Chapter III

Computer-Adaptive Online Exit Surveys: Conceptual and Methodological Issues

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Abstract

Theories of student attrition based on Tinto’s Student Integration Model are limited in their ability to provide a comprehensive framework to design a computer-adaptive online exit survey. An alternative framework encompassing the overall impressions and experiences of the dropout students during their stay at the institution is used to design the exit survey. This chapter outlines the conceptual and methodological issues surrounding computer-adaptive online exit surveys, and discusses the design, development, and administration of the survey questionnaire.

Introduction

The high rate of student attrition is of concern to academic institutions because it is a significant source of revenue loss. Tinto’s Student Integration Model (Tinto, 1975, 1993) emphasizes the lack of fit between the student and the institution as the key factor in student attrition. However, this model is limited in its ability to provide a framework to design a comprehensive exit survey. An alternate framework (Shaik, 2003) that attributes student attrition to divergent origins ranging from technological failure to organizational...
weakness forms the basis for developing a more comprehensive exit survey proposed in this chapter. The item response theory (IRT) framework is applied to customize this exit survey in order to minimize students’ boredom and fatigue. The online format of the exit survey offers students the opportunity to complete the questionnaire at their convenience, while also enabling the institution to collect and analyze data in real time. This chapter discusses: (a) the significance of student attrition to the institution; (b) the nature and limitation of currently available exit surveys; (c) the need for a comprehensive computer-adaptive exit survey; (d) the conceptual and methodological issues surrounding the computer-adaptive online exit survey; and (e) the design, development, and administration of the survey questionnaire.

Student Attrition

Between 1880 and 1980, the attrition rate of all higher education students in the U.S. was around 45% (Tinto, 1982), marginally lower than the rate in other countries for the same period. The Consortium for Student Retention Data Exchange (CSRDE, 2001) study found the attrition rate to be 20% for all member institutions, 13% for selective institutions (SAT scores above 1,100), and 31% for less-selective institutions (SAT scores below 990). The attrition rates for distance learning programs are even higher than those for the traditional on-campus programs and courses (Rovai, 2002).

Student attrition results in significant direct and indirect costs to the institution. A marginal increase in student retention would result in a significant gain in revenue to the institution. For example, a public institution in the U.S. with a freshman enrollment of 2,000 and a dropout rate of 30% can save $1 million for a 10% increase in retention (Noel-Levitz, 2004). Low retention rates may lead potential students and donors to question the quality and credibility of the institution and, if not addressed, can have serious consequences for the long-term success of the institution (McLaughlin, Brozovsky, & McLaughlin, 1998). According to Filkins, Kehoe, and McLaughlin (2001):

That retention is an important issue seems beyond debate, given that a variety of federal, state, and private consortia request the reporting of these data. Also retention data are being used as indicators of academic quality in the computation of institutional scores for the U.S. News and World Report annual college rankings. (p. 3)

Assessment Instruments

Surveys are an integral part of university assessment and evaluation activities. Instructor and course evaluation questionnaires administered at the end of each course, program evaluation questionnaires administered to seniors prior to graduation, and alumni surveys are the primary sources of student assessment data. For example, at the University of Illinois at Urbana-Champaign (2004), the format of the instructor and course