Building Trust for Interactive E-Learning

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INTRODUCTION

Learners, tutors and service providers are the basic players in an e-learning system. Similar to the situation in traditional campus education, “trust” composes the interaction baselines between each of these players. Although the establishment processes are different, the requirements and importance of “trust” are the same whether the situation is traditional education or remote e-learning.

“Trust” is one of the most important factors for the success of interactive e-learning applications. This chapter points out the primary trust challenges among learners, tutors and service providers. Then we introduce the trust mechanisms applied for interactive e-learning. The technical difference and application trends are discussed before the conclusion.

BACKGROUND

In interactive e-learning systems, learners interact with tutors via the support of service providers in a “virtual campus.” Trust relationships are required between each of them. For instance, providers need to create trust relationships with learners and tutors. Because a user may come from anywhere on the Internet, one provider must make trust decisions, determining whether the user is eligible for the e-learning service and then what resources the user may access. Based on the created trust relationships between the provider and the user, appropriate authorization and monitoring are imposed on the user to facilitate interactive studying or teaching.

The learner also must trust in the provider and other partners as well, otherwise the learner will not use the e-learning system. Typical situations exemplifying the need for trust include when the learner: enters personal information on a Web page; makes online payments (secure payment); and participates or completes an online test (fair testing, no cheating and accurate storage of results).

Furthermore, privacy also is an important factor that influences the creation of trust relationships and then interactive learning processes. Not only do people have different preferences for their privacy, service providers have certain obligations to meet requirements of current and new privacy acts. For any action involving a learner’s personally identifiable information, the learner must be able to control what information is revealed to other parties, including service providers, tutors, classmates or outside third parties. For example, an institutional registrar can request a learner’s full name, birth date and address for identification purposes, but no data regarding the learner’s study behaviors and preferences; a tutor may have access to what courses a student has studied, and possibly some of the student’s performance, but no other information—for instance, pertaining to the student’s age or current career. A classmate may know with whom he is talking, but not the location of his partner.

It is clear to see that the trust-related decision making occurs throughout the whole interactive e-learning process. Just imagining the scenarios in traditional physical education, people can easily realize that “trust” will not only provide the base for interactive e-learning, but also increase a student’s levels of motivation and aspiration to learn. The characteristic of fine-grained trust control will be a significant feature for the next generation of e-learning systems. In other words, “trust” will be one of the most crucial factors for the success of an interactive e-learning system.
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