Lecture break

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ABSTRACT

The concept of planning and implementing 5-min breaks midway through each lecture in an introductory crops course helped to solve several criticisms identified by students. During the breaks, a variety of activities took place, including short quizzes, mini-discussions, review of course objectives, and evaluation of teaching techniques. Other ideas for breaks are discussed, such as evaluation of production practices, discussions of newspaper articles and letters, classroom demonstrations, and question-and-answer sessions. Student reaction to these lecture breaks was highly favorable; benefits reported include improved material retention, better attention during the lectures, greater class interest, less boredom, and needed relaxation.

Additional index words: Instructional improvement, Teaching techniques, Boredom, Classroom attention and interest, Lecture methods, Criticisms, Improvement.

Whether or not they like coffee, many Americans look forward to coffee breaks. It’s not so much the beverage as the break in routine that is so well-received. Any activity, whether physically or mentally exhausting, becomes tiresome after a while, and a short break serves to revitalize a person and rekindle interest.

Classroom lecture situations are not much different. We often deliver lectures which last from slightly less than an hour to 2 hours or more. We sometimes forget what it’s like to sit for much of the day, taking notes in classes, sitting in a dorm room trying to study the materials, and finally completing exams that require additional time periods of relatively stationary activity. To remember what it was like sitting through one of those lectures during our college days, we need only to attend a campus meeting where someone else has the floor for an extended duration.

Furnishing variety and relief during the lecture is critically important to maintain audience attention (Mambert, 1976) and improve learning (Milford, 1984). Eble (1976) suggested providing frequent breathing spaces so that students might ask questions. He further recommended physical movement, use of the blackboard, audience involvement, and any other possible method for breaking up single presentation modes. Mambert (1976) warned that “The average audience is lulled to sleep by a kind of droning monotony.” Miller (1981) agreed, noting that few professors were capable of presenting stimulating lectures.

Many published manuscripts have provided insight into various topics concerning lectures and lectures, including suggestions for effective lecture presentations (Braden, 1981; D’Albro, 1983; Eble, 1976; Mambert, 1976; Miller, 1981; Newcomb, 1981; Viter, 1979), characteristics of good lectures (Eble, 1976; Mambert, 1976; Vaughn, 1981), criticisms of lectures (Miller, 1981), and alternatives to lectures (Anderson, 1979); but suggestions for providing variety and relief during the lectures are lacking.

The purpose of this article is to describe the concept and effectiveness of implementing 5-min breaks midway through each lecture, and to suggest activities one might plan for these lecture breaks.

THE "NORMAL" LECTURE

Normal lectures at the University of Minnesota Technical College, Waseca (UMW), are scheduled for 50 min. Lecture enrollments vary from about 10 to 150 students. Instructors rely heavily on the overhead projector, chalkboard, slides, and other visual aids. Student participation in courses is always encouraged; no lecture is so formal that students may not interject questions during the sessions. A full-time student, carrying a 17 credit-hour load, would attend approximately 13 lectures each week.

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HOW DO STUDENTS VIEW NORMAL CLASSROOM LECTURES?

During the fifth week of Fall quarter, 1984, a survey sheet was distributed to 109 students enrolled in Agronomy 1153, Introduction to Crop Science, at UMW. The survey contained several open-ended questions concerning the course, including the following:

1) "What do you like/dislike about the normal 50-minute classroom lectures at UMW and/or other educational institutions?"

2) "Would you prefer one 100-min lecture each week rather than two 50-min lectures? Why or why not?"

In response to the first question, students largely ignored what they liked about lectures (one noted that listening to lectures was better than reading a book), and listed a variety of dislikes, which can be categorized into five major areas of concern:

- **Length**—Students felt that lectures were too long; some suggested 30 minutes would be better; several stated that after a while, maintaining interest was difficult. Some said they got "sore" when sitting for too long.

- **Monotony and boredom**—They said that most lectures are boring and do not capture the students' attention; one noted that it gets tiring when one is forced to constantly write and take notes.

- **Need for variety**—Some said there should be some variety like film strips, visual aids, and movies.

- **Too much material**—Many students said that teachers "cram" too much in, and the material is difficult to absorb as a result. They criticized instructors who rush through lectures to make sure everything was covered in the allotted 50 min.

- **Size**—Students disliked overcrowded lecture sections; they said the noise was distracting; some wished that size could be reduced to enhance discussion.

Students were more apt to comment to the second survey question. Most showed strong preference for retaining the shorter, more frequent lecture format. One-third of the class felt that a single 100-min lecture would be too long. Several feared writer's cramp, monotony, boredom, lack of patience, and loss of interest. Some respondents predicted that their classmates would be too long. Several feared writer's cramp, monotony, boredom, lack of patience, and loss of interest. Some respondents predicted that their classmates would be too long.

Students felt that the shorter, more frequent lectures helped to break things up, keep them more alert, and make it easier to concentrate on the subject matter. They felt that two 50-min lectures during the week gave them more of a chance for lecture materials to "soak in." Several students felt that it was easier to remember materials if you come back to it more frequently, and that a variety of classes during the day was more conducive to learning that concentrating on a single subject.

Only 10 students favored the single 100-min lecture once per week, predicting easier class scheduling and less problems with commuting; one favored this format "as long as (there is) a break in the middle."

IMPLEMENTATION OF LECTURE BREAKS

Lectures were delivered normally in Introduction to Crop Science during the first 4 weeks of classes, Fall quarter 1984. Instruction took place in the campus auditorium. An overhead projector and prepared transparencies were used. Occasional handouts were distributed, and each student was given a list of measurable behavioral objectives the first day of class.

The survey sheet was completed by students on Monday of the fifth week of the quarter; on the following Wednesday, the survey results were discussed with the students as part of the first official "lecture break" of the quarter. Students were then informed that midway through each lecture period for the remainder of the quarter, there would be a 5-min lecture break, in response to some of the concerns identified in the survey.

The second lecture break consisted of a four-question quiz; three questions covered recent lecture topics, while the fourth question sought answers to a topic not yet discussed. Students were unaware that the quiz would not be graded, thus some apprehension as to the promised lecture breaks was evident. Students were asked to trade quiz papers, note the correct answers on the paper they were reviewing, return the quiz to its owner, then keep their own paper for personal use. Lecture proceeded normally after the lecture break.

Other lecture breaks during the quarter included reviewing objectives concerning recent lecture topics, showing a short film, and implementing a mini-discussion (Pennock, 1984) concerning the approach of high or low pressure barometric systems as they relate to timing of planting and cutting hay.

STUDENT APPRAISAL OF LECTURE BREAKS

Students were asked to evaluate the use of lecture breaks in Introduction to Crop Science during the last break of the quarter. All but 10 of the 106 respondents favored their continued use in future quarters.

The lecture breaks seemed to address the problem of length identified on the earlier survey. One student noted that the lectures didn't seem as long. Another said the breaks made it seem like two 25-min lectures were being delivered, rather than one 50-min lecture.

The breaks also remedied the need for variety. Several students noted that the breaks reduced boredom and monotony. Others noted that concentration during the second half of the lecture period was easier now as compared to second half concentration prior to the use of lecture breaks. Students noted that it was nice to put down the pen and relax for a while. The breaks were said to provide welcome mental relief. The chance to clear their minds helped to retain interest when the
lecture resumed. One student noted that lecture breaks were “Great! I was almost sleeping when we took this one.”

Regarding educational value of the breaks, one student noted that even if the students were paying for “the time lost,” they were gaining more because class attention was better when the lecture resumed. One student noted that since the breaks were implemented, it had been more quiet during the lecture; students seemed to be paying more attention and not talking so much, despite the large class size.

Several students noted that the breaks gave them a chance to catch up on note-taking. One said the breaks were valuable because they provided time to look over what was not clearly understood before the instructor got “too far over your head.” Another student said that taking a break when one studies helps to improve performance, so why shouldn’t breaks be implemented during lectures? One student complimented the use of quizzes during breaks in helping him to study and remember things.

Many other favorable comments were made, including the breaks “give you something to look forward to” and that they are an “asset to your lecture system. I couldn’t do without them.”

Not only did students evaluate the breaks, but they gave suggestions for topics during the breaks. One student suggested “strange facts and interesting subjects,” for example, “like the ones on ‘Ripley’s Believe It or Not!’” Another suggested trivia about course subjects—something interesting, but not to be tested on. Some wanted jokes. Others wanted “action” breaks, so the class could get physically involved.

Some students felt that the lecture breaks were a waste of class time. One noted problems with losing train of thought, and a couple noted a desire to lecture straight through and terminate class 5-min earlier. Some students did not agree with the problems identified earlier, thus did not feel the break was necessary. Those who would eliminate lecture breaks were greatly outnumbered, however.

### IDEAS FOR LECTURE BREAKS

Many types of activities are possible during the lecture break. Those noted previously included short quizzes, reviewing course objectives, mini-discussions, evaluations of teaching techniques and discussion of such evaluations. Here are several other ideas for consideration.

One instructor at UMW who taught a communications course at 8:00 a.m. three times per week got so frustrated at the lack of student involvement, she actually led the class in a series of calisthenics shortly after the lecture period began. I’m not sure how this would work in an auditorium with 100 or more attending students, but perhaps letting them stand and stretch a minute or two might meet the need for physical involvement as suggested by one student. Another “action” break might include rearranging the tables or chairs during a session for whatever purpose might be useful.

A break devoted solely to a quick summarization of materials presented, plus time for questions from the students, would be appreciated by students who value the lecture breaks for catching up with note-taking or clarification of topics presented. Students might be encouraged to list questions that develop during the lecture presentation. Students who hesitate to interrupt the lecture as it’s being presented might feel more comfortable raising questions during a break specifically designed for that purpose.

Preassigned student presentations might also provide for variety during the break. Perhaps a student active in the local agronomy club could discuss crop or soil judging team activities, or some recent trips to area farms or businesses.

Utilization of other professional educators on campus to share a particular concept or experience that related to the objectives of the session might also be well-received during the break. Most agricultural educators have broad experiences in the field of agriculture. It’s good to share their involvement and interest in areas other than those confined to their own field of expertise. We need to remedy misconceptions that may occur to students, who visualize us only as subject matter specialists in narrow fields of endeavor.

Any change in teaching techniques during the lecture session might serve as an effective lecture break. For example, show slides for 5 min to enhance or reinforce concepts or to introduce the topic. Or turn off the overhead and try one of the following for 5 min:

- *carry out a classroom demonstration*
- *discuss an article in a current newspaper*
- *discuss a letter just received from a farmer; ask for student input in answering the letter*
- *brainstorm—let a couple of students record the ideas on the chalkboard*
- *distribute a worksheet for students to do in class—discuss the answers with them as they proceed*
- *evaluate the most currently discussed production practice as to practicality; potential for return on investment; ease of implementation; how fast results would be expected if changes were made*
- *admit that you purposely gave students incorrect information during the first half of the lecture—have them identify the false subject matter.*

### CONCLUSIONS

Lecture breaks can serve to revitalize, stimulate interest, and improve concentration during classroom presentations. Students noted that breaks during the lecture helped to solve the problems of monotony, noise, and excessive material coverage. They feel that breaks improve learning, rather than waste valuable class time. They have been well-received in Introduction to Crops at UMW, and students have recommended continued use in future quarters.
Many activities are possible, most of which can be educational, in addition to providing needed variety and relief. We would suggest that it's just as important to plan an effective lecture break for use during a normally scheduled lecture as it is to prepare the lecture itself.

REFERENCES


SUGGESTED ADDITIONAL READING