Practical Discussion Techniques for Instructors

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"Mark (Van Doren) would come into the room, and, without any fuss, would start talking about whatever was to be talked about. Most of the time he asked questions. His questions were very good, and if you tried to answer them intelligently, you found yourself saying excellent things that you did not know you knew, and that you had not, in fact, known before. He had "educed" them from you by his questions. His classes were literally "education" - they brought things out of you, they made your mind produce its own explicit ideas ...what he did have was the gift of communicating something of his own vital interest in things, something of his manner of approach; but the results were sometimes quite unexpected - and by that I mean good in a way that he had not anticipated, casting lights that he had not himself foreseen." (Merton, 1948, p.139)

I would guess that most adult educators aspire to the pinnacle that must have been Van Doren's discussion style. In fact, we tend to take for granted the idea that discussion is a centrally important learning tool. While there have been few studies of the connection between discussion and learning, those that have been done (Smith, 1980) confirm what many of us would expect, namely, that good discussion leads to a number of desirable outcomes including:

- an increased curiosity about the subject area,
- more positive perceptions about the value of the subject,
- higher ratings of the course,
- increased time spent reading materials related to the subject, and
- higher attendance at course sessions.

Despite the widespread belief in the value of discussion, the reality for many educators is often, lamentably, different. In a recent workshop that was focused on discussion techniques, I asked the participants to describe the types of problems they encountered in leading discussions. The following were some of the more frequently mentioned issues:

1. Several participants dominate the discussion. The others are passive, and, often, resentful.
2. Sometimes the discussion flows well, but more often it bogs down and loses its spark.
3. The discussion goes off on tangents making it difficult for the workshop leader to pull things together.
4. Many participants seem bored during discussions. They look as if they're eager to have the discussion stop.
5. The focus of this paper is on how to lead discussions in adult education workshops and seminars. A variety of techniques are discussed that can readily be employed by those of us who have not been born with Mark Van Doren's gifts.

In fact, an explicit premise of this paper is that discussion leadership skills can be readily acquired. The problem for most educators is that they have not seen many good examples in the lecture-oriented institutions of learning in which they were learners. The methods to be explored in the following sections are: (1) Questioning Techniques, (2) Small Group Discussion, (3) Reflection time, (4) Responding to Learner Comments, (5) Process Leadership, and (6) Icebreakers.

I. Questioning Techniques: Question Type

"What's in a question, you ask? Everything. It is a way of evoking stimulating response or stultifying inquiry. It is, in essence, the very core of teaching." (John Dewey, 1933)

Research on questioning behavior in university classrooms by Barnes (1980) reveals some surprising facts. First, a very small portion of most classes is spent in instructor questioning (3.7%). Second, the great majority (82%) of that small amount of questions are at the lowest cognitive level (rote memory). Third, almost a third (32%) of those questions that are asked elicit no learner response. In short, whether the class is called a seminar or a lecture, the main activity is the instructor lecturing with learners passively listening.

To find out whether low response rates on the part of learners are caused by the types of questions that are asked Andrews (1980) developed four categories for classifying questions and studied the relationship between question type and response rate. The categories were question level, divergence, structure, and straightforwardness.

Question level refers to the cognitive skills required to answer the question. A low level question is one that requires only rote memory of simple rephrasings of materials. Such questions evoke memories of classroom drill and tend to turn adult learners off. In contrast, a high level question is one that requires what Bloom (1956) has called the operations of analysis, synthesis, and evaluation. Thinking at these levels captures the-interest of adults and is more likely to elicit **lively discussion.**

EXAMPLE: Low Level
Who are the main characters in Hamlet?

EXAMPLE: High Level
What about Laertes role... could he be left out of the book and would it still be Hamlet?

The **convergence/divergence** dimension refers to the number of acceptable answers that are implied in the question. A convergent question implies that there is a single right answer to a question, making it risky to answer and requiring more time to organize an answer. In contrast, a divergent question indicates that there are a number of plausible answers, making it safer to venture a viewpoint and allowing for more spontaneity in offering responses to the question.

EXAMPLE: Convergent
What's Hemmingway's main point in "A Farewell to Arms"?

EXAMPLE: Divergent
What are some of the messages that you perceive in Hemmingway's "A Farewell to Arms"?

The **structure** of a question refers to whether it provides contexts or guidelines through which the learner can prepare an answer. An unstructured question is wide open and therefore requires time to organize a good answer. In contrast, a structured question is one that directs the learner to specific approaches or .to specific areas of the subject matter as a means of arriving at an answer. This helps learners narrow their focus and arrive at an answer more quickly.

EXAMPLE: Unstructured
What did you think of the play?"

EXAMPLE: Structured
What are some things that made you feel good or bad as you read through the play?

The **straightforwardness** of a question refers to the amount of related information that is interspersed with the question. A multiple question either contains several questions or is interspersed with background information. This makes it unlikely that learners will feel that they know what is being asked of them or that learners will hear the question as stated. In contrast, a straightforward question is singular in nature allowing learners to focus on one issue at a time and increasing the likelihood that learners have heard the question as it was stated.

EXAMPLE: Multiple
What are some of the reasons that Tolstoy is condemning him? I mean ...what seems to be the main problem, according to Tolstoy? At the end of the story, we have a religious solution. A couple of you earlier said you didn't think that quite fit with the rest of the story ...do you still feel that way after discussing it? What's the problem there?

EXAMPLE: Single
What are some of the reasons that Tolstoy is condemning him?

Andrews found that questions that were high level, divergent, structured, and straightforward tended to elicit two to three times more responses than questions that lacked one or more of these characteristics. Thus, a practical rule of thumb is the following:

RULE: Prior to a class or workshop session, construct questions related to the topics that are high level, divergent, structured, and straightforward.

Of the four categories, the high level category is one that causes instructors the most problems. I have observed that many instructors ask low level questions believing that they are asking high level ones. In order to insure against this common type of error, Kissock and Lyortsuun (1982) and Cooper et al. (1977) have developed excellent programmed learning guides that facilitate an understanding of the distinction between low and high level questions and that can dramatically expand the reader's questioning scope.

On the other hand, Andrews has noted that: some instructors react to his categories by structuring questions that are overly difficult (too high level). The learner should not only have the factual information to answer the question, but he or she should work their way up a hierarchy of difficulty of question level. For example, at this point in your reading this article on questioning techniques if I asked you, the reader, to compose an example of a well structured question for your next seminar, you would probably not be ready to do. so. A better alternative might be to ask you to write some examples of questions that would violate one or more of Andrew's categories. This would be a first step in preparing you to structure a high quality question fitting all four of Andrew's categories.

RULE: Carefully choose the level of difficulty of the question ensuring that the learner has the necessary information and skills to answer it.

Questioning Techniques: Wait Time

Asking a well-formed question doesn't always guarantee that the question will be responded to. A second factor is Wait Time, the amount of time the instructor waits after asking a question before answering it himself or going on to ask another question or making further points. Good questions necessitate lengthy wait times. Yet researchers have discovered that most instructors wait less than three seconds practically ensuring that there will be no learner response. Low wait times are thought to be connected to cultural norms for social conversation where silence is taken to mean that there is some inadequacy in the conversation. Repeated use of low wait times tends to cement a low response syndrome because the learners are inadvertently reinforced for not answering and because both learners and instructor avoid long, uncomfortable silences.

RULE: Count slowly to ten or fifteen before breaking away from the silence following a question.

While longer wait times are generally desirable, the discomfort associated with them can compound the problem. As tension increases, learners become less able to focus on the question. Long wait times that produce no answers leave the instructor in a quandry; should he or she answer the question and go on to something else? The answer is "no". Instead, think in terms of finding ways of reducing the discomfort associated with question asking and wait time. Several useful rules follow:

RULE: If there is no answer, inquire whether the learners would like more time to think about the question or whether the silence reflects a need for clarification or restatement.

RULE: Create an expectation for long wait times by saying something like: "Take a minute to think about this question. Then I'll take answers."

RULE: Avoid staring at certain learners (e.g. those who more frequently answer your questions) while waiting for an answer. Keep your eyes moving by sweeping the room from side to side.

Questioning Techniques: Presentation

A third issue centered on questioning has to do with how questions are presented. My own casual observation leads me to believe that many if not most questions are presented orally. Oral presentation can result in learners not hearing or understanding a question and frequently leads to multiple questions being asked. Thus, long unproductive wait times are more likely to follow. There are several good ways to ensure that questions will be understood: before class, write your questions on an overhead; or, during class write them on a board or flipchart; or, hand them out in written form on a sheet of paper. In addition, after raising the question, it is often useful to ask whether the question is clear before launching into wait time.

RULE: Present questions in written form and ask whether they are understood.

Activation versus Participation

Questioning techniques focus on promoting learner participation in a large group setting. While most educators are clear that such participation is useful, few think in terms of a more basic concept, namely, learner activation. Learners are active when they are engaged in thinking about or discussing course issues. Instructor-learner dialogue is but one mode of activation and it suffers from drawbacks. When one learner is answering or asking a question or making a point, other are often disengaged. Many learners have become habituated to tuning out when their peers speak in class. A second factor leading to disengagement is the notion of pacing. Learners think and process ideas at different rates. Large group discussion forces pacing at the rate of the most verbally active learners and is necessarily too fast for the others.

In short, an instructor should strive to maximize learner activation, not participation. The goals for participation should be that participation is distributed among numerous learners, but not that every (or even most) learners participate in a given discussion.

Thus far, we have discussed how question type and presentation affect learner participation. Next, we examine other factors that when used in conjunction with questions promote both activation and participation.

II. Small Group Discussion

Activation can occur through other mechanisms besides instructor questioning and the resultant large group discussion. For example, learners can discuss course issues with other learners in small groups which promotes activation in several ways. First, the learners have more air time and experience an increased demand to participate in a small group setting. Second, small group discussion gives learners an opportunity to warm up and try their ideas out in a smaller, less threatening forum than the class as a whole. In turn, this creates an increased likelihood that learners will participate in a plenary session discussion. Third, small group discussion creates a diversity of thought that is likely to enliven the large group discussion which is typically dominated by the comments of the first few participants who set the trend and scope of the discussion.

RULE: A large amount of interchange in adult learning sessions should occur in small groups.

If you decide to use groups, the issues become what size groups to use, how to place learners in groups, how long to allow small group discussion to go on, and how to tie small group discussion back into the plenary session.

My own opinion is that the most effective groups range in size from two to five persons. Beyond five, there are too many people competing for airtime and many of the problems of large group discussion

(dominance, going off topic, etc.) present themselves as the size grows larger. I tend to use two or three--persons when I want to create a safe environment for discussing personal applications of issues raised in the course. I use larger groups when I want learners to share a greater diversity of thought on an issue.

RULE: Limit your groups to two to five members, the exact size depending on the nature of the question being discussed.

Groups can be formed in a number of ways ranging from self-selection to structured methods such as counting people off. The method you choose is again related to your goals. When I want people to share information that is personal in nature, I usually suggest that they select their own group. When I think that heterogeneity in thought is valuable for a certain topic, I either randomize the groups by counting people off or pre-select the groups with a particular mix in mind. For example, if I want to discuss sexual harassment in the workplace, it might be useful to start with women sharing their personal experiences with other women. However, to discuss and debate the issues, it might be useful to structure mixed male-female groups. In the early stages of a lengthy workshop or seminar, I periodically remix the groups in order to ensure that the participants get to know each other. Whatever method is used to form groups, I have found it best to tell the participants the reasons why you are using groups and why you are seeking a particular mix. Adult learners will usually find a way to give you feedback if they disagree with your reasons. If they feel that your reasons make sense, they will often create the new mix for you.

RULE: Either allow learners to choose their own group or present a rationale for a particular mix.

A third issue is how long to allow the small group discussion to go on. To answer that question, I watch and listen to the amount of activity in the groups. When the noise level begins to drop off, I either bring the group back to the plenary session or ask whether they've had sufficient time to complete the discussion. Sometimes I visit the groups and ask them how they're doing and how much more time they need to complete the discussion. Of course, groups will finish at different times and one has the choice of either stopping some groups before they are finished or letting the discussion go beyond the finishing point of other groups. In either case, these problems are insignificant when compared to the more usual case of several learners dominating a total class discussion.

RULE: Bring small groups back to plenary session when the discussion "noise" drops off significantly (or ask whether they are finished with the question).

A fourth issue is what to discuss in a follow-up plenary session. Instructors have two basic choices: to ask for answers to the question or to provide their own perspectives on the question followed by asking for further comments from the learners. If the small group discussion is short and is meant to be a warm up for an extensive large group discussion, then the plenary discussion might focus on the same question that was used in the small group. However, if the learners were given a long time to discuss the question in small groups, the former choice risks redundancy, and the learners may quickly become disengaged. In either case, there will be some expectation that you, the "expert", will contribute your own thoughts or at least react to their comments.

RULE: Use plenary sessions either for a more elaborate discussion following a short period of small group discussion or to present your own thoughts following a long period of small group discussion.

III. Individual Reflection Time

The drawbacks of small group discussion mirror the drawbacks of total class discussion. The more verbally active members of the small group may dominate the discussion, the discussion may get onto tangential or single lines of thought, and so on. For this reason, it is useful to structure time for individual reflection before group discussion takes place. Individual reflection maximizes the *diversity* of opinion in the group and diminishes the likelihood that the group will follow a single train of thought with respect to the question raised by the instructor (Van de Ven, 1974). To encourage individual reflection, the instructor might say: "Take a few minutes to reflect on this question individually before you begin to discuss it in your group." When a few minutes have passed and before the participants begin to look uncomfortable

with the individual reflection time, it is useful to suggest that they begin discussion or to suggest that they begin discussion when they are ready to do so.

Individual reflection time can also facilitate plenary or large group discussion. Without time for individual thought, the more verbally active learners quickly respond to a question and the others tend to wait for them to answer it. In contrast, a short period of individual time creates a space for immediate activity on the part of all learners and increases the likelihood that more of them will enter into a discussion.

Initially, learners may be surprised when they are exposed to a learning process as abnormal as individual reflection time. However, it very quickly becomes an acceptable norm. As a rule of thumb, .I use individual reflection time only when I have asked a question that requires a fair amount of thought or when I sense the less verbally active learners are yielding to the more active ones.

RULE: When the situation or question merits it, structure short periods of individual reflection time to precede small group or plenary session discussion.

To summarize, an instructor's main goal should be to maximize learner activation, not verbal participation. Activation takes place on an individual level, through small group discussion, and in plenary session dialogue between learners and the instructor. The degree of activation that occurs in a given setting depends on the mix of these elements coupled with the structuring of high quality questions.

IV. Responding to Learner Comments

Up to this point, the focus has been on the things an instructor can do to elicit discussion. The instructor's response to learner comments is of equal importance and can either reinforce or inhibit further comments on the part of the learners. In a casual survey of university classes, we found that instructors tend to make replies to learner comments that inhibit discussion. Two types of response were particularly apparent: arguing against a learner's comment and interrupting the learner. While in either case the instructor is probably operating out of a well-intentioned need to create a constructive dialogue, the result is often an unintentional dampening of enthusiasm on the part of the learner. In general, instructors came across as if they saw their role as a primary discussant. Thus, they tended to dominate the discussion and reduce the opportunity for widespread participation. There are several good alternatives to providing immediate rebuttals to learner comments. First, the instructor can take the role of discussion leader and avoid becoming one of the discussants. At the end of the discussion of a given topic, the instructor can summarize the points and add his or her own opinions. In this way, direct face-to-face contradictions are avoided, the instructor's expertise is still added to the discussion, and the instructor doesn't consume a disproportionate share of the air time. Second, points made by learners (whether they are judged to be correct or incorrect from the instructor's viewpoint) can be listed in summary form. Later, the instructor can comment or invite comment on the points. Again, this avoids a direct loss of face on the part of a particular learner. Third, if the instructor feels that he or she must comment, the starting point should be a. clarification of what the learner actually meant. We observed numerous cases in which an instructor rebutted a learner's comment without having understood the point the learner was trying to make. Of course there is also the case in which a learner makes a point that the instructor can agree with. While such comments offer opportunities to reinforce participation, most instructors that we observed gave very little reaction and, at best, said something like "good point". There are several other ways that instructors can reinforce participation. First, they can work actively with the comments, either by writing down the points in summary form or by building on them (e.g., "Good idea. In fact that ties very well into what we were discussing last time..."). Second, instructors can reinforce participation directly by saying things like: "I find the classes' participation in discussion very helpful. It makes it more interesting for me and helps me to know what you think about these issues".

RULE: Reinforce participation on a continuous basis and in a variety of direct and indirect ways.

V. Leading the Discussion

The quality of the instructor's coordination of a discussion also serves to reinforce or inhibit participation. In many classes that we observed, the instructor rarely looked beyond the first few rows of seats and some instructors in small seminar settings often looked to the same learners, ignoring or failing to see that others wanted to participate. A particularly good discussion leader that we observed methodically swept his eyes across the entire group and even picked up non-verbal indications that a learner wanted to say something. For example, he spotted one person shaking her head and said: "It looks like you have something to say about this issue." Another good method of eliciting widespread participation is to occasionally set a participation rule that prevents the more active participants from becoming the only participants (e.g., "For the next few minutes, I'd like each person to limit himself to one comment. That will make the airtime more available to everyone and reduce the feeling that you have to interrupt to make your point.") As a final point, my feeling is that participation should be voluntary. Calling on people to participate induces stress, creates a tendency make up comments as a means of getting off the hook, and feels more like an elementary school environment than adult education. The alternative is to create opportunities to participate by raising good quality questions, by using small group processes, individual reflection time, good discussion rules, and by reinforcing participation in a large variety of ways.

RULE: Scan continuously for verbal and non-verbal indicators of a desire to participate, set discussion rules before discussion begins, and encourage voluntary participation.

VI. Icebreakers

A final area affecting both activation and participation is what happens in the opening minutes or sessions of a class. Numerous adult educators begin their workshops with introductory "icebreaking" exercises intended to quickly get the learners acquainted and relaxed. I believe that many of these exercises are demeaning and inappropriate for adult learners. For example, one colleague who recently attended a training event sponsored by a leading North American Training Institute was given a sheet of paper with a simple tune on it and was asked to find his group by humming the tune and by listening for others humming the same tune. He was embarrassed, but felt trapped into following the instructions.

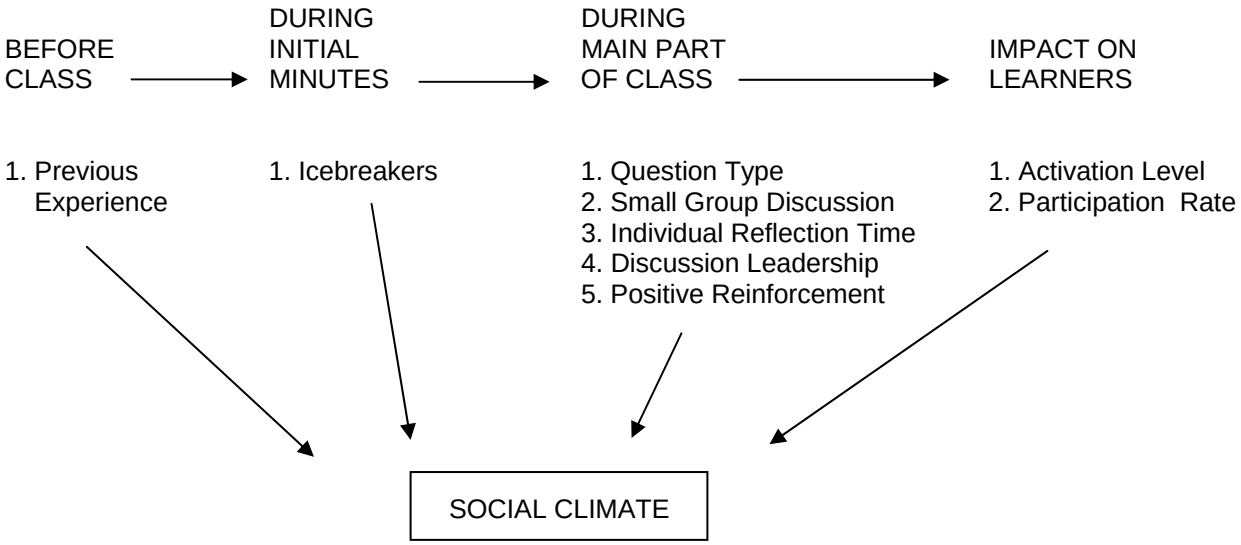
On the other hand, good icebreakers can speed up the creation of a supportive climate without insulting the learner. To do so, they should have an educational purpose that fits the topics to be explored. For example, when I taught a seminar on "Motivation and Productivity", I asked the participants to begin by discussing motivational problems that they have observed at work. As a second example, at the start of a recent seminar, on discussion techniques, I asked the participants to share their observations of the typical discussion problems that occur in seminars that they have previously attended. In both cases, I asked people to get into a group of three or so strangers and to use that small group setting as a means of introducing themselves to some of the other participants. This initiates the acquaintance process in a natural way and also launches the instruction.

RULE: If icebreakers are to be used, focus the discussion on something appropriate to the learning task.

Creating a Supportive Climate

The last part of the activation/participation picture has to do with the human climate. The climate of a seminar refers to feelings that participants have about the social system as opposed to the topics. According to Gibbs (1961) who studied communication patterns in highly varied social settings, climates will be either supportive or defensive depending on the communications used in the setting. A defensive climate occurs when individuals perceive or anticipate threat. The suggestion being transmitted in defensive climates is that the persons involved are inadequate, uninformed, and immature. This prevents the person from concentrating, creates a tendency to distort information, and an unwillingness to participate openly. In contrast, in supportive climates individuals perceive that their ideas are respected and consequently can concentrate better on the topics and are more willing to contribute openly. The areas that we have explored in this paper contribute directly to eliciting activation and participation in the ways discussed above. They also contribute indirectly to creating a supportive climate which, in turn, facilitates participation. This relationship is depicted in figure one.

Figure 1: Factors Contributing to Activation and Participation



At the start of most classes, the climate hangs in a tenuous balance between positive and negative, open and closed, active and inactive. The learners bring with them to the initial sessions their prior experiences and feelings about classroom discussion. As the instructor introduces questions and structures to facilitate discussion, the climate can steadily become positive, open, and active. As time passes, the supportiveness of the climate elicits the desired participation and the instructor can take a less active role. Developmentally, it is important to keep in mind that the climate does not change rapidly. If, because of the particular mix of learners that arrive on the first day, the class starts slowly, the participation rates can be expected to increase only gradually. Instructors expecting rapid change may fail to notice the slow but steady change and abandon their efforts.

RULE: Expect only gradual increases in participation.

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