

Assignment 1
Background and Significance of the Problem

by
Bob Daumer
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Methods of Inquiry

Nova Southeastern University
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Subject Area

The subject area of this research study is how the content self-efficacy of learners in web-based training courses (non-academic setting) is affected by the lack of an instructor and academic peers in an online environment that is training-centered.

Research Problem

Through various aspects of learning, such as achievement goals, strategy use, scaffolding new information based on recent success, peer mentoring, and reinforced effort and persistence, instructors can help increase the self-efficacy of learners (Margolis & McCabe, 2004; Protheroe, 2004). If learner self-efficacy is a factor of achievement and instructors play a major role in assisting learners, then what happens to learner self-efficacy in web-based training environments where no instructor is available? Numerous research questions are derived from this inquiry, such as: (a) do learners possess content self-efficacy, or confidence in themselves to perform tasks, in web-based training environments; (b) can web-based training, as an instructional technology, foster content self-efficacy in learners who seem to be struggling; and (c) how does the content self-efficacy of learners in web-based training environments compare to that of learners in traditional instructor-led training classrooms? The setting for the research study will be a professional organization (non-academic) which uses web-based instructional technologies as training media for the employees. A specific organization has not yet been defined; therefore, no role-relation can be drawn between the researcher and the organization.

The purpose of this research study is to investigate how web-based training, as an instructional technology, affects content self-efficacy, in the context of pre-existing learner self-efficacy, self-efficacy that is fostered by the web-based training, and compared self-efficacy of

learners in instructor-led training classrooms among learners in a professional setting who are required to complete training using web-based courses.

Justification for the Research Problem

Margolis & McCabe (2004) suggest that learner self-efficacy is a driving factor of achievement. The current trend towards distance education has invited various instructional technologies into the learning environment and, at the same, is changing the shape of the classroom. Education may now be done synchronously or asynchronously. One of these instructional technologies is computer-based using the Internet for online learning. What happens to learner content self-efficacy when the traditional classroom environment is replaced with a solely online and independent learning environment, such as web-based training? The learner has no access to an instructor, fellow students, or any other content expert; all the learner has is the self-contained web-based training package.

The training industry has implemented web-based instructional technologies differently than how they have been implemented in educational settings. The major difference with web-based training is there generally is no instructional support available to learners, whereas with web-based education, there is often a parallel, or integral, instructional support system of instructors and academic peers. It is important for training professionals and educators alike to recognize this difference and to further understand how learners in web-based training courses may be affected.

Deficiencies in Evidence

The experience of the researcher has shown that much of the web-based training that is developed is done so without much consideration given to the learner. Rather, the training is developed in accordance with contractual requirements or other guidelines such as requirements

to cut costs as dictated by executives. This lack of attention to the learner may result in poor learner performance because the training is not instructionally sound or contextually connected. This researcher suggests that training professionals need to take point from education professionals and conduct research that focuses on the learner, such as the content self-efficacy of learners in web-based training courses.

Joo, Bong, & Choi (2000) conducted a study on web-based instruction that furthered previous investigations. The researchers found that prior studies (Al-Khaldi & Al-Jabri, 1998; Levine & Donitsa-Schmidt, 1998) on the self-efficacy of learners in web-based instruction focused mostly on learner confidence in using the electronic technology and did not explore how the learners were affected by the change in environment. Joo et al. identified that learners in web-based instruction had to adopt independent methods of learning, or self regulatory learning, to achieve academic success. With this, the researches predicted that learner confidence will have a direct, positive correlation to performance. Their findings were just that; however, they noted that equally important as a factor of performance is what prior research suggests, that learner confidence in the technology used has a positive correlation to performance.

A study on self-regulated learning in computer-based, and more specifically web-based, instructional settings was conducted by Whipp & Chiarelli (2004). These researchers posed to answer similar research questions to those identified in the present study. They inquired (a) as to how learners modified their learning techniques in web-based settings, (b) what kind of self-efficacy building techniques are offered by the course, and (c) what kind of environmental affects are caused by the web-based setting. The primary difference between Whipp and Chiarelli's study and the present study is the audience. Whipp and Chiarelli used learners who were part of a graduate degree program—an educational setting. The present study focuses on

learners who are not in an educational setting; rather they are in a training setting. The researchers found that web-based learners made adaptations to their learning techniques; both the technological and communications aspects of the course affected content self-efficacy; and environmental aspects such as courseware interaction and course design positively affect performance.

Connecting the Discussion to an Audience

This research study will further the knowledge base already existing on learner self-efficacy in web-based training. Existing research has already investigated how confidence in the instructional technology affects performance and how learners adjust their learning methods in web-based instruction as part of education programs or curriculums (Joo et al., 2000; Whipp & Chiarelli, 2004). This study expands the subject of learner self-efficacy by investigating how web-based training environments (instructional settings that do not include instructors, academic peers, or other instructional support) affect learner content self-efficacy.

As education and training further adopts media as technologies for instruction, more and more variables to learner performance are introduced. It is important that industry professionals fully understand how training is impacted and recognize the changes that need to be made to ensure instructionally sound material is being developed. Although this study does not fully cover all perceived changes to the instructional setting, it does offer insight as to how learners perform in web-based courses and how professionals may apply equivalent self-efficacy building methods into their web-based courses.

References

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