Discuss and provide examples of how you believe today's instructional media and technology does or does not "make a difference." Explain and support your rationale by including examples and quoting sources you reviewed or consulted.

Anyone who says that today's instructional media and technology doesn't make a difference should have their heads examined. When done correctly, instructional videos and Flash animations, just to name a few, are so much better at helping students understand a concept than any lecturer scribbling on a chalkboard could ever do.

On the surface, it would appear that Mr. Russell's research resulting in "no significant difference" is of great significance for those that support distance education. The detractors of distance education continue to argue that only face-to-face courses are capable of providing intended student outcomes from instruction. However, Mr. Russell's survey of the media composition studies (MCS) that are out there seems to contradict that notion by saying that it makes no difference as to the mode of delivery when it comes to attaining desired student outcomes. If you dig a little deeper into the *No Significant Difference* Web site a point is made that much of the research collected is in question with regard to its validity (Russell). I can't speak to the validity of the studies collected by Mr. Russell, as his Web site is insistent that I purchase his book for that privilege, but I would argue that there does seem to be some very prominent research that contradicts Mr. Russell's findings. Many of the search results on Mr. Russell's Web site are marked "restricted access," but according to a news article on the Web site *Inside Higher Ed*, a meta-analysis released by the U.S. Department of Education focusing on online education versus face-to-face instruction only comes to the conclusion that online learning has definite advantages over face-to-face instruction (Jaschik, 2009).

Another aspect of Mr. Russell's findings that needs to be noted is that he surveyed research studies that encompassed distance education which is a much broader spectrum then just online education. Ross (1994) uses a cooking metaphor to exemplify the idea that a variety of "ingredients" contribute to the success of an instructional event, as well as the context of the collective recipe, the chosen cooking method, etc. Unless we clarify the real "ingredients" (and their interactions) that affect distance education effectiveness, we are doomed to repeat the extensive research on technology in instruction that historically has yielded no significant difference.

No matter whose research you believe, Mr. Russell's or the U.S. Department of Education's, it would appear that at the very least there is no significant difference in learning outcomes, regardless of the delivery method, and there are some good studies which say that there is a significant difference and online education is the one in the winning corner.

Conclude by addressing the factors that must be in place in order for instructional media/technology to be effective.

According to Pallof and Pratt in order for instructional/media to be effective collaborative assignments, active discussions, and the development of critical thinking and research skills need to be in place (2007). I'm not sure that I agree with them that is an all-inclusive list. I think their focus is more on developing online communities which they seem to believe is the key to a successful online course.

Drawing from my 6 years of experience teaching online courses I believe a lot more goes into conducting a successful online course. Things like keeping students motivated by responding to emails, discussion board posts for help, and scoring assignments in a timely manner are all very important pieces. Along with that, providing learning tools that are androgogically sound are important as well.

Works Cited

Jaschik, S. (2009, June 29). *The evidence on online education*. Retrieved September 2, 2010, from Inside Higher Ed: http://www.insidehighered.com/news/2009/06/29/online

Pallof, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the online classroom.* San Francisco: John Wiley & Sons.

Ross, S. (1994). From ingredients to recipes...and back: It's the taste that counts. *Educational Technology Research and Development 42(3)*, 5-6.

Russell, T. L. (n.d.). *Frequently Asked Questions*. Retrieved September 2, 2010, from No Significant Difference: http://www.nosignificantdifference.org/faq.asp