Chapter IX

Evaluating Designs for Web-Assisted Peer and Group Assessment

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Abstract

Activities, such as peer-group discussion and peer review, where students assist each other by commenting on and assessing each other’s course work, are thought to be beneficial and effective in many aspects. Web-based technology has opened up new possibilities for peer- and group-assessment activities. Three main Web functions—e-resources, e-display, and e-communication—are discussed in this chapter in the context of six cases of teachers using peer and group assessment in a Hong Kong university. These cases use different levels of Web enhancement. Evaluation of the six cases involved student surveys, focus-group interviews, teacher surveys, analysis of forum postings, and counter site logs. The chapter provides an analysis of this evaluation data within the various designs of
these courses. The data collected generally confirm that Web-enabled peer- and group-assessment activities can produce positive results. The need for careful planning for these types of assessment activities is also clearly illustrated.

Peer and Group Assessments in Teaching

Traditionally, learning has been regarded as an individual process, especially under the influence of individualism in western countries (Webb & Palincsar, 1996). The model was that students would learn on their own in order to compete with their peers, and their achievements in tests or projects were also assessed on an individual basis. However, beginning in the 1950s, there have been an increasing number of studies demonstrating that group learning can be superior to individual-to-individual transfer of learning (Johnson & Johnson, 1989). Cooperative interactions were identified as bringing about good learning outcomes. A variety of peer-learning approaches appeared, and students were also assessed either on a group basis or an individual basis (Sharan & Hertz-Lazarowitz, 1980; Slavin, 1980, 1995).

Peer assessment involves using peers’ comments in assessing the quality of assignments. Johnson and Johnson (2004) defined group assessment as “collecting information about the quality or quantity of a change in a group as a whole,” while peer assessment “occurs when peers collect information about the quality or quantity of a change in a student” (p. 2). Thus, group-assessment activities involve students working in groups. Very often, group assessments look only at the group’s performance as a whole and ignore the differential performance of the individuals in the group. A more complete model involves the performance of the group and its members being assessed not only by the teacher, but also by their peers in the same or in other groups. These activities involve both peer and group assessments.

Activities that involve peer assessment take many different forms, such as peer tutoring (Wagner, 1982), cooperative learning (Kagan, 1985, 1994), peer-group discussion (Hatano & Inagaki, 1991), and peer review in writing (Gere, 1987) in which students assist each other by commenting on and assessing each other’s course work. Brown, Race, and Smith (1996) suggested that peer assessment helps students develop an awareness of the importance of structure, coherence, and layout in their work; peers can help one another by brainstorming the content and structure of essays. They can check for correct answers and may be able to identify exactly where errors have occurred.
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