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Strategic Co-Teaching in Your School

Using the Co-Design Model

by

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CHAPTER 15

Technology

Rapid developments in technology are quickly reshaping the way people engage the world. Through the power of the Internet, information is no longer something only the expert possesses but something the public can easily gain access to, consume, or create. Personal and professional relationships can now be formed and sustained beyond one's backyard through large, web-based social networks. Virtual communities allow the individual to connect with others, globally, based on a common set of friends, common interests, or common aspirations. Its influence can be neither ignored nor avoided. Job applications and face-to-face interviews are now being handled entirely online. Digital pictures are taken and uploaded to the Internet using mobile phones. Mobile computing and touch screens are here, as the keyboard and mouse quickly drift off into the history books. This is our world, and in many ways one's level of engagement with it determines his or her level of relevance.

A segment of society that understands this dynamic and has begun to rally behind these advancements in technology is public education. Many educators are now using Web 2.0 tools to create dynamic, content-rich learning activities that really engage the students where they are. These web-based tools are cost effective (and often free); they are accessible 24/7 on the Internet; and they are media-rich, making them capable of presenting information in multiple formats that engage multiple (and often all) modalities. And perhaps one of the greatest strengths of these new media is their ability to create learning spaces that are student centered and promote active learning (Hsu, Ching, & Grabowski, 2009).

Wikis are a good example of this concept. A wiki is a web-based collaborative writing tool that has a seemingly limitless number of applications within educational settings. As a presentation tool, a wiki can be used to quickly serve up new information that is dynamic, interactive, and accessible 24/7. Although a wiki page can be used to communicate new information to learners using straight text, interactive components, such as audio recordings, streaming video, and illustrations, can be added in just a few clicks. As a social and constructivist tool, authorship of the wiki can be turned over to the students, who can then use the wiki to work together on creating a common knowledge base. That knowledge base could be a simple bulleted list or a comprehensive collaborative writing project. Ultimately, the wiki provides a learning space that engages the students socially, allows them to create something new from what they know, and accommodates diverse styles of learning and learning needs.

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However, wikis are only one example of how advances in technology are being leveraged by some educators to create meaningful learning experiences for students: A quick Internet search on "Web 2.0 tools for teachers" will return millions of results. Blogs, social bookmarking, cloud computing, screencasting, webcasting, and mashups are just a few of the most common examples at this moment. The real challenge, however, is not the availability of tools but simply trying to keep up with them all. As mentioned, wikis can be wonderful learning tools, but often student access to these web sites is blocked in the classroom. Students are able to do more and more with mobile computing, but mobile phones are often prohibited in schools. Prensky points out in "Digital Natives, Digital Immigrants" that "our students have radically changed. Today's students are no longer the people our education system was designed to teach" (2001, p. 1). And this article was written in 2001! Clearly, advances in technology are quickly changing the way people engage with the world. In order to ensure that schools are creating learning experiences for students that are relevant and leverage all that technology has to offer, three main questions need to be addressed:

- Who are the students?
- How can teaching methodologies be reshaped to reflect the reshaping world?
- And how do teachers bring that world into the classroom?

By Brian Danielson, Director of the Center for Technology and Design at Slippery Rock University

In 2001, the software designer, educational consultant, and writer Mark Prensky coined the term *digital native* to describe the generation of students born after 1990 (Prensky, 2001). He used this term because this is the first generation to grow up completely under the influence of computers and digital technology. According to Prensky, it is likely that students will spend 10,000 hours playing video games, 20,000 hours watching television, and fewer than 5,000 hours reading before they graduate from high school. E-mail, the Internet, digital music downloads, cell phones, and text and video messaging are all a part of the Digital Age in which students are growing up and all are an important part of their lives. For these reasons, as well as more presented within this chapter, technology in the collaborative classroom is included as a pathway for achieving success via the Co-Design Model.

Many educational leaders are looking to technology as a centerpiece in creating a student-centered, constructivist pedagogical paradigm shift that can create more effective and engaging classrooms. However, effective integration of technology is the result of many factors, with the most important factor being the teacher's competence and ability to shape instructional technology activities to meet students' needs. Many of the teachers leading classrooms across the United States completed their own formal education well before the Digital Age. These *digital immigrants* (as Prensky calls them) often know less about technology than do their students. As a result, we see technology avoidance in many of the classrooms we visit in the course of our work.

As schools continue to develop more inclusive classroom settings, it is essential that technology be used as part of daily classroom instruction. Many students with various types of disabilities (as well as their peers without disabilities who struggle with academic work) do not respond to the traditional "stand and deliver" style of instruction. Often, these students cannot cope neurologically with this type of instruction because they have receptive and expressive language problems and cannot process information when it is delivered solely in an auditory or lecture mode. The use of various types of technology in the classroom has the potential to remedy this problem because it may increase the engagement level of students and address their preferred mode of learning.

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Few, if any, educators question the idea that technology is essential to creating an environment that fosters student engagement and helps increase academic achievement. But integrating technology into classroom instruction is a complex process that requires teachers to first learn the technology and then use it in a way that enhances the learning process. In particular, in the inclusive classroom technology should be used to support active engagement, provide multimodal experiences, foster participation in groups, allow alternative ways to demonstrate proficiency (assessment), promote critical thinking, and help make connections to the outside world. All of these basic principles for technology use in a classroom integrate nicely with a differentiated philosophy for teaching and can be used to promote inclusive school environments.

When teachers think about using technology to differentiate instruction for students, a good place to begin is to first examine the content being taught, the products students are expected to create, and the process of instructional delivery and then determine how technology can be used by both the teacher and the student to enhance the teaching and learning process. Consider that multimedia and digital applications and tools can combine video, sound, text, animation, and graphics to address various learning styles in the inclusive classroom, as well as foster student strengths as demonstrated through multiple intelligences (see Chapter 14). The following are some of the benefits of using technology in daily lessons to address learner needs:

1. Digital technology and multimedia reach a variety of senses and can provide a multimodal experience. This allows the teacher to be sure that all types of learning styles and preferences are being considered.
2. The use of technology allows students to produce products of their own choice and design. This increases active participation in the curriculum and leads to a deeper understanding of the content. It also fosters ownership of the learning.
3. Technology allows the teacher to provide choices for students to demonstrate proficiency. This is part of a differentiated assessment philosophy that is essential for an inclusive school environment.
4. Technology can help promote critical thinking in a classroom through project-based experiences that require students to do research, analyze the content of web sites, and apply mastery in the synthesis of new products using technology.
5. Technology can be used to promote communication among students, as well as between students and teachers, through such options as wiki spaces, blogs, Twitter, WebQuests, and other forms of technology. Students and teachers can discuss content, organization of content, presentation of material, interpretation of text and other information, and insights and opinions that foster new attitudes and ideas in the classroom.

Teachers have a responsibility to provide students with different avenues for acquiring content and constructing and making sense of new ideas and concepts. Marrying differentiated instruction with technology empowers teachers with opportunities for creating classroom content that fits the needs of diverse learners in countless ways. The rest of this chapter is devoted to specific examples of how technology can be used to differentiate classroom instruction. Table 15.1 summarizes many excellent web sites that provide great ideas for differentiating instruction.

USING WEBQUESTS AS AN INSTRUCTIONAL TOOL

In our experience as educational consultants, one of the best but most underused technology tools available to classroom teachers to help differentiate instruction is the WebQuest. The WebQuest model was developed by Bernie Dodge in the mid-1990s

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Table 15.1. Selected web sites for integrating technology into instruction

Web site	Curriculum area	Description
WebQuests* http://WebQuest.org http://www.questgarden.com	Multiple areas	Existing WebQuests
Game show templates* http://jc-schools.net/tutorials/PPT-games/	Multiple areas	PowerPoint games
JeopardyLabs http://jeopardylabs.com	Multiple areas	Game-show format with reusable hyperlink
Funbrain* http://www.funbrain.com/teachers/	Multiple areas	Comprehensive elementary web site with games and activities
SuperTeacherTools http://www.superteachertools.com	Multiple areas	Flash games and other tech tools for teachers
Thinks.com http://www.thinks.com	Multiple areas	Database of brain teasers, digital chess, other fun games
Freeology http://www.freeology.com/graphicorgs/	Multiple areas	Database of graphic organizers and other teacher tools
Mr. Nussbaum http://www.mrnussbaum.com	Multiple areas	Interactive web site that covers all areas of the curriculum
National Library of Virtual Manipulatives* http://nlvm.usu.edu/en/nav/vlibrary.html	Math	Library of virtual math manipulatives
Illuminations (National Council for Teachers of Mathematics)* http://illuminations.nctm.org	Math	Hundreds of activities, lessons, and recommended web links
AplusMath http://www.aplusmath.com	Math	Comprehensive math web site
Exploratorium http://www.exploratorium.edu/explore/handson.html	Science	Database of hands-on science activities
WebElements http://www.webelements.com	Science	Interactive periodic table of elements
Edheads http://www.edheads.com	Science/health	Science and health virtual activities on topics such as knee replacement
HyperHistory Online http://www.hyperhistory.com/online_n2/History_n2/a.html	History	Interactive time line
Famous trials (University of Missouri–Kansas City School of Law) http://www.law.umkc.edu/faculty/projects/ftrials/ftrials.htm	History	Detailed web site of all the great trials in history, with diagrams, transcripts, images, and so forth
Starfall* http://www.starfall.com	Literacy	Interactive, graphic-rich auditory experiences for all levels of literacy development
Kurzweil text-to-speech tools* http://www.kurzweiledu.com	Literacy	Accessibility tools for text
Online dictionaries* http://dictionary.reference.com	Phonics	Dictionary words pronounced aloud
VocabularySpellingCity http://www.spellingcity.com	Spelling	Comprehensive web site of spelling games, activities, and test giver
Grammar Bytes http://www.chompchomp.com	English	Interactive grammar activities
Web English Teacher http://www.webenglishteacher.com	English	Comprehensive web site of lesson plans and activities for English

Note: Asterisk designates a site discussed in this chapter.

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and continues to be an excellent and easy method to integrate technology into instruction. A WebQuest is an inquiry-oriented activity in which the learners interact with resources on the Internet to learn information and complete a task that often results in some form of product being produced (Dodge, 1995). The process of completing a WebQuest involves following step-by-step directions provided by the teacher and accessing preestablished web sites that support the learning activity. Some of the best WebQuests include web documents, video clips, virtual experiences, and access to experts. According to Dodge (1995), a well-designed WebQuest will involve the student in the process of analysis, synthesis, and evaluation. Critical components of a WebQuest follow:

1. An introduction
2. A research-oriented task
3. A process in which all of the supporting web sites are listed
4. Clearly defined steps for researching the task
5. Directions for creating a product or products
6. An evaluation rubric
7. A list of references and credits

WebQuests can vary in length, ranging from a 1- to 3-day activity to a 3-week experience that includes the expectation that the learner will produce multiple products. The WebQuest should not be an isolated assignment but should be connected to the subject curriculum, state and national standards, and previous material learned in the classroom (Skylar, Higgins, & Boone, 2007).

Bernie Dodge, the developer and creator of the WebQuest model, maintains two robust databases of existing WebQuests. The sites, http://WebQuest.org and http://www.questgarden.com, are filled with thousands of these teacher-made activities, organized by grade level and subject matter. Before using an existing WebQuest, however, the teachers should give some careful consideration to the availability of computers for student use, the readability of the content of the web sites that support the learning, the vocabulary being used within the web pages, the age appropriateness of the task, and whether the WebQuest can be completed independently or is more appropriate as a group activity. A well-designed WebQuest provides students with an efficient tool to conduct research, think critically, examine relevant topics, experience learning in multimodal ways, engage the curriculum in ways not allowed by traditional methods of teaching, and work collaboratively. Researchers Kortecamp and Bartoshesky (2003) found strong evidence that WebQuests foster collaboration among students and that a majority of students perceived a benefit to this kind of collaboration.

For students with disabilities, WebQuests are an ideal activity for at least two reasons. First, because WebQuests are a tool that is accessed primarily via the Internet, modifications are much easier. Digitized text is easily modified to make it more accessible for students with a variety of needs. Text can instantly be made larger, it can be highlighted or underlined, definitions can be easily and quickly attained, and screen-reader software enables nonreaders or poor readers to listen via synthesized speech. Second, research-based strategies such as advanced organizers, study guides, and graphic organizers can be developed in conjunction with the WebQuest to assist the students with comprehension (Skylar et al., 2007).

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WebQuests can easily be incorporated into the co-taught classroom to support meeting the needs of all learners. Teachers may consider using a WebQuest for students identified as gifted and talented. The alternative co-teaching model could be used to provide enrichment for these students, as one co-teacher works exclusively with a small group of students on a WebQuest while the other co-teacher instructs a larger group of students in content more appropriate for their level of proficiency and understanding. In this scenario, the needs of the gifted students are being met by using the WebQuest as specially designed instruction while the other students are also having their needs met in an appropriate way.

An additional way a WebQuest can be used in the inclusive classroom is as an alternative assessment on a differentiated menu or choice board. Students with an interest in technology might choose to complete a WebQuest as an assignment to demonstrate their level of understanding of a concept or unit of instruction, or they might even be given an opportunity to construct a WebQuest for other students to complete. Both of these examples demonstrate the use of WebQuests to support student learning in a differentiated manner.

ILLUMINATIONS AND OTHER MATH WEB SITES

A helpful web site for educators that supports math instruction is the Illuminations site developed by the National Council for Teachers of Mathematics. This site (http://illuminations.nctm.org) contains a database of hundreds of differentiated lesson plans and supporting materials arranged by math topic and grade; a list of web links that support math instruction in areas such as geometry, computation, algebra, measurement, and so forth; and 105 online activities designed to be graphic representation of various concepts taught in typical math classes. This web site not only provides teachers with ideas for lesson planning but also gives them tools to differentiate content. The Illuminations site is a great resource because it provides interactive visual representations of math concepts ranging from simple number identification to more complex algebraic concepts. Examples include an interactive fractal tool, a graph creator, a box plotter, and a compound interest simulator. Illuminations support the teaching of mathematics using the Concrete-Representational-Abstract (CRA) Model of instruction. Researchers and professional organizations suggest the importance of teaching through concrete objects (Devlin, 2000) and visual representations of important math concepts to help students better understand the abstractions that are ubiquitous in mathematics (National Council of Teachers of Mathematics, 2000). The CRA Model is based on sequential instruction that begins by providing students with concrete examples of math concepts, followed by visual representations, followed finally by more abstract examples. In our work as consultants, teachers have remarked on the difficulty of obtaining concrete manipulatives and representations of math concepts as math gets more and more developmentally complex. The Illuminations web site is effective in that it provides activities that students can manipulate but that also present students with a visual representation of the concept.

Illuminations can be used in the inclusive co-taught classroom to help differentiate math instruction in a variety of ways. First, it can be used in a stations teaching model as one of three stations students must visit in a math class period. Co-teachers could be responsible for facilitating two of the stations by providing direct, explicit instruction, whereas the third station could be a technology station in which students must complete an independent activity on the Illuminations web site. All three stations would be developed to support the learning of a single math concept, but students would be exposed to three different methods of teaching it.

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Another way in which Illuminations can be used is as an instructional tool during a lesson in which the team-teaching model is being used. Teachers can work together to provide explicit instruction in math and support the instruction by projecting tools found on the web site. One teacher might demonstrate solving a complex math formula on the whiteboard, and then his or her co-teacher might use one of the activities found on the Illumination web site to reinforce the learning and provide an interactive representation of the problem. These are only two examples of how Illuminations can be used in an inclusive classroom. There are countless more ways this resource can be used to support a differentiated philosophy.

A second web site that math educators will find useful in classroom instruction is the National Library of Virtual Manipulatives (NLVM) found at http://nlvm.usu.edu. This web site was developed and is maintained by the National Science Foundation and Utah State University. It is a library of uniquely interactive, web-based, virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction with a K–12 emphasis. The premise behind the development of the site is that learning and understanding math at every level requires active engagement. Too much instruction fails to actively involve students. One way to address the problem is through the use of manipulatives, which are physical objects that help students to visualize relationships and applications (Utah State University, n.d.).

When visiting the NLVM, educators will quickly notice that the web site contains an index of the five big areas of math instruction: numbers and operations, algebra, geometry, measurement, and data analysis and probability. Once on the site, teachers are able to access several hundred interactive manipulatives and tools in any of these five areas. Examples include bar charts, base blocks, a chip abacus, geoboards, money, analog and digital clocks, tangrams, and more. Tools are easy to use for both teachers and students: Detailed instructions are provided on each activity, and the national standards addressed by each activity are specified.

Using the NLVM web site allows educators to differentiate instruction for students in various ways. Student learning styles could be considered when planning a math lesson, as students who are primarily visual learners and need concrete objects and visual representations could benefit greatly from the use of this web site during instruction. Co-teachers in an inclusive classroom could use the parallel teaching model, with one teacher instructing half the students in the class using the NLVM web site while his or her co-teacher provides an alternative method of instruction to the other half of the class using music or song as the primary method of instructional delivery.

SUPPORTING LITERACY INSTRUCTION THROUGH TECHNOLOGY

A favorite web site to support literacy development in the primary grades is the Starfall web site developed by Starfall Education (http://www.starfall.com). This site contains interactive, graphic-rich auditory experiences for all levels of literacy development, beginning with letter and sound identification and going all the way through activities to support comprehension. The systematic phonics approach at the core of the activities on the web site, in conjunction with phonemic awareness practice, is perfect for preschool, kindergarten, first grade, second grade, special education, home schooling, and English language development (supporting English language learners and students with English as a second language). We often see this web site being used in co-taught inclusive classrooms as part of the stations teaching model.

Using technology such as Starfall to support literacy development can be beneficial in a number of different ways. First, computers can present any type of auditory or visual materials—including speech, text, music, animations, photographs, or

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videos—alone or in different combinations. This technology can link different types of representations, such as pictures with sounds, oral readings with written text, videos with subtitles, or any other combinations that might reinforce teaching and learning. It can also provide enormous flexibility, allowing the user to set the speed of speech, decide whether written text is also read aloud, choose the language presented in text and speech, or decide whether to repeat the presentation. This flexibility can be valuable in presenting educational tasks—such as phonemic awareness practice, phonics lessons and drills, fluency practice, vocabulary instruction, and opportunities to learn and apply text-comprehension strategies—to students. The company Kurzweil Educational Systems has developed a text-to-speech tool that is a good example of this and can be used as assistive technology to help make content accessible to students with the cognitive ability but who lack literacy skills (see http://www.kurzweiledu.com).

Second, computers can accept a variety of inputs from students, ranging from mouse clicks to written text to spoken words. (A wide variety of special input devices, such as touch screens, special keyboards, and single-switch devices are also available for young children and students with special needs.) Computers can be programmed to check a child's work to determine whether he or she selected the correct word or picture, typed a correct word, said the correct word, or, with recent advances in computerized speech recognition, read a passage fluently.

Computers are also capable of recording and organizing information and reporting that information in multiple formats. Computers can record the responses of all students in a class to a set of letter–sound matching problems and then immediately report to the teacher the errors made by each student and the most common errors made by the entire class. (Some examples of audience response systems are shown on the web site of Padgett Communications [http://www.pcipro.com/play/]). In more complex tasks involving oral reading or text comprehension, computers can serve as convenient recording and reporting devices for teachers, helping them track student progress far more conveniently than other means of data collection. This capability can be used to inform teachers' instructional decisions and to make documenting students' progress more efficient.

Finally, computers can provide powerful scaffolds or "training wheels" for children's reading by presenting information flexibly, assessing students' work, and responding to students. For example, a student with limited phonics skills or vocabulary can benefit from scaffolding in the form of an online dictionary (e.g., http://dictionary.reference.com) that, at the click of a mouse, can speak the word and display its meaning. Similarly, students who have difficulty chunking sentences into meaningful phrases—a critical component of fluent reading—can have the computer highlight text in meaningful chunks to provide models of how words are grouped for fluent reading. Or a child weak in comprehension strategies can be guided by the computer to pose and answer questions, create concept maps, or check his or her own understanding while reading on-screen text. New technologies enable computers to provide immediate help when children need it in oral reading. The role of the computer is to make individualized, responsive scaffolds available for each child, thereby providing, as closely as possible, what a teacher would provide when working individually with a student. Scaffolding is addressed as a pathway for success in the Co-Design Model (Chapter 16).

WEB GAMES AND WEB 2.0 TOOLS TO SUPPORT INSTRUCTION

Although reading is a skill that can be supported by technology in multiple and obvious ways, many other curriculum areas can also be supported through the use

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of technology that allows teachers to differentiate instruction along the way. Take, for example, the integration of PowerPoint games with Bloom's Taxonomy to create leveled questions during a social studies lesson that includes technology to increase learner interest. The game-show format can be very effective as well. The site http://jc-schools.net/tutorials/PPT-games/ allows the user to download visually rich templates, complete with authentic sound, to a hard drive. The drive can then be used in a stations teaching model as an opportunity to review learned material, in a team-teaching model to review for a midterm exam, or in an alternative teaching model to provide an enrichment activity for advanced learners. Other teacher-friendly game sites include http://jeopardylabs.com (a site that allows the teacher to construct a game-show template and assign it a hyperlink so that it can be used repeatedly), http://www.puzz.com/stickelsframegames.html (a site containing frame games that can be used as bell ringers and brain teasers at the beginning or end of a class period), and http://www.funbrain.com/teachers/, which is a comprehensive K–8 web site that presents games designed to primarily support reading and math.

Another consideration for teachers is how they can use technology in the presentation of material to differentiate the process of learning for students. Kathy Schrock, the Director of Technology for Nauset Public Schools in Cape Cod, Massachusetts, and an adjunct professor at Wilkes University and Arcadia University, has developed a tremendous resource for teachers on her web site, called Kathy Schrock's Guide for Educators (http://school.discoveryeducation.com/schrockguide/). This page refers to a comprehensive list of Web 2.0 tools (http://www.go2web20.net) that teachers can use in almost any subject area. Web 2.0 tools are second-generation web applications that facilitate interactive information sharing, interoperability, user-centered designs, and collaboration on the World Wide Web. Examples of these tools include wiki spaces, blogs, audio and video file-sharing web sites, and social bookmarking. A few of our favorites include Viddler (http://www.viddler.com), which is a friendly video platform that can be used to post videos (students can interact with the video through tagging on the time line built into the program); Prezi (http://www.prezi.com), which can help to create astonishing presentations live and on the web; and Xtranormal (http://www.xtranormal.com), which is a movie-maker site that allows users to create animated movie clips of important information through character dialogue. These tools can also be used to support differentiated assessment because they provide students with opportunities to use the technology to create extraordinary projects representing their understanding of concepts and content being taught. The use of Web 2.0 tools allows the student to share their work not only with their teacher and classmates but also with people all over the world.

WHAT TECHNOLOGY LOOKS LIKE IN THE CO-TAUGHT CLASSROOM

There should be little doubt that one of the most effective techniques for improving student achievement, if it is implemented with fidelity, is co-teaching (Scruggs, Mastropieri, & McDuffie, 2007). Consider, for example, the benefits of two teachers in a classroom. Under the best of circumstances, two teachers can reduce the student–teacher ratio in half. When both teachers are fully used, then both teachers are more available to assist individual students (Mason, 2010).

Now consider the unlimited possibilities if technology is added to the co-teaching partnership. Technology could be added to each of the models of co-teaching in the following ways:

Excerpted from Strategic Co-Teaching in Your School: Using the Co-Design Model
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- Mobile technology computer carts could be used in a stations teaching model as a single station.
- Individual computers or laptops could be used by students during an alternative teaching model to allow students access to web sites for enrichment.
- SMART Boards could be used during a parallel teaching lesson by one of the co-teachers to provide instruction to half of the students in a classroom.
- Differentiated assessment strategies, such as choice boards, could include options that require students to use Web 2.0 tools such as Prezi, GoAnimate, Xtranormal, and VoiceThread to create products that reflect their learning.
- Co-teachers could use wiki spaces to post assignments, communicate with parents, or provide instructional videos for students to access outside school. Both co-teachers can have a presence in the wiki space.
- Kindles, Nooks, or other electronic book devices could be used as assistive technology in an alternative teaching model as one co-teacher instructs students in a large group while the other co-teacher provides instruction using these devices in a smaller group.
- Multimedia presentations can be given by co-teachers using a team teaching model. Some of the technology used might include PowerPoint, Prezi, RealPlayer or YouTube video clips, and music downloads.

The preceding list includes only a few ways technology can be integrated into the inclusive classroom and used by co-teaching teams. In each of these examples, technology can be used to increase student engagement, provide alternative ways for students to be assessed, and provide a multimodal instructional experience.

CONCLUSION

Given that today's students have grown up using technology in their day-to-day lives, educators have an obligation to find ways to integrate technology into the classroom. Considering the diversity found in classrooms as a result of the inclusion movement and the changing demographics of the United States, it almost seems impossible to continue teaching without the use of technology. Classroom teachers need to embrace a philosophy of differentiated instruction and technology integration with the idea that these are components of creating the type of brain-friendly classrooms of the future. Schools must train teachers to use technology and support them with the necessary equipment, infrastructure, and professional development to become more knowledgeable and competent than the students they teach. Table 15.1 serves as a starting place where teachers can begin exploring web sites and online instructional tools. Many of these sites have been recommended by teachers as proven tools of the trade.

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