The value of student participation in classroom discussion is considered. An approach is suggested for college teachers to help them better motivate and evaluate students who participate in classroom discussion. Reliable, accurate, and meaningful assessment of students' participation in classroom discussion can be achieved if an instructor bases the assessment on criteria that are known to all students, are reinforced, and are operationally defined. The approach described involves the use of behaviorally anchored rating scales (BARS) to assess student performance. A series of statements are used to arm a scale to assess classroom performance. Students are involved in the development of the appraisal instrument. Student views concerning adequate classroom performance yield anchors or statements that have similar meanings for students and the instructor. This approach provides clear performance expectations for the student. The domain of performance is explained as well as the indication of acceptable and unacceptable behaviors. Steps in the development of BARS are outlined. (SW)
Participation Performance and Behavioral Expectations

Paul R. Lyons

The use of time for discussion in college classes and the attendant need for student participation in discussions seem to be increasing, in general, in our colleges and universities. The purposes of this paper are to identify the concerns that surround the matter of student participation in class discussions and to suggest an approach for college teachers to use which may help them become better motivators of students, better evaluators, and, ultimately, better teachers. The suggested approach responds positively to many of the central problems associated with student participation in classes.

Several investigators (Clarke 1985, Wood 1979, Armstrong and Boud 1983) have indicated that structured classroom discussions seem to be increasingly popular with college faculty and students. The increase in interest probably results from educators attending more to student-centered approaches to teaching and learning. As older students make up a greater proportion of college attenders these days, teachers encounter more students who are able to engage in meaningful discussion.
Many older students have life experiences that can be discussed in relation to the topics being examined in class. Further, in many courses, particularly in upper division undergraduate courses and in lower level graduate courses, one finds that class participation may be weighted somewhat heavily as compared to other performance expectations in the course. It is not unusual to discover courses in which class participation performance is valued as being from 20 to 50 percent of the final course grade. In general, class participation in discussion is desirable because students' levels of involvement in the classroom have been consistently and positively related to reported growth -- both personal and academic.

VALUE OF STUDENT PARTICIPATION

In a thorough treatment of the topic of student participation in class discussions, Lowman (1984) addresses various educational objectives for discussion, including the development of thinking skills, the furthering of course content, improving student attitudes toward, and enhancing student involvement in discussion. Below are comments which address these matters.
Participation in discussion can be a most useful means of engaging students in the process of thinking. Students can test their assumptions, both implicit and explicit, as well as improve their approaches to problem solving. They can also order and re-order sequences of events or activities to explore interrelationships, and examine what-if propositions.

With regard to content of courses, participation in discussion may assist students to integrate information obtained from readings or lectures. Asking students to discuss in class what they have learned requires them to demonstrate some understanding of the material: class discussion is a relatively safe way for students to exhibit independence — practice for the time when they will be on their own (Lowman 1984).

Questions as stimuli for discussion may center on students' values. Individuals become more aware of their own attitudes and values from listening and comparing their attitudes and values with those expressed by others. On an individual basis, discussion techniques can influence attitude change, increase sensitivity, motivation, and increase responsibility. Motivation to learn can be increased because students usually want to work for instructors who value their
ideas and who encourage them to be independent (Lowman 1984).

Use of discussion can help in developing a less authoritarian and/or teacher-centered teaching style, enhancing student-faculty relationships, and in promoting peer learning. As a process, discussion invites attention and it breaks up the routine of lecture. Well-led, focused discussion may substantially increase attentiveness.

ASSESSING PARTICIPATION

Assessment of class participation has been used quite extensively since the First World War in non-academic areas. The civil service, the armed forces, industries, and business firms have used it as a means of identifying and selecting persons with leadership potential (Clarke 1985, Bass 1954). Assessment of class participation has been used as a selection device for entry into various types of education. McMaster University Medical School, for example, evaluates applicants to the school based, in part, on the student’s ability to function as a member of a small group during a simulated tutorial (Mitchell et al. 1975). One study
Armstrong (1978) was reported to have found that students prepared and participated effectively only in classes that had class participation assessment.

Even with increased use of assessment of class participation and with the recognition of the problems with its use, there has been very little written about assessment of this kind of activity. Much of what has been written is of a descriptive nature wherein an instructor-centered rating system is applied during discussion or at some later time. The rating systems are usually derived from the instructor’s experiences (Greive 1975, Armstrong and Boud 1983, Clarke 1985, Fisher 1975) as an instructor. If class participation is intended to be a significant component of a course, then it is important to discover meaningful, timely, and relevant assessment methods.

PROBLEMS AND ISSUES IN ASSESSMENT

Most teachers would agree that objective assessment of class participation is desirable. Perhaps a good deal fewer would agree on the possibility of injecting a substantial degree of objectivity into the process. They argue that a teacher’s personal likes and dislikes
can influence the judgment of a student's oral performance. The subjectivity of the assessment is thus underscored.

Besides the subjective aspect of evaluation and assessment, there are several other problems that require identification. Grading of discussion participation may tend to increase student anxiety, which, in turn, may inhibit discussion. Knowing that assessment is being conducted may place considerable pressure on students to participate in what they perceive to be a somewhat threatening environment.

The faculty member may assume there are several features of class discussion such as the frequency of engagement or interaction and the quality of the contributions made. For the instructor there may be substantial difficulty in the identification of these components, the valuing of these components, and difficulty may arise from the confounding of the components as observed and as assessed. Faculty cannot be full participants in what is going on in the discussion and perform assessment at the same time.

As Lowman (1984) has observed, some faculty cannot effectively manage a discussion; other faculty tend to dominate a discussion so that what takes place is not a
discussion at all. Few, perhaps have really established objectives and goals regarding why they want students to discuss a particular topic. These matters all have a bearing on the assessment of participation as well as on the success of engaging in discussion.

There are other student-centered considerations that have a bearing on the discussion. Some students may attempt to dominate discussion thereby discouraging other students from participating. This behavior will demand management skills on the part of the instructor. Some students are not motivated to engage in discussion because the topic may be well beyond their grasp or because the topic is not interesting to them. Some students cannot effectively engage in discussion because they may not possess the required skills of listening, speaking clearly and persuasively, and the like.

PERFORMANCE CRITERIA

The establishment of criteria for the assessment and evaluation of a student's work, particularly work regarded as contribution to class discussion, is perhaps one of the most neglected aspects of assessment of student performance. Clarke (1985) reports that the lack
of interest in establishment of criteria is manifest in the fact that books on assessment are practically silent on the topic of performance criteria.

Criteria are critical factors in defining the performance that is expected and that is desirable. The expression of criteria can be made with varying degrees of specificity. Clearly, it seems insufficient to inform students that participation in class discussion, activities, and so on will be worth 30 percent of the final course grade and not inform them what participation means in an operational sense. By way of example, Clarke (1985) identifies several domains of criteria to guide students, such as:

- **Cognitive:** the student must demonstrate a knowledge of facts, etc.
- **Expressive:** the student must demonstrate the ability to make statements with conciseness and with clarity, etc.
- **Affective:** the student must show attentiveness, interest, and enthusiasm, etc.

Reliable, accurate, and meaningful assessment of participation performance can be achieved if an instructor bases the assessment on criteria which are known to all students, are reinforced, and are operationally
AN APPROACH TO RESOLVING SOME OF THE PROBLEMS AND ISSUES

The approach that is explained below addresses several of the important problems and issues identified. The approach offers the possibilities that objectivity can be substantially enhanced while subjective assessments can be moderated. Further, explicit performance criteria can be identified and made known to all students and, because the performance criteria are explicit, the approach suggested serves to diminish anxiety in students as there is less "fear of the unknown." Because criteria are both known and operationally defined one could expect enhancement of management of discussion. As a side benefit, the approach requires student involvement in its development so students are participating from the start and are actively involved in generating performance criteria which they understand.

The approach described involves the use of behaviorally anchored rating scales, or BARS. For the past several years, I have experimented with and used such scales in several performance contexts. The fun-
damental research by Smith and Kendall (1963) guides the
development and use of the scale. The use of the
scales has many practical applications in college teach-
ing and in the assessment of student participation.

WHAT ARE BARS?

Behaviorally anchored rating scales were designed
(Smith and Kendall 1963) as a behaviorally-based perfor-
mance assessment tool. Typically, they are a set of
scales corresponding to each of the major dimensions of
a job. On each scale are placed a set of anchors or
statements which illustrate behavior on the particular
job dimension. In the application of the method for
purposes of this discussion, the performance dimension
established is Participation in Class Discussion
(henceforth, participation). This is general and will
serve to illustrate the method. Obviously, one could
identify participation in class discussion as the "job"
and construct two or more scales to address quality,
quantity, and other dimensions.

For our performance dimension, participation, a
series of statements are used to form a scale against
which performance may be assessed. The development of
these statements or anchors requires some use of class
time at the beginning of the course and this scale con-
struction requires several steps. Depending on the
needs of the instructor, BARS are not typically general-
ized from course to course. That is, if one wishes to
use scales to assess performance it may be necessary to
repeat the development process with each class (group)
of students.

HOW BARS ARE DEVELOPED

Following is the step-by-step process by which the
scales are developed:

1. Explain to the students that participation is
an important component of the course and of
their grade. Further, a useful guide is to
be constructed that will help them in their
performance in the course.

2. Give each of the student's 3 x 5 cards and ask
them to write at least one example (preferably
two or three) of each of the following:
   - Poor performance in class discussion
   - Adequate performance in class discussion
   - Good performance in class discussion

Collect the cards -- tell the student that the
second round of the activity will occur at the
next scheduled class meeting. Then, go about
your planned activities for the remainder of
the class session.

3. Have a panel of colleagues (two or three) or
graduate assistants, honors students, etc.,
review the responses listed on the cards. Ambiguous responses, duplicate responses, non-behavioral sodas, etc., must be removed. The members then re-write the remaining items into the "expectations" format, e.g. "The student could be expected to ________." These statements are then typed as a list of statements. My experience indicates that a class of 15 to 30 students will have generated a usable list of performance behaviors in the range of from 22 to 28 statements.

4. The list is then given to the students at the next scheduled class meeting. They are asked to rank all statements (items) using 1 to rank the lowest level of performance and 7 to rank the highest level of performance. The students are asked to carefully consider each item and to be careful to make distinctions regarding level of performance by using roughly equivalent quantities of 1's, 2's and so on in their rankings. Students seem to take this activity seriously.

At this point, each of the statements (items) has a set of rankings or "scores." These rankings for each statement are to be averaged, so that for each statement we have an average ranking. For each statement the standard deviation of the rankings must also be calculated. Typically, the statements that have standard deviations of less than 1.5 (for a 7-point scale) can be used to construct the scale.

6. The final scale can be prepared. See Figure 1 for the format and general appearance. Place the statement you want to use on the scale at the point approximating the average value of the statement. At least six items must anchor the scale. You may have a pool of items which meet the standard deviation criterion, in which case you have some latitude in choice of statements to anchor the scale.

7. Duplicate the scale, distribute it to the students and discuss what it means and how it is to be used. For example, have copies of the
scale produced and every three or four weeks during the semester give each student a copy of the scale with instructor comments written on it regarding behavior observed in relation to scale anchors. You might tell students how they need to improve. You can reinforce positive behavior.

Figure 1 about here

The development of the scale is itself a learning experience for those involved since it requires the students to face the question of what constitutes good or poor performance (Bushardt, Fowler, Debnath 1985). The development of the scale yields anchors or statements which should have similar meanings for all participants -- students and the instructor. The review of performance of any given student should be superior to most other methods of assessment because of the availability of specific, performance-related feedback. Areas in which the student can show improvement can be identified. Student participation in the development of the appraisal instrument should result in greater student acceptance of the evaluations tendered by the instructor. A number of grade or points-awarded options exist for the instructor in the use of scales such as these. The specific grading features should be an-
nounced to the class at the session when the completed scale is presented to the class.

SUMMARY AND CONCLUSIONS

What has been demonstrated has been a short-cut method of the application of the BARS approach (Green et al. 1981). The approach yields much promise and can be creatively applied in a variety of instruction settings. The potential benefits are many as student motivation is improved as a result of the identification of clearer performance expectations. The domain of performance is explained as well as the indication of acceptable and unacceptable behaviors. Subjectivity regarding performance expectations can be diminished although the instructor is still required to make observations during class and record them thus diminishing instructor attentiveness, or recording observations after class in which case the instructor observations may be subject to recency bias.

If expectations are made known and if they are operationally defined we can expect student anxiety to be diminished. While not the final answer, the BARS methodology can help students and faculty achieve educational objectives.
FIGURE 1

Performance Scale - Class Participation
(from a sophomore level course in marketing)

6 = good performance
4 = average/adequate performance
1 = lowest level of performance

- 6: you would expect this student to participate/get involved in all discussions
- 5: you would expect this student to attempt to answer all questions given to the class
- 4: you would expect this student to ask questions
- 3: you would not expect this student to offer any information in class discussions
- 2: you would expect this student to distract the class from discussion
REFERENCES


