Using Assistive Technologies in Millennium Teaching

Carol Knicker
Augsburg College, USA

What are assistive technologies (ATs) and how will millennium teachers use ATs to assist all learners?

Assistive technologies can be defined as services or devices which allow students to meet their maximum potential. The Individuals with Disabilities Education Act (IDEA) requires this provision for all students with disabilities as part of its mandate to provide learners with a free and appropriate public education (FAPE).

ATs have been available and used by students with disabilities, but have been, at times, problematic for the education community. For the most part, the purpose of ATs has been misunderstood to apply only to those students with severe disabilities. School personnel often remain uninformed regarding the range of assistive technology services and products available to them. Too often the use of these technologies has set students with disabilities farther apart from the rest of the class. ATs have been perceived to provide even inappropriate or inequitable assistance to the learning process, and have made students without disabilities wonder why some of their peers get "special treatment." Teachers of the new millennium should be sensitive to these issues as they learn the wide range of technologies available to all learners.

Universal design technology (UDT) is an idea whose time has come! As a nation, we have begun to strive to make life more accessible for all our citizens; UDT is making life easier for those with handicaps without setting them apart from others. Defined simply, UDT makes use of assistive technologies "standard" practice, rather than an option to be used only by the disabled. Examples of UDT include elevators displaying floor numbers in ways that can accommodate both the visually impaired and the non-visually impaired, closed-captioned television, and public buildings with ramps or doors which are easily accessible to both walkers and those in wheelchairs. Such strides must continue into school classrooms.

The application of UDT will enhance learning opportunities for all students, whether or not they have identifiable disabilities. UDT will benefit all learners by allowing teachers to individualize instruction to meet the needs of many diverse learners—learners who are considered eligible for special education services and those who are not.

Through the use of UDT, instruction can be differentiated to accommodate various learning styles. Imagine if all textbooks were available electronically; all students would have the option of reading or listening to the text, a benefit to both the visually impaired and those who learn best auditorally. Print can easily be enlarged or color-coded, and extraneous information removed. Students new to our country can study content areas in their primary language. When a student is unsure of a word or a term, it can be highlighted and defined. The possibilities are endless as to how electronic delivery of content can be modified to meet the needs of all students, including the disabled. When new texts are selected for example, millennium teachers can advocate for using electronically available materials.

Millennium teachers also understand that technology does not have to be expensive to be useful. Classroom teachers of the millennium will have available for use by all students paper for note taking which automatically makes a second copy, organizational tools like colored file folders, erasable highlighter markers, assorted tabs and adhesive dots, plastic filters for reading, removable adhesive notes, and classroom digital voice recorders. Pencils and pens will come with grips to make writing less challenging.

Millennium teachers will sometimes allow students to work with their headphones on—because that is how some students learn best. Millennium teachers will have the knowledge base and skills required to creatively utilize technology to tailor instruction to meet the needs of many students. There will always

be some students whose disabilities require the use of highly specialized technology, and UDT might not be appropriate for them; but for most students, especially those with minor disabilities, the millennium teacher's use of assistive technologies holds great promise.

U

Related Content

An Online Learning Community Integrated with Web-Enhanced Collaborative Learning and Self-Regulated Learning
Chia-Wen Tsai (2013). *Learning Tools and Teaching Approaches through ICT Advancements (pp. 164-174).*
www.irma-international.org/chapter/online-learning-community-integrated-web/68584

Update - Anytime/Anywhere - Finding Our Way: Better Understanding the Motivations of Teachers in Online Learning
Kathleen P. King, Frank J. Meliaand Marlene D. Dunham (2005). *International Journal of Information and Communication Technology Education (pp. 56-69).*
www.irma-international.org/article/update-anytime-anywhere-finding-our/2275

Creating a Framework for Remote and Hybrid Learning Amid COVID 19: A Case Study from India
Vandana Khareand Archana Shrivastava (2022). *Handbook of Research on Adapting Remote Learning Practices for Early Childhood and Elementary School Classrooms (pp. 191-204).*
www.irma-international.org/chapter/creating-a-framework-for-remote-and-hybrid-learning-amid-covid-19/297460

A Methodology for Developing Learning Objects for Web Course Delivery
Karen Stauffer, Fuhua Linand Marguerite Koole (2008). *International Journal of Distance Education Technologies (pp. 58-68).*
www.irma-international.org/article/methodology-developing-learning-objects-web/1729

Virtual Situated Learning Environments: Developing Inter-Professional Skills for the Human Services
Sandra Jones (2010). *Information Communication Technologies for Human Services Education and Delivery: Concepts and Cases (pp. 72-86).*
www.irma-international.org/chapter/virtual-situated-learning-environments/36950