

Key Findings	Implications for Teaching	Designing Classroom Environments
<p>1. Students come to the classroom with preconceptions about how the world works. If their initial understanding is not engaged, they may fail to grasp the new concepts and information that are taught, or they may learn them for purposes of a test but revert to their preconceptions outside the classroom.</p>	<p>1. Teachers must draw out and work with the preexisting understandings that their students bring with them.</p>	<p>1. Schools and classrooms must be learner centered.</p>
<p>2. To develop competence in an area of inquiry, students must: (a) have a deep foundation of factual knowledge, (b) understand facts and ideas in the context of a conceptual framework, and (c) organize knowledge in ways that facilitate retrieval and application.</p>	<p>2. Teachers must teach some subject matter in depth, providing many examples in which the same concept is at work and providing a firm foundation of factual knowledge.</p>	<p>2. To provide a knowledge-centered classroom environment, attention must be given to what is taught (information, subject matter), why it is taught (understanding), and what competence or mastery looks like.</p>
<p>3. A “metacognitive” approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.</p>	<p>3. The teaching of metacognitive skills should be integrated into the curriculum in a variety of subject areas.</p>	<p>3. Formative assessments — ongoing assessments designed to make students’ thinking visible to both teachers and students — are essential. They permit the teacher to grasp the students’ preconceptions, understand where the students are in the “developmental corridor” from informal to formal thinking, and design instruction accordingly. In the assessment-centered classroom environment, formative assessments help both teachers and students monitor progress.</p>
<p>Source: <i>How People Learn: Brain, Mind, Experience, and School</i>: Washington, DC: The National Academies Press, 2000.</p>	<p>Prepared by: Centre for Teaching and Learning UBC Okanagan clt.ok.ubc.ca</p>	<p>4. Learning is influenced in fundamental ways by the context in which it takes place. A community-centered approach requires the development of norms for the classroom and school, as well as connections to the outside world, that support core learning values.</p>