

Case Study

Nassau Boces

21st Century Learning: Finding the Relevance in Computers for Students

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21 Century Learning: what indeed does it mean? Teachers and school administrators have seen a sea change in the way their students learn in just the last few years. And it's been everything in our power to keep up with them. Students are engaged by technology, and they are finding new ways to incorporate it into their everyday lives. Translating that experience into a learning experience is part of our challenge. Surprise: it has less to do with the laptop than you think.

It's Not Really About Computers

As the Executive Director of Curriculum, Instruction and Technology at the Nassau BOCES (Board of Cooperative Educational Services) in New York, I've seen technology integrations in many forms in the classroom. Through these experiences, I have become convinced that kids today aren't nearly as concerned about whether they have a laptop at all times as they are concerned with having some form of constant connectivity – cell phone, iPod, computer, even just a desktop at a computer station. More important, they are concerned with the kind of experience they're having.

Witness the huge success of Web 2.0 and social networking applications online. Kids are connecting, reconnecting and gaining excitement from the Web experiences they are able to have. They are processing their world through video, audio, chat, RSS feeds and more. And we're not talking computers as much as we used to in educational technology – we're talking about what we plan on bringing to the kids via computers. As part of this trend, it becomes increasingly important to provide our students with a relevant environment for virtual learning.

It's the Interface, Folks

We wouldn't send our young students to college to fend for themselves among other university students, so why are so many of us forcing our students to learning on virtual learning platforms that were built for college? Furthermore, why are we asking our K-12 teachers, with a limited set of instructional minutes at their disposal, to learn to implement virtual learning environments practically from scratch?

At the Nassau BOCES, we are beginning to see our teachers and students thrive using a new system that is strictly designed for K-12. What this means is that the interface is pre-loaded, plug-and-play, for elementary through high school classrooms. In effect, the system is easier to use for students, and more relevant to the K-12 teacher, whose time is often more limited than a college professor's.

The primary version looks different from the middle and high school versions, in the same way that textbooks for K-5 will use larger text, more pictures and graphics in larger format, and more colors than would be used in texts for higher grades. But the differences in our virtual learning environment run much deeper. So different is our system, that we've started calling it a dynamic learnspace as a way to call out the distinctions. Some examples of the differences include:

No class registration: The students don't have the responsibility for building out their schedules – the content is fed to them in the dynamic learnspace. And even the teacher has assistance and support in building this initial introduction for the students.

Individualized learning: There is no place in K-12 for the sink or swim mentality common to the university virtual learning environment. With our dynamic learnspace, teachers can tailor the curriculum by group, and even by individual, all in a very private setting, so no student is aware of the differences in content of another student. This has the added benefit of thwarting cheating on quizzes: each student's test can have questions presented in a unique order! Where college students, through the virtue of admissions processes, are often of nearly equal intellectual caliber in each classroom, a K-12 teacher is faced with the challenge of sometimes teaching gifted students and special education students in the same group. The

individualized capabilities of a dynamic learnspace allow for simultaneous communication with these students, in customized ways.

More security: instead of sending students out to the Web, elements of the Web are brought in. In this way, the value of the Web– video, feeds, chats, avatars and other Web 2.0 tools – can be made immediate to the learner, without the distractions or potential dangers of the rest of the Internet.

Parent involvement: a dynamic learnspace recognizes the importance of parent access to the student's learning experience. When all assignments are posted on the learnspace, the parent can be more involved in enforcing a work ethic, and can also better access what is being learned at any given time. Opportunity for parents to email teachers is facilitated as well.

1 to 1 is a reality for most college students. But for K-12, it's mostly a work in progress. Meeting K-12 students with valuable content wherever they may get it – at home, in the computer lab, at the library - is paramount. From what I understand about the Maine 1 to 1 initiative, one of the most famous statewide initiatives in the country, it's the dynamic learnspace that is breathing new life into their students' 1 to 1 experience – allowing all of Maine's middle schools to connect and learn in ways they never have before.

At Empire High School, outside of Tuscon, Arizona, textbooks have been eliminated completely. You can bet that Empire ensured that it had the most robust dynamic learnspace available to make a leap like that. But most schools must make the computer experience a rich one that works in spurts (i.e. in a computer cluster), before they can make a move as drastic as Empire's. And that takes excellent content and curricula.

Yes, It's Also about Content

The best way to explain the content our Nassau BOCES students are experiencing is to explain it in terms of student projects and experiences. Take our project at the Long Island School of Performing Arts.

Through our dynamic learnspace, teachers and students at this school have orchestrated a unique cross-global connection with a school in Canberra, Australia. In this project, students collaborated through chat rooms to discuss and then create their own dramatic interpretations of "An Inconvenient Truth."

After watching the popular movie adaptation of Al Gore's popular book, students from Long Island and Canberra Grammar School created a dramatic response to the film and recorded their productions. Their recordings were uploaded into the Studywiz Spark gallery – a collaborative place within the system that enables files of all types to be shared and viewed – which enabled students from each school to watch the productions and discuss their work.

Students used video blogs and chat to comment on their pieces and teachers were able to facilitate and monitor the discussions. Teachers found that the ability for students to use interactive media to share their work and ideas enabled communication to be more dynamic and meaningful because the students were more engaged and enjoyed using the technology to collaborate.

The project encouraged cross-cultural discussion and sharing of different perspectives.

It has been a great experience for all the students, as they see different viewpoints from different points on the globe. Studywiz Spark also allows for parents to better see what multi-media projects their kids are working on, by allowing them their own parent access for viewing of the school projects.

Most important, the project has boosted global awareness and promoted active learning in a global network. I can't think of anything more 21st Century than that!

Fred Podolski is Executive Director at the Nassau BOCES in New York, which uses the Dynamic LearnSpace Studywiz Spark.

For further information on Studywiz Spark visit www.studywiz.com