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Distance Education at UAS: A Case Study

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Abstract

Increased pressure on the University of Alaska Southeast (UAS) to become more involved in distance education compelled UAS to commission a study of the perceptions, problems, and opportunities in the area of distance education as seen by three distinct groups in the university community: students, faculty, and staff (including administrators). The researchers used qualitative methods to gather data from which questionnaires were derived. The results suggest that all three groups see lack of leadership and coordination in distance education as the primary obstacle to improving and expanding offerings. Recommendations propose practices that support the needs of each group and the program in general.

Résumé

L'augmentation de la pression sur l'University of Alaska Southeast (UAS) de mieux contribuer à l'éducation à distance a incité UAS à commander une étude des perceptions, problèmes et possibilités dans le domaine de l'éducation à distance, tels que perçus par trois groupes distincts de la communauté universitaire : les étudiants, la faculté et le personnel (notamment les administrateurs). Les recherchistes ont utilisé des méthodes qualitatives pour amasser des données, menant à la création de questionnaires. Les résultats indiquent que les trois groupes constatent que le manque de leadership et de coordination en éducation à distance est le principal obstacle à l'amélioration et à l'expansion des offres. Les recommandations proposent des pratiques qui appuient les besoins de chaque groupe et du programme en général.

Background

Distance education has become an area of opportunity and concern for many colleges and universities. Although it offers tremendous opportunities to expand services to students, it also poses challenges because students are often off campus and are connected to teachers, resources, and peer learners through technologies and teaching techniques. This *distance* significantly challenges the standard on-site educational culture pedagogically, organizationally, technologically, and financially.

The University of Alaska Southeast (UAS) has been involved in providing distance education opportunities for all Alaskans for many years and

recently recommitted itself to the development and expansion of this area of teaching and learning for the following primary reasons.

- The Board of Regents has called for the expansion of distance education.
- Improved technologies will make it more possible to offer distance education options.
- There is a demand for distance education due to changing demographics of learners, many of whom are returning students who have jobs and families and whose schedule does not conform to on-site offerings.
- Distance education may offer UAS a niche in terms of serving students throughout the state of Alaska.

In an effort to understand the prospects and challenges of providing quality distance education, UAS commissioned a study to inform policy and implementation of course development, student and faculty support, and budgeting, which we undertook. The results of this study are the focus of this article.

Literature Review

Distance education represents a way of communicating with geographically dispersed individuals and groups. Distance learning is above all the process of teaching and learning in which learners "just happen to be physically separate from a teacher" (Garrison & Shale, 1990, p. x). Education at a distance has played a role in society since the existence of a reliable mail system. In the United States, distance education at the adult level was originally confined to military, corporate, and university continuing education. In the last few decades, this situation has changed dramatically. Higher education has been diversifying, more people have become interested in postsecondary education, and societal pressures have forced institutions to offer a wide variety of course delivery options.

In addition, growth in the practice of lifelong learning is reflected in the large numbers of students who are nontraditional in terms of age of responsibilities. Often referred to as returning or mature students, these nontraditional students are not making the transition from high school to college, but rather are attending years after high school while amid responsibilities of adult life. These individuals frequently must overcome concerns about scheduling, distance, and financial support for their education that traditional students do not have. Institutions are feeling particularly vulnerable because the advantage of location no longer ensures them a market based on geography, and instead they must reach out to lifelong learners using a variety of distance delivery technologies.

A study of distance education in higher education institutions conducted by the National Center for Education Statistics (NCES, 1997) presented the most recent trends. Using as its definition "education or training courses delivered to off campus locations via audio, video, or computer technologies" (p. 3), approximately one third of the institutions reported offering distance education courses, another one quarter planned to offer courses in the next three years, and 42% did not offer and do not plan to offer such courses.

The NCES (1997) study also addressed the issue of access to instructors and services and found that in 42% of institutions, distance learning instructors visited remote sites on occasion, and the use of toll-free telephone, e-mail, or other online access models were frequent. Access to library resources varied depending on the type of resource. However, at best somewhere between 35% and 45% of distance education students were not provided with institutional support resources that would be available to on-campus students.

Past research into distance learning efficacy often concentrated on the quality of the technologies used, usefulness of various media, or student profiles and persistence. In an overall review of the research, Moore and Thompson (1997) concluded that distance education was considered effective "when effectiveness [was] measured by the achievement of learning, by the attitudes of students and teacher, and by return on investment" (p. 59). Unfortunately, they also reported that many research studies in distance education used weak designs, poor control of populations and treatments, and employed inappropriate or weak statistical methodology. This indictment was echoed by Phipps and Merisotis (1999), who felt that flaws invalidated much of the research in distance education. Others regarded the standards being applied to distance education research as higher than those applied to other educational research (Brown & Wack, 1999). In addition, some researchers (Ehrmann, 1995; Saba, 1998; Schrum, 1999) have suggested that research in distance education has asked the wrong questions and needs to focus more clearly on the educational strategies that engage students, successful student characteristics, and the interaction between instructor and student.

In the past several years, a trend has also developed in the technologies being used for distance education. At one time, satellite and audioconferencing were the primary methods; now almost all distance courses include a strong online component. These new requirements have resulted in additional demands on faculty. Kember (1995) urged designers to work toward deep learning, which requires moving away from excessive assignments, shallow assessments, and lack of freedom in activities. The transition to an online environment is not a trivial matter, and the challenge is to understand the relationships between the user and the technol-

ogy, the instructor and the participants, and the relationships among the participants (Gibbs, 1998; Palloff & Pratt, 1999; Schrum, 1998).

Research Questions

The essential questions that drove this study were What are faculty, student, and staff perceptions of the opportunities, challenges, and needs regarding distance education at UAS? and What are the major issues that need to be addressed in order to guide distance education policy and practice at UAS?

Research Methods and Timeline

The research questions led us directly to the use of a mixed-methods model for data gathering. The goals required that large surveys be designed and administered to faculty, students, and staff (staff included staff and administration). However, the steps to designing these instruments were complex. In addition to the survey data, it was important to develop a rich understanding of the perceptions, experiences, and views from the participants' perspectives. Thus a case study approach was employed. This approach allowed us to use several types of instruments and tools and presented the opportunity to investigate the same events from a variety of views. In this situation, we examined the perspectives of faculty, students, and staff, and their university experiences, but also investigated the current policy and political realities in which distance education was evolving.

Questionnaire development proceeded in several stages. Schrum interviewed faculty and staff about distance education at UAS from October 2001 (the time of her first visit to Juneau) through February 2002. The interviews were conducted using naturalistic inquiry. They took place in person and via telephone or e-mail and were audiorecorded and transcribed when necessary. Interviewees were encouraged to identify and explores issues of particular importance to them related to the development, delivery, and administration of distance education at UAS. These data were then examined and coded for emerging themes to create a framework from the participants' perspectives (Merrian, 1998). Interviewing a wide variety of university community members allowed us to develop a customized questionnaire suited to the particular institution under study.

Simultaneously, two graduate students assisted us in a search of scholarly literature and in collecting survey instruments relevant to the study. A number of instruments were identified, portions of which were adapted. These include "Barriers to Distance Education Survey" (Berge, 1999), "Survey on Distance Faculty Compensation and Incentives Models Endorsed by Temple University and the National University Telecom-

munications Network" (NUTN, 2002), and "Needs, concerns and practices of online instructors" (McKenzie et al., 2000). The literature review had two distinct goals: first, to provide background literature that would assist readers in understanding the issues from an historical and research perspective, and second, to use the literature to inform the design and development of the research instruments. This proved to be an extremely valuable activity, as other institutions have tackled narrower and more targeted versions of this type of research, and we were able to learn from their experiences. Using document analysis, the graduate students used the data from the initial interviews, as well as the information from the literature and other surveys, to design a separate survey for each of the three constituent groups.

Although the instruments have a number of similarities, they also have a number of differences. This is to be expected, as each group viewed distance education from a different vantage point, a fact that became clear in Schrum's interviews. The surveys were vetted through faculty and staff, and individuals from all three target audiences were invited to complete them. Many excellent suggestions were incorporated into the surveys. In October 2002, the surveys were made Web-accessible (see Appendix).

Results by Category

Faculty Results

The faculty members at all three campuses were invited to complete the survey. Eighty faculty members did complete it for a return rate of 78%. Seventy percent of those completing the survey had taught at least one primarily distance course in the last five years. Of those who had taught at a distance, the most common technologies used were online components (computer conferencing, Internet, Blackboard, and so forth (61.3%); audioconferencing (48.8%); and videotape by mail (28%). Almost 20% traveled to remote locations and also used e-mail or postal communications.

Of those faculty members who had taught at a distance, 28% had taught eight or more classes in the last five years, 23% had taught four to eight, and 46% had taught between one and four. It was important to understand why faculty members would choose to teach at a distance, and the reasons were compelling. The three reasons rated the highest (on a scale where 1=not important and 5=significantly important) were the opportunity to meet the needs of students at a distance (4.53), a response to students' requests for educational opportunities at a distance (4.42), and increased flexibility in working hours and location for the students (4.00).

Finally, on a scale of 1-5 where 1 is very unfavorable and 5 is very favorable, the faculty members were asked to rate their overall impression of their distance education experiences. The mean score was 4.07, or above

somewhat favorable for those who have taught at a distance. Very favorable (46.4%) and somewhat favorable (32.1%) responses accounted for 78.5% of all respondents, with only 5.4% being very and 7.1% somewhat unfavorable toward distance education.

Using a scale where 1=highly unmatched, 5=highly matched, faculty were asked to identify how appropriately the technology was matched to the content of their courses. Again, the response was quite favorable with a mean score of 4.02. These data strongly suggest that those involved in distance education were engaged and felt favorable about this aspect of their work at UAS.

Faculty individual perspectives of distance teaching

In addition to the overall impression of distance education, the survey sought to gather individual reflections on the specifics of faculty perspectives. Faculty were asked to rate their experiences in their distance education courses on a variety of factors and to provide specific information on their perceptions. The survey used a scale of 1-5, with one representing strongly disagree and 5 representing strongly agree, with a list of statements about distance education. Faculty strongly believed that they had positive interactions with their students (mean=4.22) and that the students were somewhat committed to their learning (3.80). They did not believe their students were particularly ready to learn (3.68), nor were they completely satisfied with the support they received for the delivery of the course (3.70), technical aspects of the course (3.55), development of their course in general (3.25), and especially for the pedagogical aspects of the course (3.06). Although these are not negative responses, they do indicate a perception of lacking support.

Faculty members were also asked to identify how significant various barriers might have been to their efforts at teaching at a distance. Figure 1 represents their perceptions, again based on a scale of 1-5 (1=no barrier

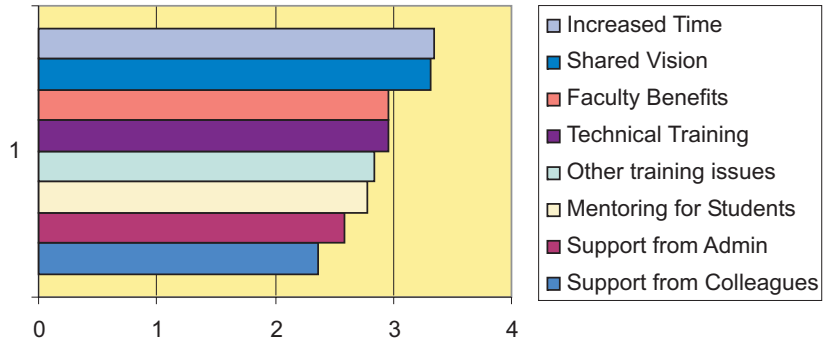

Figure 1. Barriers perceived by faculty.

and 5=very significant barrier). None of the issues was considered a very significant barrier, but as Figure 1 illustrates, the faculty felt that several factors stood in the way of their success in teaching at a distance. Most compelling were demands on faculty time and the need for a shared vision about distance education at UAS.

Faculty were asked to provide information on any other support or assistance they felt they needed to be able to teach at a distance. These comments were coded and consistently clustered around a need for technical support, instructional design assistance, a centralized coordination to assist them, and acknowledgment of the faculty time and effort required for participation in distance education. In addition, support from the UAS administration was identified as important, specifically as related to a match between the stated purpose and goals of distance education and the resources allocated to its implementation.

Next it was important to gather information from the faculty members on their perception of the larger picture of distance education at UAS, specifically as it related to their department, campus, and the institution in general. When asked if they had felt pressure to participate in distance education, the faculty provided the following results. Of the faculty experienced in distance education, 14% agreed but 38% disagreed that they had been pressured to use distance education. Of those not experienced in distance teaching 8% had felt some pressure whereas 11% had not. Clearly faculty members did not feel great pressure to participate, and thus their active participation was related to their own goals, purposes, and belief in the mission of UAS to serve Alaska citizens.

Overall, faculty felt that their distance education responsibilities were well or somewhat integrated into their normal work load. Only 25% of those with previous distance education teaching experience felt that these responsibilities were not integrated into what they normally were expected to do. The primary explanations of those who felt that their distance education responsibilities were not well integrated into their workload concerned faculty compensation and promotion issues. For example, they were not convinced that the enormous time commitment was taken into account in their evaluation (for promotion and tenure), they were not compensated for the extra amount of time and effort expended, and there appeared to some to be differential compensations and expectations due to a lack of consistency and resources.

Next the survey investigated the need for different types of support for teaching at a distance. Those with experience in distance education identified more items of need than those without experience. In particular they cited a need for policy on faculty compensation and intellectual property, assistance in course development, and workshops to assist in all develop-

ment. However, in one area both groups shared equal concern: collegial support for teaching at a distance.

We asked faculty members to describe their vision for distance education at UAS and to identify what an excellent program might be able to accomplish. The responses were remarkably consistent between experienced and nonexperienced faculty members. The primary perspectives presented were the creation of a vision for the UAS distance education program with a stated mission to satisfy the needs of all Alaska's citizens and to provide service throughout the state. Associated with this was a need for strong leadership to implement this mission and to align the stated goals for distance education with the allocation of resources to support these goals. Almost equally important was a need for consistency across courses and among UAS campuses. Many individuals expressed a desire for a central office to coordinate and help plan for distance education so that all individuals would have one place to seek answers and solutions.

Faculty members were also invited to describe the types of courses, programs, degrees, and certifications that could be available in a distance format. It was clear from the many and varied responses that all programs seemed viable as distance offerings, including some that had been offered and were discontinued and others that have never been tried.

Faculty members were asked to identify the role that they, their departments, and the administration and UAS in general would or should play in the future of distance education. Each of these three areas is addressed below.

Individual involvement of faculty

In terms of what role they would individually like to play, half the faculty not currently doing distance education did not want any role, whereas the other half expressed uncertainty about distance education or a desire to explore it. Those who were active in distance education overwhelmingly said they wanted to teach or continue to teach. Far fewer stated that they would like to be actively involved in a number of other areas, including planning, course design, student advising, training and mentoring faculty, and exploring new technologies.

Departmental involvement

Of those faculty not actively involved in distance education, about one third did not want their departments to be involved, whereas the other two thirds felt that their departments should have some sort of active role, including providing leadership, resources, training, or other kinds of support. Those faculty who were involved in distance education overwhelming cited a need for their departments to become involved in coordination, policy development, and/or leadership.

Administrative involvement

Interestingly, both groups (those with and those without distance education teaching experience) felt that the administration needed to be involved in distance education. A similar mix of responses was received from both groups, so both sets of answers are considered together.

Concern clustered around two central issues: (a) time and compensation, and (b) a need for centralization, coordination, and leadership. In a similar question that asked what UAS as an institution should do to help distance education, these two issues also emerged as the two most important.

Faculty concern about time and compensation has two parts. First, 85% of faculty felt that distance education was more demanding, and second, 70% felt the administration did not understand and/or acknowledge this reality. Variations of faculty concern about this issue were expressed in terms of needs for work release, extra compensation, limiting class sizes, and the need for administrative and technical help in developing and delivering courses.

The issue of leadership and coordination also had two parts. First, faculty felt there was a need for UAS to have a vision for distance education as an institution. This included having clear goals that were well articulated and understood throughout all departments. Second, there was a need to operationalize this vision through coordination of distance education events: teaching, scheduling, technological support, and so forth. A number of suggestions were offered for hiring the staff needed to offer a distance education program in a successful and responsible manner.

Two lesser issues emerged in response to the issue of the administrative role in distance education: (a) that administration should be actively involved in ensuring course quality, and (b) that the administration should help faculty involved with distance education to interact with each other for the purpose of sharing insights and skills and to speak with a unified voice to articulate concerns.

Student Results

It is important to set the stage and provide a context for the students' responses that are part of these data. Students' e-mail addresses were generated for all those who had enrolled in a distance course at any time during the 2001-2002 school year through any of the three UAS campuses. These individuals were contacted via e-mail and invited to participate in the survey. In all, 4,300 students were contacted, but approximately 1,200 were nonoperational e-mail addresses or duplicates. Another 800 students responded that they were on the list by mistake, and so ultimately we

invited approximately 2,300 students to participate. Our response of 355 valid surveys resulted in a response rate of 16%.

It was important to develop a picture of the students and their goals and needs. Students' highest level of education was high school (36%) or bachelor's degree (32%) with 10% holding a master's degree. Sixty-two percent of the students held full-time jobs, and another 12% considered themselves full-time students. Approximately 11% were part-time workers, and only 1% had no job. They were adult learners, with the majority (69%) between 30 and 60 years old and only 15% under 25.

Fifty-four percent of the students had taken one to three distance classes, 19% had taken four to seven classes, 10% had taken seven to nine classes, and 17% had taken more than nine classes. The primary methods of distance technology had been online technologies (computer conferencing and Internet), audioconferencing, and videotapes by mail. Another common method was satellite broadcasting.

Students were asked to identify their main reasons for taking a distance education course. They could select more than one answer, but overall, 23% stated that they had no other options for postsecondary education, 35% needed the flexibility in their schedules because of work, 20% needed the flexibility because of personal circumstances, and 8% just preferred to take distance classes. Specific reasons stated for this varied widely, but most dealt with convenience, learning styles, time flexibility, comfort, and availability.

Students' individual experiences

It was important to gather information and perspectives of students who had taken distance classes from UAS to inform our understanding of their needs and goals. First, we asked the students to identify how important certain aspects of their course(s) were to them. Table 1 presents these aspects and the mean score on a scale of 1-5 where 1=disagree strongly and 5=agree strongly with the following statements.

As the data indicate, students felt relatively strongly that distance learning was working for them, but also were less favorable about interactions with other students. In addition, they missed the interaction with mentors and still needed advice and information about financial aid. Students were also asked to identify the challenges that they faced in completing their distance course(s). Overall (on a scale of 1-5 where 1=no challenge and 5=significant challenge; N=355), they felt that many of the most common problems were only minor difficulties, rating insufficient employer family and UAS support at 2 or less, and rating personal reasons such as insufficient time or personal motivation at only 2.3 and 2.4.

More interesting were their descriptions of *other* complications and issues that challenged their successful completion of their distance

Table 1
Importance of Aspects of Course

How strongly students felt about these statements (1=strongly disagree, 5=strongly agree; N=355)	*Mean*
Contribution to achieving my educational goals	4.13
Course materials were helpful	4.08
I would take another distance learning course at UAS	4.04
Learning activities (assignments, group work, homework, etc.) helped meet the objectives	3.98
I understood requirements from syllabus and/or Web pages	3.96
I am pleased with my learning I accomplished in my course	3.95
The workload in the distance course was reasonable	3.8
Student services from UAS were sufficient and helpful	3.8
I had a sufficient number of interactions with my professor	3.67
The amount of work was comparable to a traditional in-class course	3.64
Advising that I needed was available, timely, and helpful	3.6
Financial aid information was accessible and clear	3.3
The availability and access to mentors/tutors to assist me was appropriate	3.24
I had quality personal interactions with students in the class	3.15

courses. The most significant obstacles were related to the instructor, and these were primarily related to lack of response, interaction, and support. The next most significant challenges were instruction-related, although it was difficult to determine whether these were directly related to the distance model. Other issues included the technology and their individual challenges with respect to organization, time management, and personal situations.

Students were asked to identify the level of improvement that was needed in the UAS distance education programs. On a scale of 1-5, where 1=no improvement needed and 5=a major improvement needed, it is clear

Table 2
Level of Improvement Needed

Level of improvement needed (1=no improvement, 5=major improvement; N=355)	*Mean*
Mentoring/Tutoring	2.55
Advising	2.43
Access to information about financial aid	2.42
Instructor feedback	2.38
Technology	2.29
Student services	2.18
Course materials	2.15
Flexibility in the program	2.06
Registration process	1.81

that the items on the survey were not considered major problems, as evidenced in Table 2, because all items fell below 3.

However, when we analyzed the *other* answers provided by the students, a different picture emerged. The students felt that significant improvement was necessary, particularly in general customer service and support. These were identified as issues of timely exchange of information and general responsiveness (textbooks, course schedules, grades, financial information, and communication in general). Students also articulated a need for more communication between the instructor and students, and particularly among students in general. Technical challenges were also mentioned by several students, in particular the need for a toll-free telephone number, a 24-hour, 7-days-a-week support system, better audioconferencing equipment, and faster servers and computers in remote locations. Finally, there was a small but determined view that more courses were needed in all general university offerings.

Throughout the history of distance education one consistent problem has confounded institutions: the high dropout rate. This study helped determine why UAS students drop their distance courses and helped to identify how UAS might help prevent this from happening. Twenty percent of the student respondents (n=71) identified themselves as having dropped one or more distance courses. They began to consider dropping the course less than one month from beginning it (52%), around the midpoint of the course (24%), or just before the end of the course (13%). Some of their reasons for dropping their courses included lack of response from the instructor, personal and lifestyle difficulties, and realization of the difficulty of completing their course. Other challenges they identified included low personal motivation, insufficient UAS support, technical problems, and personal issues (insufficient time to study, lack of family and/or employer support).

Students were also asked what courses or programs they would like to take at a distance. Of 216 responses, 101 areas were identified. Of these, three clearly emerged as most important: education, business, and computer science. However, when allowing for groupings into traditional areas of academic pursuit, students identified many of the major areas associated with general university studies: science, mathematics, education, business, computer science, social sciences, humanities, and so forth. These data seem to indicate that students want access to the full spectrum of coursework typically associated with a university, with a concentration in the three areas identified above. Some responses identified levels or kinds of degrees rather than specific areas such as master's, AA, endorsement, bachelor's, or certification.

Students were also asked to identify any concerns they wished to bring to the attention of UAS. Of the 258 responses to this question, 30% fell into

the category of individual challenges. This was twice as many as for any of the other categories. A closer look at the comments by students revealed that over 90% were related to a need to be self-motivated, self-disciplined, and organized to be a successful distance student.

The second most frequently mentioned concern was instructor-related, specifically related to instructor-student interaction. Seventy-five percent of students having problems with instructors noted lack of interaction, or lack of quality interaction, with their professors. The next largest group of responses (16%) commented that some professors simply were not adept at distance education.

The third most cited concern was technical. Most of these comments were about accessing and understanding how to use the computer networks and services. The concerns cited were typical but not overwhelming. That is, students offered a smattering of comments about not liking Caucus, the system being too slow, Web links being down, and so on. The second area of concern (16%) was with audioconferencing from the perspective of technological malfunction, its limitations as a teaching tool, and availability.

A lesser concern was instruction-related, with students citing faculty's difficulty in handling the distance medium. In particular, students were concerned with faculty knowing how to manage audioconferencing effectively, as well as managing two audiences (in-class and distance students) for satellite-delivered classes.

Individuals did relate various other concerns, including problems with customer service, workload, and time requirements, and a few students took the time to report that everything was just fine. Perhaps most important in the miscellaneous category was the frequent referral to students needing and missing student-to-student interaction (29%), followed by a need for more course availability (15%).

Staff Results

Of the staff who chose to respond to this survey (n=78), 78% were working as support personnel at some level. This represents approximately 62% of the staff at UAS. Like the responses received from faculty and students, the primary methods of distance delivery supported by staff were online (computer conferencing, Internet, etc., 61%), audioconferencing (59%), videotape delivery (66%), satellite (44%), or travel to remote locations (38%).

The staff who did have distance education support experiences were strongly committed to the system. Over 60% had supported 11 or more courses, and 31% had supported between one and five courses. The remainder had supported approximately five to 10 courses.

Staff were asked their opinion of the overall students' and faculty members' experiences with their distance education courses. Figure 2 demonstrates how highly regarded staff estimated that these experiences were.

In general, staff felt that the technology was well suited to the courses they supported as 64% stated it was well or very well matched. When asked to identify strengths and weaknesses of the distance courses they supported, on a scale of 1-5 (where 1=strongly disagree and 5=strongly agree), staff said that the students were committed to their learning (4.04) and ready to learn (3.93) and that faculty had positive interactions with their students (3.95). Staff members were less positive about other aspects and felt that faculty were only somewhat satisfied with their experiences (3.69), and with the support they received from the institution (3.58), the technical aspects of their courses (3.51), and the development of their courses (3.21).

Staff were also asked to rate the barriers that might affect the implementation of distance education. They identified lack of strategic planning and of a shared vision as important followed by lack of technical skill training and support and student mentoring.

They were also asked to describe any other support or assistance that faculty or students needed and did not receive. Their responses focused on five main topics, the most significant being technology in the form of support, training, access, help desk, and equipment. The second topic was for better student support, and the third most mentioned was information for students before they started a distance course.

Staff members were asked if they had felt any pressure to support distance education, and overwhelmingly those with previous experience

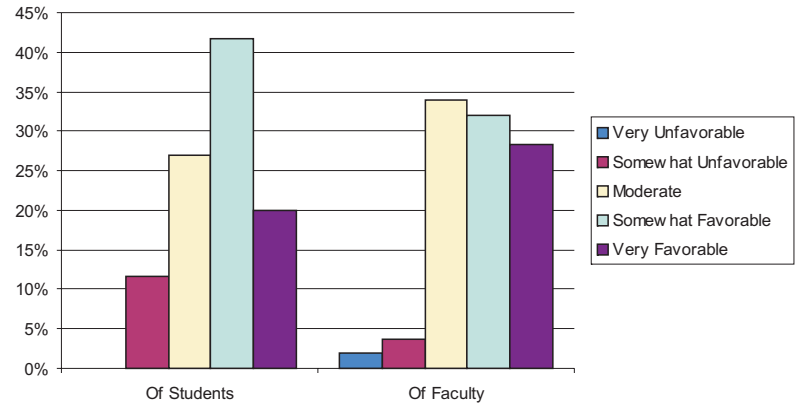

Figure 2. Staff perception of overall experience, students and faculty (N=53).

reported feeling no pressure (85%). They were also asked if supporting distance education was part of their work load, and those that did support distance education felt that it was part of their tasks (71%).

It was important to identify the areas of greatest need from those staff members who supported distance education. On a scale of 1-5, where 1=no need and 5=very strong need, the staff strongly identified their needs as technical training (4.35), support/encouragement from administrator (4.3), support/encouragement from colleagues (4.2), technical support (4.3), and workshops (4.2).

One outcome of this research was the staff's vision for distance education at UAS. Using open-ended questions provided an interesting glimpse into the staff members' views of where UAS might move with respect to distance education. About 50% of the responses expressed a desire for expansion and development of distance education to include more programs and courses, to serve all Alaskans as well as people outside Alaska, and to create a system that is seamless to the learners. Other comments included a desire for improved programs at a distance, better organization and consistency, development of a community of learners, and improved customer service, including providing mentors to support students.

Staff members were also asked about what other programs or degrees might be viable for UAS to offer at a distance. Like the faculty, staff members had a variety of suggestions that ranged across all disciplines. Many said that there should be no limit to the degrees offered. When asked about the role their departments might play in distance education at UAS, many staff said they wanted their departments to assist in the expansion of distance education, to become more comfortable with all aspects of it, be more proactive, and to encourage students to take distance courses. A small number suggested that unless the administration made a firm commitment to distance education, they would not wish to play any role at all.

Staff members were also invited to articulate their concerns about distance education. Again, the most significant items identified were about infrastructure, organization, and centralized functioning of processes that support the implementation. Additional comments were about the amount and quality of the interaction between students and faculty, interaction among students, concerns about the technology and support of the various technical components, and the quality of the course content. Other comments included the need for information about financial aid and preparation for students before their first distance experience.

They were also asked what the UAS administration could do to support distance education. A large number of the responses were in the area of creating a vision and then providing the leadership to implement that vision. This included development of a strategic plan, appointing one

person to coordinate the process among the three UAS campuses, and increasing collaboration and communication among all stakeholders. They said that support was needed in staffing, student information and technical assistance, and faculty support and recognition. Further, they recommended that an effort be made to find funding to create quality programs. Some suggested a yearly distance education conference for all those involved and better credit exchange and acceptance among campuses. A few respondents also mentioned upgrading the technology.

The last two questions sought more information on the types of activities that would help improve the distance education program at UAS overall. First, staff members were asked for ideas about how to make distance education a more significant part of the entire UAS program. The most frequent response was that the infrastructure and planning functions needed to be strengthened and that the entire program should come under one director for all three UAS campuses. The next most frequent comment was about the need for administration to articulate the importance of distance education. Other suggestions included advertising and ensuring that the distance courses were included in the regular course schedule; hiring individuals exclusively for distance education; improving the courses; offering a larger variety of degree options; providing more face-to-face meetings in hybrid classes; and expanding the outreach and academic facilitator programs.

Finally, respondents were asked if they wished to make any other suggestions or comments. Only nine comments were made, and these reiterated the major results presented above. The comments suggested that more collaboration was needed at the state and regional levels, staff and coordinator support was necessary, distance education was valuable and necessary, and that UAS needed to commit wholeheartedly to it or discontinue it completely.

Discussion

This study was driven by practical considerations. A small institution with a mandate to expand and improve distance education opportunities needed to assess attitudes toward and perceptions of distance education held by staff, faculty, and students in order to overcome obstacles, build on successes and plan for the future. In the first part of this article, we present findings for each respondent group about these issues. Here we discuss these findings in relation to the central question that guided this study: What are the major issues that need to be addressed in order to guide distance education policy and practice at UAS? The questionnaire items that most clearly operationalized this question were those about perceived barriers and areas needing improvement. The answers to these questions promised to yield the most important data both in terms of

developing the global appreciation of distance education problems and opportunities needed for planning, and for identifying practical considerations that would need to be addressed in the implementation of new distance education programs.

Barriers were identified through many hours of interviews and from the questionnaire development process. The final questionnaires addressed these barriers by asking faculty and staff to rate their importance. The questionnaire results for faculty and staff are presented independently above. Here they are presented and discussed in relation to each other. Table 3 presents the results from the two groups.

A number of important points become immediately apparent. Although faculty and staff were interviewed separately and helped develop questionnaires separate from one another, the issues they identified were similar. In only a few cases were issues cited that were not common to both groups. Also, the importance of the issues is similar between the groups. Both groups identified the need for a vision as either at the top of the list or near the top. The issue of *strategic planning*, which tops the list of the staff concerns, can be viewed as the operationalization of vision. It is not surprising that staff, wanting solutions to the many operational issues for which they were responsible, saw vision as something needing a practical component.

Both groups also viewed technical training and support as important areas needing improvement, highlighting the fact that distance education requires more technical participation than is associated with on-site learning, and that perhaps UAS had not expanded its support services to address this.

Table 3
Barriers to Distance Education Identified by Faculty and Staff

(1=no barrier, 5=very strong barrier) *Issue*	*Faculty*	*Staff*
Need for increased time to perform tasks	3.4	3.3
Shared vision	3.3	3.8
Strategic planning	Not cited	3.9
Faculty benefits	2.9	Not cited
Technical training	2.9	3.7
Technical support	Not cited	3.6
Other training issues	2.8	Not cited
Need for mentoring for students	2.7	3.5
Support from administration	2.5	3.3
Support from colleagues	2.4	Not cited
Difficulty recruiting faculty	Not cited	3.1

Most of the remaining issues fall under the heading *human infrastructure support*. Both staff and faculty wanted a more supportive administration, clearly indicating a need for leadership in distance education in practical terms. Faculty also wanted more benefits to compensate them for the additional effort required in distance education. Interestingly, both groups cited issues with faculty members. Faculty engaged in distance education wanted more support from their colleagues, presumably a reference to the fact that distance and on-site teachers at UAS are often at odds over quality, resource allocation, and other issues. The staff's issue with faculty was simply about being able to find teachers willing and able to teach at a distance.

Perhaps the most surprising finding was that both groups clearly recognized the need for student mentoring. Students were asked about distance education barriers from a slightly different perspective in terms of what level of improvement was needed in key areas. If we can assume a rough equivalency between the identification of the importance of barriers and level of improvement needed in key areas, this was the only issue identified by all three groups.

Most of the other issues identified by students fall under the general heading of *student services*: advising, financial aid, course materials, program flexibility, registration, and so on. This seems to be a clear indication that students need a higher level of support than they are receiving, both academically and as administratively.

Conclusion and Recommendations

Clear recommendations emerged from the data. We precede these recommendations with two observations.

First, the overall attitude toward distance education at UAS is positive. By and large, those individuals involved with distance education had a good experience with it and wished to continue their involvement. They saw it as one important way for UAS to fulfill its mission to serve a diverse student body and to meet the ongoing educational needs of Alaska.

Second, there was much consistency among the groups that responded to the surveys. That is, when asked similar questions, respondent groups (faculty, students, and administration and staff) shared common perceptions, concerns, and reference points about the phenomenon of distance education at UAS. This is not to imply that respondents' perceptions were the same, but rather to point out that respondents addressed similar issues. Thus there appears to be no perceptual problem about what distance education is at UAS or about the problems and opportunities associated with it. The most important reference points emerged as the following themes.

1. Vision, particularly the articulation of the role of distance education in the future of UAS. This includes the need to address how distance education is administered in concert with UAS's on-site mission.
2. Coordination, particularly the administration of distance education in practical, real terms, including planning, training and facilitating, and evaluating distance education efforts.
3. Support, particularly those areas of distance education that diverge from traditional education.

Given our experience in the field, it is clear that many of the items brought up by all three respondent groups are the issues and details that are easily overlooked by normal assumptions of an on-site approach to education. Acknowledging and addressing the additional requirements necessary to support distance education could resolve many of these challenges. Such an effort needs to include all stakeholders and needs to happen as part of the processes of academic planning, budgeting, allocating faculty and staff time, and using technological resources.

Recommendations based on common themes that emerged across all three groups are as follows.

Recommendation 1. UAS must develop a vision and mission statement about distance education that is understood throughout the UAS community. It should reflect involvement of all major components of the university community, including administration, faculty, and students. Such a vision and mission are critical and require committed leadership to implement distance education fully at UAS.

Recommendation 2. The stated vision and mission can only be fully implemented with the development of appropriate policies and the commitment of necessary resources, both human and technological. Policy development issues include, but are not limited to, faculty time commitment and compensation, the value of distance education in the organization, and issues of quality and copyright. Resource commitment issues include, but are not limited to, technical and administrative support and helping faculty design, develop, and deliver distance courses.

Recommendation 3. A centralized coordinating agency or mechanism is needed to help coordinate the many details of distance education at UAS. Duties would include, but not be limited to, helping with course sequencing, program planning, advertising, providing support (pedagogical, developmental, institutional, and technological), and evaluating distance education experiences. It is important to note that many minor details confound faculty, students, and staff and are impediments to effective distance education at UAS.

Recommendation 4. UAS needs to help students develop a clear understanding of the unique qualities and characteristics necessary to succeed in a distance education environment. This includes demands on family and

personal life, the need for self-discipline and effective study habits, and skills in accessing and using library resources and delivery systems.

Recommendation 5. Discussion is needed among faculty, leading to some resolution about issues of course quality between those who deliver distance courses and those who do not. The desired result is mutual respect and an atmosphere of support among the two groups, which might come about through an open exchange about the various kinds of materials, teaching methodologies, and experiences involved in teaching on site and at a distance. Other issues that need to be addressed include appropriateness of distance delivery for particular kinds of coursework, cost effectiveness, and relevance to UAS's mission.

Recommendation 6. Support from the administration and to a lesser extent from fellow faculty is needed for understanding and planning for the special needs of distance education. The special support is needed because of course and program design requirements, technological issues, and especially in terms of the amount of time these require. Teaching at a distance is different than teaching on site, and faculty need help in adapting materials and delivery methodologies to the new media.

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Appendix
Faculty Survey

This survey was designed to gather information about UAS faculty members' experiences, perspectives, and needs regarding distance education. By completing this, your input will become part of the planning and decisions, as next steps are taken. Please take a few moments to add your thoughts.

- In the following questions, please choose the answer(s) that best represent your thoughts and experiences.

1. Have you taught any courses primarily at a distance in the last five years?
   ☐ Yes ☐ No

If YES, please check all the technologies that you used. Then please go to No. 2 to continue this survey. If NO, please skip to No. 8 to continue this survey.

- ☐ Audio conferencing
- ☐ Satellite broadcasting
- ☐ Video tape or other materials by mail
- ☐ Travel to remote locations plus postal or e-mail communication
- ☐ Online (computer conferencing/ Internet, e.g., Blackboard, Caucus)
- ☐ Others _____

2. How many times have you taught course(s) completely at a distance in the last five years?
   - ☐ 1-4
   - ☐ 4-8
   - ☐ 8 or more
3. In what percentage of the courses you taught at a distance did you also do the following:

- ❑ Teach the same course to on-campus students (different section) ___ %
- ❑ Teach the same course to on-campus students (same section) ___ %

4. Please rate the strength of your reasons for choosing to teach your course(s) at a distance (if you have taught many times, please answer the questions in a general sense).

(1 Very Weak/ 2 Weak/ 3 Moderate/ 4 Strong /5 Very Strong/NA=Not applicable)	1	2	3	4	5	N/A
Desire to get students more involved with technology						
Opportunity to use technology more innovatively to enhance course quality						
Opportunity to meet needs of students at a distance						
Increased flexibility in working hours and location for the students						
Increased flexibility in working hours and location for you						
Response to students asking for educational opportunities at a distance						
Chance to interact with students more frequently						
The course was required to be a course at a distance						
The course was mandated to be offered as part of a course or program sequence						

5. Please describe your overall impression of your distance education experience.
   - ❑ (5) Very Favorable
   - ❑ (4) Somewhat Favorable
   - ❑ (3) Moderate
   - ❑ (2) Somewhat Unfavorable
   - ❑ (1) Very Unfavorable
6. Please describe your thoughts on how well the technology used in the distance course(s) was appropriate for the content of the course(s).
   - ❑ (5) Very well matched
   - ❑ (4) Well matched
   - ❑ (3) Moderate
   - ❑ (2) Poorly matched
   - ❑ (1) Very poorly matched
7. Please rate how strongly you agree or disagree with the following aspects of your distance education experience:

(1 Strongly Disagree/ 2 Disagree/ 3 Neutral/ 4 Agree/ 5 Strongly Agree/ NA Not Applicable)	1	2	3	4	5	N/A
My students were ready to learn						
My students were committed to their learning						
I was satisfied with my students' learning outcomes						
I had positive interactions with my students						
I was satisfied with my experiences						
I was satisfied with the support I received from my institution in general						
I was satisfied with the support I received for the development of my course(s)						
I was satisfied with the support I received for the delivery of my course(s)						
I was satisfied with the support I received for technical aspects of my course(s)						
I was satisfied with the support I received for the pedagogical aspects of my course(s)						

I was able to advise, or provide information about advising, for my students

8. Consider the following aspects of distance learning. For each aspect, please respond as to whether it represented a barrier to the effective teaching and learning of the distance courses, and how significant of a barrier it represented.
   (1 No Barrier/ 2 Little Barrier/ 3 Moderate Barrier/ 4 Strong Barrier/ 5 Very Strong Barrier/ NA Not Applicable) 1 2 3 4 5 N/A
   Understanding and meeting accreditation requirements
   Need for technical support
   Use of student information retrieval (BANNER), etc.
   Concern about faculty compensation, incentives, workload, promotion and tenure, recognition, or awards
   Increased time commitment (e.g., for exploration of new materials; course development; training; release time needed)
   Concern that distance education lowers the quality of courses/programs, students that are admitted, or expectations for student learning
   Need for support or encouragement from administrators
   Need for support or encouragement from colleagues
   Need for distance learning training provided by your institution
   Need for shared vision for the role of distance education in the institution
   Need for student services support in the following areas:
   a. admissions
   b. library services
   c. initial technical training
   d. ongoing technical support
   Need for information about financial aid to assist students in funding their education
   Difficulty recruiting participants/students
   Equipment failure (student, university or faculty)
   Need for effective mentoring or tutoring for students
9. Please describe any other support or assistance you feel you needed and received or did not receive:
10. Have you felt any pressure that you should or should not participate in UAS's distance education program?
    ☐ Yes ☐ No
    If yes, please describe your experiences:
11. Do you feel your distance education responsibilities are an integrated part of your work load?
    ☐ Yes ☐ Somewhat ☐ No
    Please Explain:

12. How much assistance do you need in teaching your courses at a distance in the following areas, assuming you are willing to teach at a distance?
    (1 No Need / 2 Weak Need / 3 Moderate/ 4 Strong Need / 5 Very Strong Need) 1 2 3 4 5 N/A
    Understanding and meeting accreditation requirements
    Technical support

Policy regarding faculty compensation, incentives, workload, promotion and tenure, recognition, or awards
Staff assistance with course development
Support or encouragement from administrators
Support or encouragement from colleagues
Technical training provided by the organization
Workshop about distance education, including copyright/fair use issues
Policy concerning intellectual property rights/ownership
Research sources guiding the effective practice of distance education

13. What is your vision for distance education at UAS?

14. What degrees or programs do you think are or would be viable for UAS to offer at a distance?

15. What role would you like to play in the future of distance education at UAS?

16. What role would you like your department to play in the future of distance education at UAS?

17. What concerns regarding distance education do you want everyone to know?

18. What might the administration do to support distance education throughout the three UAS campuses?

19. In your opinion, what does UAS need to do to make distance education a significant part of the UAS program?

20. In how many courses that you teach locally (traditional in-class format) do you use the following technologies: (Please put the number within your most recent two semesters)

- ❑ Caucus
- ❑ UAS Online
- ❑ Blackboard
- ❑ Television Signal
- ❑ Internet Resources
- ❑ CD/DVD
- ❑ Streaming audio or streaming video
- ❑ Others (please name) _____

21. Please add any comments that you feel were not addressed in this survey.

Note

Other surveys are available from authors.

Acknowledgments

#8 is modified from Berge (1999).
#11 is modified from (NUTN, 2002)
#4 is modified from McKenzie, Mims, Bennett, and Waugh (2000).