A Quick Theoretical Basis for Conversation in Education & Training Pat Parrish, The COMET[®] Program

The most prominent learning theorists have worked to explain how knowledge and skill comes about in the broadest sense, how individuals and groups of people learn throughout their lives, not just in formal settings like classrooms. In response, much of the evolution in instructional theory in recent decades has been an attempt to reconcile learning in this broadest sense with what should happen in classrooms. The premise is that instructors can't ignore general patterns of learning and should adapt traditional formal teaching modes to reflect how learning occurs in the natural environment. In general, learning theorists conclude that learning is an active process—not just one of knowledge transmission, but of knowledge construction over time through interaction with content, the world, and other people.

Knowledge construction requires active learning through experience and inquiry, not simply passive reception of information. It is often said that learning should occur in "authentic" activities, which are often taken to be limited to the activities of performing a job or applying a practical skill. But "authentic" also means activities in which learning naturally occurs. We learn much of what we know during practical application, but we also learn when we reflect about that application, and particularly when we reflect with others—colleagues, teachers, mentors, and students. We learn through the stories we tell one another about our experiences. We learn by asking questions and posing problems, and then discussing possible answers or solutions. We learn by trying to explain what we think we know, not just listening to what we should know. We learn in conversation.

Below is a summary of the work of four key learning theorists that will help us think about the role of active conversation in learning.

John Dewey (1859-1952, philosopher/educator, American)

Dewey proposed that all learning happens in experience, and that the quality of learning is determined by the quality of the experience. His concept of experience was broad, but can be loosely defined as engagement with the world toward some useful or rewarding outcome. Dewey was an early proponent of learning by doing. Particularly in complex disciplines like science, he proposed that learners should be actively involved in disciplinary thinking, not just told about facts and concepts that others have developed over the history of the discipline. For Dewey, thinking is also a kind of doing, and he felt learners should be challenged to think in complex, rather than rote ways. He considered



conversation as social thinking, and saw the teacher's role as one of engaging the student in the social conversation that is the basis of a productive and growing social life. Dewey also saw knowledge as evolutionary, in a process of constant change through refinement and negotiation. Conversation in the broad sense (including not just speaking, but also writing, reading, and otherwise responding to others) is then like the genetic material of this evolution.



Lev Vygotsky (1896-1934, psychologist, Russian)

Vygotsky was a developmental psychologist who saw learning as guided by interpersonal communication. He suggested that significant learning happens within a "zone of proximal development," wherein the learner is allowed to participate in tasks beyond their current skill level with the guidance of a skilled teacher, mentor, or parent. The primary mechanism for this guidance is language. Vygotsky also noted in his research that mental capacity in children appeared to change in quality once they began to speak. In young children, speech was frequently used to accompany complex activity, as if speaking aloud were central to the activity. He

theorized that external speech slowly becomes internal speech and complex thought. In other words, he was proposing that complex thought itself develops socially in the context of conversation.

Jerome Bruner (1915-, psychologist, American)

Bruner was one of the pioneers in the cognitive psychology movement, but in his mature years he expressed regret that the movement had shift focus entirely to the mind as information processor, rather than as meaning maker—which he felt was a more fundamental depiction of mind. For Bruner, people are meaningmakers first and foremost, seeking pattern, category, and narrative structure in experience. People seek meaning through language (and other symbols) and through narratives told through language. The stories that we tell about our experiences (including case studies) are one of the principal ways we store and recall knowledge.



Gordon Pask (1928-1996, cybernetics/psychology, English)

Although a psychologist by education, Pask worked in the multidisciplinary fields of cybernetics and systems theory, which studied how complex systems grew and evolved through feedback mechanisms. His interest in systems was focused on how knowledge itself is socially constructed in a dialectic process of conversation—the give and take of ideas that moved toward a synthesis of new ideas. Pask offered "Conversation Theory" as an explanation of how learning occurred in an environment in which interaction and mutual influence are allowed to take place. For Pask, as for all the theorists above, learning is dynamic and complex (in other words, unpredictable), and is richer when the learning system remains open to the individual contributions of all involved.

Applications to Instruction

So, what principles can we draw from the brief descriptions of learning theories above? Here are a few suggestions (you may have others):

- Because learning is not just a matter of ingesting information, and is instead constructed through outward expression, we should encourage students to talk, write, or use other forms of expression to articulate their knowledge about subject matter.
- Because learning is a social and dialectic process, we should provide substantial feedback to students' articulations about what they know—when possible, the kind of rich, dynamic feedback that happens in conversation.
- Because we embody knowledge in narratives, we should encourage students to tell stories of their relevant experiences, and we should also tell our own—not just summarize what we've abstracted from those experiences.
- Teachers should avoid providing definitive answers, even when they know they possess them, until students have had a chance to articulate their own thinking.
- Teachers should encourage students to work outside their comfort zones, and they should created supportive environments where students can express themselves without fear of embarrassment.
- Teachers should challenge students to think deeply about content through active and probing conversation. They should not just ask rote questions about facts, or ask the perennially conversation-stopping question, "Are there any questions?" (which forces students to admit lack of understanding if they dare to speak).
- If we want learners to enter a discipline, we should prepare them to be conversant about that discipline, which means that we need to offer them practice in conversing about it.