Course Completion Rates among Distance Learners: Identifying Possible Methods to Improve Retention

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Abstract

Many colleges continue to report high attrition rates among distance education students. This study included a survey of students at Coastline Community College to determine why they dropped or failed their distance-learning courses and to identify methods that might improve their success and retention. Questionnaires were sent to a group of randomly selected students who responded to five general topics. Support service options in the survey focused on supplemental tutoring and pre-course orientation sessions. Results were cross tabulated by student performance (i.e., success, drop, failure). Fifty-nine percent of the respondents said they would use free tutoring, either onsite or online. Forty-six percent felt they would benefit by orientations. Online tutoring services and a distance learning student success course were developed and offered at Coastline with mixed results.

Introduction

As colleges offer more distance education courses and student enrollment in these courses continues to rise (Sikora & Carroll, 2002), educators continue to report course drop out and failure rates among distance learners that are significantly higher than those for traditional, campus-based students (Carnevale, 2000b; Carr, 2000; Pierrakeas, 2004; Scalese, 2001; Simpson, 2004; Tresman, 2002; Wojciechowski & Palmer, 2005). While detailed comparisons are scarce, there is evidence to support the existence of higher withdrawal rates among these nontraditional students (Chyung, 2001; Frew & Weber, 1995; Garrison, 1987; Grayson, 1997; Morgan & Tam, 1999; Nelson, 1999; Pugliese, 1994).

Over the last few decades, research on college success and retention has led to a variety of responses, including first-year seminars, learning communities, and "early alert" programs. Many of these remedies have been shown to increase the persistence of traditional undergraduates in "brick and mortar" classrooms (Barefoot, Warnock, Dickinson, Richardson, & Roberts, 1998). Comparatively less research has been done on methods to improve the success and retention of nontraditional students, especially those learning off campus.

The purpose of this study was to determine why distance-learning (DL) students at Coastline Community College (Fountain Valley, California) dropped or failed courses and to identify methods and services that might improve their success. Coastline is a two-year community college serving primarily nontraditional students, including young adults attending part-time and older returning students. Through its distance-learning department, Coastline offers video-based telecourses, Internet/online courses, cable TV classes, and independent study courses delivered

Literature Review

Much of the research on student retention and attrition references Vincent Tinto's model (1975, 1993). The model presents a series of causal factors related in a longitudinal process. Student attributes and family background affect initial levels of commitment to goals and the institution. These in turn affect academic performance and interaction with peers and faculty, which in turn lead a student to be more or less "integrated" into the academic and social systems of the institution. Tinto proposed that a student who is more integrated is more likely to persist. Subsequent research has supported Tinto's theory in explaining the behavior of traditional, classroom-based students at residential colleges, although the importance of individual causal variables has differed between studies. For example, Terenzini and Pascarella (1980) found that frequency of contact with faculty made the largest, individual contribution to the model, while Munro (1981) found that student educational goals and those of their parents—part of attributes and background—had greater influence than peer or faculty interactions.

Tinto's model challenges researchers in distance learning to find appropriate measures for interaction. For instance, Sweet (1986) adapted Tinto's model to study "completing" and "noncompleting" students at The Open Learning Institute in British Columbia . Adding ratings of telephone exchanges between students and course tutors, the adapted model explained 32% of the total variance in student drop/withdrawal decisions. Telephone interaction was positively related to persistence, although the correlation was not strong.

Distance learners typically attend college part time, and many never intend to complete an entire program of study (Bååth, 1984b; Grayson, 1997; Holmberg, 1995; Kember, 1989; Yorke, 2004). For this reason, research on drop out in distance education often focuses on individual course completion rates rather than program or institutional attrition (Kemp, 2002). But, with this focus, individual course characteristics could play a greater role in withdrawal decisions.

In a survey of students who enrolled in correspondence business courses, Bernard and Amundsen (1989) tested Tinto's model with Sweet's adaptation, but added variables regarding individual courses and communication with peers. Their model explained a larger percentage of total variance between completers and noncompleters (between 40 and 58%, depending on the course). Other significant factors included prior experience with distance learning and reasons for taking the course.

Nevertheless, others have questioned the validity of Tinto's model when applied to nontraditional learners and some have offered alternative models (Bean & Metzner, 1985; Kember, 1989; Rovai, 2003; Scalese, 2001; Taylor, 1986; Yorke, 2004). Distance learning students are typically older, attend school part-time, and often juggle a full-time job along with family responsibilities (Fjortoft, 1995; Galusha, 1997; Holmberg, 1995; McGivney, 2004). This can serve to increase the importance of factors *external* to the academic environment. In fact, Ostman and Wagner (1987) found "lack of time" to be the single most commonly cited reason for dropping out offered by distance learners. But Garland (1993b), using personal interviews, also found "deeper" reasons for withdrawal, such as poor direction and feedback on assignments, problems with time management, and students trying to accomplish too much.

Other factors found to explain DL student attrition include general college preparation, lack of

guidance and information prior to enrollment, perceived lack of support from faculty, and difficulties in contacting them (Brown, 1996; Cookson, 1989; Frew & Weber, 1995; Pierrakeas, 2004; Tresman, 2002). Other researchers have found that student characteristics such as computer literacy and confidence, reading ability, and time management skills play a role in successful course completion (Miller, Rainer, & Corely, 2003; Osborn, 2001; Powell, Conway, & Ross, 1990; Rovai, 2003).

Some educators report that students may take DL courses because they think these courses will be easier (Carnevale, 2000b). This expectation could explain the attrition of first-time distance learners when they realize these classes require the same amount of work demanded by traditional courses.

Methods to Improve Course Completion

Researchers have paid a substantial amount of attention to distance learner attrition, but less work has been done on specific remedies to improve the persistence of these students. While many possible solutions have been proposed, few have been tested empirically. And, the research that does exist is not in complete agreement. Kember (1990) and Powell et al. (1990) make the case that persistence and drop out are influenced by many different variables, many of which affect each other. So, studies that focus on single variables can be misleading or fruitless.

Still, a common criticism of distance learning is the lack of personal contact and immediate instructor feedback that some students prefer (Brown, 1996; Carr, 2000; Garland, 1993a; McGivney, 2004; Minich, 1996). One of the most frequently stated reasons for dropout is the sense of isolation experienced by students studying off campus (Galusha, 1997; Garrison, 1987; Gibson & Graff, 1992; Heverly, 1999; Kerka, 1995; Ludwig-Hardman & Dunlap, 2003; McCracken, 2004; Pugliese, 1994; Sweet, 1986; Wojciechowski & Palmer, 2005). In a study of a video-based distance-learning program (i.e., telecourses), Towles, Ellis, and Spencer (1993) showed that faculty-initiated contact (via phone calls) improved course completion among freshmen students. Minich (1996) recommended that faculty initiate contact earlier and more frequently with students, perhaps with an electronic bulletin board system (i.e., asynchronous discussion). Catchpole (1992) has argued for more faculty-student contact in DL environments, and Simpson (2004) described the benefits of "proactive contact." But these interactions can be time-consuming and difficult for faculty to sustain, especially with larger class sizes.

An option that could provide similar benefits is supplemental tutoring, which can include assistance with specific course assignments or more general training in prerequisite skills (Castles, 2004; Lentell & O'Rourke, 2004; McCracken, 2004; Miller, 2002). To augment services offered by the instructor of record, supplemental tutoring could be provided by paid faculty, subject matter experts, and/or trained peer tutors, either on campus or via technology (filling the role of a learning/tutoring center on a traditional campus). As Galusha (1997) explains, "[Distance-learning] students need tutors and academic planners to help them complete courses on time and to act as a support system when stress becomes a problem" (p. 4). Sweet (1986) and Rekkedal (1985) have mentioned the benefits of tutors in distance education, although "tutors" in the Open University model are often faculty who combine administrative, teaching, and counseling functions (Keegan, 1981).

In addition to supplemental tutoring, some educators have recommended pre-course orientations to help manage students' expectations and generally prepare them for distance learning (Bååth,

1984b; Carnevale, 2000a; Carr, 2000; Chyung, 2001; Cookson, 1989; Hammond, 1997; Kember, 1990; Kerka, 1995; Ludwig-Hardman & Dunlap, 2003; Rovai, 2003; Ryan, 2001; Scalese, 2001; Tresman, 2002; Wojciechowski & Palmer, 2005). These orientations can describe the specific demands of a particular course. They can also provide instruction on general study approaches and the technical skills necessary for success. For instance, Dupin-Bryant (2004) and C hyung (2001) showed that computer training is positively related to retention. In another example, an "online bootcamp" offered by Boise State University (mandatory for first-year online students) improved completion rates by 20 to 40 percent per class by running students through drills with the course delivery software and allowing them to chat informally online before their course began (Carnevale, 2000a).

Orientations can be held online or on campus. In the Minich study, 68% of student respondents said their on-campus orientation was conveniently scheduled, and only 7% said it was not helpful. But, given that these students have chosen distance learning to avoid having to come to campus, some institutions are beginning to offer their student services—including orientations—at a distance via technology (Boehler, 1999).

Research offers many interrelated factors that influence distance learner attrition and persistence. Most of these (such as illness, academic background, and job demands) are out of the institution's control. With that in mind, this study focused on controllable factors such as student skills and expectations as well as specific responses to those factors such as supplemental tutoring and pre-course orientations. Of course, one cannot presume that students will use these support services if they are offered.

For instance, Holmberg (1995) makes a case for two-way communication as one of the "constituent elements" in an effective DL program. However, the use of these services has often disappointed educators.

"Communication initiated by students and based on questions that they raise and want further comment on along with suggestions for further reading, implementation, and practice, would seem very desirable. However, few distance-study institutions have managed to inspire more than a minority of their students to make use of this facility..." (p. 107).

Some experts explain this phenomenon by arguing that students who succeed and persist in distance learning are—by their nature—more independent and self-regulating (Lynch & Dembo, 2004; Powell et al., 1990; Rovai, 2003; Thompson, 1984). In their quest for education "anytime and anywhere," they may be willing to forgo or even desire less interaction with teachers and fellow students. But, not all students who prefer the convenience of DL courses are independent learners who work well in isolation. Some may require the assistance provided by the support services identified in this study.

Method

Students registered in distance education at Coastline Community College are primarily middle class and represent a variety of ethnicities, including white (51%), Asian (21%), Hispanic (11%), and African-American (5%). The percentage of female distance learners enrolled (62%) outnumbers that of male distance learners (37%).

The project's accessible population included all DL students (10,218; no repeat names) who

enrolled at Coastline during the spring, summer, and/or fall terms of 1999. From this population, the team randomly selected a sample of 3,261 students (31.9% of the population). Four demographic statistics from this sample were compared with those of the entire 1999 population. These included gender, ethnicity, primary language, and grade. Each statistic between the population and sample matched within one percentage point.

A total of 478 students filled out and returned a survey questionnaire. The voluntary respondents represented 14.7% of the sample and 4.7% of the population. The relatively low response rate is considered a limitation of this study. In addition, it should be noted that respondents did not match the population in at least two areas. The success rate of respondents was higher than that of the population (70% vs. 54% respectively), and a higher percentage of students indicating "white" ethnicity responded to the survey (58% vs. 51%). These are also limitations of this study, although the research team was able to isolate the responses of these groups via cross tabulation and these differences did not appear to bias results. Of course, students do not always report accurately or truthfully on self-report instruments such as this. In our case, even if they did, they may not have known which services would truly help them. Nevertheless, readers may see parallels with their own students and find useful applications for these data at their own institutions.

Questionnaire Design

To ensure an adequate response rate, the project team limited the survey to 13 questions in these general categories: expectations and reasons for enrolling, perceived difficulty of coursework, level of study skills, preference for support services, and reasons for drop/failure (if applicable).

Demographic data on the project population revealed that 15% of these students did not speak English as their primary language, and many were returning to college after an extended period of time. The team theorized that prerequisite and general study skills might be a particular problem, so questions on reading/writing, math, and time management were included in the survey.

To pilot test an early draft of questions, the team conducted a phone survey and delivered it to a group of randomly selected students in the population. This phone survey helped refine items for the written questionnaire by confirming areas of student interest and concern.

The final survey included a number of multiple-response questions (i.e., "choose all that apply") because there are often multiple reasons for student decisions. Because students may have had reasons for success or failure not foreseen by the research team, the survey also offered a number of open-form questions, which invited "write-in" comments.

Especially important to the team were the reasons that students might have for dropping or failing. (Information on which students dropped or failed was separately collected from the College's office of student records.) Most often, distance learners respond to questions on this issue with answers of "personal reasons" or "I didn't have the time" (Garland, 1993b; Morgan & Tam, 1999). Considering this answer to be superficial, the questionnaire was designed to identify deeper, more specific reasons. This question was positioned at the end of the survey to avoid biasing other survey items with a potential "negative" issue (i.e., "Why did you fail?").

Survey Deployment

Each questionnaire was printed with a number on the upper right corner, and then mailed to the sample students according to a numbered list. This made it possible to identify which student sent in which survey, and allowed the team to cross-tabulate each student's survey results with his or her academic records and demographic data provided at registration. A cover letter described the purpose and methods of the survey and invited students to participate.

After collection, the survey data was cross tabulated according to the academic performance of students into categories of "Success," "Not Success," and "Drop." "Success" was defined as a student receiving an "A," "B," "C," or "Pass/Credit" in his or her distance-learning course(s). An instance of "Not Success" was counted when a student received a "D," "F," "Not Pass/No Credit," or an Incomplete ("I") for one or more of his/her DL courses. A "Drop" was recorded only when a student officially withdrew from a course (i.e., a "W" recorded on their transcript).

Results

Regarding reasons for enrollment, the largest number of responses (44%) suggests that students take distance-learning classes because of time or physical constraints. (See Table 1.) In the cross-tabulated data, students who failed and dropped were more likely to say that they "thought the course work would be a little easier" in the distance learning format. "Not Success" and "Drop" students selected this option at rates of 13% and 10% respectively, compared to 6% for "Success" students.

TABLE 1

(Results Cross Tabulated by Performance)

1. During 1999, why did you choose distance-learning courses at Coastline rather than traditional classroom courses? (Please check all that apply.)

Response Categories	Success	Not Success	Drop	Un- Known	Total Responses	% of Total Responses
Because of time or physical constraints, I can't take traditional classes	225 (45.8%)	25 (36.8%)	25 (41.7%)	38 (43.7%)	313	44.3
I like learning on my own, at my own pace	157 (32.0%)	22 (32.4%)	19 (31.7%)	27 (31.0%)	225	31.9
I thought the course work would be easier	28 (5.7%)	9 (13.2%)	6 (10.0%)	6 (6.9%)	49	6.9

Totals	491	68	60	87	706	100
Other (write in): Miscellaneous					24	3.4
Traditional class versions of course(s) I wanted were closed/cancelled	13 (2.6%)	4 (5.9%)	3 (5.0%)	4 (4.6%)	24	3.4
Other (write in): DL classes are more convenient/flexible for my schedule and family					34	4.8
Distance learning is fun and interesting	25 (5.1%)	4 (5.9%)	1 (1.7%)	7 (8.0%)	37	5.2

Success = A, B, C, Pass/Credit

Not Success = D, F, Not Pass/NC, Incomplete

Drop = Withdrawal

Regarding the difficulty of coursework, 24% of the responses indicated that "midterms and final exams" were the most difficult aspect of distance-learning courses (Table 2). Twenty-two percent (22%) indicated that "reading assignments" were the most difficult, and 20% indicated "Exercises, problems and special projects." "Exams" and "Exercises" were cited as especially difficult by students who failed a class, at 34% and 26% respectively.

TABLE 2

2. Of your distance-learning coursework, what has been more difficult to complete? (Please check all that apply.)

	Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses	
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Totals	354	50	46	58	508	100
Other (write in): Misc.					60	11.4
Other (write in): All were easy, no difficulty					11	2.6
Quizzes	(5.9%)	3 (6.0%)	3 (6.5%)	7 (12.1%)	34	6.7
Writing assignments	51 (14.4%)	(8.0%)	6 (13.0%)	8 (13.8%)	69	13.6
Exercises, problems & special projects	66 (18.6%)	13 (26.0%)	10 (21.7%)	12 (20.7%)	101	19.9
Reading assignments	86 (24.3%)	10 (20.0%)	7 (15.2%)	10 (17.2%)	113	22.2
Midterm and final exams	81 (22.9%)	17 (34%)	11 (23.9%)	(19.0%)	120	23.6

Seventy-one percent (71%) of the student respondents judged their English reading and writing skills to be excellent or above average (Table 3). These results cross-tabulated by ethnicity (Table 3a) revealed that Coastline's Asian-American students marked themselves considerably lower, with just 39% in excellent and above average categories.

TABLE 3

3. How would you rate your English reading and writing skills?

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Totals	325	43	45	55	478	100
Missing cases					10	2.1
Poor	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0	0.0
Below average	8 (2.5%)	2 (4.7%)	0 (0.0%)	0 (0.0%)	10	2.1
Average	83 (25.5%)	13 (30.2%)	9 (20.0%)	13 (23.6%)	118	24.7
Above average	124 (38.2%)	14 (32.6%)	18 (40.0%)	24 (43.6%)	180	37.7
Excellent	(33.8%)	14 (32.6%)	18 (40.0%)	18 (32.7%)	160	33.5

TABLE 3a

3. How would you rate your English reading and writing skills? (Results cross tabulated by ethnicity)

Category	Excel.	Above average	Avg.	Below average	Poor	Total	% of Total
Asian	8 (9.0%)	27 (30.3%)	50 (56.2%)	4 (4.5%)	0	89	18.6%
African American	8 (30.8%)	13 (50.0%)	5 (19.2%)	0 (0.0%)	0	26	5.4%

Hispanic	8 (26.7%)	13 (43.3%)	8 (26.7%)	(3.3%)	0	30	6.3%
Other Nonwhite	6 (33.3%)	5 (27.8%)	7 (38.9%)	0 (0.0%)	0	18	3.8%
White	123 (44.4%)	109 (39.4%)	41 (14.8%)	4 (1.4%)	0	277	57.9%
Unknown	7 (22.6%)	13 (41.9%)	7 (22.6%)	1 (3.2%)	0	31	6.4%
Missing cases						7	1.5%
Totals	160	180	118	10	0	478	100%
% of Total	33.5%	37.7%	24.7%	2.1%	0%		

Forty-five percent (45%) of the student responses judged their math skills to be excellent or above average, and 62% marked their time management skills as excellent or above average. (See Tables 4 and 5.) The time management data cross-tabulated by performance showed that 67% of "Success" students, 51% of "Drop" students, and just 45% of "Not Success" students judged their skills as excellent or above average.

TABLE 4

4. How would you rate your math skills?

Responses	Success	Not Success	Drop	Unknown	Total	% of Total
Excellent	58	6	10	8	82	17.2
	(17.7%)	(13.6%)	(22.2%)	(14.5%)		

Above average	98 (30.0%)	11 (25.0%)	8 (17.8%)	16 (29.1%)	133	27.8
Average	139 (42.5%)	19 (43.2%)	27 (60.0%)	25 (45.5%)	210	43.9
Below average	27 (8.3%)	7 (15.9%)	0 (0.0%)	3 (5.5%)	37	7.7
Poor	5 (1.5%)	1 (2.3%)	0 (0.0%)	3 (5.5%)	9	1.9
Missing cases					7	1.5
Totals	327	44	45	55	478	100

TABLE 55. How would you rate your time management and planning skills?

Responses	Success	Not Success	Drop	Unknown	Total	% of Total
Excellent	81	2	8	14	105	22.0
	(24.5%)	(4.5%)	(17.8%)	(25.5%)		
Above average	141	18	15	17	191	40.0
	(42.7%)	(40.9%)	(33.3%)	(30.9%)		
Average	91	16	16	23	146	30.5
	(27.6%)	(36.4%)	(35.6%)	(41.8%)		

Below average	16	5	5	1	27	5.6
	(4.8%)	(11.4%)	(11.1%)	(1.8%)		
Poor	1	3	1	0	5	1.0
	(0.3%)	(6.8%)	(2.2%)	(0.0%)		
Missing cases					4	.8
Totals	330	44	45	55	478	100

Regarding tutoring, 24% of the responses indicated that students would prefer t utoring "for specific assignments in course I'm taking," and 20% suggest a preference for "assistance in test-taking and memory skills" (Table 6). The latter option was slightly more attractive to students who failed a class (23%). Also, while "Assistance in time mgt. and planning" represented just 9% of total responses, "Drop" students chose this option at twice that rate (18%).

TABLE 6

6. If they were offered free, either online or onsite, which of the following tutoring services would you use? (Please check all that apply. If none apply, skip to question 8.)

Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses
Tutoring for specific assignments in course I'm taking	119 (23.8%)	19 (24.7%)	16 (22.5%)	24 (27.6%)	178	24.2
Assistance in test-taking and memory skills	98 (19.6%)	18 (23.4%)	16 (22.5%)	16 (18.4%)	148	20.1
Assistance in computer use	97 (19.4%)	13 (16.9%)	11 (15.5%)	15 (17.2%)	136	18.5

Assistance in reading, writing or math	94 (18.8%)	12 (15.6)	10 (14.1%)	17 (19.5%)	133	18.1
Assistance in time mgt. and planning	40 (8.0%)	8 (10.4%)	13 (18.3%)	8 (9.2%)	69	9.4
Assistance in communicating with instructor	41 (8.2%)	5 (6.5%)	4 (5.6%)	5 (5.7%)	55	7.5
Other (please specify)					16	2.2
Totals	500	77	71	87	735	100

Thirty-one percent (31%) of the questionnaire's responses suggested that DL students would prefer to receive tutoring services "from an instructor" (Table 7). Twenty-seven percent (27%) indicated "From a trained tutor," and 26% "From self-paced instructional materials." In the cross-tabulated data, "Drop" students (at 31%) selected self-paced materials as their first choice.

TABLE 7

7. From whom would you like to receive the help you checked in the previous question? (Please check all that apply.)

Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses
From an	148	20	20	23	211	31.1
instructor	(30.8%)	(31.3%)	(29.9%)	(34.3%)		
From a trained	136	12	16	16	180	26.5
tutor	(28.3%)	(18.8%)	(23.9%)	(23.9%)		
From self-paced	119	19	21	15	174	25.6
instructional materials,	(24.7%)	(29.7%)	(31.3%)	(22.4%)		

perhaps on computer or the Internet						
From a 'mentor' (i.e., an instructor or fellow student)	78 (16.2%)	13 (20.3%)	10 (14.9%)	13 (19.4%)	114	16.8
Totals	481	64	67	67	679	100

TABLE 8

When asked if they would use free tutoring services either onsite or online, 59% of the students said "Yes" (Table 8). "Not Success" students were favorable to tutoring, but their "Yes" responses were somewhat fewer at 55%.

8. If Coastline offered a free tutoring center where you could get assistance either onsite or online, would you use it?

Responses	Success	Not Success	Drop	Unknown	Total	% of Total
Yes	196	24	26	38	284	59.4
	(59.6%)	(54.5%)	(57.8%)	(69.1%)		
No	26	3	5	6	40	8.4
	(7.9%)	(6.8%)	(11.1%)	(10.9%)		
Maybe	107	17	14	11	149	31.2
	(32.5%)	(38.6%)	(31.1%)	(20.0%)		
Missing cases					5	1.0
Totals	329	44	45	55	478	100

Thirty-eight percent (38%) of all responses suggested that students would prefer to access tutoring services via the Internet, while 25% indicated a preference for walk-in service without appointment (Table 9). Twenty-seven percent (27%) of all responses indicated "weeknights"

would be the preferred time to access tutoring service, with "Saturday mornings" (15%) being the second choice (Table 10).

TABLE 9

9. If you answered 'No' to the previous question, skip to question 11. Otherwise, how would you prefer to use the tutoring center's services? (Please check all that apply.)

Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses
By the Internet	176 (38.3%)	22 (42.3%)	28 (35.9%)	21 (37.5%)	247	38.2
Walk in, anytime	108 (23.5%)	15 (28.8%)	19 (24.4%)	16 (28.6%)	158	24.5
By telephone	98 (21.3%)	5 (9.6%)	18 (23.1%)	10 (17.9%)	131	20.3
Walk in, by appointment	78 (17.0%)	10 (19.2%)	13 (16.7%)	9 (16.1%)	110	17.0
Totals	460	52	78	56	646	100

TABLE 10

10. When would you be most likely to use tutoring center services? (Please check all that apply.)

Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses
Weeknights	199	26	25	23	273	27.4
	(29.1%)	(31.3%)	(21.6%)	(20.5%)		

Totals	684	83	116	112	995	100
Saturday evenings	45 (6.6%)	5 (6.0%)	10 (8.6%)	(9.8%)	71	7.1
Weekday mornings	52 (7.6%)	10 (12.0%)	9 (7.8%)	10 (8.9%)	81	8.1
Weekday afternoons	58 (8.5%)	9 (10.8%)	8 (6.9%)	14 (12.5%)	89	8.9
Sunday evenings	66 (9.6%)	8 (9.6%)	12 (10.3%)	12 (10.7%)	98	9.8
Sunday afternoons	78 (11.4%)	5 (6.0%)	19 (16.4%)	10 (8.9%)	112	11.3
Saturday afternoons	89 (13.0%)	8 (9.6%)	14 (12.1%)	13 (11.6%)	124	12.5
Saturday mornings	97 (14.2%)	12 (14.5%)	19 (16.4%)	19 (17.0%)	147	14.8

When asked if they would benefit from pre-course orientation sessions, 46% of the students said "Yes" (Table 11). In contrast, 25% said they would not benefit. "Not Success" students were more favorable to orientations, with 57% saying "Yes." "Drop" students, with just 35% selecting "Yes," were less favorable than the group as a whole.

TABLE 11

11. In the future, would you benefit from pre-course orientation sessions (either in class or via the Internet)?

onses Success N	ot Success Drop	Unknown	Total	% of Total	
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Totals	324	42	45	49	478	100
Missing cases					18	3.8
Don't know	79 (24.4%)	(31.0%)	19 (42.2%)	(26.5%)	124	25.9
	(28.4)	(11.9%)	(22.2%)	(20.4%)		
No	92	5	10	10	117	24.5
	(47.2%)	(57.1%)	(35.6%)	(53.1%)		
Yes	153	24	16	26	219	45.8

Students cited time management issues as the major reason they dropped or failed a course (Table 12). Twenty-seven percent (27%) of all student responses indicated "I tried to accomplish too much that semester" and 17% indicated "I had difficulty managing my time." "Drop" students showed a strong preference (33%) for "Tried to accomplish too much," while "Not Success" students were more likely (25%) to select "I had difficulty managing my time." Those students who failed also selected "Course assignments too difficult" in greater numbers than the group as a whole.

TABLE 12

12. If you've ever dropped or had difficulty succeeding in a distance-learning course at Coastline, what were the reasons? (Please check all that apply.)

Responses	Success	Not Success	Drop	Unknown	Totals	% of Total Responses
Tried to accomplish too much that semester	76 (27.4%)	12 (18.5%)	24 (32.9%)	16 (25.0%)	128	26.7
Had difficulty managing my time	44 (15.9%)	16 (24.6%)	12 (16.4%)	8 (12.5%)	80	16.7

Course assignments too difficult	25 (9.0%)	12 (18.5%)	6 (8.2%)	6 (9.4%)	49	10.2
Directions for assignments were unclear	24 (8.7%)	7 (10.8%)	9 (12.3%)	8 (12.5%)	48	10.0
I couldn't get help when I needed it	25 (9.0%)	5 (7.7%)	6 (8.2%)	7 (10.9%)	43	9.0
Those classes not a high priority	19 (6.9%)	4 (6.2%)	4 (5.5%)	4 (6.3%)	31	6.5
May not have possessed the skills to succeed	17 (6.1%)	4 (6.2%)	2 (2.7%)	7 (10.9%)	30	6.3
Other (write in): Personal reasons (e.g., job, family, health)					19	4.0
Other (write in): Too much course work or too difficult; lack of skills					15	3.1
Other (write in): Low quality course design or delivery					11	2.3

Other (write in): Misc.					25	5.2
Totals	277	65	73	64	479	100

Discussion

As expected, time constraints and learning preferences enticed most Coastline students into distance-learning classes. Time is clearly a very important asset to distance learners. These students want or need the flexibility offered by DL courses. With this in mind, educators should find cost-effective ways to provide support services to these nontraditional students (Bothel, 2001; Heverly, 1999; McCracken, 2004; Ryan, 2001).

The survey results show that Coastline students who dropped or failed a course were more likely to believe DL courses were easier than campus-based classes. This suggests the need to manage student expectations about this mode of learning, especially for those new to the format. Pre-course orientations are one method educators can use to prepare students by describing the demands of these courses.

Those students who dropped or failed asked for tutoring in test taking and memory skills, and ranked themselves lower in time management skills. Pre-course orientations could address these needs by offering tips in time management, test taking, memory, and other general study skills. But, while students who have failed are particularly interested in orientations, students who have dropped are less enthusiastic. These busy students may be telling us that they are not sure they have the time to attend an orientation.

Coastline's distance learning students generally believed their reading and writing skills are more than adequate to do college-level work, yet many admitted their reading and writing assignments are among the most difficult to complete. *Actual* skill levels in these areas may help explain why those students who dropped or failed their DL classes felt they did not have sufficient time. Skills assessment followed by onsite/online tutoring may help students in particular disciplines, such as English and math, and ultimately increase completion rates.

Tutoring is one method that most Coastline DL students seem willing to try to improve their success. But, it should be noted that drop and fail students were somewhat less favorable to the idea. This is disconcerting given that these students probably need tutoring services more than others.

Interestingly, Coastline students preferred to get tutoring assistance in order to complete their specific course assignments, and most of them asked for this assistance to come from a teacher (Tables 6 and 7). It has been noted above that distance learners can often feel isolated and lonely, especially if they are not independent learners. These students may be asking for more interaction with and feedback from their course instructors. Still, for large classes where instructors are pressed for time, supplemental tutoring may emulate this interaction.

Conclusion

The literature supports the use of pre-course orientations and supplemental tutoring services to improve the course completion rates of distance learners. And the results of this survey suggest that many students would be willing to use these services. In Coastline's case, the response to these interventions has been mixed.

After this survey project was completed, Coastline began offering a 3-unit student success telecourse designed specifically for distance learners. Instead of a short course-specific orientation, this was developed as a general course covering many topics, such as goal setting, time management, study and memory skills, test-taking strategies, etc. It has been quite popular with students, with enrollments of 60 or more each semester. In reaction surveys, students have reported that they enjoy the course and feel better prepared to succeed in their distance education classes. Plans are underway to compare the success rates of these students with those distance learners who have not taken the course.

While developing the telecourse, Coastline also began a grant-funded effort to offer supplemental tutoring online to all students at the college. C-TOOLS (Coastline Tutoring On-site and Online Systems) began operation in February of 2001. During that spring term, 73% of all students using C-TOOLS (including on-campus and distance learners) successfully completed their courses (Leighton, 2002). Although this figure may be biased by self-selection, it was above the average completion rate for the college as a whole and well above the average completion rate for distance learners.

Although the tutoring services were popular with those students who used them, the program did not attract students in sufficient numbers. Just over 520 students used C-TOOLS in its peak term, representing 3.4% of all enrolled students and 13% of distance learners. This is substantially lower than the percentage of distance learners (59%) who said in the survey that they would use tutoring services if they were offered. After losing grant funding during California 's recent "budget crisis," C-TOOLS ceased operations. Today, the college offers more limited tutoring focused on math and English.

This is similar to the result experienced at Kirkwood Community College in the state of Iowa. Funded by a FIPSE (Fund for the Improvement of Post Secondary Education) grant, the college began offering a support team for online students that included the instructor (team leader), an advisor, a tutor, and a supplemental instruction leader (Payne, 2002). Those who used the service liked it and performed better on average than their classmates, but the number of students using the service was lower than anticipated and the program was discontinued.

It is clear that distance-learning students have conflicting needs and pressures. Although they may lack certain skills and have the desire to get assistance, they may ultimately decide that they do not have time to take advantage of these services. To help improve usage rates, Payne recommended that educators develop support services for *all* students (i.e., not just distance learners) and create incentives that will motivate students to use them. In another approach, the Illinois virtual campus has achieved some economies of scale by offering tutoring services to multiple colleges (Lach, 2003).

In Coastline's case, staffing challenges made it difficult to offer tutoring during the hours most popular with DL students (weekday evenings and weekend days). Also, it may have been more effective to offer tutors and services tied to specific courses (focused on specific assignments in those courses) rather than general skill development. For instance, Lentell and O'Rourke have

argued for "customised levels of support for different students in different contexts" (p. 2). This may be worth further study. Certainly, those interested in providing student services to distance learners should be prepared to focus on both *value* and *delivery*, making these services as convenient as possible for this growing segment of students who demand their education anytime and anywhere.

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