



Teaching Concerns

Newsletter of the Teaching Resource Center for Faculty and Teaching Assistants

Hotel D, 24 East Range (434) 982-2815 trc-uva@virginia.edu <http://www.virginia.edu/~trc/>

Fall 1997

The "Change-Up": A Good Pitch to Have in Your Teaching Repertoire

by Bill McAllister, TRC and History Department

We've all had the experience, probably both as teachers and learners, of drifting off part way through a presentation. The phenomenon most often occurs in lectures, but can happen in any class. Individual students pursue various strategies to cope. Some gamely attempt to stay alert, the telltale sign of which is often a noticeable snapping back of the head at the precise moment they lose consciousness. Others deliberately opt for a short sojourn in hopes of avoiding a longer recess from sentience. Most succeed in refreshing themselves one way or another, but in the interim they may have missed a goodly portion of the day's proceedings and perhaps disrupted your concentration as well.

Among the TRC's many excellent library holdings is an article that deals with precisely this issue. Entitled "The 'Change-Up' in Lectures," by Joan Middendorf and Alan Kalish, the article addresses the empirical literature on attention span and then suggests practical ways to counteract the all-too-natural human tendency toward cerebral entropy.

Middendorf and Kalish note that studies on attention span indicate that, when passively absorbing information, adult learners usually experience mental lapses after a mere 15-20 minutes. Moreover, refocusing efforts proved only partially successful; students tended to drift off more quickly after the initial period of alertness and inattention.

Additionally, the authors cite research indicating that, in order to make connections between old and new knowledge, students require opportunities to

practice thinking in terms of new concepts. Without a chance to exercise their new-found knowledge, they are less likely to inculcate it—to make it "their own."

One relatively non-intrusive tactic you can employ to counteract the attention-gap is to utilize a "change-up" in class. The terminology emanates from the baseball diamond:

by throwing the ball at different speeds the pitcher keeps batters off-balance. The concept works equally well in the classroom: by mixing brief period(s) of application into your teaching, you can help students stay alert for the entire class. Moreover, change-ups afford students opportunities to wrestle with difficult concepts and ultimately enhance student learning.

Keep in mind that change-ups need not consume large amounts of class time; many can be completed in five minutes or less. Although some instructors are loathe to spend precious classroom minutes on what might appear to be an ancillary project, the time used is more than compensated for by the increased retention rates your students will enjoy.

Here are the essential principles to follow when designing change-ups:

- **TIMING:** Plan on inserting a change of pace every 15-20 minutes. That means a 75-minute session will typically require two change-ups, whereas a 50-minute session usually needs only one.
- **TOPIC:** Make your activity directly related to that day's course material. When appropriate, pick a task that reinforces the central point(s) you want students to retain.
- **THE PITCH:** Have a clear idea of what you want your students to do and give explicit instructions about what they are to accomplish. If your change-up involves a question, make

sure it is unambiguous.

- **TALK IT OVER:** Make sure to debrief after completing the activity. Discuss, explore, and confirm what students discovered. Reinforce what is important and tie it to the day's key points.

EXAMPLES

The following change-up activities have been selected from a larger range of ideas proposed by Mittendorf and Kalish and from other sources available at the TRC. For more suggestions, contact the Teaching Resource Center.

PROBLEM SOLVING

Small Group Discussions: Have students discuss a key point from today's material in groups of two to five. Ask them a question that requires analysis, evaluation, or synthesis, and see what kind of responses you get.

STUDENT-GENERATED QUESTIONS

Write a Question: Simply ask students to write down one or two questions about the material. Before providing the answer yourself, ask other students to attempt it. You could learn a lot about what they know (and don't know).

Exam Questions: Alone or in small groups, have students write their own exam questions. Select a few to read to the whole class, and critique the questions. If you collect all the questions at the end of class, you might generate some new material for your next test.

QUICKIE ASSESSMENTS

Student Evaluation of Course: Ask them to write down the muddiest point from today's class. Collect and analyze. Or, discover what you're doing well, perhaps by asking them to point out one thing you are doing that is promoting a helpful learning environment in the classroom. Their responses can be quite helpful.

Student Self-Evaluation: Ask students to rate their own performance. Do they read the assignments on time, come to class regularly, think carefully about the material, and generally take an active role in their own learning?

GENERATING IDEAS

Graphic Representations: Ask students to concoct a non-narrative account of some key issue or concept. Asking them literally to draw the "big picture" can lead to some interesting results.

Truth Statements: Ask students to write down two or three things they know to be true about some aspect of the day's material. Use the responses to examine assumptions and level of knowledge.

Perhaps the best indicator of the value of change-ups is what the students have to say about them. In my own lecture class this past spring I instituted change-ups to good effect. No one complained that they constituted an improper use of class time. Here are some of their comments about change-ups culled from end-of-semester evaluations:

Great teaching aids: the change-ups are a terrific idea, almost addictive.

The change-ups were very helpful in keeping people from losing concentration.

The change-ups are very interesting, and help provide perspective to the class.

The change-ups accommodated students, because they recognized that we become restless easily and quickly.

The change-up in the middle of the class often provided food for thought.

I enjoyed the creativity of the change-ups.

The change-ups are GREAT! All classes should have them.

The change-ups midway through class made a HUGE difference. I can't stress this enough. I loved the way they utilized the different senses to help us learn.

Adapted from Mittendorf, Joan and Alan Kalish. "The 'Change-up' in Lectures," *The National Teaching and Learning Forum* 5:2, 1996.