E-LEARNING – POTENTIAL AND PITFALLS

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Introduction

The three promises of e-learning or distance learning were: 1) to deliver instructionally sound learning programs to mass audiences at a fraction of the cost of traditional learning systems; 2) to empower learners to take more control over their learning experiences and 3)provide learning opportunities for wider audiences who have varied learning styles and require more flexible schedules. There have been many e-learning success stories in the areas of desktop application training, proprietary product or technology information, IT systems education, employee orientation, and legally mandated courses such as CEU's, most e-learning companies of any size are losing money. The LMS (learning management system) sub-industry has just about been brought to its knees. This article suggests that there may be a current pitfall in e-learning that has not been given much attention by the e-learning industry or the emerging literature on the topic.

The Educational Production Function

Any analysis of e-learning must start with a concept we call the "education production function." It is not complicated. In the traditional educational setting, the first element of the production function is to identify a need for a particular type of knowledge and information. Other elements of the traditional production function include a curriculum, a trained teacher/instructor, a physical school setting, a text book, a library, a librarian, the assignment of in class activities, coursework and homework, and grading.

In the e-learning space money was supposed to be saved by greatly increasing the student to teacher ratio and not paying for physical schools. Experience has shown that good e-learning curriculum development is very expensive. The jury is still out on whether the learning outcomes of e-learning courses are equal to the learning outcomes of traditional education courses. And many in the industry are now suggesting that some type of "mixed" system, which combines e-learning with some form of traditional learning system may be the best approach to producing satisfying educational results. These are just some of the challenges that help to explain why e-learning has failed to meet the promises that e-learning proponents made just three years ago.

A Potential Cause of e-learning Failure

Most e-learning courses leave out a key element of the traditional educational production function. It would seem that if e-learning has the same "outcome" goals or production goals of traditional learning, then e-learning models would include many of the same basic elements of the traditional educational production function. This is not true. Without any theoretical justification, many e-learning courses are accompanied by no *librarian and no library*. Omitting these two key elements in

the e-learning production function may be a substantial reason that e-learning has not met its promise, since these two elements of the traditional education production function have over time proved to be a valuable element in producing successful educational outcomes..

Toward A Solution

Some e-learning environments have tried to create "libraries" and "librarians" with on-line help systems and vast networks of information available by typing in key words to access answers to key questions on the spot. Other e-learning systems go farther and when a query is made tens of articles pop up on the screen and often serve well as a virtual library. Even with these elements in place in sophisticated e-learning systems, one key element of the traditional educational production function that is still missing in almost all e-learning systems is the "*librarian.*" We do believe at some point our intelligent systems will be able to mechanize much of what a librarian does. However, until the students can intelligently explain what they don't understand and until our machines can invite and encourage people to learn as a good librarian does, we believe the e-learning world does its customers and its industry a tremendous disservice by not providing some form of human, real time, interactive librarian support for e-learning courses. Today, there is even a word for the type of person that can fill this role. This person is called a "*cybrarian.*"

Conclusion

E-learning has been the brainchild of technologists and the step child of educators. Understanding this lineage gives a strong indication of where some problems may lie in the industry. Technologists overlook the softer areas of the production function such as the librarian and are notorious for overlooking the parts of the production function that they did not use in their educational upbringing (e.g., the library). Educators would never leave out these two critical components of the educational production function.

These problems with e-learning can be easily addressed, but not until they are recognized and accepted by the technologists creating education in their own image rather than in the image of world class educators.