<p style="text-align:center">Chapter XI</p>

Teaching with Real Time Communications Technologies

Introduction

Real time communications technologies are just that: technologies that facilitate real time or synchronous communications. An example that springs rapidly to mind is the telephone. The real time communications technologies (RTCs) that are commonly found in educational contexts include text-based examples such as text chat, and rich media examples such as video chat, videoconference, and Access Grid. Teaching with RTCs is not the same as face-to-face teaching due to the imposition the technology makes on the learning, thus limiting some activities. Full definitions of videoconference and video chat and recommendations for teaching with videoconference and video chat are discussed in detail in Chapter XIII. Likewise, teaching with Access Grid plus a description and a definition of it are provided in Chapter XIV. In this chapter some general approaches to teaching that are common to all RTCs are discussed and contrasts are drawn between other approaches that clearly highlight the differences in the RTCs.

In Chapter VII the learning technologies model (LTM) was introduced as a theoretical framework that classified learning technologies in two dimensions. The first dimension classified technologies as one-way or two-way and referred to them as *representational* and *collaborative*. The second dimension introduced three levels of communicative attributes. The LTM is shown in Figure 11.1.

Video chat, videoconference, and Access Grid are all collaborative technologies and of level 3 attributes when classified by the LTM. These RTCs are important in education as they provide cost effective communications channels between students and between students and teachers. Their importance to e-learning and their future role is increased by the:

- Global trends of increasing bandwidth.
- Increasing availability of free or low cost video communications software.
- Yhe trend towards cameras, microphones, and speakers as standard computer features.

As video chat increases in popularity it is reasonable to expect that students will use it to communicate with their peers, and it is not unreasonable that they will expect it to be part of their online learning experience.

Technologies often impose restrictions on teaching and learning activities and there are tasks they perform well and other tasks for which they are not suited and do not perform well at all. In Chapter VIII the technology selection method was introduced and takes as part of its basis the notion that different technologies are appropriate for different categories of learning activities. For this reason technologies are seldom used singularly in e-learning. Learning management systems are good examples of

Figure 11.1. The LTM

	Learning Technologies		
	Representational	Collaborative	
		Dialogic	Productive
1	text	text	text
2	voice	voice	voice
3	voice and image	voice and image	voice and image

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