Faculty and administrative strategies for the effective implementation of distance education

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Abstract
Over the past several decades, professionals in the field of instructional technology have witnessed a progression of varying “technologies” that can be utilized for the presentation of educational materials to students in a variety of environments. These technologies have included 16mm films, educational filmstrips, 35mm slides, instructional videotapes, computers, and computer-based instruction, to name a few. While the specific hardware and software varied significantly over time, these systems generally focused on the delivery of educational materials to students within traditional institutions learning through group-based or individualized instruction.

Within the past several years, however, there has been a re-birth of one type of education—distance education—specifically designed for students who choose to learn at some distance from a formal institution. While there are a variety of options available within this educational format, it typically allows students to study at their own pace, at their own chosen time, and using materials that are specifically designed for learning at a distance from formal teachers, instructors, and classrooms. This type of learning was originally provided primarily through correspondence study (with the written materials sent back and forth between instructor and students), while current materials are generally now provided via computer, video, or the World Wide Web.

The purpose of the present article is to describe relevant issues in this field as well as various related strategies which may be utilized by faculty and academic administrators to support the appropriate use of this educational format. The discussion of these strategies is particularly relevant at this time given the increasing availability of many new technologies, the mounting pressure on educational institutions to be cost effective in their delivery of instruction, and the growing interest in providing quality education to students who are not easily able to travel to a traditional campus or school location.
Description of distance education

Historically, distance education has been utilized to provide instructional access to adult students living in remote areas where traditional education is not available (Hawkins, 1999). This form of education is generally learner-centered, where students are active participants in the learning process which is carried out over some distance. This system also provides an overall focus on facilitated learning, with the instructor augmenting previously prepared instructional materials with a variety of appropriate learning strategies. Finally, various forms of technology are utilized to overcome the time and distance issues involved with this type of learning (Beaudoin, 1990).

Faculty members have always had a significant, but unique, role within this form of education. Beaudoin (1990) and Cini and Vilic (1999), for example, have described the following instructional activities for faculty involved with distance education:

- Coaching students throughout the learning process;
- Focusing on the instructional process in addition to the educational content;
- Encouraging students to be active learners;
- Designing and guiding experiences and activities; and
- Providing explanations, references, and reinforcement.

While many of these activities can provide motivation or incentives to faculty interested in working within distance education, they can also be threatening to graduates of traditional education programs or those who need to be more in control of the overall educational process (Beaudoin, 1990; Cini and Vilic, 1999).

Technology is also a significant part of distance education since it offers the capability to deliver educational materials in a variety of different formats while providing consistent instructional delivery to students with diverse learning needs. Over a number of years, technology in this area has included a wide variety of delivery systems (eg, telephone, television, radio, mail, fax, email, and listservs) with the content presented in a number of different instructional formats (eg, video, audio, graphics, and text) (Beaudoin, 1990; Swift, Wilson and Wayland, 1997).

The utilization of distance education, however, varies to some degree by the country where it originates and is delivered to students. For example, while Granger and Gulliver (1996) describe open and distance learning as the method of choice for providing training and education to a broad spectrum of learners, they also discuss the potential negative effects on long term growth in the United States and Canada due to their higher levels of localized educational control.

Finally, Bernath (1996) discusses three different types of educational institutions that can provide distance-based learning. These types include:

- Specialized institutions which have significant, long-term experience providing distance education via various correspondence methods;
Open and distance learning institutions that deliver instruction to degree-seeking students on a large scale (e.g., the Open University of the United Kingdom); and

Dual-mode universities which combine significant distance teaching concepts with more traditional core academic programs.

According to Bernath (1996), future development efforts in distance education will generally focus on combining specific distance-based teaching concepts from open and distance institutions with the research capabilities and teaching expertise available at conventional universities.

Advantages and disadvantages of distance education

Faculty from a variety of institutions have a number of reasons for becoming involved with distance education (Billings, Durham, Finke, Boland, Smith and Manz, 1994; Dillon, 1989; Landstrom, 1995). First, it allows them to offer courses beyond their traditional classroom walls without having to be in class at specific times each week. In some cases, it can also provide a new challenge or change of pace, and may also permit faculty to bring in “top names” from within their own disciplines through various technology options. Finally, it often allows faculty to work on a more equal basis with their students, since distance-based learners tend to be more disciplined, motivated, and mature than their traditional student counterparts.

In addition, there are several specific advantages for students involved with this form of education (Daugherty and Funke, 1998). These include several items related to instructional convenience (e.g., 24-hour access, no required traveling to class, no scheduling conflicts, etc), increased exposure to technology-based applications (email, listservs, etc), as well as the potential for an improved education through a higher degree of independent learning and increased amounts of available information. Distance education may also allow participating students to become stronger members of the global community through information exchange, access to numerous external sites, and increased communication with other class members who may be dispersed throughout the world.

However, there are also a number of disadvantages related to faculty involvement with this field (Billings et al., 1994; Martin, 1999). For example, courses offered via this format may involve increased planning and preparation time as well as significant changes in teaching styles and instructional strategies for the specific faculty involved. These courses may also result in a decrease in interpersonal contact with students, although technology may reduce this negative impact to some degree.

Many of these concerns have been summarized in a list of questions for faculty developed by Rompf (1999) including:

- Why leave the traditional classroom and deal with new situations?
- Why change something that works well?
- What if my teaching evaluations drop?
• What if my students are disadvantaged?
• How do I learn and work with all this technology?

Faculty issues with distance education
In conjunction with the general characteristics described above, there are a number of specific issues that should be considered by faculty before undertaking any significant distance education initiatives. One of the most important issues in this area is the overall institutional support for the development and implementation of distance education. Dillon and Walsh (1992), for example, have described institutions as being somewhat indifferent, inconsistent, and even skeptical of this form of education, and also providing resources in a piecemeal fashion. Schifter (2000) adds to these concerns, suggesting that there is a lack of technical support, release time, training, and grants for materials and expenses for distance education initiatives.

Faculty compensation is an additional area of concern for those who are considering (or currently working) in the distance education field. Specifically, institutions should determine (Saba, 1998):
• When compensation should be provided (during the development phase of a course and/or during its delivery to students),
• How this compensation should be given (direct payment, course release, and/or a percentage of royalties), and finally,
• A timeline for the negotiation of these items (during faculty recruitment and/or at a change of contract).

Issues related to time availability are also of significant interest to faculty, particularly as they relate to any possible reduction in research and publications (Wolcott, 1997). In addition to the potential negative effects on promotion and tenure, significant work in distance education could also adversely affect a faculty member's annual review process (and the resulting salary adjustments) since this type of work may not be highly valued by the institution as a whole. This issue is particularly problematic for new faculty members since the development of distance education materials is quite time consuming, which could significantly reduce the research output from these scholars early in their careers.

Faculty who teach in distance education environments may also face significant changes in their instructional styles. These potential changes in teaching may include items such as (Swift et al., 1997):
• Increased preparation time for various instructional materials,
• Higher needs for interactivity since students are located at distant sites,
• Adjustments in travel time including possibly teaching and/or meeting with students at remote sites,
• Changes in the use of technology including the need for contingency plans in case the primary technology system fails, and
• Revisions in student evaluation processes.

The final issue of interest to faculty who work in distance education relates to intellectual property rights and the specific ownership of the materials developed for this type of instruction. Current institutional policies are somewhat unclear in this area, with distance-based materials sometimes compared to inventions (where universities own patent rights), or textbooks (where faculty deal directly with publishers), or journal articles (where faculty often give copyrights directly to journals) (Guernsey and Young, 1998; Hawkins, 1999). This is a very complex issue since faculty worry about their potential loss of control over course content as well as their general academic freedom, even though the materials may actually be produced using some university systems and personnel (Guernsey and Young, 1998; Saba, 1998).

Administrative strategies for effective distance education

Based on the above issues, there are a number of strategies that can be implemented by educational administrators to make distance education more appealing and rewarding for the faculty who may be interested in working in this area. While institutions may be able to mandate the use of this new instructional tool, it will be far more effective if strategies such as those listed below are implemented in a timely and comprehensive manner.

One of the most important strategies relates to appropriate financial support for the development and delivery of distance education courses. This compensation could include a variety of options such as:

- Payment for all direct instructional costs such as faculty travel to off-sites, telecommunications, etc;
- Faculty release time before and/or during teaching (Daugherty and Funke, 1998);
- Payment for training and other related activities (Sedlak and Cartwright, 1997); and
- Travel support for distance education conferences (Olcott and Wright, 1995).

Strong support from upper administrative levels is also important since it may have a very significant effect in setting the tone toward distance education for the institution as a whole. This support should come from presidents, vice-presidents, and provosts (who provide overall resources and general policies) as well as deans and department heads (who provide specific resources and policies related to teaching, release time, and promotion and tenure). Direct support from other administrative units such as media organizations (for development and training) and continuing education (for student-related services) are also important for the success of a distance education program (Olcott and Wright, 1995).

Finally, the institution should develop policies and procedures to support distance education as a whole. These policies should include student-related procedures such as registration, financial aid, library services, transfer of credit, and student advising (Sedlak and Cartwright, 1997); faculty-related policies for training, course release, class size limits, and compensation (Billings et al., 1994; Olcott and Wright, 1995); as well as potential changes in policy related to promotion and tenure requirements or collective bargaining (Carter, 1996).
Faculty strategies for effective distance education

There are also a number of strategies that can be developed and implemented by the faculty. One of the most important of these is work within the broader university related to making this form of instruction more compatible with existing institutional systems and personnel. Faculty members, for example, can help to align distance education with the overall university mission through the acceptance of a greater range of scholarly activities (e.g., the development and use of non-traditional delivery systems). Other work by the faculty can help the university to define various copyright and intellectual property issues and to protect junior faculty, perhaps relieving them of distance education responsibilities until tenure (Wolcott, 1997).

Faculty members can also work through existing committee structures to maintain contact with administrators and support staff in order to keep everyone informed about distance education as a whole and to help make sure that these programs become more integrated with ongoing institutional and instructional activities (Yong and Wang, 1996). In a similar manner, faculty senates can work with administrators to assure that promotion and tenure policies support distance education initiatives and that the accreditation for various programs is not negatively affected by distance initiatives (Olcott and Wright, 1995).

Faculty training is another important aspect of preparing for new distance education initiatives. One of the most effective ways to begin this type of training is to provide faculty with general information about distance education, including the overall educational process, instructional models, appropriate technology, relevant research, and specific publications. This early training could also include showcases of faculty examples and experience, workshops, forums, and newsletters (Olcott and Wright, 1995), as well as an online mini-course which could provide an introduction to the online environment, its features, and activities (Cini and Vilic, 1999).

Additional faculty training for distance education can be provided in a number of different areas including:

- Reducing technology fears and anxiety (Cini and Vilic, 1999),
- Team teaching (Saba, 1998),
- Hands-on courseware development (Willis, 1998),
- Adapting materials and activities to new systems (Swift et al., 1997), and
- Instructional design (Moskal, Martin and Foshee, 1997).

As one of the last steps in this training process, faculty members can be carefully guided as they implement their new found skills in a specific course within their current curriculum. Daugherty and Funke (1998) provide a number of specific suggestions to assist in this process including:

- Planning for a large time expenditure,
- Investigating various options by looking at other courses and talking to others,
- Identifying a mentor for guidance during design and development,
• Starting small and relying on generic software tools,
• Keeping it initially simple and adding complexity over time,
• Making sure that all the targeted students have basic technology skills,
• Humanizing the course by focusing on the educational process, and
• Having contingency plans for any technology problems.

Conclusion
From a variety of different perspectives, it appears that distance education will continue to grow and reach increasing numbers of students who choose to learn at some distance from a traditional educational institution. Even with the concerns described above, this educational format can be very beneficial for faculty, administrators, and students who work in this environment.

With this expected growth and a potentially high level of financial return, it is extremely important that this non-traditional form of education become part of the mainstream within an educational institution. It is hoped that the issues and strategies discussed above will help in that process and assist faculty and administrators in their work to bring quality-based distance education to those students who wish to take advantage of this instructional option.

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