Chapter 5.7
Barriers to and Strategies for Faculty Integration of IT

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INTRODUCTION

At most institutions of higher education, faculty members wear many "hats." Among other responsibilities, they are expected to teach, conduct research, and participate in institutional and public service. Within the teaching realm, faculty members have always had multiple responsibilities. For example, in addition to being content experts, they may need to become course design, assessment, communication, community or interaction experts. Instructors can be described as architects, consultants, resources, reviewers, and role models (Oblinger & Hawkins, 2006). It is primarily (though not exclusively) in the teaching realm where instructional technology (IT) is relevant. The more that faculty utilize IT, the more the non-content aspects of teaching become salient.

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Depending on level of faculty expertise, asking them to increase the time and effort they put into their teaching might reduce the time and effort they can devote to research, service, and other institutional requirements and responsibilities. Why should they, especially if there is very little acknowledgment or tenure/promotion credit given for incorporating IT into their teaching? This is, in part, why many faculty members may have to be dragged "kicking and screaming" into using these technologies.

BACKGROUND

To address the predicament faced by faculty, it would be helpful to provide some guidelines on how to balance multiple roles (and the time and effort required). However, there do not appear to be any models that deal with this challenge. One

way to help understand the process of IT adoption is to consider the different roles or positions of individual faculty members. For example, non-users of IT face a much steeper learning curve than do instructors who have partially or fully integrated IT into their teaching. Learning to use IT might, therefore, be thought of as a socialization process.

In their model of socialization to groups, psychologists Moreland and Levine (2000) highlight the importance of the processes of evaluation, commitment, and role transition. In particular, in order to acquire a new identity as a group member, an individual must pass from being a prospective member to a new member to a full member. This passage is a function of how both the group and individual evaluate each other, their respective levels of commitment to each other, and the eventual transition in roles as the individual passes into and through the group.

For purposes of this chapter, we assume that higher education faculty go through a similar socialization process with IT integration. In particular, they must first evaluate the IT options available to them and determine if using those options is feasible. If their commitment to integrating IT into their teaching is high enough, they may begin learning about those options, depending on the support and resources of their institution. This learning process might shift the instructor's role from a prospective user to a new user and eventually to a full user of IT. The barriers to IT integration vary depending on the user roles that faculty play in this socialization process, how they evaluate IT, their own and their institution's levels of commitment to its use, and their IT learning curve. Table 1 presents a developmental model of faculty integration of IT loosely based on Moreland and Levine's (2000) group socialization model.

Both non-users and prospective users of IT may not adopt it for several reasons. They may negatively evaluate the use of IT, lack the time and effort necessary to commit to its use, or fear the steep learning curve that awaits their efforts to integrate IT into their teaching. New IT users are more likely to evaluate its use favorably and to have more commitment to using it, yet will still have a steep learning curve. Of course, if new users' initial experiences are negative, they will be less likely to increase their commitment to and use of IT. Experienced users will typically show positive evaluations, high levels of commitment, and less steep learning curves. However, with each of these roles, there are potential barriers that limit the initial or continued integration of IT into faculty members' teaching.

PERCEIVED BARRIERS

Even assuming adequate levels of training, support, and access, there are many barriers to faculty members' adoption and integration of instructional technologies. Table 2 lists some of the major technology-related and academic-related barriers to IT use in higher education.

Prospective IT users may have the misconception that they should learn about and use IT because it makes teaching and learning more convenient. This may be true to some extent, but it is no more true than the claim that instructors use a textbook

Table 1. Developmental model of faculty integration of IT

Role	Evaluation	Commitment	Learning Curve
Non-user	Negative or neutral	Low	Very Steep
Prospective user	Negative, neutral, or positive	Low to medium	Very Steep
New user	Negative, neutral, or positive	Medium to high	Steep
Experienced user	Positive	High	Moderately steep