This literature review analyses the variety of necessary support services for distance learners and the relevance of such variables as it relates to their progress in and completion of distance-delivered programs. Nonacademic variables for purposes of this review are defined as academic support, academic advising, library support, career advising, tutoring support, and mentoring support. Little data is available on the support needs of distance learners or the support services provided. There is a need to investigate Web-based academic support systems. If nothing else, distance education providers should insure that high quality services are being delivered to help distance learners achieve academically. (Contains 35 references.) (SLD)
Student Support Services at a Distance:
Are Institutions Meeting the Needs of Distance Learners?
Abstract
A strong need exists to explore nonacademic issues as they pertain to the academic success and retention of distance education students. This literature review analyzes the variety of necessary support services for distance learners and the relevance of such variables as it relates to their progress in and completion of distance-delivered programs. Nonacademic variables for the purpose of this review are defined as academic support, academic advising, library support, career advising, tutoring support, and mentoring support.

Over the last decade there has been tremendous growth in the area of distance education. The use of technology has changed the way course content is being delivered in higher education (Hollenbeck, 1998; Lundin, 1996; Tuovinen, 2000; Yacci, 2000; Zav, 2001). Because of technology, there has been tremendous growth in the number of students taking distance education courses.

Much of the literature regarding distance education investigates instructional components of such systems; however, there are few studies that have investigated nonacademic issues (Everett, 1999; Upcraft, Terenzini, & Kruger, 2000). A strong need exists to explore nonacademic issues as they pertain to the academic success and retention of students. Nonacademic variables for the purpose of this review are defined as academic support, academic advising, library support, tutoring support, and mentoring support.
Support Services for Distance Learners

Those in student affairs know that a great deal of learning takes place outside of the classroom through programs like counseling and advising services and participation in student activities. However, the issue of providing services to distance learners has been addressed only tangentially in the literature. Because of the growing popularity of online distance education, there is a need to examine the support services offered to distance learners. Learning at a distance has raised questions about the services offered to students. However, much of the literature that discusses support services for distance learners are primarily descriptive reports (Sampson, 1999). Student support services such as academic advising, career advising, and tutoring are offered to students who participate in traditional modes of post-secondary education, and providing such services has been recognized to contribute to the overall learning experiences of the students.

In particular, some theorists have recognized that student satisfaction of academic services has been linked to educational outcomes (Astin, 1993; Tinto, 1993). The type and use of these services may significantly improve the educational experience of the student. The level of involvement in academic programs such as tutoring, time spent at the library studying, and career counseling has a positive association with the level of satisfaction with their college experience (Astin).

Grades are also associated with satisfaction levels. If students have high levels of satisfaction with these services, the more likely they are to have higher grades (Astin, 1993). While there is not substantial evidence leading to the conclusion that a student's decision to drop out is associated with levels of satisfaction, there is a linkage showing that the level of satisfaction may increase the likelihood of degree completion.
Traditional student experiences in academic support programs provide useful clues on why some students decide to drop out.

For institutions to invest financial resources into academic programs have been proven to be worthwhile. Astin (1993) found that there is a direct association between the source measure (e.g., books, labs) and educational outcome measure (e.g., grades, retention). When institutions provide monetary and human capital into academic support programs, educational benefits are likely to be found. However, this has yet to be determined with distance learners.

Advising

A student’s ability to succeed academically is influenced by the quality of academic advising received. Studies have shown that one of the greatest concerns among many college students is the availability of good academic advising (Cabrera, Nora, & Castaneda, 1993; Creamer, 1980). One of the tasks of academic advising is for the student to decide from among a list of alternatives, the most appropriate direction to take in planning a program of study (Gordon, 1995). Studies similar to Watson’s (1994) have shown that that colleges’ and universities’ advising procedures can have a profound effect on the subsequent academic performance levels of students (Cabrera et al., 1993; Friedman, 2001). The quality of advising is dependent on the level of interaction between the academic advisor and student (Shields, 1994).

Academic advising is considered an important activity for distance education students as well (Curry, Baldwin, & Sharpe, 1998). Although electronic advising formats such as videoconferences and online computer conferences are not common, the use of these activities is presumed to grow as technology becomes increasingly sophisticated
and available. Nonetheless, there is less known about how online advising can contribute to the academic success of the distance learner and there appears to be few scholars who have attempted to explore this area.

*Library Resources*

Providing library resources to students is another form of academic support. The use of online library services is one of the most popular uses of the web among college students (Scherer, 1997). Library services help to address the instructional, research, and service needs of students. Traditionally, libraries have provided users with assistance in locating and obtaining information resources (Davis-Underwood & Lee, 1994). In addition, librarians provide group instruction to students, assist with library-related assignments, and offer classes in the use of specific information resources.

Traditional on-campus students have benefited greatly from the use of such services. The amount of use of library support services that students on the campuses of colleges and universities have been known to contribute to the academic success and retention of students (Davis-Underwood & Lee). Erazo and Derlin (1995) suggest that the same may be true for distance learners. It is presumed that an integral component of successful distance learning programs is the extent and strength of the library support that is offered. Such services that might meet the demands of distance learning students include digitizing libraries, offering several options of electronic library support, teaching and providing online searching and tutorials, providing CD ROM databases, and the use of inter-library loans (Erazo & Derlin).

*Tutoring*
Another service that assists students academically is tutoring. Tutoring is seen as a means to provide one-on-one or group academic assistance to students outside of the traditional classroom setting. There are two types of classifications for tutors: peer and professional (Komives & Woodard, 1996). Peer tutors are typically undergraduates or graduates who have achieved high academically in particular disciplines. Professional tutors are those who are considered experts in their area of discipline and are typically compensated for their expertise.

The impacts of tutorial services have been found to be beneficial to the traditional learner in face-to-face interaction (Astin, 1985). In a three-year longitudinal study of student support service programs prepared for the U.S. Department of Education, it was found that peer tutoring during the first year of college has a positive and statistically significant impact on students in each of three outcome areas: grades, credits, and retention (Weinsheimer, 1998). In addition, the study identified five key issues in the design and implementation of tutorial services: (1) institutional context, or awareness of how the program's structure influences student learning and persistence, as well as how tutorial services contribute to the campus climate; (2) tutor selection, training, and support; (3) program evaluation and outcomes; evaluations can focus on short-term student outcomes directly related to tutoring (grades and grade-point averages) as well as longer term outcomes such as retention; (4) non-cognitive factors such as the ability of staff to assess students' initial reactions to academic difficulties and their readiness to make changes; (5) cognitive factors; successful programs also provide course content while helping to improve student learning styles.
Less is known about the effects of tutorial services that are provided to distance learners. The literature is fairly descriptive. Those studies that have attempted to look at web-based tutorial services have investigated the use of email as a method to provide asynchronous writing assistance (Hedrick, McGee, & Mittag, 2000) or looked at different types of web-based software to deliver such services (Moe, 2000). Hendricks et al (2000) discussed the impacts of providing one-on-one tutoring for pre-service teachers through e-mail communication. Descriptive statistics revealed that pre-service teachers were able to benefit in reading and mathematics. This was determined by analyzing the field text messages of the interaction that occurred during the duration of the course. However, participants involved in the study did have access to their tutors, and were not true distance learners in the sense of distance and time from the main campus.

Moe (2000) investigated the use of a web-based software program called Smarthinking, which allows synchronous interaction between tutors and students. The software allows tutors to use a combination of live chat, whiteboards, and application sharing. Overall, students were satisfied with the online tutoring system, and favorably rated future use of it. Although the tutoring system was rated favorably, the investigators did not examine the academic achievement levels of students after using the service, which is an integral component of measuring the effectiveness of tutoring (Astin, 1985). In either case, neither of the studies seem to be extensive enough, unveiling the growth and outcomes of students utilizing these services.

Mentoring

The last academic support service to be discussed in this review is mentoring. Mentors serve as a role model to protégés; someone they can look up to and receive
advice. This relationship may involve both an informal and formal component (Komives & Woodard, 1996). The informal dimension may involve developing a personal relationship that goes beyond the typical advising role, while the more formal role is more likely to provide professional advice. This relationship can either be short term or long term, depending on the relationship and amount of assistance that the protégé needs.

Typically, protégés select mentors based on their interest. In higher education, it is likely to be determined by academic interest. The reason for such selection basis is that mentors often serve as career advisors to students, assisting them with their career goals (Komives & Woodard, 1996). However, there are many programs that have peer-mentoring systems setup, which has also been successful (Glass & Walter, 2000). In these programs, students can be paired up according to academic interest as well. Because of the recent experiences that peer mentors have been exposed to, they are likely to know the tendencies of instructors and academic departments, just as well as a professional advisor (Lahman, 1999). However, the role of a peer mentor is likely to focus on the transitional needs of students, whereas the professional mentor is likely to assist their students with career-related activities (Komives & Woodard, 1996).

Mentoring programs have contributed to the growth and academic success of traditional students (Beisser, Kurth, & Reinhart, 1997) as well as members of the minority community (Highsmith, Denes, & Pierre, 1998). Conversely, few studies have investigated if these same results are likely to occur with distance learners (Hakes, 1993). Of those authors who have attempted to look at mentoring programs for distances learners either compared compressed video mentoring to face-to-face mentoring (Hakes) or examined design considerations for web-based mentoring programs (Sumner, 1998).
To say the least, there is a great deal of room to explore how web-based mentoring can affect distance learner student retention.

Summary

Student support services have been found to be beneficial to on-campus students. Such services have been identified to help students achieve academically, as well as help them towards their degree attainment (Maxwell, 1997). However, the same cannot be said if such services will have the same impact on distance learners. With the growth of the Internet and online classes, it is wise to say that more research is needed in this area. Most of the studies reviewing web-based services for distance learners are primarily descriptive (Engstrom, 1997). For example, they explain how to implement an online service (Sumner, 1998) or examine software applications that can help deliver such services (Menlove, Hansford, & Lignugaris-Kraft, 2000).

There are many unanswered questions surrounding the future implications that web-based academic services can have on distance learners. Such questions are: Can web-based academic services help distance learners achieve academically? What interactions need to take place to make distance learners satisfied with such services? Can academic support services have an impact on the retention of online distance learners? Are there differences in the academic support needs of distance learners who are near campus versus those farther away? Similar to the development traditional campus based support services; there is an eminent need to further investigate web-based academic support systems. If nothing else, distance education providers should insure that high quality services are being delivered to help distance learners achieve academically.
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