

After reading the chapters for this module, discuss and provide examples of how you believe today's instructional media will or will not completely change the way we educate various learners – elementary students, secondary students, college students, military personnel, and professions. Explain your rationale, including statements made by the authors and other sources you may have read. Conclude by addressing what factors must be in place in order for instructional media to be effective. Use the "Assignment 2.1: Instructional Media's Impact" discussion forum.

In all sectors of education there are a lot of factors which will determine how much the usage of instructional media will increase and improve in the coming years and what impact it will have in the long term. I wouldn't want to make the same mistake as Thomas Edison and over-state the future possibilities of instructional media, but there are seeds that have been planted that could lead to some interesting scenarios. Personally, I believe that we are on the cusp of a changing paradigm in education which will see a more full scale, automated approach to education in the coming years, at least in the government and private sectors. Four things: standardization, the employment of rapid application development (RAD) in media development applications, user interaction with more responsive feedback, and cross-platform compatibility are maturing and sparking the interest of major players to take part in the educational arena.

The United States Department of Defense (DoD) has launched their Advanced Distributed Learning (ADL) initiative which "collaborate[s] with government, industry, and academia to promote international specifications and standards for designing and delivering learning content" (ADLnet.gov). The Shareable Content Object Model (SCORM) which is supported by Blackboard (who recently bought WebCT) and other course management systems is a result of research and development coming from the DoD's ADL initiative. Part of the ADL initiative is the ADL Registry, a repository of SCORM objects that can be posted, searched, and used by instructional technology developers who are members of the DoD community of practice and "where permitted, the general public" (adlnet.gov/Technologies/adlr). An offshoot of DoD's ADL is the military's educational application, the United States Air Force Air University, which seems to be developing a good model to follow with its Institute for Advanced Distributed Learning (www.au.af.mil/au/afiadl).

Adobe appears to be another one of the innovative forces who are helping to promote advancements in instructional technology with numerous new tools being created to ease instructional technology development and enhance the e-Learning workflow by incorporating simplified methods for adding user interactivity and embracing rapid application development principals in their media development applications. First and foremost are their efforts to increase the popularity of the SWF format by making it open source. The advantage of the SWF format is that it allows for cross-platform compatibility, which means it can be viewed on any digital device that has a Flash-compatible player installed; this should encourage many more digital device manufacturers incorporate Flash players into their components and which will in turn really open up the market-place for developers of Instructional Technology to sell their wares. On the application side, [Flash Catalyst 4](#), now in beta release, is a new tool from Adobe that allows developers to import Photoshop, Illustrator, and Fireworks files in their native layered formats and then add interactivity to those objects using non-programmatic methods. The resulting project can then be exported to Adobe [Flash Builder 4](#) (formerly known as Flex Builder which is also in beta release) to add database connectivity allowing for dynamic content implementations as well as the addition of other functionality. The resultant program that is developed using these applications can be output as either SWF or AIR files, which means that developers write one program which can be then used in either a desktop or web-based environment and again will run on any computer platform including mobile devices, and perhaps, even devices yet unseen. Both Adobe's [Presenter](#) and [Articulate '09](#) allow narration to be added to PowerPoint presentations which can then be combined with user interaction using a non-programmatic method as well and also can be exported as SWF files. Finally, Adobe's [Captivate](#), formerly RoboDemo and similar to [Camtasia Studio](#), lets developers incorporate video-based software demonstrations with user interaction, again in non-programmatic fashion, and it has numerous file export options available including SWF.

I think that just-in-time instruction and fully automated educational environments will become more prevalent and successful than the current educational philosophies currently in use in public education.

Several factors including rapid application development (RAD), interactive media, cognitive analysis from real-time brain scanning, and more realistic simulations of real world scenarios will be behind the plethora of instructional technologies that will be developed in the next ten to twenty years. Many companies are already researching how to exploit these technologies and most likely the results of these efforts will culminate in the new "Microsoft" or "Google" of instructional media appearing on the landscape. In fact it could be either of those companies, or Disney, or Pixar, or even Industrial Light and Magic (ILM) who take the lead in this arena, as all of them have the financial assets, human resources, and technical savvy to invest in large scale educational projects that could bring about dramatic changes in instructional media.

On the downside, one of the biggest hurdles for implementation of cutting-edge instructional media may be teachers and teachers' unions. There may very well be a time when we see resistance to full scale implementations of instructional media occurring, at least in formal educational environments. As Reiser states "most educators have viewed instructional media as [a] supplementary means of presenting instruction" and "teachers are usually given authority to decide what other instructional media they will employ" (2007, p. 18). Realizing the possibility of replacement by automation, teachers and their unions may choose to resist implementation of instructional technologies on a larger scale than currently exists. Cost and the time to develop large scale instructional media projects will also be a factor in the growth of the industry.

In addition, what needs to be in place for these new instructional technologies to be successful will be many of the same factors as now exist, teachers/instructors will need time and training to learn the new technologies, the technologies will have to be based on sound pedagogical principals including clearly stated objectives and assessments that accurately assess a student's progress towards meeting those objectives, there will need to be an adequate amount of digital services and an appropriate distribution infrastructure in place on the distribution end, whereas clients will most likely be beefed-up mobile devices, desktop or laptop computers, or thin clients.

In my opinion, we could not have picked a better time to learn about and take part in the field of IDT. We are in for an interesting journey ahead, lets' put the top down, put the pedal to the metal, and enjoy the ride.