Chapter III

Introducing Information Systems Students to Research with a Structured Group Project

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ABSTRACT

This chapter reports on an approach to getting information systems research students started. The approach involves beginning research students undertaking a structured group research project in which the instructor is an active participant. The major purpose of this group project is to provide a gentle, supportive, structured introduction to information systems research. This approach benefits students by ensuring that they have participated in a complete research project before they have to assume complete responsibility for their first large individual project. The chapter discusses the use of this approach at an Australian university. In general, students have participated well, learning from their own experiences and the experiences of others in the group.
INTRODUCTION

Although the majority of information systems students graduate and start work in industry as information technology professionals, a minority reenroll in research degrees. In a number of countries, the initial introduction to information systems research for university students is via an Honors year that includes a substantial research dissertation component (e.g., Australia, the United Kingdom). In Australia, this research component is normally supervised by a single academic or two academics, and usually accounts for at least 50% of the student’s grade. The Honors year also commonly contains a number of advanced theory topics and may contain a research methods course. Performance in the Honors year is a major determinant of acceptance into a Ph.D. program.

Starting to undertake information systems research can be a difficult and unsettling time for students (Clarke, 1998). This chapter describes one approach to facilitating the introduction of information systems research students to their research career: a structured group research project with the instructor as an active participant. This approach is intended to be complementary to the traditional means of research training, such as direct guidance by an individual supervisor and formal research methods courses.

BACKGROUND

Various approaches have been proposed as being useful for helping information technology students to acquire the skills and experience they need to undertake successful research. The following section reviews some of these approaches.

Supervision

For many students, their first exposure to the process of undertaking research is when they enroll in a postgraduate research degree, and this may be a relatively solitary experience. Cullen (1994) noted that in a number of countries, a single supervisor or supervisor and associate supervisor is common, and students may not receive much input into their projects from others. For example, in an Australian study he conducted, only 22% of students obtained advice from anyone other than their primary supervisor. He pointed to an inadequacy in this traditional means of supervising postgraduates and recommended that a study be made of other strategies to restructure graduate education. He commented favorably on the American Ph.D. system, which makes greater use of a panel of supervisors and thesis advisers.

In the Honors year, as well as during Ph.D. studies, a student’s performance can be dependent upon the input of individual supervisors. However, individual supervisors may not have the time or interest to cover more than is strictly necessary for an individual project, and thus, students may not acquire breadth in their research training. This may particularly be the case when supervising students who are not directly in their area of interest.

Research Methods Courses

Whitten and Bell (1993) acknowledged that many research skills can only be learned under the direction of a supervisor who is expert in the subject matter, but recognized that researchers also need more general research knowledge and skills. Research methods
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