Planning ADE: Implications From The Literature On Student Perspectives

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Accepted and Revised March 25, 2005.

Abstract

English:

As the use of instructional technology continues to escalate, it is not surprising that universities are attempting to reach new student markets by using technology. Many of the benefits and barriers to asynchronous distance education (ADE) have been examined over the years; however, few have explored these constructs from the student's perspective. This manuscript points out some benefits of ADE: lower costs, increased flexibility, greater convenience, higher return on investments, and expanded opportunities. It also addresses possible obstacles: administrative policy and infrastructure issues, quality of technical instruction, inadequate support services, and intrinsic factors affecting student performance. An analysis of these pros and cons is a vital part of planning effective ADE. Suggestions for methods to improve the viability and quality of ADE from the student's perspective are offered using examples from the discipline of health education.

Key words: Distance Education, Program Planning, Asynchronous Distance Education

Introduction

As instructional technology application becomes more pervasive in society, the prevalence of distance education programs increases. Such programs have achieved varying levels of success. Success in a distance education program is clearly linked to the quality of instructional applications and the extent to which the courses and programs meet the unique problems, needs and capacity of the target audience.

Much of the discussion on the benefits and barriers of distance learning in higher education has focused on such administrative and faculty concerns as technology, faculty acceptance and program implementation factors. The purpose of this manuscript, however, is to view the benefits and barriers strictly from the student perspective as a backdrop of the program design process. More specifically, the authors will examine the benefits and barriers to enrolling in asynchronous (lack of concurrence in time) distance education (ADE) courses and programs, provide practical applications examples from the education and health education professions, and outline related guidelines for program planning. Suggestions to enhance the viability of such programs will also be offered.

Student benefits and barriers from participation in asynchronous distance education (ADE) programs are varied and often influenced by logistic, professional, social and family factors. Most successful asynchronous distance education programs employ some type of systematic marketing research activity to examine these barriers and benefits in the program design process. This type of market research does not focus solely on the "selling points" of the course or program, but includes an exchange of values and needs between the potential student pool and the distance education program planners. These student values and needs are often closely aligned with perceived barriers and benefits of ADE. For example, if students need a set of knowledge and skills to pass a certification exam, these tools are built into the distance education courseware. Or, if students do not have the ability to stream videos, other distance education delivery mechanisms are offered. A systematic and focused marketing research process helps the program planner to identify both the benefits and barriers for student participation in distance education programs.

Benefits And Planning Implications

The benefits and barriers cited later in this paper are based on literature in the field and the experience of the authors. This is done to provide a snapshot of ADE programs for health educators without the capacity to conduct an extensive needs assessment.

Many of the student benefits of using ADE courses process used to design distance education programs and can be categorized as:

- Convenience and Capacity
- Cost
- Flexible Learning
- Expanded Opportunities
- Return on Investment (ROI)

Convenience and Capacity

Often potential students are drawn to distance education programs because the students are "location bound," and a college program in their area of interest is not readily available within a reasonable driving distance. This problem becomes more acute as college-degree programs become more specialized. For example, a student may be able to find a graduate program in health education locally, but he might not be able to find a program specializing in school health education. In addition to logistic concerns, many potential students are "time bound." The nature of the economic climate today typically requires that most adults in a household work in order to maintain lifestyle expectations. With the normal workday extending to 5 p.m. and beyond, many potential distance education students find that their evenings are often devoted to community, household and child-rearing duties. Consequently, carving time from a busy and changing schedule often negates the ability to devote weeknights to attend classes. Yet, an ADE program allows students to complete coursework at the pace their schedules permit. The convenience found in self-direction of pace and depth of learning certainly appeals to some learners. The ability to work at a variety of locations can be a time-saving device. Additionally, the amount of time saved in avoiding the extraneous activities related to attending class makes the choice for ADE more attractive. Time spent in transit, parking, walking to class, and returning home could be more efficiently used to complete distance coursework. Obviously, convenience of distance education courses and programs is a key benefit for students. The convenience of an ADE program is clearly linked to the capacity of students and their attitudes toward this type of instruction. These conveniences work well for the mature, disciplined, motivated students, but program planners should keep in mind that the procrastinating, underachieving, uncommitted student might find these same items detriments. Careful screening of enrollees, perhaps with required faculty recommendations and an evaluation of previous scholastic performance, help to identify those students who may require a greater amount of support and those who can work independently. Also, prospective students should be asked to write a statement of purpose for enrolling in a distance education course. This statement will provide insight into their expectations and motivation.

Cost

Enrolling in distance education courses often reduces some of the ancillary costs associated with attending college. These savings range from the obvious such as parking and room and board, to the more concealed or oblique, including the waiver of certain fees, extra-curricular costs, and travel expenses. For most working adults, the cost of college is a major concern. Today's distance education students are discerning consumers who want to get the most for their educational dollar. They are asking for the stripped-down version of higher education that is not academically inferior and are unwilling to pay for activities, extras, and services they will not use (Levine & Sun, 2002). ADE courses and programs help students to manage their budgets better by minimizing or eliminating the traditional amenities without sacrificing quality. When comparing traditional, on-campus courses to distance, on-line modes of delivery, Navarro and Shoemaker (2000); Nunan (1999) found no significant difference in learning outcomes. "Media comparisons statistically almost guarantee that distance learners perform just as well as campus-based students" (Lockee, Burton, & Cross, 1999). It appears, therefore, that some of the cost of traditional on-campus instruction can be minimized without diminishing institutional quality.

Tuition and fee expenses are major considerations for working adults, therefore, special consideration should be paid by those developing the policies and practices of ADE. When possible, tuition should be set based on the results of the program design needs assessment process. This needs assessment will reveal "what the market will tolerate" related to tuition and fees. As ADE continues to become more popular, planners will need to address issues related to scholarship and financial aid. Currently, financial aid is somewhat limited. To qualify for the most widely available federal student loans, namely need-based subsidized and unsubsidized Stafford loans (current rate: 7.46% after you finish your course work), you must be enrolled at least half time (Smith, 1999). There is a need to provide scholarships, stipends and/or financial aid for distance education students.

Flexible Learning

Quality distance education programs actively explore strategies to transform traditional campus-based classroom instruction. Ideally, the quality of distance education is enhanced because the method of delivery requires the instructor to modify his or her traditional role, likely resulting in a more student-directed experience. Instead of being instructor-centered, the presenter becomes more like a dynamic coach, guiding the process, motivating the learner, and sparking interest in related topics. The instructor's primary role is to supply and clarify information skills and processes, deemed pertinent to the students' educational goal. For ADE, obviously face-to-face student discussions are not possible on-line, thus other strategies to replace discussions need to be implemented. There is a unique safety and intimacy from on-line interaction not found in a large class situation. With a chat-room environment comes a "personal," immediate interaction, but it can come with a degree of anonymity, if desired. The instructor truly becomes a facilitator/coach; this naturally results in the course having a student-centered focus rather than an instructor-centered format. Delay in interaction can benefit both students and instructors, for both have time to research and refine answers or to call on specialists. Maintaining structure while relinquishing a degree of academic control to learners allows the online-instructor to provide closer support for learners while encouraging greater interaction among participants in the course (Mahesh, McIsaac, 1999). This significant shift in delivery allows the student to take responsibility for the learning process and the ability to determine the depth and breadth of exploration.

For example, when the authors conducted an evaluation of a distance education master's degree program, they found that one of the primary reasons why students were attracted to distance education was the ability of the student to be self-directed and to study independently. Many distance education programs offer the prospect of exploring supplemental materials that are not part of the core curriculum. Following the discussion of how to enhance expertise in designing smoking cessation programs, a student might choose to spend more time probing the theories of behavior change with appropriate behavioral theory information linked to the instructional application. Additionally, the ability to move through course-related material at a pace determined by the student prevents stagnation. The advantage of being able to press on without waiting for the "rest of the class" to reach the same level of mastery saves the learner time that could be better used improving areas of weakness or exploring related topics of interest. Distance education offers adaptation to different learning styles and diverse levels of competence; this allows a customized learning environment in which the student determines how fast or how deeply to examine a topic (Perreault, Waldman & Ahao, 2002). This is a clear advantage over traditional classroom courses that are tied to a pre-determined curriculum content and time schedule.

When developing on-line courses, program planners need to offer technical support in the form of establishing chat-rooms and building web pages with links that will enhance the student's ability to explore other sources of information. Faculty mentors for ADE courses need to be carefully selected and trained. Faculty working with ADE students need to be sensitive to the timeliness and specificity needed to effectively mentor students.

Expanded Opportunities

Another advantage of distance education often missed by students enrolled in traditional college courses is the ability to eliminate the constraints of being "location-bound." This elimination provides the distance learner the opportunity to explore information from a wider range of academic leaders in a particular field. Perhaps a student in New York has an interest in diabetes and health disparities, but the leaders in these fields are located in Texas. With distance learning, the student could easily enroll in different courses, at different universities to create a course-work portfolio of substantial creditability. This flexibility allows students to take courses from the most distinguished and knowledgeable educators in a particular content area. Planners should, whenever possible, include recognized scholars and leaders in the field in ADE courseware. ADE provides an excellent opportunity to include the work of natural scholars in the field of study into the program application. Because the scholar does not need to be "on campus" the program planner can include these experts in the ADE courseware and link student to related background information and documents. Keep in mind, the use of experts in distance education programs is more applicable in asynchronous offering. The content of the expert can be captured electronically and viewed by students as needed. Obviously, it would be expensive and often impossible to have experts to interact with each student on an individual basis.

Distance education also opens other doors to allow for interaction among health professionals. Enrolling in a distance education course with other health educators allows the students the opportunity to gain from the experiences of other professionals in the field. In a survey designed to explore learner

satisfaction with distance education courses that used online postings, Stephanie Buckingham, summarizes the sentiments of one student involved in her study "… the other students were working in such a variety of practice settings that the experience (online learning) enabled me to learn about different areas of practice." (Buckingham, 2003) The enormous variety of settings available to health educators makes the use of distance education a real advantage in the learning process.

Return on Investment

Those with bachelor's degrees, as a general rule, tend to make more money during their lifetime than those without degrees. Also, those who secure master's degrees earn even more than people with bachelor's degrees. Thus, many ADE students can see a significant return on investment (ROI) across their lifespan. For example, in one southeastern state, public school health educators earn approximately $4500 more per year with the completion of a master's degree. Let's look at a case study example to highlight potential ROI.

> Barb Wire is a 35-year-old school health educator with two children. She enrolled in a distance education master's program that requires 33 hours and plans to complete the program over a two-year period. Each course costs $550 plus books, making the approximate cost of the program $6850 ($6050 for tuition and $800 for books.) With a $4500 pay raise, Barb will yield a return on her program expense in 1.52 years (keep in mind that this scenario does not account for tax credits related to educational expenses or tax liability on earned income.) So, if Barb works until she is 57, her long-term gain is $90,000 during her tenure as a teacher. If she retires on 50% of her salary and lives to the age of 72, her income gains during her retired years in $56,250.

Even considering the necessary costs associated with the ADE program—such as computer hardware, Internet access and paper expenses—the ROI from a master's degree is substantial.

Program planners can play a vital role in helping students see their potential return on investment. Providing cost benefit scenarios for potential students might enhance their understanding of the ROI a student could accrue from completion of a distance education program. The impact of financial aid availability should also be included in these ROI calculations.

BARRIERS

Although ADE may seem ideal for many students, it is not free of barriers. These obstacles to distance education can be categorized into several key areas:

- Technological Drawbacks
- Administrative Support and Student Services
- Instructional Quality
- Support Services
- Requisite Student Skills

Technological Drawbacks

In order to complete asynchronous distance education courses, students need a reasonably high degree of computer and technology skills. Additionally, they need the appropriate hardware necessary to access course materials and the instructor. Research by due to computer-related problems than because of instructor interaction or course content (Mason and Weller, 2000). If on-line video instruction is offered, students need computer equipment and connections sufficient to stream the video files. Program designers often possess technological skills and have equipment that is not present for a critical mass of the target audience. For the student to achieve success, offered programs need to be user-friendly and technologically simple. Sometimes students overestimate their computer expertise when enrolling in a distance education course, and this necessitates the need for on-line help desks and student-tutorials (Perreault, Waldman & Ahao, 2002). Limited equipment and training present significant barriers for students enrolling in ADE. Keeping this in mind, program planners should strive to design courses such that computer equipment and standard software requirements are accessible by most students. Student tutorials and on-line help should be an integral part of every distance education offering. A "frequently asked question" link on your website is often a useful feature for many ADE programs. Program planners should consider technical support staff needs when designing programs. Lack of appropriate technological skills, support and proper equipment remain barriers for students seeking distance education options.

Administrative Support and Student Services

At its best, a successful distance education plan should be integrated into the university's vision and a strategic plan, which outlines the purpose and the goals of the ADE program should be clearly articulated. This concept holds especially true from the perspective of the student participating in the course. Although many universities have added

continuing education and distance education activities as "core mission", the day-to-day procedures to admit, enroll, track and graduate participants are still geared to resident students. The bureaucratic rules and policies, both written and unwritten, that fail to account for the unique circumstances of distance education cause quite a hassle for students. Many students completing asynchronous distance education courses begin and complete courses outside of the traditional semester or term format. Universities that have not modified their student records procedures may give "I" (representing an incomplete grade) to distance education students. This creates a false impression of the student's progress toward a degree, especially, if the "I" grade remains on the transcript. Clearly, several barriers of administrative support must be addressed.

Planners with a clearly defined vision for ADE will be able to foresee potential problems and to avoid them. As part of the needs assessment process, program planners should carefully examine university policies and procedures to determine those that are not distance education friendly. Also, the use of qualitative evaluation measures with enrolled students might help pinpoint problem areas. The early years of distance education provided an exploratory approach to offering online education by faculty members who desired to delve into cyber-education. Consequently, many of the current programs have evolved from a bottoms-up approach that lacks a systemic perspective (Rowley and Sherman, 2001). Policies and procedures should be examined to identify those that support and hinder ADE. Universities are often bound by traditions that support the resident instruction model. Administrative gridlock can be reduced by a careful examination of university policies and procedures with an eye toward the needs of the distance education student.

Instructional Quality

An expressed concern of potential distance education students relates directly to "quality of instruction" issues. Students ask a variety of questions such as:

- Is this course/program the same quality as the on-campus program?
- Will I have open access to program faculty?
- Will I be able to discuss instructional material, methods and activities with my peers?

Research on the relationship between quality and ADE and distance education programs has yielded some basic information. First, distance education students may be willing to pay a premium for courses as long as they are of comparable quality to those offered on campus (Sevier, 2003). Second, interaction between the student and instructor appears to be a pivotal issue for student satisfaction in on-line courses. Students rate their online experience as more favorable when their personal participation is greater (Stein, 2004). Third, participants cite a lack of timely feedback and minimal teacher contact as common barriers when evaluating course satisfaction (Galusha, 1998). Fourth, the quality and integrity of the educational process is grounded in two-way communication; thus, student feedback is a critical component of the distance education process. (Hillesheim,1998). Students definitely expect and deserve a quality interactive program.

The online instructor's role takes on a heightened complexity in the distance education arena. Crucial to the instructor's effectiveness is the ability to adeptly communicate; however, it is just one of many characteristics necessary to be an effective online educator (Young and Shaw, 1999). The quality control guidelines developed by the American Council on Education (2003) provide program planners with suggestions to endure quality control.

For most online students the instructor is perceived as an important source of support for academic and administrative matters (Cain, Marrara, Pitre and Armour, 2003). A key indicator of the quality of an ADE program is the quality of the interaction between student and faculty. Program designers, therefore, may need to incorporate an additional level of training to ensure that instructors are competent to handle this responsibility to motivate and nurture students. Doing so will create a sense of community where students feel free to participate. "Online educators who understand that safe, nurturing environments are foremost in contributing to learners' happiness, sense of comfort and ultimately rates of completion, place the creation of community high on their list or priorities" (Conrad, 2002 p. 9). The sense of community is enhanced when students feel like they are an important and integral part of the learning process; instilling this concept is easily accomplished through frequent positive feedback from the instructor. "In the absence of nonverbal cues, instructors… noted the importance in providing increased levels of reinforcement" (Kennedy, 2002 p. 412). Frequent and positive feedback has the ability to act as motivation for students to become more involved, thus, more satisfied with the educational process. When comparing types of feedback and student satisfaction, Hubschman (1999) discovered that participants who received more mentoring types

of messages (personal and caring) when communicating with their instructor, had higher levels of satisfaction about being members of their academic program as opposed to the control group who received neutral messages that conveyed general information. It seems evident that the level of an instructor's involvement and personal contact with the distance learner is correlated to student satisfaction and potential educational success in the on-line course. Coordinators for ADE must take into account the involvement and responsibility of the course providers and see that they are sufficiently trained for their uniquely complex roles.

Support Services

As the market for distance education becomes more competitive, program planners will need to be prepared to provide new enticements that will attract students to their offerings. It is most probable that these enticements will come in the form of student support services. ADE students need to know that they have equal access to student support services provided to residence students such as: financial aid, automated registration, enrollment, fee payment, grade access, website/email and library services. These support services, which provide assistance and guidance beyond the learning material, build a sense of community for the distance education student. According to Mason and Weller (2000) students provided with support services are more likely to succeed on their online distance education classes. Students appreciate the fact that they are considered part of the campus population even though they are not resident students. A key selling point for a distance education program, designed by one of the co-authors of this paper, was that students enrolled in the program were allowed to purchase student football and basketball tickets. Although very few distance education students took advantage of this service, the fact that they could do so made students feel that they were valued members of the campus community.

Distance education does not have to exist in an "internet vacuum;" student services may be offered using toll-free telephone numbers which can allow the student contact with the university on a fairly personal level (Sevier, 2003). This can enhance the distance learner's sense of partnership, thereby minimizing a potential barrier to on-line courses and programs.

Most of the planning for distance education is centered on the course offerings, and the consideration of student support services becomes an after-thought. Current distance education students are accessing about 10% of the student services available to the "on campus" student (Levy and Beaulieu, 2003). Typically these services include admissions, catalog, library resources, registration and scheduling. Scholarships, student clubs, online tutoring, testing centers and disability services represent some of the potential areas of expansion in student support. Based on the results of their study, Levy and Beaulieu suggest "colleges need to consider all the student services before implementation and not plan and implement one service at a time" (Levy, and Beaulieu, 2003). The advance planning which establishes an entire program of services will eliminate many course complications. Offering additional services will require considerable preparation on the part of program planners, but the addition of student support services will enhance the learning experience of the on-line student. Stages of providing on-line support have been suggested by Johnstone (2002); these include:

1) Creating Web pages that provide information
2) Linking the Web pages to forms and support service contacts
3) Making available online access to student records
4) Providing counseling through the use of chat-rooms.

Levy and Beaulieu, (2003) suggest that distance education students who receive on-line support services are more likely to succeed in their courses. On-line success is the fundamental that insures the viability of distance education. Word-of-mouth marketing is a powerful tool in the promotion of distance courses, for satisfied consumers, have the opportunity to be a driving force behind support for online courses and programs. One simple way to help students to gain better access to student support services is to weave these issues and concerns into the needs assessment process used to design and update the program. Assessment will pinpoint problems and solutions from the student's perspective. Acting on this information will ameliorate many of the student support problems inherent in asynchronous distance education programs.

Requisite Student Skills

Taking courses through distance education is a new experience for most students; therefore, fear of the unknown, questions about personal motivation and lack of role models are barriers for some students. Retention rates for on-line courses are often worse than for conventional learning; recent studies indicate that about 30% of participants will successfully complete their distance courses

(Simpson, 2004). The lack of self-discipline is perhaps the most difficult barrier to overcome. Students find, however, that once a subject is completed, the satisfaction prompts them to enroll in another course. As they continue to use the distance education venue, they become more confident in their abilities, making the entire process seem less overwhelming (Wilson, Glassford, Drupa, Masuda, Wild, Plotnikoff, Ranie and Stewart, 2000). These intrinsic factors are often overlooked, but they remain true impediments for many students.

Student fears about course expectations and their ability to perform at an acceptable level are issues that program planners should strive to eliminate. The pre-admission process should provide information to triage students in order to determine those needing special attention. At some universities, students have the ability to access the entire course prior to registration, thus, allowing the student to have full knowledge of the expectations before enrollment in the course. Previewing courses will empower the enrollees to select the ADE courses that they believe will provide a significant learning experience. The importance of student interaction cannot be over emphasized. Interaction is defined as an interplay and exchange in which individual groups influence each other (Wagner, 1994). Enabling learners to have student-to-student interaction, via posting and answering questions in chat-rooms or at posting sites, enhances student skills while it creates a great sense of community among the distance education participants. The formation of this bond between "classmates" brings a greater depth and richness to the learning process. In a study conducted by Wilson, Varnhagen, Krupa, Dasprzak, Hunting and Taylor (2003) researchers found that the degree of participation and engagement among online-learners was greater than that of the "on-campus" students when discussions were held. One online course provider was quoted as saying:

"I just found the discussion was richer on the Web. I think it was because people had more time to reflect on the question because you're not all in it for a hour and a half thinking about it all at the same time. People went in at different points and then they reflected on each other's contribution and it provided more depth."(Wilson, Varnhagen, Krupa, Dasprzak, Hunting and Taylor, 2003)

Activities, which allow students to become actively involved in the learning process, yield a more successful learning experience. Challenging students to construct their own knowledge in a self-directing manner results in a greater student responsibility in the learning process (Rovai and Barnum, 2003). An instructor may choose to form peer-to-peer support systems, which allow students to exchange information on a more personal level. Enhancing the distance learner's experience can also be accomplished through the special student-instructor relationship. The student certainly benefits from all these self-strengthening experiences.

Summary and Key Resources

In order to effectively encourage participation in ADE, program planners and coordinators need to focus on promoting the benefits of asynchronous distance education while diminishing the barriers. Table 1 summarizes some of the ways the beneficial components of distance education can be further enhanced. Amelioration of barriers is the primary objective for planners of programs. Accentuating the positives and minimizing the perceived barriers associated with distance education are central to successful planning. Numerous well-crafted sets of guidelines are available to assist program planners in the designer of distance education programs. For example, the American council on Education has developed a set of guiding principles (http://www.acenet.edu/clll/dist_learning/dl_principlesIntro.cfm) to address the qualities that should be characterized in distance education programs. The Indiana Higher Education Telecommunication System has developed guiding principles for faculty involves in distance learning activities (http://wwww.ihets.org/progserv/education/distance/guiding_principles) and the American Distance Education Consortium has developed a set of "Guiding Principles in Distance Education Teaching and Learning" (http://www.adec.edu/admin/papers/distance-teaching_principles.html). These sets of guidelines are thoughtful and thorough; providing the program planner with appropriate tenets of distance education to help ensure quality control. For example, the American Council on Education's Guiding Principles provide suggestions to guide the "learning design", "learner support", "organizational commitment", "learning outcomes" and "technology aspect" of distance education courses and programs.

Table 2 summarizes areas of concern, which need to be anticipated and proactively addressed.

Table 1: Promotions of Benefits

CONSTRUCT	PROMOTE BENEFITS	APPLICATION
Convenience and Capacity	▪ Self directed learning pace ▪ Promote ability to work from a variety of locations ▪ Promote time savings	▪ Screen applicants based on previous self-directed scholastic performance ▪ Require faculty recommendations ▪ Clarify student expectations and purpose for enrollment in ADE program ▪ Treat ADE as a normal university function
Costs	▪ Reduce ancillary expenses ▪ Time savings	▪ Waive some required fees ▪ Set tuition based on market factors ▪ Address needs for financial aid ▪ Identify sources of scholarships and stipends
Flexible Learning	▪ Self-directed learning enhances depth, breadth, and speed of learning process ▪ Shifts from instructor-centered to student-centered presentation ▪ Instructor becomes facilitator /coach ▪ Modification of traditional teaching techniques ▪ Greater opportunity for instructor/ student and student/student interaction	▪ Redesign course material for ADE ▪ Careful selection and training of faculty mentors for ADE courses ▪ Utilize chat-rooms/on-line interactions ▪ Provide additional links to other resources ▪ Encourage interaction through student anonymity
Expanded Opportunities	▪ Allow for program specializations ▪ Promote the ability to take courses from the notable leaders in the field of a particular content area ▪ Promote ability to interact with others who share common positions in the health field to get their perspective	▪ Promote the academic credentials of ADE instructor ▪ Address need for providing most current information ▪ Integrate recognized leaders/scholars in the design of ADE courses ▪ Line students to key documents written by leaders/scholars
Return on Investment	▪ Promote the ability to increase earning potential	▪ Make available scholarships or stipend opportunities ▪ Design cost/benefit scenarios for students

Table 2: Amelioration of perceived barriers

CONSTRUCT	PRECEIVED BARRIERS	AMELORATION
Technological Drawbacks	• Lack of student skills • Lack of computer hard/software • Over-estimation of computer proficiency	• Keep program user friendly • Provide on-line help desks • Provide student tutorials
Administrative Support and Student Services	• ADE not part of university vision • Lack of marketing • Bureaucratic red tape	• Integrate into university's vision • Examine universities policies and procedures • Multi-disciplined course planners
Instructional Quality	• Concerns about quality of program • Concerns about access to faculty/peers • Need for student interaction • Concerns about a lack of timely -feedback	• Training for instructors • Create sense of community • Frequent feedback • Plan for complex roles of instructor • Use standard quality control guidelines
Support Services	• Need for equal access to support services	• Create sense of community • Expand availability of additional student perks • Develop sense of partnership • Establish entire program of offering additional services • Provide online support
Requisite student skills	• Fear of unknown • Lack of role models • Lack of personal motivation	• Increase the amount of active learning • Develop peer-to-peer relationships • Provide course preview /demonstration modules • Triage students prior to admission

Conclusion

Developing a strategic plan for the online distance learner necessitates careful planning, common sense and a commitment to provide specialized educational opportunities equivalent to those of the "on-campus" student. Designing distance education programs to suit the unique needs of the on-line learner is not an easy task, but it is sure to be a more and more important one. A commitment to developing a quality product that takes into account the needs of student interaction, the necessity for competent instructors and enticements through student services will augment viability and quality of ADE and therefore, assure its growth and continued future use.

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