**Introduction to Contextual Teaching and Learning**

Susan Sears

***What Is Contextual Teaching and Learning?***

Contextual teaching and learning (CTL) is a concept that helps teachers relate subject matter to real-world situations. CTL motivates learners to take charge of their own learning and to make connections between knowledge and its applications to the various contexts of their lives: as family members, as citizens, and as workers. It provides a conceptual framework for unifying a constellation of education theories and practices and represents one approach to improving teacher education.

CTL rests on the following assumptions:

* Teaching and learning are interactional processes; Individual learners must decide to learn and to engage in the attentional, intellectual, and emotional processes needed to do so;
* Teaching isn't happening if learning is not occurring; and
* Learning is a developmental process that takes place across the life span.

Contextual teaching and learning includes six-inter-related teaching and learning strategies that can be better understood under the headings of "Who," "Where," and "How."

*Who are the learners?* A primary purpose of CTL is to help students become self-regulated learners capable of high achievement. Beyond this primary goal, there is the recognition that students possess unique skills, interests, and cultural backgrounds. This diversity must be addressed in the CTL classrooms if students are to feel valued and to learn respect for others.

*Where does learning take place?* The contextual aspect of CTL embraces the proposition that learning should take place in many sites, or multiple contexts, not just in classrooms. Museums, parks, government offices, and health-care facilities are just a few of the places where learning can occur in the community.

*How does learning take place?* Connected to learning in multiple contexts is the first of three teaching strategies: problem-based learning, which recognizes that students learn from real-world problems. Two other teaching strategies, interdependent learning groups and authentic assessment, contribute to the development of self-regulated learners.

**Self-Regulated Learning**

Ms. Walters wants to teach her students to take responsibility for their own learning... She knows that, as adults, the students will be expected to acquire knowledge and skills on their own. Ms. Walters uses what she learned about the concept of self-regulation during her teacher preparation. Self-regulated learners appear to have both academic skills and skills in self-control that help them to learn more easily. They have the skill and the will to know, according to McCombs and Marzano (1990). Three factors influence skill and will: knowledge, motivation, and self-discipline (Woolfolk 1998). Self-regulated learners need knowledge about themselves, the subject, the task at hand, learning strategies, and the contexts in which they will apply their learning. SeIf-regulated learners are similar to "expert" learners who know how they learn best - that is, their preferred leaming styles, what is hard or easy for them to learn, and how to use their strengths to learn. They generally understand that they must approach different learning tasks in different ways. They know a range of specific learning tactics, from networking and mapping to self-questioning. And they understand how to match the most effective learning tactic to the task. Self-regulated learners think about the contexts in which they will apply their knowledge now and in the future, connecting their present leaming to future activities.

Self-regulated learners also are motivated to learn. School assignments are interesting to them because they value learning. They know why they are studying and feel in control of their actions and choices. Self-regulated learners are disciplined. They know how to avoid or deal with distractions.

Not all of Ms. Walters' students are self-regulated learners, but she knows that she can encourage students to move in that direction. She can teach her students specific learning tactics, such as notetaking, networking, mapping, self-questioning, using imagery, hypothesizing, identifying reasons for actions, and analyzing similarities and differences. She can teach her students how to compare their own performance to expert models.

Ms. Walters also improves her students' levels of motivation and their self-discipline by using instructional techniques, such as:

* Tying instruction to students' backgrounds and experiences.
* Encouraging student goal-setting.
* Providing opportunities for problem solving, decision making, and cooperative learning.
* Giving options in assignments.
* Teaching study skills.
* Grading student progress.
* Allowing students to progress at their own rate.
* Developing leadership opportunities for all students.
* Teaching students to monitor and evaluate their own progress and to correct their learning strategies as needed (Woolfolk 1998).

The students in Ms. Walters' room regularly set their own learning goals and then assess their progress in relation to their goals. She teaches mini-lessons to the students on how to collect evidence of progress and what constitutes good evidence. At the end of every term, she and the students confer, and then the students lead the parent-teacher conferences. Students discuss their goals and their progress. Then, with input from both the teacher and their parents, they set goals for the next term. They celebrate success and work on strategies for unmet goals.

Earlier in the year, Ms. Walters found that, while most students are doing very well and in many cases the goals they set exceed those she would have set for them, some students were not invested in goal setting. For example, Marsha did not follow through on anything unless an adult pushed her. Marsha set a goal of following through on her assignments, but there appeared to be little progress toward this goal - and little interest in improving.

Ms. Walters decided to hold a private conference with Marsha to see what Marsha needed in order to follow through with her goals. She told Marsha she would no longer take responsibility for Marsha's goals but that she would be glad to take a hand in helping Marsha. Marsha decided that she needed help once a week to keep herself reminded about her goals. Ms. Walters scheduled a conference with Marsha for each week. At each conference, teacher and student would decide what was to be done before the next week's meeting.

When Marsha slipped, the weekly conferences helped her to get back on track. At the end of the term, Ms. Walters and Marsha's parents could see progress. For the next term, therefore, Ms. Walters and Marsha would meet once every week and a half. Lengthening the period between conferences would help Marsha learn to work without external motivation on a longer-term basis. Eventually, she would become a wholly self-regulated learner in this manner.

**Teaching and Learning in Multiple Contexts**

While preparing to become a teacher, Ms. Walters learned that contextual teaching and learning is based on the hypothesis that students tend to retain higher-level knowledge and skills longer when their learning experiences are framed by contexts that are as close to real life as possible. When Ms. Walters gives her students opportunities to learn in multiple contexts, the students provide evidence to support the instructional theories that suggest that learning is situated in particular physical and social contexts. Theories of situated cognition assume that knowledge is inseparable from the contexts and activities within which it develops (Borko and Putnam 1998). Ms. Walters believes that how and where the person learns a particular set of knowledge and skills are fundamental to what the student learns. She believes that students make sense of new information, given their internal mindsets, by relating it to their past social, cultural, and physical experiences.

Based on situated-cognition theories, Ms. Walters accepts the principle that learning occurs naturally in a variety of contexts, both inside and outside the school. She understands that before, during, and after the school day, as before and after the school year, students are continually learning. The contexts may be home, community, or workplace, or less tangible contexts such as cyberspace and the imagination.

Students in Ms. Walters' classroom were involved m a variety of learning experiences outside of the classroom. For example, some students went to a senior center and were involved in an oral history project, learning about the kinds of jobs that were available 50 years ago and comparing them to the jobs they would likely get a few years down the road. They were discovering how technology changed people's lives. In exchange for the information from the senior citizens, the students helped senior center patrons design web pages and learn how to use e-mail.

This project did far more than simply make social studies and career studies come to life. As students answered the senior citizens' questions about the workings of technology, they reinforced their own computer literacy. They also improved their own computer skills as they helped seniors scan in family photos and create links to their children's and grandchildren's web pages. The students' writing improved as they worked with seniors on the texts that went with the web pages. Being part of teaching the seniors and learning from them reinforced the lifelong learning aspect of being a self-regulated learner. Along with the academic learning associated with the project, Ms. Walters was pleased to note the friendships that had developed across generational lines through this project. She thought students developed a positive view of aging through working on this project.

**Problem-Based Learning**

Ms. Walters uses problem-based learning to engage her students. She feels specific "touchstone" teaching and learning events need to be present in problem-based learning. Touchstone events include:

*Engagement*. Learners prepare to be self-directed, collaborative problem-solvers and encounter a situation that invites them to define one or more problems and to propose hunches, actions, and so forth.

*Inquiry and Investigation*. Learners explore a variety of ways of explaining events and their implications; they gather and share information.

*Performance*. Learners present their findings.

*Debriefing*. Learners examine costs and benefits of the solutions generated and reflect on the effectiveness of their problem-solving approach.

Ms. Walters employs instructions raise questions, issues, and challenges, or present difficulties that are in need of a solution. Activities are organized around solving problems in context in order to increase students' learning of subject matter. Generating solutions to problems is complex, requiring students to:

* Use critical thinking skills and a systematic approach to inquiry.
* Draw on multiple content areas.
* Address a series of questions of different types.
* Acquire new skills and knowledge.
* Apply, analyze, synthesize, transfer, and evaluate old skills and knowledge in new ways.

**Interdependent Learning Groups**

Ms. Walters divides students into work groups on a regular basis. She feels that learning is a social process that can be enhanced when learners have opportunities to interact about instructional activities. The topic of collaboration in learning can be traced to the early 1900s, when John Dewey criticized the use of competition in education and proposed that educators structure schools as democratic learning communities.

Ms. Walters' students interact face-to-face, rather than across the classroom. Group members seem to need each other for support, explanations, and guidance. But even though group members work together, she holds them individually accountable for learning. She teaches the students collaborative skills - giving and receiving feedback, reaching consensus, and involving others - and the students practice collaboration before starting a new learning task. She also teaches students how to monitor group processes and relationships to make sure their group is working effectively.

Ms. Walters believes in learning environments that encourage social interactions and respect diverse ideas because such environments encourage flexible thinking and social competence (Lambert and McCombs 1998). In interactive and collaborative learning contexts, students have opportunities to adopt various perspectives and think reflectively in ways that foster social and moral development and self-esteem. Learning groups can help students feel safe about sharing their ideas and actively participating in the learning process.

**Authentic Assessment**

Authentic assessment can best be distinguished from traditional modes of education assessment by qualities that foster formative development of teaching and learning process. These qualities include:

* Using assessment tasks that are "real instances" of extended criterion performances of actual learning goals.
* Involving students in in-depth situations in which they develop and habitually solve problems and employ higher-order thinking.
* Featuring collaboration between students and teachers to determine meaning and produce knowledge (Newmam and Wehlage 1995).
* Including multiple opportunities for students to learn and practice the desired outcomes, along with multiple opportunities for feedback and reflection.
* Directing students toward producing discourse, products and performances that they value beyond school success (Newmam and Wehlage 1995).
* Using rubrics and other criteria checklists at the core of authentic assessment as standards to improve learning and teaching.
* Drawing on multiple sources of information over time and in multiple contexts, employing reflective use of journals, reflective essay writing, portfolios, applied performance exhibits, work samples, peer mirroring, action research, case studies, checklists, and the like.
* Sampling the actual integration of knowledge, skills, and dispositions desired of teachers as they are used in multiple kinds of pedagogical practice contexts.

Ms. Walters is fortunate to work in a school that is committed to CTL, because the "report card" that goes home for every student is really a qualitative assessment. Each student fills out parts of his or her own report card, listing goals and accumulated evidence of achievement. She also adds her comments about this evidence. The report card is cumulative in that each term Ms. Walters and the students add new goals and comments. This helps parents to see their children's progress throughout the year.

Along with the qualitative report card and the self-assessment that is part of the self-regulating learner procedures, there is the everyday assessment that takes place in Ms. Walters' classroom. At least twice a week Ms. Walters records an anecdotal note on each student.

When Ms. Walters considers her class assessments, she sees that learning is occurring. She knows that by using CTL strategies, she creates self-regulated, lifelong learners.

Sears, S. J. (2003). What is Contextual Teaching and Learning? In *Introduction to Contextual Teaching and Learning*. Bloomington, IN: Phi Delta Kappa Educational Foundation.