

## ***Warns against excessive reliance on computers to adapt instruction.***

### **Commentary on “Intentional Learning in an Intentional World”**

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This article, subtitled “Audience Analysis and Instructional System Design for Successful Learning and Performance,” by Margaret Martinez is a must-read for all committed to seeing to it that technologies keep their promises and achieve their potential. There is a propensity among technology proponents to disregard, or at least to minimize the importance of, individual differences among learners and the impact of differences in learning.

While the research design, execution, and findings are significant it is important to recognize this work for what it is—a meaningful addition to a less-than-adequate body of knowledge. In our (still) instruction-centered educational environment it is still frustratingly difficult to elicit recognition that we are all different in many ways and that includes how we learn. Ms. Martinez has provided us with a contemporary update on individual difference data which flows well from her excellent historical review (Appendix A.).

I feel this work, if replicated, properly applied, and built upon can influence instructional designers, in particular, to look beyond stated student-declared learning preferences to ever-broadening horizons and variations to accommodate empirical differences. The Martinez study deserves a prominent place among contemporary and established related studies to help unravel this highly complicated picture of learners, their learning “styles,” and how that can be reconciled with their perceived needs and their expressions of needs.

Permit me to add another practical element that might not be readily embraced by the readers of this publication. While the study in question is relevant, to my way of thinking it must not be taken to mean that all technology options for instructional design manipulation (accommodating learning differences) are contained within computer-based technologies. There is no doubt of the profound power, flexibility and immensity of the computer universe. This very fact has clouded so many minds into a uni-technology mentality to the detriment of the education community. There are technologies that have preceeded the computer that can enrich the mix of options to accommodate individual learning differences. One of the oldest of the technology “universes,” print, still plays a significant role with virtually every technology-based instructional system including computer-based ones. How many times have you observed a significant print element, usually in the form of manual, study guide, and or textbook, accompany a computer-based course?

And what about the traditional classroom? Is it really an anachronism or are some learners, at some point, for some or all of their learning experiences bound to learn best in that environment? What about “older” technologies—audio/video? Are

they only useful if employed within computer-delivered lessons? And don’t overlook what I feel is almost a moral issue. Research has proven that it is impossible to show learning advantages of one technology over another. Yet

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we are increasingly focusing on just one technology, the computer, and overlooking those unable to access that technology.

Another question to be considered relates to student preferences in technology adaptation. Can learners, especially adult learners which many distance education learners are, be trusted to make wise decisions as to which technology(ies) are best suited to their circumstances? Davis, in 1969, studied learners' attitudes and motivations when considering whether to receive instruction via technology (television) or through the traditional classroom. One of the most interesting findings in this well-designed/conducted study was that, "Students stated a preference for a live lecture rather than TV. But when the choice was better defined their preference often shifted." This

finding bodes well for properly informing potential enrollees in technology-based courses of the differences and realities they are to experience. These findings can magnify exponentially the importance and significance of audience analysis in an intentional learning environment.

## References

Davis, R., Johnson, C., and Dietrich. (1969). Students Attitudes, Motivations Shown to Influence Reception to Televised Lectures. *College University Business*, 46 (5), 59-63.

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