## Part I: Principles of Engaging Teaching

- 1. Student-Centred Learning
- 2. Deep Learning
- 3. Active Learning
- 4. Creating Positive Classroom Environments
- Benefits, Challenges, and Suggestions for Engaging Teaching

## Student-Centred Learning

Education is not the filling of a pail, but the lighting of a fire.

-William Butler Yeats

Part I presents core principles for increasing student engagement, provides references to the research supporting their effectiveness in improving student learning, and offers some preliminary examples of how to apply these principles in the classroom.

Traditionally, postsecondary classroom environments have been based on *teacher-centred instruction* focused primarily on *transmission of content and knowledge* in a method described memorably by Fink (2003) as "an information dump" (p. xi). In such environments, teachers "emphasize the learning of answers more than the exploration of questions, memory at the expense of critical thought, bits and pieces of information instead of understanding in context" (Hanley, 1994, p. 1). Too often, the traditional *teacher-centred* classroom can be characterized as

a one-person show with a captive but often comatose audience. Classes are usually driven by 'teacher-talk'. Teachers serve as pipelines and seek to transfer their thoughts and meaning to the passive student. (Hanley, 1994, p. 1)

In the traditional teacher-centred classroom, the instructor is the dominant gatekeeper, controlling content and pace of delivery, transferring knowledge as the *sage on the stage* (King, 1993); in this environment the students play a passive role, receiving, retaining, retrieving, reflecting, and regurgitating the accepted explanation or methodology expostulated by the instructor.

Student-centred instruction, on the other hand, manifests activities that engage both instructors and students in an ongoing search for understanding, relevance, and application of new knowledge. The literature is replete with rationales for and taxonomies of student-centred learning (Krathwohl, Bloom, and Masia, 1973; Bok, 2006; Cox, 2006; Davis, 1993; Fink, 2003; Gardner, 1983; Hein, 1991; King, 1993; Knowles, Holton & Swanson, 1973; Kristensen, 2007; McKeachie & Svinicki, 2006; National Research Council, 2003; Nilson, 2003; Royse, 2001; Staley, 2003).

In a student-centred environment, learning is an *active process* that involves engagement and interaction with knowledge, where students "revisit ideas, ponder them, try them out, play with them and use them" (Hein, 1991, p. 3). Student-centred classrooms focus on the learner through active, interactive, and exploratory learning activities, through real-life authentic problem solving, and often through social, collaborative activities in which students and instructors use language to discuss, share, and seek understanding together.

The student-centred instructor, rather than being a sage on the stage, acts as a guide on the side (King, 1993), performing the role of coach, mentor, and facilitator of learning; providing students with support and encouragement; designing learning activities that engage student interest; and asking challenging and provocative questions intended to motivate students toward further inquiry and exploration of ideas. In von Glasersfeld's (1995b) memorable phrase, the student-centred instructor is "midwife in the birth of understanding" (in Murphy, 1997, p.3).

Students in this learning environment are actively engaged, producing and constructing their own interpretations and conclusions, exploring possibilities, collaborating with others, creating multiple meanings and alternative solutions, learning how to learn and how to apply their learning in situations beyond the classroom. Table 1 summarizes the contrasting roles and expectations between these two perspectives, and indicates the direction of increased student learning as instruction moves from teacher-centred to more student-centred instruction.

Table 1: Teacher-Centred versus Student-Centred Instruction

Teacher-Centred Instruction	Student-Centred Instruction
Teacher Role:	Teacher Role:
Sage on the stage	Guide on the side
<ul> <li>Acts as gatekeeper, transmitter of content</li> </ul>	<ul> <li>Acts as coach, facilitator, mentor</li> </ul>
<ul> <li>Controls content, pace, resources</li> </ul>	<ul> <li>Provides challenge, support, resources</li> </ul>
Predominantly lecture format and "teacher-	<ul> <li>Acts as "midwife in birth of</li> </ul>
talk" (Hanley)	understanding" (von Glasersfeld, 1995b)
Student Role:	Student Role:
<ul> <li>Passive recipient reflecting teacher's</li> </ul>	<ul> <li>Active participant, constructing own</li> </ul>
knowledge	knowledge
Learning Environment:	Learning Environment:
<ul> <li>Focus on transmission and acquisition of</li> </ul>	<ul> <li>Focus on interactive, exploratory learning</li> </ul>
content	Real-life problem solving
Often text based	<ul> <li>Encourages multiple perspectives</li> </ul>
Logical-sequential	Learning is a social, collaborative activity
Common curriculum	Multiple formats for assessment through
Standardized testing	demonstration of learning
Assessment of learning	Assessment for learning

Increase in retention, higher-order thinking, participation, and engagement.

## **Deep Learning**

To be caught up in the world of thought—that is being educated.
—Edith Hamilton, 1958 (as cited in Lewis, n.d.)

The goal of student-centred learning is to emphasize *deep learning* over *surface learning*. The distinction between these two levels of learning provides another perspective on improved student achievement (Angelo & Cross, 1993; Fink, 2003; Gibbs, 1993; King, 1993; Kristensen, 2007; Martin, Hounsell, and Entwistle, 1997; Pan, 1988). In *surface learning*, students memorize required information and reproduce information presented throughout a course, but discrete elements are not integrated, general principles do not emerge, and tasks often lack relevance to students. Little of the knowledge or skills obtained via surface learning are retained. By contrast, *deep learning* involves students interacting with content, examining the logic of an argument, relating evidence to conclusions, and relating and applying new learning to previous knowledge and everyday experience. Students engaged in *deep learning* seek a personal, meaningful, applicable understanding of course material. In contrast to surface learning, knowledge and skills obtained via deep learning are usually retained and integrated into students' world views.

Surface learning may be appropriate in certain learning situations, but instructors who wish to engage students more fully in the subject matter are well advised to design and employ activities that promote deep learning. Fink (2003) and Gibbs (1993) suggest that instructors can move students toward a deeper approach to learning through the following methods:

- Develop students' underlying concepts of learning.
- Provide time and opportunities for students to explore ideas.
- Make assessment demands explicit so that students know that only full understanding (rather than simple knowledge retention) will be acceptable as a learning outcome.
- Modify teaching methods to make learning more active and interactive.

Instructors may use activities that involve learning-by-doing, that employ problem-based learning activities, that encourage group discussion and individual reflection, and that foster generic learning skills in order to increase student engagement and achieve deeper learning