Following an opening statement explaining the importance of small groups as an educational innovation, the author examines seven different types of groups, their organization and function. 1) The task group involves students in many types of meaningful work, with each member able to make a useful contribution towards the completion of the task. 2) The didactic group has the teacher or leader presenting material with the purpose of informing, reviewing or clarifying. 3) The tutorial group puts the emphasis on individual instruction, usually of a remedial nature. 4) The discursive group provides for free and uninhibited discussion by students of a topic of prime importance to them, with the teacher in the role of interested observer. 5) The brainstorming group is problem or solution centered, without criticism, and the teacher's role is to motivate, to get the ball rolling, and then to stay out. 6) The heuristic group places the emphasis on inquiry and discovery, and is intended to make students skillful askers of questions. 7) The maieutic group uses the Socratic method to determine the answer to a question through the open and honest exchange of informed opinion.
Learning in the Small Group
Learning in the Small Group

ALLAN A. GLATTHORN

PRINCIPAL, ABINGTON HIGH SCHOOL
NORTH CAMPUS
ABINGTON, PENNSYLVANIA
INTRODUCTION

Many schools throughout the United States and Canada have succeeded in removing the organizational rigidities which, for generations, have made small group instruction impractical for all but the most well-to-do schools. Teachers, however, have been experiencing a great deal of difficulty in devising new methods which enable them to take full advantage of the small group's potential.

Too often the seminar teacher has continued to teach the new small group in much the same way he taught the conventional class of thirty. The seminar teacher tends either to dominate or abdicate. If he dominates the group, it becomes teacher centered, and spontaneity and originality is sacrificed. If he abdicates, chaos and superficiality result.

Dr. Glatthorn draws upon his own and his faculty's experiences with small group instruction to present this provocative article. The ideas expressed here were originally presented to a group of teachers and administrators attending the Abington Conference on Innovations in Education, held at Abington, Pennsylvania on May 1-3, 1968.

This speech is reproduced and distributed by IDEAL as a service to teachers and administrators who wish to consider systematically ways for improving small group instruction in their schools.
Let me begin by stating flatly that the small group is one of the most important educational innovations to be discussed at this conference. We could survive without the large group. We could manage without the complexities of the flexible schedule. But without the small group we would inevitably fail in our educational task. The reason is simple: it is only through the small group that we can multiply the opportunities for pupil-teacher interaction. And very significant kinds of learning take place only through such interaction.

This interaction becomes of prime importance for the student. He learns best when he is involved actively in the learning process, and the small group most effectively provides for such involvement. In the small group the student is seen as the individual learner — he cannot be ignored, he cannot get lost as a passive listener. The shy student finds himself more at ease and gradually begins to speak up and open up to the few who are with him. The talkative student who enjoys impressing a large class feels a bit different when five or six are sitting with him in the quiet of a seminar room, and he begins to listen. And the students are perceptive of the value of the small group. Most surveys of student opinion reveal overwhelming approval of the small group as a learning environment.

The teacher also benefits in very obvious ways. He finds himself functioning in a different kind of role — because the setting demands such a change. We have frequently heard the educational platitude that “changing a schedule won’t change the teacher.” Don’t believe it. We have found that scheduling the teacher for a small group does change teacher behavior. Even the most dogmatic and didactically oriented teacher finds that he just can’t lecture to five or six students. Our experience has been that once teachers have been successfully introduced to small group, they want more and more time for it.

These benefits for the students and the teacher apply in all subjects. It is a mistake to think that small groups are useful only in English and social studies: they have proved to be effective in mathematics, science, and foreign language. Incidentally, we have found small groups very effective as a way of working with problem students in guidance-oriented seminars. Use this as a general maxim: if you can teach it in a group of 27, you can teach it better in a group of 10.

Given its basic importance, how do we schedule for the small group? There are those who say it should not be scheduled. Let the teacher divide his class group when he sees the need for it, the argument goes; he will thus achieve greater flexibility. Unfortunately, the average teacher does not operate this way. Given the option, most teachers would be so obsessed with their need to dominate instruction that they would only very reluctantly and only very occasionally divide their classes into small group.

We begin then by arguing that the small group is such a vital component of learning that it must be a scheduled activity — and scheduled as often as possible
Given this basic premise let's turn our attention to other specific matters dealing with the small group.

First, what physical arrangements would make for the best small-group performance? We should not make the mistake of assuming that the small group can function effectively in any kind of environment. Adequate ventilation, proper seating, good acoustics, and attractive environment all produce better discussion. While there has been much well deserved kidding about the teacher who always wants to “put our chairs in a circle and begin to discuss,” such acorn should not make us forget that for most small group purposes, the arrangement whereby people who are speaking to each other can also face each other is the best arrangement. Very careful research has documented the fact that such an arrangement produces the most productive exchange of ideas. One interesting sidelight: even in a circular arrangement, members tend to address more communications to the person opposite them, not to the person on their right or on their left.

How small should the small group be? Possibly no other aspect of small-group learning has been so diligently researched. The research suggests that, first of all, there is no single ideal size for all groups. The best size depends on the nature of the task and the skills available in the members of the group. It has been suggested by Thelen that for any task-oriented group the ideal size is the smallest number that represents all the required skills necessary for the accomplishment of the task. In a group that is essentially discussion oriented the evidence seems quite clear that five or six represents the optimum number. With a group fewer than five, the individual members feel threatened; they know clearly they are on the spot. Such a threatening situation tends to inhibit free response.

On the other hand, in a group larger than five the amount of participation by the individual members can fall off sharply. The bigger the group, the greater the gap there is between the most frequent contributor and the rest of the group. In a typical class group of thirty, it usually happens that no more than one-third participate actively in a forty-five minute period. Even in the group of twelve or fifteen you will probably notice that only the most forceful individuals are expressing their ideas. My hunch — and it is only a hunch — is that the small group starts to look like a class when it gets to be about 14 or 15.

Does this mean that if teachers have been scheduled with a group of fifteen they must conduct the discussion with such a number? Not necessarily. They should experiment with group size, find to what extent all can be actively involved and, if necessary, subdivide the seminar of fifteen into two groups of seven or eight. One note about the composition of a small group. One study has indicated, perhaps surprisingly, that heterogeneous groups are superior to homogeneous groups in finding inventive solutions.

So much for the matters of physical arrangement, size, and composition. Let us
Next, turn our attention to the nature of leadership in the small group. Here again there is much confused thinking. There are those who contend that only the teacher can direct the small group—and only the teacher who also teaches these same students in class. Others insist so strongly on the importance of a student-centered situation that they assert that only the student can lead. Both positions ignore the very simple point that leadership is a function of task. Later we shall attempt to point out more specifically how this is so. Even when student leadership is used, however, merely appointing the student leader does not end the teacher’s responsibility. He must work with the leader, prepare him, help him see the kinds of questions that must be asked, help him evaluate the discussion. It is usually wise to rotate student leadership. Also, it is considered desirable to use the student observer in the group. The observer can serve as a summarizer, evaluate progress and, most importantly, can keep track of participation. Most teachers are blind to the extent to which students do not participate in most discussions.

We have heard much talk and have read much about the importance of democratic leadership in a group. A few points perhaps need to be made here. Democratic leadership does not mean laissez-faire leadership. It means, first, the active participation by the teacher as a guide who has respect for student opinions. It means the teacher must listen to student ideas, must give students a chance to express their feelings, and should within reason permit student preferences to determine the nature of the group task and the methods for group attack. In the long run, democratic leadership may be preferred by the group; initially, however, students resent it and prefer the most directive kind of approach. One study showed that in a group with an active leader as opposed to a group with only an observer, the leader-group more frequently arrived at the correct answer, since the leader was able to secure a hearing for the minority viewpoint.

Just as leadership will vary with the nature of the group task, so will the optimum length of time for any single meeting of the small group. As we discuss below the special types of small groups, it will probably be possible for you to make some inferences about the time needed. I would, however, like to make some general observations based on our experiences with two years of small group work. First, we have found that our single module of twenty-three minutes can be effective for some types of discussion. While some teachers complain that it seems a bit too short, I personally have found that it is desirable not to reach closure with the small group—but to have students leave with the issues still unresolved, with questions turning over in their minds. Also, some teachers report that our double module of forty-six minutes is just a bit too long for the low-ability student to keep a good discussion going. But these judgments are probably best arrived at through your own experience, not by listening to ours. As a very general rule, let me suggest that a thirty-minute period might work well for most small group activities.
What of these small group tasks to which we have alluded? What can the small group do in the educational setting? Here again there has been a too narrow view of the small group. Some teachers think that the small group must be tied in closely with the content of the curriculum, and they get much upset if each of their small groups does not follow a given large-group presentation. Such teachers are too much concerned with covering the curriculum where they should be concerned with uncovering and discovering with students a world of exciting knowledge. And it is in the small group that uncovering and discovering best take place. Actually, of course, the small group has numerous roles and functions which can be identified simply by asking, "What can I do with a group of ten that I cannot do just as effectively with a larger group?" I would like to discuss with you several different types of instructional groups.

The first might be called the task group. In our "life adjustment" days we called it committee work. But it is not to be sneered at. The small task group can be an effective way of involving students in many types of meaningful work in which each member can make a significant contribution. The rules for the successful task group are known to all of us who have worked unproductively on committees: be sure the task is clearly defined and understood by all; be certain that roles and individual assignments are sharply delineated; provide the necessary resources or indicate where they might be obtained; check closely on the progress of the group and hold them to a realistic schedule; provide for some type of feedback to the larger group through oral, written, and/or audio-visual reports. This diagram perhaps illustrates the nature of the task group:
The second type of small group I would designate as the didactic group. In the didactic small group the teacher — or a student leader — presents material with the purpose of informing. At times we hear educational dogmatists state that the teacher should never teach in a small group. I always suspect such dogmatic generalizations. There is justification, I think, for the teacher occasionally to use the small group to review, to clarify, to instruct, permitting the students to interact with questions and comments. I think there are certain things a teacher can teach in a small group — and I mean teach — that can not be taught as well in a class of twenty-seven. I would diagram the didactic group like this:
The third type might best be called the tutorial. Here the emphasis is on individual instruction, usually of a remedial nature, although it may well be individual instruction, motivation, or evaluation for an independent study project of an advanced nature. The teacher—or again an able student—merely uses the small group session to deal in turn with the individual members. A good teacher can probably give effective individual attention to seven or eight students in a half-hour period and accomplish much real benefit for the learner. The small group tutorial might look like this:
The fourth type is one which we term the discursive group. This is the free and uninhibited discussion by students of a topic of prime importance to them. It would be a mistake for teachers either to exclude completely the discursive discussion or to indulge in it too much. It can make a very valid contribution to any class where the subject matter involves controversy or issues of significant interest to students. No preparation is, of course, needed by the teacher except to find the topic of sufficient interest for the class. And the teacher's role is merely one of an interested observer. All he needs to do is stay out of the way. He should listen attentively to student opinion, notice carefully who is taking part, watch closely for student reaction. Teachers, of course, need to be admonished about overusing the discursive approach. It can be a great waste of time and often is productive of nothing except the exchange of prejudices, serving merely to reinforce erroneous ideas. Teachers who boast again and again, "We have the greatest discussions in my class," often are deluding themselves if these so called "great discussions" are only bull-sessions. The discursive group might look like this:
The fifth kind of small group is perhaps best characterized by the term “brain storming” coined by Alex Osborn, the originator of the technique. “Brain storming” like the bull-session, is free and uninhibited. It tends, however, to be problem centered, or solution centered. The teacher's role in the “brain storming” discussion is merely to motivate, to get the ball rolling, and then to stay out. The teacher should not criticize, evaluate, or react negatively to any idea advanced in the “brain storming” session.

Here are a few suggestions culled from Osborn's books: 1. The ideal number for a brainstorming group is about twelve. 2. Choose a subject that is simple, familiar, and talkable. When a problem calls for use of paper and pencil, it usually fails to produce a good session. 3. Criticism is ruled out; adverse judgments of ideas must be withheld until later. 4. “Free-wheeling” is welcomed; the wilder the idea, the better. 5. Quantity is wanted. 6. Combination and improvement are sought. In addition to contributing ideas of their own, participants should suggest how ideas of others can be turned into better ideas, or how two or more ideas can be joined into still another idea.

Those who are interested in more information about “brain storming” are referred, of course, to Osborn’s own works.

The diagram below shows the problem — centered concern of the brain-storming group.

![Diagram of brain-storming group](image)
The sixth type of small group might best be termed heuristic. Here the emphasis is on inquiry and discovery, and the teacher becomes what Suchman calls a responsive environment. Briefly, the emphasis on the Suchman inquiry training is to develop the skills of scientific inquiry—to make students skillful askers of questions. As you know, with Suchman's approach the students are first presented with a concrete problem to serve as a focal point for their investigations: in his particular use of inquiry the concrete problem is a film of a physical event. The second condition he establishes is a responsive environment: we make it possible for the children to gather whatever additional data they need by asking specific questions which are restricted to the "yes-or-no" format. Third, we provide guidance in the process of inquiry. He sees three stages emerging here: the first is episode analysis asking questions that make sure you have an accurate picture of what it is you are trying to explain. Stage two is called the determination of relevance, asking yes-no questions to determine which facts are relevant to the explanation and which are not, which conditions are necessary to the outcome of the filmed demonstration.

The third stage he calls the induction of relational constructs. This is where hypotheses are formulated and tested. The children construct an hypothesis based on relational constructs, test their hypothesis and find it tenable or untenable. The Suchman approach provides finally for critiques of part inquiries, using tape recordings of previous sessions.

While some of us have reservations about a possible over-emphasis on process in the Suchman inquiry training, all of us can learn much from the general approach of making students the question-askers and teaching them the skill of scientific question asking. A diagram of the heuristic small group might look like this:
The final type of small group we would call maieutic or Socratic. Here the teacher becomes the Socratic questioner and responder. He begins by posing a problem for the group: “Is Death of a Salesman a great tragedy?” Note that the problem posed should be one in which the answer can best be determined through the open and honest exchange of informed opinion—through the dialog of searching minds. If the problem can be answered by consulting a reference book, it is not a suitable problem for the maieutic discussion. Having posed the problem and defined it clearly, the teacher does not retire to the rear; instead, he continues throughout the discussion to have a very active role and the good maieutic discussion can be led only by a highly trained teacher. It is the most taxing and demanding of all his tasks.

The maieutic discussion probably begins with the teacher challenging, disturbing, demanding definitions, driving the discussants back into a corner to examine their prejudices, to defend their position, to analyze their biases and preconceived notions. At times during the preliminary stage the teacher will play the devil’s advocate, seeming to assume positions he really doesn’t hold. The teacher’s responses during this stage would probably sound negative to those committed to the dogma of interaction analysis—“Prove it. Define it. Why do you think that? Where is your evidence? Had you considered this possibility? Do you really mean that? What do you mean?” The first stage probably ends with the students confused, upset, and dismayed to see their prejudices demolished. But this is only a first stage. Unfortunately, some teachers—usually very young ones—leave them there. The first stage is destructive, and destruction should be only a necessary preliminary to reconstruction, the second stage.

At the conclusion of this first stage, it might be wise for the teacher to do a bit of constructive summarizing. “Now look, we have made some false starts but we also have come to some tentative agreements. We have defined tragedy as the fall of a great man through some external or internal force, a fall which leads to some greater reconstruction. Now let’s take that definition and apply it to Miller’s play.”

During the second stage the teacher must do a lot of good hard listening. (And did you ever notice what poor listeners we really are? We really don’t hear what students are saying—with their words and their non-verbal communication.) We must listen then very carefully to every student answer and we make a split-second judgment about how to respond to it. Is the comment totally irrelevant and should I very gently get him back to the subject? Is his comment totally unproductive and should I just give him a bit of encouragement but try subtly to get another answer from someone else? Does this answer contain a piece of the truth which can be related to what has been said before by someone else? Does this response contain some glaring fallacy which should be challenged by some other student? Does this response contain a really fresh insight which should become the focus for a new line of thinking?
It is evident that during this stage the teacher becomes more than a challenger and more than a listener. He becomes a leader and a participant in the search for truth. Suddenly he finds himself caught up in an exciting dialog of searching minds. He probes, directs, stimulates, entices, responds, channels, synthesizes. And he learns. Any teacher who doesn’t learn from every discussion he conducts just hasn’t listened.

I might make this other point about the small group maieutic discussion. Be sure that the students develop the art and skill of listening and responding to each other. With the unskilled teacher the small group discussion too readily becomes teacher centered, with all questions and answers aimed unilaterally at the teacher.

Note, as this diagram shows, the role of the teacher is the unique one of participant-leader, with the students responding to each other and to him. As I indicated this participant-leader role in the maieutic discussion is the most challenging kind of teaching. And anyone who says airily, “My students can lead a discussion just as well as I” is talking through his modular hat.
With these major types established, let us conclude with some final general matters. First, can small group be evaluated? Obviously it can be and it must be. Some suggestions follow: First, there is need for group evaluation which says in effect, "How did we do today?" "Did we reach our goal?" "How many of us participated?" As mentioned before, an observer is of much help here. Second, there is obviously a need for teacher evaluation. But such evaluation should not be purely quantitative. The teacher is unwise who says in effect, "The one who talked the most gets the best grade." The teacher should learn to distinguish between meaningless verbalism and thoughtful analysis; he should learn to treasure the student who makes a few insightful comments and to chasten the garrulous dominator of discussion who really contributes nothing of substance. Finally, there is the need for individual student evaluation. In some cases it might be wise for students to keep a log of the discussions in which they participate.

Since in the small-group discussion teacher-student relationships are of key importance, it might be helpful at this stage to turn our attention to this crucial nature of teacher-student relationship. Again, there is no easy answer. The teacher must learn to play it by ear and must respond to individuals. While it is difficult to generalize, perhaps we can be of help by making some suggestions about handling certain typical small-group types. First, what do you do about the hand-waver; the student who constantly thrusts his hand in your face and almost demands your attention? To begin with, you cannot ignore him completely. This would only tend to make him resentful or else intensify his demands. Neither should you take the easy way out and call on him any time he has his hand waving. The best answer is to make him see that you value his participation, but you don’t want others to be excluded. Second, what about the student who is the constant butt of class ridicule? To begin with, he needs your support. The class needs to learn that each of us has a right to be heard and that no student or teacher deserves ridicule. No matter how outrageous his questions or answers may be, find something in them to support. Make him see that your class is an open forum for the exchange of ideas, not merely a place where the sycophant can perform.

What about the shy type, the student who rarely answers just because he lacks security? Sometimes it helps, if the problem is especially acute, to talk to the student, to encourage him to participate and to prepare him for the discussion to come. You might say, for example, "John, tomorrow I’d like to discuss the garden symbolism in ‘Rappacini’s Daughter.’ Will you give this your careful attention tonight and be prepared to make some comments tomorrow?" Also, it is helpful with this kind of student to ignore the oft-repeated warning about not mentioning a student’s name first when asking a question; give the shy student some warning that he has to answer. Don’t confront him abruptly with a difficult question. Say something to this effect, “John, I’d like you to give thought to this. The garden in ‘Rappacini’s
Daughter' has a symbolic significance. What do you think the garden really stands for?" Then pause. Don't be afraid of silence, but give him a chance to think by amplifying the question. "Of course, it may not have any symbolic significance at all, but most who have read the story generally are convinced that it does have. Do you have any notion, John, as to what the symbolism may be?"

So much for the shy type. Now let us say something about the diversionist, the student who purposely or unintentionally sidetracks discussion. He must be dealt with firmly. You can answer his question of a diversionary nature briefly and then say, "That's not really the substance of our discussion. Let's get back to the point." At times, of course, the sidetrack can be illuminating and provocative, but for the most part the problem-centered discussion should stay on the track.

Finally, what of the shocker—usually a gifted student who tries to shock you and his classmates by giving some outrageous answer. The obvious answer is not to be shocked, since that is the effect he wants. Deal with his ridiculous answer calmly and quietly but deal with it effectively. Do not permit nonsense (from any source) to go unchallenged in the classroom.

It is evident that the teacher needs much training to function effectively in all small groups, regardless of the type. What type of training is most effective? He should be knowledgeable about the findings of the specialists in group dynamics and sociometry; Shepherd's Small Groups is a good source here. He should explore the use of one of the more promising types of methods for analyzing student-teacher interaction in the small group. The work of Flanders and Amidon looks most helpful here; and Olmsted's The Small Group provides a summary of other interaction analyses methods. But most of all the teacher needs some in-service training in the school on the spot. We at North Campus have effectively devoted entire faculty meetings to the matter of the small group and have used small group demonstration lessons with good effect. I think also the teacher needs much feedback through observer reports, pupil rating sheets, and audio and video tape. The last, I think, has much promise for improving the teacher's performance in the small group.

But we must also help the student grow in his skills with the small group, and these skills can be presented in a large-group lecture. A few suggestions for teachers might be appropriate here: 1. Stress the importance of the small group sessions. Some compulsive students will feel that they are a waste of time and demand that you get on with the "business" of teaching; other students will be tempted to waste the time with frivolous talk. 2. Use the procedures suggested in selecting and training student leaders and observers; have them use an observer evaluation check list. 3. Help the students develop goals and objectives for each discussion: what should we try to accomplish in this session? 4. Stress the importance of listening skills in the small group. Critical listening is especially important here: they need to develop the ability to listen objectively to contrary points of view, to weigh arguments
critically, to detect fallacies in thinking, to recognize prejudices. 5. Help them develop the skills of responding—knowing how to differ without animus and rancor, how to take a point made by another and use it as grist for one's own intellectual mill, how to advance discussion, how to get discussion back on the track. 6. Help students evaluate their discussions. From time to time tape a discussion and play it back for critical evaluation. Take a few minutes at the conclusion of each discussion to ask, "How did we do?"

I hope it is evident from this discussion that the small group serves so many vital functions that all schools regardless of their commitment to modules or to classes should find more and more time for small group activities.