Imagine education being as enthralling as Disneyland! At Disneyland, guests are not spectators. They actively experience the different attractions throughout the park.

Teachers have begun the transition from “sage on the stage” to “guide on the side,” but they must do more. For schools to be as immersive as Disneyland, educators must learn to harness the power of classroom computers.

David Thornburg, one of the keynote speakers at the 2000 NSDC Annual Conference, envisions that our students would remember and treasure all that they learn, look forward to school and pursue learning at home or at the library online.

Thornburg says, “The challenge is to re-craft educational practice in ways that have learners and educators alike fully engaged and immersed in topics of study.” For this to happen, educators must make classroom-based instruction more compelling than traditional learning.

Instead, federal, state, and local policies, standards, and high-stakes assessments are choking us. What gets measured, gets done. What gets tested gets taught. Teachers are afraid if they are not teaching the content and test-taking skills for students to succeed on that one-shot exam, their students’ academic future is in jeopardy, along with their own teaching positions.

We believe in high academic standards for all students and holding teachers and students accountable, but not in a one-shot, high stakes test. We believe in multiple forms of assessment, especially using tasks that are authentic and performance-based. And although reading, writing, and mathematics are important, they should be immersed in contextual, real-world, problem-based learning that is integrated and taught with and through the other disciplines, such as the arts, social science, foreign language, and science.

Are they enthralled in learning? No.

Perhaps someone should write a book titled, “Why Johnny Hates to Learn.” Teachers will tell you that they and their students have lost the joy and passion for learning. They have become so tangled in this vicious web of literacy assessments that they can’t find their way out of the mess.

We can use online learning and other forms of technology to help put the joy back into teaching. We can enthrall teachers and students, even in the age of standards-based assessments. Learning must be transformed through contextual, immersive, project-based online
experiences.

Some of the best online learning models come from the field of science, which has long been grounded in inquiry, discovery, and hands-on constructivism. Some of the best examples are the more than 50 Challenger Centers in the United States, Canada, and the United Kingdom. These centers were founded by the families of the Challenger 51-L crew.

The Challenger Centers help individuals understand science and the role it plays in our lives. Students have opportunities to collect data, ask questions, interpret the results, and transfer that information to new situations — critical thinking skills that tomorrow’s citizens will need to survive.

Teachers and students can fly one of four different missions: On the two-hour “Rendezvous with a Comet,” for example, the goal is to successfully plot a course to rendezvous with a comet and launch a probe to collect scientific data. The exploration is “sprinkled with lots of surprises and emergencies, giving students first-hand insight into teamwork and problem solving.”

Adult groups can also find professional development activities here with integrated, authentic, real-world simulations that help them improve their skills in collaboration, communication, and problem solving.

Even if you are not close to a Challenger Center, you can transform your classroom and/or school into a space habitat using cardboard and various art supplies (Contact Patti Kota, director of operations, (304) 243-4431 or e-mail pkota@cotf.edu). A number of centers can “fly” your students on a mission via the Internet.

The Wheeling center also offers online, hands-on, problem-based professional development opportunities for teachers in content areas such as earth system science. According to Nitin Naik, president of the Center for Educational Technologies and executive director of the Classroom of the Future program, the courses are designed for teachers. The courses allow teachers to network around the world to reflect and share ideas about how teaching changes in a technology-rich environment.

The Challenger centers are only one example of how students can learn in a context that immerses them in real-life situations that afford opportunities to problem solve and build collaboration skills. Other examples are popping up all across the Internet. A couple of starting places are www.pbs.org (Public Broadcasting Station) and www.classroom.com/ (Classroom Connect).

It’s time that educators speak up in favor of activities that captivate and enthral learners of all ages through active, hands-on learning experiences using “push” technology rather than sit-and-get, “pull” technology. We need to educate policy makers and others so they understand that student learning must be measured through multiple forms of assessments, not one-shot high-stakes testing. And finally we must help teachers and students realize that they can have high expectations and hold themselves accountable for achieving those high levels of learning while still having fun with content standards.

Let’s write the book, “Why Johnny’s enthralled with learning.”

RESOURCES:

- “In Praise of Enthrallment,” by David Thornburg. Published at his web site at www.pbs.org/teachersource/thornburg/ (Other articles by Thornburg are archived at this site: www.pbs.org/teachersource/thornburg/thornburgarchive.shtml).
- www.classroom.com/ Classroom Connect provides numerous resources for teachers and online virtual trips, such as AmericaQuest, for students.
- www.pbs.org/teachersource/scienceline/nyberg2.shtml Video clips of Inquiry Science and staff development how-to’s.
- www.spaceday.com A site that will enable any classroom teacher to use the Design Challenge Activities with students. It also has numerous learning opportunities for students.