

INTERACTIVITY IN ELECTRONICALLY-DELIVERED DISTANCE EDUCATION

Paul D. Larson, University of Nevada, COBA, Mail Stop 028, Reno, NV 89557; (775)-784-6993 x308

Electronically delivered distance education (EDDE), or virtual education, is evident when course-related communication between teachers and learners is primarily transmitted via Internet, e-mail or modem.

Table 1 contrasts traditional and virtual education in terms of one of the oldest concepts in marketing education—the four utilities (form, time, place and possession). To provide utility to consumers/users, a product or service must be available in the right form, at the right time and place. The Internet is available to anyone, at any place and any time. Thus, people can stay in touch *asynchronously* (at different times). Its asynchronous form is the single most controversial aspect of EDDE. Critics cite its lack of face-to-face, two-way interaction as EDDE's key limitation. In this view, virtual education limits interactivity. However, technology can be used to foster interaction between students and their professor.

TABLE 1
Utilities: Traditional vs. Virtual Education

Utility	Traditional	Virtual
Form	Synchronous	Asynchronous
Time	Scheduled	Anytime
Place	Classroom	Anywhere
Possess.	Prof.-centered	Student-centered

Traditional course sessions are limited to scheduled times in fixed classrooms, while EDDE "sessions" can occur anytime, anywhere, at students' convenience. Furthermore, traditional education is centered on the professor, as fountain of knowledge. To a large degree, the professor controls the exchange of information, i.e. the creation of possession utility. In contrast, EDDE is inherently student-centered. S/he makes exchange happen, drawing on a variety of resources, such as textbooks, WWW sites, work experiences, fellow students—and the professor.

Experts suggest that one benefit of EDDE, compared to the classroom, is more equal participation among class/group members. A 1998 AACSB report states that: "On-line learning allows everyone to participate equally, unlike the classroom where three or four may dominate a discussion based on their verbal ability or their presence." This inspires the first proposition—

P1: EDDE facilitates equal participation.

There is controversy among scholars on the issue of gender differences in student response to EDDE. It has been suggested that North American females are socialized to avoid revealing their intelligence. Also, the computer "nerd" stereotype is distinctly male. So, males should out-shine their female peers in virtual education situations. However, several studies have found no significant gender differences in terms of student satisfaction with or anxiety toward distance education. This leads to a second proposition—

P2: The sexes participate equally in EDDE.

Almost all educators agree that increased student participation and interactivity is desirable. However, educators disagree on the ability of EDDE to foster interactivity. Some are concerned on-line education obscures the professor's presence. Even advocates admit it is challenging to foster interaction on-line.

Among the key variables available to educators, for fostering on-line interactivity, are: student group size and degree of professor involvement. The Virtual-U at Simon Fraser uses groups of 10 students in its textbook conferences. One expert suggests structure provided by the professor is the key to increased interactivity. The lack of published results on these variables inspires two exploratory propositions—

P3: Interactivity increases with group size.

P4: Interactivity increases with professor involvement.

This session reports results of a field experiment on some determinants of interactivity and treatments to increase interactivity in an electronically-delivered Strategic Marketing course. Within-group student participation rates in a "Marketing Forum" database were found to be relatively level. Furthermore, no significant gender differences were found in student participation rates. Finally, while greater involvement by the professor had a positive impact on interactivity, group size had no significant impact.

For more details, e-mail the author: plarson@unr.edu