A good starting point for our discussion of facilitating classroom interaction is the ever-present, all-important question: How do people learn best? Obviously, to a large extent, the answer to this question is individualized and based upon the gifts, talents, and motivations of the learner. From a somewhat different perspective, however, there are categories of teaching techniques that are more likely to result in learning than others. One method of representing the relationship between instructional practices and student learning is Edgar Dale’s “Cone of Learning.” In its original form, published in the book *Audiovisual Methods of Teaching* (1946), Dale merely attempted to demonstrate that various approaches to teaching (e.g., reading, listening, watching, listening and watching, discussing with others, personally experiencing, and teaching) result in varied levels of retention and learning. Over the years, percentages of retention were added to the chart as a perceived means of strengthening the relationship between teaching methodology and learning (see further explanation at: www2.potsdam.edu/betrusak/AECT2002/dalescone_files/dalescone.html.ppt).

Despite the possibility of a statistical enhancement of Dale’s “Cone of Learning”, it does maintain a sense of intuitive value. Think for a minute about the level at which you personally retain new knowledge or information. It is very likely that you will remember materials that you both read and discussed or taught than material you simply read. Given that initial assumption, take a few minutes to reflect on the manner in which you typically teach. Is there a significant emphasis on remembering the content of your lectures? Are your students required to read and digest large amounts of text-based materials? The data described above does not contradict or eliminate the value of using a lecture format or requiring students to read their text books in order to learn important course content. What this data does reveal, however, is that we can greatly enhance the amount of information that our students retain by systematically providing classroom experiences that allow students to

- Discuss learning with others
- Engage in activities and learning experiences that allow them to personally interact with course content, and
- Teach one another

### The Factors That Lead to Student Interactions

A study by Anderson and Carta-Falsa (2002) investigated the factors that promote personalized classroom interactions. Students and teachers alike expressed a desire for classroom learning environments that promote openness, support, a level of comfort, safety, lack of threat, and an interpersonal climate. Students expressed a preference for classrooms in which they can work together, share information, and interact with one another. According to this research, students and teachers alike are willing to take learning and teaching risks in these types of classrooms.

“Cooperative learning, role-plays, discussion processes, and debates seemed to change the traditional interface of students and faculty and led to outcomes that could not be achieved in more traditionally taught courses.”

(Anderson & Carta-Falsa, 2002, p. 35)
Strategies for Creating an Interactive Classroom

Pair and Share

As a means for encouraging students to interact with a variety of classmates, Garmston and Wellman (2002) in their book *The Adaptive School: Developing and Facilitating Collaborative Groups* recommend “Round the Clock Learning Partners” and “Seasonal Partners”:

**Round the Clock Learning Partners**

In larger classes, students are presented with a line drawing of a clock indicating times between 1:00 and 12:00. They are asked to make appointments with twelve different classmates corresponding with each hour on the clock. To introduce a time of interaction or discussion, the instructor simply tells the class to “Find your 2:00 partner and talk about ...”

**Seasonal Learning Partners**

In smaller classes, the same strategy is used with one minor modification. The students are given a paper with the four seasons of the year. They are asked to make appointments with four other people corresponding to the seasons of the year.

**“Rule of Ten and Two”**

Garmston and Wellman (2002) also introduced the “Rule of Ten and Two”: For every 10 minutes of information presented in the classroom (e.g., lecture, video, demonstration), learning occurs most effectively when the teacher provides students with 2 minutes of processing time in the form of discussion, activities, or sharing.

Reporting Back to the Large Group

Quite often, after working in diads or small groups, students are sometimes reluctant to report their results to the whole class. In their book *Discussion as a Way of Teaching*, Brookfield and Preskill (1999) have developed some clever strategies to help facilitate large group sharing:

**Rotating Small Groups**

Students rotate in small groups through a number of dialogue stations that have been created in the room. At each station, the small group ponders a question or issue, records their response on newsprint paper, and then moves to the next station. The groups that follow will have an opportunity to respond to what the earlier groups thought and wrote.

**Snowballing**

Students are first asked to reflect on a question or issue by themselves. Then they are paired with another student to share. Then two pairs of partners come together and form a group of four for the purpose of sharing. Two groups of four can come together and form a group of eight. This allows for dialogue with a larger audience and the melding of ideas and concepts generated in the smaller group formats.

**Thumbs Up/Thumbs Down**

As an alternative means “If you agree give a thumbs up; if you disagree, give a thumbs down. If you feel very strongly, wiggle your thumb as you vote or use both hands”

**Stand in Response**

Students are asked to express their thoughts on topics that may involve controversy or differences of opinion by: “If you agree with this position, please stand now.” These strategies help students who may never verbally volunteer in class to express their opinions and be part of the instructional process.