Chapter I

Teaching Teamwork in Information Systems

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ABSTRACT

Teamwork is very important in information systems development. Therefore, most courses in systems analysis and design and many programming courses require students to work on group projects. However, a project group is not the same thing as a team. Furthermore, for a group to become a team, there are several important characteristics that must be developed. These characteristics do not always develop automatically. This chapter discusses the requirements for effectively forming, building, managing, and evaluating teams in information systems courses. Students should be taught these concepts in addition to the regular course content. This chapter also addresses two special issues that deal with team development and team management: managing cultural diversity and managing “virtual” teams, where the team members are geographically separated.

INTRODUCTION

Teamwork has been the norm for the development of many information systems (IS) projects since the early days of computing. Teamwork is also known to be an effective teaching and learning technique. Therefore, many IS classes in systems analysis and design, and also in programming, use student teams for class projects. However, just because students are required to do...
their projects with other class members, it doesn’t necessarily follow that they learn about effective teamwork. In fact, from previous experiences with classroom teamwork, many students dread taking another class that will require teamwork assignments. Why? It is because their experiences were filled with all sorts of problems and frustrations that they do not want to repeat. It is important, then, for many reasons, that IS instructors know about managing effective teamwork. And it is important that they teach teamwork in their courses, so their students will be prepared for effective teamwork in the “real world.”

In 1999 an informal survey of the six top-selling college textbooks on systems analysis and design revealed that the word “team” or “teamwork” only appeared in the index of two of the books. These six books had a combined total of approximately four pages devoted to a discussion of teamwork or developing and managing effective teams. Informally, instructors will admit that one-fourth to one-half of their student project groups develop serious problems, and want to “fire” (or, “divorce”) one or more of the group members. Obviously, those students have not learned how to work well in teams. In a “field quasi-experiment,” Van Slyke, Trimmer and Kittner (1999) found that “…investing valuable class time on teamwork training can provide significant benefits. Student team members who receive teamwork training feel that their teams are more successful as a result” (p. 43).

The purpose of this chapter is to summarize what is known about effective teamwork, both in the “real world” and in the classroom. This chapter will also describe several specific techniques, activities, tools, and readings, which may be used in the classroom to teach teamwork rather than just assigning group projects to students.

BACKGROUND

Teamwork

What is a team? “The distinction between a work group and a team is an important one.... A work group becomes a team when shared goals have been established and effective methods to accomplish those goals are in place” (Wheelan, 1999, p. 3). A team, therefore, is more than just a group of individuals. For the purposes of this chapter, the following definition of a team will be used:

“A team is a small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable”
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