

IN CASE YOU'RE ASKED

The Effectiveness of Distance Education

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According to the 248 studies that were compiled by Russell (2000), there is no significant difference between distance learning and traditional classroom learning. In other words, distance learning (can be) considered as effective as face-to-face learning, and our results support this conclusion (Dean, et al., 2001 p. 252).

Russell (2000) and Dean (2001) reported results that are indicative of the research on the field of distance education. Most who are deeply involved in the field of distance education are unsurprised by these summaries of the research. As a matter of fact, it is very clear that instruction delivered to distant learners is effective and that learning outcomes can be successfully attained when offered to students at a distance (Hanson, et al., 1997; Anglin & Morrison, 2000).

In 1983, Clark clearly stated that the media used to deliver instruction had no significant impact on learning. Clark stated that:

The best current evidence is that media are mere vehicles that deliver instruction but do not influence student achievement any more than the truck that delivers our groceries causes changes in nutrition...only the content of the vehicle can influence achievement (Clark, 1983, p. 445).

After more than a decade of criticism and attempts to refute his review of over fifty years

of instructional technology research, Clark (1994) once again reviewed the research on technology used to deliver instruction and said that:

It is likely that when different media treatments of the same informational content to the same students yield similar learning results the cause of the results can be found in a method which the two treatments share in common...give up your enthusiasm for the belief that media attributes cause learning (p. 28).

Since Clark's widely distributed comments, a number of researchers have attempted to find fault with his premise. They have not been successful. It is currently the consensus that "media are mere vehicles" and that we should "give up (our) enthusiasm" that the delivery media for instructional content significantly influence learning.

Unfortunately, some have misinterpreted the no significant differences phenomenon and assumed that instructional technology and dis-

tance education do not promote learning. This is incorrect. Actually, the evidence is quite clear that students of all ages can learn from instruction delivered using technology, and that distance education works.

Distance education may be defined as “institutionally based formal education where the learning group is separated and where telecommunications technologies are used to connect learners, resources, and instructors” (Simonson, et al. 2003, p. 28).

This definition has four components. First, it is institutionally based, this is what differentiates distance education from self-study. Most now feel that the institution that offers instruction at a distance must be accredited and, (in the U. S.), probably by one of the regional accrediting associations.

Next, distance education is formal, meaning that instruction is designed and administered similarly to other forms of education. Design of instruction to be delivered to distant learners is probably the most significant determinant of learning outcomes. Well-designed and developed instructional experiences are required (Simonson, et al., 2003) in order for distance instruction to be successful.

Third, telecommunications technologies, or distance communications systems, are used to deliver instruction. Increasingly, this means use of the Internet, but other technologies are also in wide use, such as interactive television, audio, and print.

Finally, distance education involves learners, resources, and instructors. Instructors are critical to modern definitions of distance education. The teacher should work with designers, technical staff, and other support persons. However, the direct involvement of a teacher is critical.

In 1997, Hanson, et al. summarized the research on distance education in a publication of the Association for Educational Communications and Technology. This widely distributed review concluded that:

...comparative research studies on achievement tend to show no significant difference

between different delivery systems and between distance education and traditional education...several recent studies indicate a significant higher achievement level in those learning at a distance...the accepted position is that the delivery system affects no inherent difference on achievement (p. 22).

In other words, it is not the fact that instruction is delivered in a traditional, face-to-face environment or at a distance that predicts learning. (Anglin & Morrison, 2000; Berge & Mrozowski, 2001; Darwazeh, 2000).

A recent report on distance education by the National Center for Educational Statistics (Sikora & Carroll, 2002) provides information on the rapid growth of distance education. In 1999-2000, eight percent of all undergraduates and ten percent of all graduate students participated in distance education, and the vast majority reported high levels of satisfaction with their distance education experiences. The majority of students were “equally satisfied” with their distance education courses compared to their regular courses.

It is clear from the research literature that distance education works (Hanson, et al., 1997, for example). Why it works and how it works is important, however. The following conclusions about instruction delivered to distant learners are directly related to effectiveness.

- Training in effective instructional strategies is critical for teachers of distant learners.
- Distance education courses should be carefully designed and developed before instruction begins.
- Visualization of ideas and concepts is critical when designing instruction to be delivered to distant learners
- Adequate support systems must be in place to provide the distant learner with access to resources and services.
- Interaction between the instructor and students and among students must be possible and encouraged.

- Assessment should be designed to relate to the specific learning outcomes of the instructional experiences.

In summary, distance education can be as effective as any other category of instruction. Learning occurs and knowledge is retained. Students report that they have learned and they feel their distance learning experiences are as successful as more traditional education. The keys to successful distance education are in the design, development and delivery of instruction, and are not related to geography or time.

REFERENCES

- Anglin, G., & Morrison, G. (2000). An analysis of distance education research: Implications for the field. *Quarterly Review of Distance Education*, 1(3), 189-194.
- Berge, Z., & Mrozowski, S. (2001). Review of research in distance education. *American Journal of Distance Education*, 15(3), 5-19.
- Clark, R. (1983). Reconsidering research on learning from media. *Review of Educational Research*, 53(4), 445-459.
- Clark, R. (1994). Media will never influence learning. *Educational Technology Research and Development*, 42(2), 21-29.
- Darwazeh, A. N. (2000). Variables affecting university academic achievement in a distance versus conventional education setting. *Quarterly Review of Distance Education*, 1(2), 157-167.
- Dean, P., Stahl, M., Sylwester, D., & Peat, J. (2001). Effectiveness of combined delivery modalities for distance learning and resident learning. *Quarterly Review of Distance Education*, 2(3), 247-254.
- Hanson, D., Maushak, N., Schlosser, C., Anderson, M., & Sorensen, M. (1997). *Distance education: Review of the literature*, (2nd ed.). Washington, DC: Association for Educational Communications and Technology.
- Russell, T. (1997). The no significant difference phenomenon. <http://teleeducation.nb.ca/phenom>.
- Sikora, A., & Carroll, C. (2002). *A profile of participation in distance education, 1999-2000*. Washington, DC: National Center for Educational Statistics.
- Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2003). *Teaching and learning at a distance: Foundations of distance education*, (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

