

Chapter 5.4

Discursive Context–Aware Knowledge and Learning Management Systems

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ABSTRACT

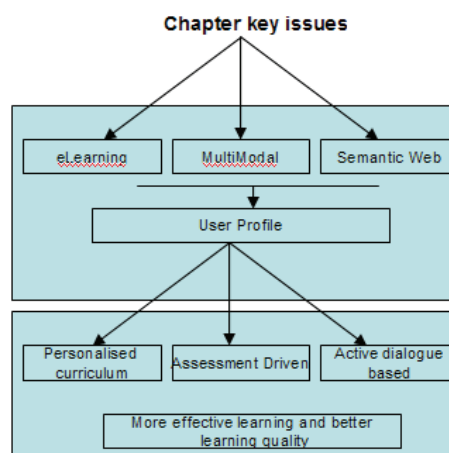
In this chapter, we look at the research area of discursion and context-aware information as it relates to the user. Much research has been done in the area of effective learning, active learning, and in developing frameworks through which learning can be said to be achieved and have some possibility of being measured (i.e., Networked Learning and Bloom’s Taxonomy) (Bloom, 1956). Having examined many such frameworks, we have found that dialogue plays a large part, and in this chapter we specifically examine dialogue in context of the user’s background and social context. This always plays a critical role, and it is around this that we

want to dig deeper. We aim to provide a quality discourse analysis model which will achieve in more detail a picture of the users actual level of knowledge. Problem solving skills, together with the critical thinking capability as part of a team, and individually, in the following chapter.

BACKGROUND

Over the past 20 years, we have had many and varied computer-based and Web-based packages which aim to teach the user some skills. But most of these packages fail to achieve their design goals for one of many reasons, for example:

Figure 1. Hierarchy of topics



1. Lack of user driven focus
2. Lack of engagement
3. Poor navigation system
4. No educational theory used or involved
5. Lack of challenge or testing of lessons learned
6. No assessment whatsoever
7. No feedback on any assessments covered
8. Lack of contact with anyone else doing the course
9. No followup in relation to a future path or career
10. No credits built up for future courses in work

These, through our research, tend to be the main reasons why computer-based training and Web-based training courses are not being completed. In this body of work we have taken these results and aimed to counteract them by developing a new direction, emphasis, and structure in how courses are created. Our initial aim is to greatly reduce the retention issues and to make courses more personally engaging and worthwhile. In so doing, new technology, which in the past had been used for the sake of being used and not to help

in making courses more effective or useful, must be used effectively. These aspects are considered to be the failings of e-learning over the years (Badger, 2000; Crichton, 2003; Greenagel, 2002). In the next version of the Web, that is, Web 2.0, we will see far more powerful and useful Web-based applications based around the semantic information community. We will examine some applications which exhibit some semantic options in the education area and in other areas later in this chapter.

Very important to this chapter and to learning utilities is the area of pedagogy, and the initial pedagogy frameworks examined was based on Goodyear (2001) and Salmon (2000), which deal with encouraging asynchronous methods of collaboration, but do not attempt to take into consideration the context of the user (i.e., gender, context, age group, or background). In fact, the collection of action verbs put together to aid evaluation of user input is very much based on language more likely to be used by middle aged academics rather than most of the student population (Figure 1).

Added to that was Socratic method (Hwee, 2000), in which the dialogue was based on the

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