among the members should be encouraged as the group takes on increasingly complex situations. In response to requests agreed upon by the group, the facilitator needs

to negotiate modifications in the group's program or experiences. As the group matures, the facilitator should reduce her or his activity levels and interventions.

Fostering a meaningful end to the group. The ending of a group experience is particularly important for groups that have met over a sustained period of time and which have worked hard to make their experience helpful and satisfying. As the end of a group's time together approaches, members may experience increased levels of anxiety. Their ability to sustain work often decreases dramatically. While they share expressions of solidarity with one another and positive feelings about being in the group, their ability to manage group may decrease. Issues that are problematic are minimized or avoided altogether. Group members will often talk about ways of continuing the group beyond its formal ending but these plans rarely extend beyond the level of a fantasy. Cohesion will gradually decrease and members may assume an increasingly personal perspective on the group's termination.

Facilitators need to build in time for groups to constructively end their process. Far too little time is devoted to this important task in educational contexts but it is an important time for closure and saying good-byes. During this termination phase, the facilitator should increase his or her level of activity with the group. Groups should be assisted in developing points of generalization and application of their work beyond the group. The facilitator can also summarize the group's progress and stress their achievements. Planning some type of celebration provides a structured context for much of the work that needs to be done in this phase and the facilitator can help the group plan this event. The planning itself becomes a way for the group to process its ending.

Effects of changing group membership. It is generally recommended in collaborative learning that teachers keep the groups together and avoid changing or shifting their memberships. A stable membership is vital for the group's development and maturation. Introducing new members has the effect of forcing the group to deal with developmental issues felt to be resolved, such as trust and disclosure. When new members join a group, the group-as-a-whole may regress to earlier developmental periods to address these issues, thus complicating or even retarding its movement. Many years ago, I worked with a physician training group of eight members that met one hour per week for 25 weeks. The group composition changed radically from week to week and at no time during its life did the entire membership meet together. It was not at all uncommon to have 75% of the members present one week absent the previous week. Needless to say, the developmental work that this seminar needed to do to become a powerful collaborative learning group did not take place and the group ended with many of the issues discussed above still powerful and impeding forces in the group's learning processes.

While these fluctuations do not necessarily preclude a group's maturation and development, they make it more difficult to achieve. Groups may be able to accommodate small numbers of changes readily but substantial change in group membership literally creates a whole new group and evokes all the group formative issues again. If you are presented with a situation, such as commonly experienced in many adult basic education programs, where student attendance can change dramatically from session to session, it is probably advisable to restrict your use of group work to collaborative strategies that can be completed within the time frame of a single session.

In summary, groups that work together over time experience common and predictable changes that revolve around group roles, patterns of communication, leadership, norms and values that guide intragroup behaviors, conflict, and the expression of feelings and emotions within the group (Wheelan, 1994). Movement in the group occurs from independence through dependence to interdependence, and from polite but superficial conformity through disenchantment with interpersonal issues to more authentic and real expressions of feelings, differences, and attitudes (Bennis & Shepard, 1956). While group members are preoccupied with emotional issues within the early phases of group life, they become increasingly task-oriented and productive as the group matures. Members depend less on the teacher or designated leader and more on each other to work on their tasks.

One of the most effective ways to build on the skills involved in collaborative group work and to foster group development is to *process the process*. By this I mean to build in time within or after group activities to allow group members to reflect on how they went about their task. They should be encouraged to examine issues like how well they stayed on task, the kinds of roles used and who played them, kinds of leadership demonstrated, patterns of or possible breakdowns in communication. Group members should identify what they did well and how their future processes might be improved.

Conclusion

References

1. © John M. Dirkx, 1998, To be published in S. Courtney & J. M. Dirkx (Eds). *Approaches to active learning in adult education: Tips, strategies, and techniques for teaching adults*. Washington, D. C.: American Association of Adult and Continuing Education.