A Statewide Study of Factors Related to the Successful Implementation of GSAMS Credit Courses at Technical Institutes.

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Georgia Statewide Academic and Medical System

The factors related to successful implementation of Georgia Statewide Academic and Medical System (GSAMS) credit courses at technical institutes were examined in a statewide study of teacher and student satisfaction with GSAMS. The six faculty members who taught distance learning class via GSAMS were interviewed, and the 62 students enrolled in GSAMS courses during winter 1995 were surveyed. Of the 57 (92%) students who responded, 91% were highly satisfied and 7% were somewhat satisfied with their course. Occasional malfunctions of GSAMS equipment were reported by 82% of the students and considered by 44% to be very important to their ability to learn effectively. Overall, students' attitudes toward their courses became more positive throughout the quarter. GSAMS courses were considered as good as other courses by 47% of students and better by 28% of students. Most instructors (67%) were satisfied with the course, spent more time preparing to teach their GSAMS course than their other courses, rated administrative support for learning distance education strategies as medium, and had positive attitudes about teaching GSAMS classes. All students and instructors stated their willingness to take/teach another GSAMS course. (Appended is a copy of the student questionnaire with the tallied responses.)
A Statewide Study of Factors Related to the Successful Implementation of GSAMS Credit Courses at Technical Institutes

Dr. Camille Hassenplug
Research Specialist

Dr. Shary Karlin
Research Specialist

Dr. Dorothy Harnish
Project Coordinator

Occupational Research Group
School of Leadership and Lifelong Learning
College of Education
The University of Georgia
Athens, GA

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A Statewide Study of Factors Related to the Successful Implementation of GSAMS Credit Courses at Technical Institutes

This project proposed to study the relationship between student and instructor satisfaction with GSAMS credit course instruction and the various factors identified in the literature as critical to the success of distance learning. Factors most closely related to faculty and student success were identified and assessed so that recommendations could be made about how GSAMS programming should be structured, planned, presented, supported, and delivered to contribute to satisfactory teaching and learning experiences by faculty and student participants.

This study measured student and instructor satisfaction with their GSAMS credit course experience by analyzing its relationship to the following critical factors: course design, instruction, communication, technology, training, and administrative support.

Student and faculty ratings and responses are described and compared, and changes that occurred through pre and post assessments are assessed, to provide descriptive information about participant perceptions and experiences in GSAMS courses at the technical institutes.

Methodology

In order to identify the technical institutes that were planning to offer credit courses over GSAMS during the Winter 1995 quarter, telephone calls were made to all the Vice Presidents for Instruction in the late Fall, 1994. Five technical institutes said they planned to offer distance learning classes: Athens Technical Institute, Heart of Georgia Technical Institute, Macon Technical Institute, North Metro Technical Institute, and Savannah Technical Institute. Each were delivering at least one course to one remote site. Because of the low number of schools offering GSAMS courses, it was decided that a survey would be developed and administered to all students enrolled in the courses, but structured interviews would be conducted with each faculty member. Questions for the student survey and the structured interview guide for the faculty were developed, using the critical factors for the study. Common questions were included in both the student and faculty surveys to allow later comparison of responses.

A pilot test of the student survey was conducted in November, 1994 with an undergraduate course in occupational studies offered at the University of Georgia and delivered to one other site over GSAMS. The survey was revised based on feedback from these students. The student survey covered the broad areas of instruction, course design, technology, communication, and attitudes. The structured interview guide for faculty included the broad areas of training and preparation, administrative support, course design, technology, instruction, and attitudes. Some questions in both the student and faculty surveys were designed to measure change.
Sample selection

Participants in the study included the six faculty members teaching the technical institute credit courses over GSAMS during the Winter Quarter 1995, and all the students enrolled in these courses. Permission to participate in the evaluation study was sought and granted from each faculty member, as well as from the Vice Presidents for Instruction at each of the participating schools.

Athens Technical Institute offered Economics 192 to students at Savannah Technical Institute. Five students were enrolled at the originating site; two at the remote site. All seven surveys were returned. One student at the host site was blind, which accounts for the missing responses on the visual or sight related questions. The survey was administered to her verbally by the researcher.

Math 101 was offered at Heart of Georgia Technical Institute to students at their Eastman, GA campus. There were seven students in the host site and three at the receive site. All surveys were returned. This course was designed as self-paced and individualized; therefore, many students had completed the course by the time surveys were administered but all returned at the final session to complete the survey. Surveys were faxed to the remote site.

Macon Technical Institute provided Management and Supervisory Development 101 to five students at the host site, and to one at North Metro Technical Institute, the remote site. All students completed the survey.

North Metro Technical Institute offered Management and Supervisory Development 104 to Macon Technical Institute. Eight students were enrolled at the originating site, and four were enrolled at the remote site. Surveys from all students were received.

Savannah Technical Institute offered Fire Science 260 to firefighters at Brunswick College. There were two students enrolled at the originating site, and 11 at the receive site. Eleven surveys were returned. The course was taught in two sections on two different nights, due to firefighters' schedules. Students could attend whichever day their schedule allowed.

Savannah Technical Institute also offered Fire Science 161 via GSAMS. This course was added to the school's schedule late; therefore, the initial survey of the instructor was administered at approximately the mid-point of the course. The course originated at Brunswick High School because the instructor lived closer to Brunswick than Savannah. There were four students enrolled at the host site, and 10 were enrolled at Savannah Technical Institute, which was the remote site.

Data collection

Prior to the first class session of each course, arrangements were made with each instructor for the researcher to fax several questions from the structured interview that
would be used a pre-assessment, and for a follow up phone call to be made to the instructors to obtain their responses. In this way, instructors could elaborate on any question, or provide any additional comments. The distance learning coordinator at each technical institute was contacted before the final class session in order to receive the surveys for the faculty, and the student surveys for those at the remote sites. Arrangements were made with the instructor by the researcher to visit each site at the final class session in order to administer the survey, interview the instructor, and make observations. While the students completed the surveys, the instructor was interviewed. Surveys were returned by 57 of the 62 students, for a response rate of 92%. The response rate for faculty was 100%.

Data analysis

Data from student surveys was analyzed using SPSS-generated crossbreak tables to determine patterns of responses and the extent of relationships among the factors being studied. Findings were analyzed using the categories of course design, instruction, training, technology, administrative support, and communication. Field notes from the researcher’s observations were used to illuminate the conclusions and recommendations.
Findings

Student experience in Georgia Statewide Academic and Medical System (GSAMS) credit courses

Data analysis of responses from the 57 student surveys administered during the last class session yielded information about student attitudes toward and experience with course design, instruction, communication, and technology. Percentages are rounded.

Q1: Overall level of satisfaction with course

All but one student reported being satisfied with the course. Ninety-one percent were "satisfied" and seven percent "somewhat satisfied". Ninety-four percent of students enrolled at the originating sites, and 89% of students at the remote sites reported being "satisfied".

Q2: Ability to see/hear the instructor, students, and A-V materials

Students were asked about their experience with different aspects of the course. With one student not responding, all at the originating sites reported they were able to see the instructor "always" during the course, whereas only 85% of those at the remote sites reported this. Similarly, all students at the host sites could hear the instructor, as compared with only 73% at the remote sites.

Students had more difficulty seeing and hearing other students at each site. At the originating sites, 83% of students were able to see and 71% could hear the students at each site "always". At the receive site, only 42% of the students reported they could always see the students, and 54% reported they could always hear the students at each site.

Of the students at both sites who responded, 77% of students were always able to see the visual materials and 80% of students were always able to hear the audio materials. There were no differences between originating and receiving sites in student responses in this area.

In reporting their experience with various aspects of the course, overall, students at both originating and receive sites noted that they could see and hear instructors better than they could see and hear the other students or see the visual materials.

Q3-6: Instructor use of distance learning teaching strategies

Students were asked to note how frequently the instructor conducted certain teaching-related activities considered to be important in distance learning. These activities were classified as: course design, presentation style, interaction, and instructional materials.
In the course design category, all students who responded reported that the instructor always or sometimes developed reviews or summaries of important points of lessons, and allowed time for questions at frequent, regular intervals. At least 91% reported that the instructor used a variety of formats in presenting information, helped students visualize course content by using graphics, pictures, videotapes or demonstrations, and used part of class time for students to practice skills or apply knowledge presented in the lesson. Less frequently conducted activities included avoiding long periods of notetaking by students, and offering a variety of activities and change of pace during each class.

Under presentation style, all students who responded reported that instructors always or sometimes spoke directly to remote sites at regular intervals, invited or requested comments or questions from all the sites, and used a clear speaking voice at least some of the time. Activities conducted with less frequency included calling upon specific individuals by name at both live and remote sites, describing visuals being broadcast, looking into camera to establish eye contact with students at remote sites, and staying within the range of the camera while speaking.

In the remaining categories, instructors encouraged interaction and feedback from all students, and provided instructional materials or handouts for each remote site in time for class always or sometimes, according to all the students who responded to the questions. Instructors less frequently encouraged interaction between sites; encouraged student conferencing with instructor by phone, video or fax; and used print and graphic documents, photographs, slides, and real objects on the graphics camera.

Comparing all the activities to each other, the activity reported as occurring most often by 98% of students was that the instructor invited or requested comments or questions from all sites. The least frequently reported activity (68% of students) was the instructor allowing for student presentations. Other less frequently reported activities were the instructor encouraging interaction between sites (88%), encouraging student conferencing with instructor by phone, video, or fax (88%), and offering a variety of activities and change of pace during class (80%).

Q7: How well GSAMS equipment worked

Students were asked several questions about the GSAMS equipment. When asked how well it worked, about 82% of the students reported some or frequent problems. Of the students reporting problems, 53% were enrolled in the originating sites, and 47% were in the remote sites.

Q8: Importance of equipment malfunctions

Of the 44% of students responding that GSAMS equipment malfunction is very important to their ability to learn effectively, 52% were enrolled at the originating sites. Thirty five percent of the students, evenly distributed between originating and receive sites, reported that equipment malfunction was somewhat important to their ability to learn. Of the 11 students noting that equipment malfunction was not important to their
ability to learn effectively, 8 were enrolled at the host sites, and 3 at the remote sites.

**Q9: Ease of use of GSAMS equipment**

Regarding the ease of use of the GSAMS equipment, 77% of students reported that it was "good", 21% said "average" and one student said it was "poor".

**Q10: Opportunity for students to operate equipment**

There was little opportunity, or opportunities only during a few class sessions, for students to use the GSAMS equipment, according to 44% of the students. About 39% reported there was no opportunity for students to operate the equipment during class. However, almost 18% of the students reported that there were a lot of opportunities at each class session for students to operate the equipment.

**Q11-12: Effect of student operation of equipment on learning**

Having other students in the class operate the GSAMS equipment made no difference in their ability to learn, according to 51% of the students. About 30% claimed that students did not operate the equipment, and about 18% responded that having other students operate the GSAMS equipment enhanced their learning.

Of the 58% of students who operated the GSAMS equipment themselves, about 32% claimed it made no difference in their ability to learn, but approximately 25% reported it enhanced their learning.

**Q13: Effectiveness of class components**

When asked to rate the effectiveness of specific elements of the course, all (100%) students rated the following as "very good" or "good": teaching methods, presentation of information, organization of course, interaction with teacher, and interaction with students at your site. Somewhat lesser rated elements were course materials (98%), and GSAMS equipment (97%). Interaction with students at other sites was rated very good or good by only 90% of students. Overall ratings by students of all aspects of the course were unanimously positive.

**Q14: Change in specific student attitudes about course**

Students were asked to retrospectively choose the adjectives from a list that described their feelings about taking the course as of the first class session. The second part of the question asked them to identify from the same list of adjectives those that described their feelings about the course as of the last class session.

At the first class session, about 61% of the students claimed they were curious, 49% were excited, 47% were enthusiastic, about 37% felt eager. Students also felt skeptical (25%), confident (23%), uncertain (23%), cautious (14%), reluctant (11%), scared (4%),
and resentful (4%).

By the last class session, many more students felt confident (23% increase). One student was more resentful (+ 2%). Students also felt far less curious (-54%), skeptical (-18%), uncertain (-18%), eager (-9%), reluctant (-7%), cautious (-5%), excited (-4%), enthusiastic (-2%), and scared (-2%).

Q15: Change in overall attitude toward course

Students were asked to describe their overall attitude toward taking the course, retrospectively, as of the first class session. They were then asked about their attitude toward taking the course as of the last class session.

Of those responding, 65% felt "very positive", and 30% felt "somewhat positive" toward the course as of the first class session. By the end of the course, students who felt very positive towards the course increased by 16%, while those describing their attitude as somewhat positive decreased by 16%.

Specifically, the number of students in the originating sites who reported their attitude as very positive increased by about 13%, and those in the remote sites increased almost 4%. Those in the originating sites who described their attitudes as somewhat positive decreased by almost 15%, and those in the remote sites decreased by about 2%.

Overall level of student satisfaction with the course became more positive by the end of the course, but this increase was mostly with students at the originating site.

Q16: Reason for taking course

The most frequently cited reason for taking the course (67%) was the fact that it was required for the student’s program. The second most often reported reason (37%) was that the course was offered at a convenient time or place. Other reasons, in order, are: liked instructor (28%), curious about TV courses (19%), friend or counselor recommended it (18%), and other (12%). No one responded that they preferred TV courses.

Q17: Quality of GSAMS course compared to other courses

When asked to compare the quality of their GSAMS course to other courses taken at the technical institute, about 47% of the students rated it "as good as" the other courses. Of these students, 63% were enrolled at the originating sites and 37% were at the remote sites. About 28% of the students rated the GSAMS course "better" than their other courses. For 21% of the students, this was their first course at the school. These students were evenly distributed between the originating and remote sites.

Q18: Expectations about level of difficulty
Students were retrospectively asked about their expectations of the level of difficulty of this course before starting the course, compared to other courses taken at the technical institute. They were then asked to compare the actual level of difficulty to other courses taken at the school after completing the GSAMS course. At the beginning of the course, 54% of the students expected the GSAMS course to be about the same in difficulty, 14% expected it to be easier, and 14% expected it to be harder than other courses they had taken at the technical institute.

After completing the course, 58% reported that the course was actually about the same in level of difficulty as other courses. Fourteen percent still reported it was actually easier than other courses, but only about 9% noted that it was harder than other courses. The remaining students reported that this was their first course at the school.

Q20-21: Previous TV classes; willingness to take another

Of the student who responded to the question, about 90% noted that they had never taken an interactive TV course before, but all students (100%) claimed that they would take another one if given the opportunity.
Faculty experience in Georgia Statewide Academic and Medical System (GSAMS) credit courses

Data analysis of the faculty pre-assessment and final survey responses (survey was used as an interview guide for the six instructors) yielded information in the areas of faculty attitudes toward and experience with training and preparation, course design, instruction, technology, and administrative support. Percentages are rounded.

Q1: Overall level of satisfaction with course

Overall, the majority of the instructors (67%) were satisfied with the course; the others were somewhat satisfied.

Q2: Prior notice on course assignment

The amount of advance notice instructors had to prepare to teach their GSAMS course varied. Half of them received a month in advance, two had several weeks notice, and one had several months to prepare.

Q3: Release time for course preparation

The majority of faculty (67%) received no release time in order to prepare for the course. The others indicated that they did receive release time.

Q4: Course preparation time compared to other courses

Most instructors (67%) spent more time preparing to teach their course over GSAMS compared to other courses they teach. The others noted that preparation time was either the same or much more compared with their other courses.

Q5: Support from administration

Instructors were asked to rate the support they received from administration in various areas related to distance teaching.

Three claimed they received a medium level of support from administrators in learning to operate GSAMS equipment. Two felt support was high.

Most (67%) rated administrative support as medium for learning distance teaching strategies, preparing and organizing course lessons and instruction for GSAMS, and preparing and distributing GSAMS course materials.

All but one instructor rated administrative support high in providing technical support staff to operate equipment, and direct involvement with coordination of GSAMS offerings.
The majority (67%) rated administrative support as high in terms of commitment to success in instructional uses of GSAMS, and overall level of administrative support for instructional use of GSAMS.

Regarding administrative support in providing extra time if necessary to teach on GSAMS faculty ratings were divided evenly among high, medium and low levels of support.

Half rated support from administration as high in commitment to expanding the uses of GSAMS for credit course offerings; two instructors believed support was low.

A comparison among these areas shows that administrative support is highest in providing technical support staff to operate equipment, and direct involvement with coordination of GSAMS offerings. Support is at a medium level in learning distance teaching strategies, preparing and organizing course lessons and instruction for GSAMS, and preparing and distributing GSAMS course materials. The greatest percentage of instructors rating support from administration in any area as low was 33%. These areas include learning distance teaching strategies, providing extra time if necessary to teach on GSAMS, and commitment to expanding the uses of GSAMS for credit course offerings.

Q6: Reasons for teaching the course

Half of the faculty indicated that their reason for teaching the course via GSAMS was because they were asked by administration and agreed without reservation. The others volunteered for various reasons.

Q7: Feelings about teaching the course

In order to identify changes in attitudes about teaching a distance learning course, instructors were asked five questions prior to the first class session, and again at the conclusion of the course. Prior to the first class session, faculty were asked to choose the adjectives from a list that described their feelings about teaching the class. Most (67%) reported they were curious. Half described themselves as feeling eager, confident and enthusiastic. One instructor felt excited, one felt scared, and one felt slightly intimidated.

At the last class session, instructors were asked the question again. By this time, the same number of faculty indicated they felt curious, confident and scared. However, two more, or 33%, described themselves as excited and cautious. One additional instructor identified eager and enthusiastic as describing their feelings toward the course, and one felt frustrated.

Q8: Overall attitude toward course

When asked to describe their overall attitude toward teaching the class, the majority (67%) of faculty claimed they were very positive; the remainder felt somewhat positive.
By the end of the course, though, instructors were evenly divided between feeling very and somewhat positive. That is, overall attitude about teaching a distance learning course did not change throughout the course except for one instructor, who was less positive at the end.

**Q9: Level of preparedness to teach the course**

Prior to beginning the GSAMS course, most of the faculty (67%) rated their level of preparedness to teach the course as average, with the remaining instructors rating their level as high. There was no change in the frequency of these ratings at the end of the course. Faculty did not feel more prepared to teach a distance learning course after having completed a course than they did at the beginning. However, all felt they were prepared.

**Q10: Ability to use GSAMS equipment**

All but one instructor (83%) rated their level of ability or skill in using GSAMS equipment before the first class session as average. The other instructor rated it low. At the conclusion of the course, 67% claimed their skill level was average. One reported it was now high, and one still reported it as low.

**Q11: Ability to use distance teaching strategies**

The level of ability or skill in using distance teaching strategies before the first class session was average for five of the six instructors, and low for the other one. By the end, one rated their skill level as high, two as low, and the others rated it as average. Only one faculty member felt they improved and one felt less skilled in using distance teaching strategies by the end of the course.

**Q12: Instructor use of distance learning strategies**

In the next set of questions, faculty were asked about the frequency of conducting certain activities in their class. These activities were categorized as related to course design, presentation style, interaction, and instructional materials.

In the course design category, the most frequently conducted activity by the instructors (100%) was that they allowed time for questions at frequent, regular intervals during class. The next most often conducted activity was that they developed reviews or summaries of important points of lesson, followed by avoided long periods of notetaking by students; offered a variety of activities and change of pace during each class; helped students visualize course content by using graphics, picture, videotapes or demonstrations; used part of class time for students to practice skills or apply knowledge presented in the lesson; used a variety of formats in presenting information; and allowed for student presentations.

In the presentation style group, all instructors claimed they always spoke directly to
remote sites at regular intervals, and called upon specific individuals by name at both live and remote sites. These were followed in frequency by invited or requested comments or questions from all the sites, described visuals being broadcast, looked into camera to establish eye contact with students at remote sites, stayed within the range of the camera while speaking, and used a clear speaking voice.

In terms of interaction, all instructors encouraged interaction and feedback from all students at least some of the time. About 83% encouraged interaction between sites and 67% encouraged student conferencing with instructor by phone, video or fax at least some of the time. One instructor never encouraged interaction between sites. This could be due to the individualized format of the math course, as students completed assignments and progressed at their own pace.

All the instructors provided instructional materials or handouts for each remote site in time for class at least some of the time, whereas print and graphic documents, photographs, slides and real objects on the graphics camera were used with less frequency.

In comparing all the areas in each category to each other, those reported by faculty as being conducted most frequently were: allowing time for questions at frequent, regular intervals during class; speaking directly to remote sites at regular intervals; and calling upon specific individuals by name at both live and remote sites. The activity conducted least often was allowing for student presentations.

Q16-18: Faculty prior experience and training on GSAMS

Two of the instructors had taught at least one class over GSAMS before Winter Quarter 1995, and all but two received training on the use of the equipment prior to this class. Those reported by faculty as providing the training were Georgia State University, CLI, an electronics instructor, a local technician, and a high school. Training focused on operating the equipment, though one instructor reported receiving training in instructional strategies.

Q19: Training and practice time prior to course

Prior to the course beginning, instructors spent an average of 1.6 hours on their own, and 1.7 hours with professional or technical assistance in training and practice with GSAMS equipment. Reported hours in both categories ranged from 0 to 3, with most reporting 2 hours.

Q20-22: GSAMS equipment functioning

Overall, the equipment worked with only some problems, as reported by all instructors. Half of them felt that when the equipment malfunctioned, it was very important to their ability to teach effectively. Two claimed equipment malfunction was not important to their teaching ability.
Most (67%) faculty rated the ease of use of the GSAMS equipment as good; the rest rated it average.

**Q23-24: Student operation of equipment**

Four of the instructors allowed students to operate the equipment only at a few class sessions; one instructor did not provide students the opportunity to operate the equipment; and one instructor allowed students only at the receive site to operate equipment a little at each session. When students did operate the equipment during class, half of the instructors claimed it made no difference in student learning. One claimed it enhanced learning, and two reported that students did not operate the equipment.

**Q25: Effectiveness of class components**

Instructors were asked to rate the effectiveness of specific aspects of the course. Half of faculty rated the GSAMS equipment as "very good"; a third rated organization of the course and interaction with teacher and on-site students as very good; and one teacher rated course materials and interaction with students at receive sites very good. Other faculty rated these components as "good". Teaching methods and presentation of information were rated good by all faculty. There were no areas rated as bad.

**Q26: Course quality compared to others**

Faculty unanimously rated the quality of their GSAMS course "as good as" other courses they have taught at the technical institutes.

**Q27: Willingness to teach another GSAMS course**

All faculty reported they would teach another course over the GSAMS system. Instructors commented that they would teach again because they liked the technology, because it was an interesting experience, and because teaching at a distance gave them the opportunity to bring their expertise to others.
Comparative Analysis and Conclusions

The data obtained from students and faculty are analyzed in terms of the relationships between satisfaction and quality of their GSAMS experience, and the broad factors of communication, teaching strategies, technology, effectiveness, attitude, and motivation. Certain responses between the faculty and students are also compared.

Satisfaction

All faculty, and all but one student, reported they were at least somewhat satisfied with the distance education experience. Therefore, any problems that were reported in communications, training and preparation, course design, instruction, equipment, and administrative support did not seem to detract from a favorable teaching and learning experience with GSAMS.

Quality

The ratings of the quality of the GSAMS course compared with other courses show that all faculty believe it was as good as their other courses, whereas less than half of the students rated it as good as the other courses they have taken at the technical institute. Most of the students reporting a less than favorable comparison with other courses were at the originating sites. Twenty eight percent of the students, split evenly between originating and receive sites, rated this course as better than the others they have taken. Students were apparently more positive toward the GSAMS experience than were the faculty. This difference might be due to the faculty’s reports of the lack of training in the area of distance teaching strategies and lack of substantial preparation time. Faculty might have been more critical of their teaching over GSAMS than were the students because of their lack of training and preparation time. However, all faculty and all students were in agreement that they would teach or take another course over GSAMS.

Communication Factors

In an analysis of the communication factors involved in the distance education experience, almost all of the students responded they were able to see the instructor (91%), and most (88%) could hear the instructor at all times. All the students in the originating sites could always see and hear the instructor. However, 15% of those at the remote sites could only sometimes see the instructor, and a higher percentage of students at the remote sites (27%) reported they were able to hear the instructor only some of the time. Of the students who were always able to see and hear the instructor, 90% reported a satisfying distance education experience overall, and all of the students who were not always able to see and hear the instructor (those in the remote sites) also reported overall satisfaction with the experience.

Concerning audio and visual materials, 81% of the students could always hear, but fewer (77%) were always able to see the visual materials. There was no difference between
the host and receive sites in the ability to see and hear the materials. For those who reported they could always see the visual materials, 95% reported overall satisfaction with the distance education experience, and 96% of those who could always hear the audio materials indicated they also had a satisfying experience with GSAMS.

The communication areas which were more problematic than the other areas were the ability to see and hear students at each site. Only 64% of the students could always see the students at each site, and most of these students (83%) were at the originating sites. Of the students claiming they were always able to see the other, 94% reported overall satisfaction with the GSAMS course. More than half of the students at the remote sites were sometimes, seldom or never able to see other students. Of these students reporting that they were not always able to see the others, 15% reported being less than completely satisfied with the distance education experience.

Comparing by course, the majority of students in FSC 260 (82%) were not always able to see other students, as were 40% of those in MAT 101, and 36% in FSC 161. On the other hand, all students in ECO 192 were always able to see the others.

About 63% of the students could always hear students at each site, which included the majority (71%) of those in the host sites. Ninety two percent of all these students reported a satisfying distance education experience. About 46% of the students in the remote sites could hear other students sometimes, seldom, or never. Of those who reported not always being able to hear others, 10% did not have a completely satisfying experience with distance education overall. In a comparison by course, half of the students in MAT 101, 46% of those in FSC 260, 42% in MSD 104, and 36% in FSC 161 were not always able to hear other students.

In summary, there does seem to be a relationship between the number of students not always being able to see other students, and the number reporting a less than totally satisfying experience with GSAMS overall. Thus, the area of communication with the greatest impact on student satisfaction was the students' inability to see the students at each site. The area with the greatest impact on satisfaction was the students' ability to see and hear the instructor, as all who were not always able to do so were still satisfied with the experience.

Teaching Strategies

Faculty and student responses can be compared in the specific areas within teaching strategies. Instructors were asked how frequently they conducted certain activities in class. In the course design category, the most frequently performed activity, as reported by faculty, was allowing time for questions at frequent, regular intervals during class. This concurs with the students' response. Faculty reported that the activity conducted least often was allowing for student presentations, and this also concurs with students' perceptions.

Regarding presentation style, faculty claimed they most frequently spoke directly to
remote sites at regular intervals, and called upon specific individuals by name at both live and remote sites. The students support the faculty's claim in part. According to students, instructors frequently spoke directly to remote sites, and also invited or requested comments or questions from all the sites, and used a clear speaking voice. Only about 97% claimed they called upon specific individuals by name at least some of the time.

In the interaction category, all faculty claimed they encouraged interaction and feedback from all students at least sometimes. This claim was supported more strongly by students, as all students reported that instructors always encouraged interaction and feedback.

Students also were confident that all instructors always provided instructional materials or handouts for each remote site in time for class. Only 33% of the faculty confirmed this response; the rest indicated they provided handouts or materials only some of the time.

Within each category, the faculty's perceptions of the frequency of their class activities matched the students' perceptions of the frequency of class activities, with a major discrepancy only in the area of instructional materials.

An analysis by teaching strategy overall shows that the behavior occurring with most frequency, according to 98% of the students, was the instructor always invited or requested comments or questions from all sites. The activity occurring least often, according to almost 68% of the students, was the instructor allowed for student presentations at least sometimes. The other activities conducted less often, as perceived by the students, were: offered a variety of activities and a change of pace during class (80%), encouraged interaction between sites (88%), and encouraged student conferencing with instructor by phone, video or fax (88%).

According to instructors, they always allowed time for questions at frequent, regular intervals during class; spoke directly to remote sites at regular intervals; and called upon specific individuals by name at both live and remote sites. They least often allowed for student presentations, and used a variety of formats in presenting information.

Faculty believe that they are making an effort to use strategies which encourage interaction with students at both sites. Students generally agree with this, but see fewer attempts by faculty to change the pace and variety of instructional activities and encourage interaction between the sites.

This might be related to the lack of training in distance teaching strategies by all but one of the instructors. Interaction is very important in this type of teaching and learning situation, and instructors most familiar with traditional lecture methods might need to concentrate more in the area of generating interactivity within the constraints of this technology. It also may be possible that the course content for these classes did not lend itself to student presentations.
Technology

In reporting how well the GSAMS equipment worked, the responses from faculty differed from students. All instructors reported that there were some problems with the equipment throughout the course. This compares with 82% of the students who reported some problems. Of the students reporting problems 53% were at host sites, and 47% at receive sites.

Almost 18% of the students claimed there were no problems with the equipment, and approximately four percent reported frequent problems. This variance may be due to the tolerance level of individuals for equipment problems, or varying attendance at classes. Additionally, the students in the math course may not have been as aware of equipment problems as the instructor, since each was working on an individualized basis.

When the equipment malfunctioned, half of the instructors felt it was very important to their ability to teach effectively. This percentage is similar to the 45% of the students reporting that equipment malfunction was important to their ability to learn effectively. More students at receive sites felt equipment malfunction impacted their learning than those at host sites. Twenty-six percent of host site students said malfunctions did not affect their learning, while only 12 percent of receive site students said this. This is not surprising since students at host sites still have an instructor present in the room when equipment fails, however, communication at receive sites is entirely dependent on the technology connections.

A third of the faculty, versus 19% of the students, did not feel equipment malfunction was important. An issue with instructors teaching over systems like GSAMS is the lack of control they have over their class. When the equipment malfunctions, it is possible that some feel they have lost control and therefore will note that it is very important to their ability to effectively teach.

Of the students reporting problems with the GSAMS equipment, 89% still reported being satisfied overall with their distance education experience. Approximately 40% of those who reported no problems with the equipment rated the quality of their GSAMS course as better, and 40% rated it as good as the other courses they have taken at the technical institute. Of the students reporting problems with the equipment, almost half claimed the quality was as good as, and another quarter reported it was better than the other courses they have taken. Two students reported that the GSAMS course was worse. In general, equipment malfunction did not seem to affect student perceptions of course quality.

The ease of use of the GSAMS equipment is basically comparable between students and faculty. Sixty seven percent of the instructors, versus 77% of the students, reported that the ease of use was good. Thirty three percent of the faculty, versus 21% of the student, claimed it was average.
There were discrepancies between instructors’ and students’ perceptions in the opportunities for students to operate the equipment during class. Most of the instructors (67%) reported they allowed students to operate equipment only at a few class sessions, but only about 18% of the students agreed with this claim. Thirty-nine percent students but only one instructor said students never had occasions to operate the equipment. Twenty-six percent of the students, compared with one instructor, reported they operated the equipment only a little at each session. About 18% of the students reported they had a lot of opportunities to use it, compared with no instructors reporting the same. The difference in the views between students and faculty could be explained by the fact that instructors controlled student use of equipment only at the host site where they were present. The students at receive sites may have had greater latitude in the operation of equipment.

When students did operate the equipment, half of the instructors claimed it made no difference in the students’ learning, which concurs with the 51% of students who felt the same. The percentage of students and faculty who reported either that student operation of equipment enhanced learning, or that students did not operate the equipment, were also identical.

In summary, even though a great number of students at both original and remote sites reported problems with the GSAMS equipment, the majority claimed they had a satisfying GSAMS experience overall. They also rated the course at least as good as the others they have taken at the technical institute. Thus, there is no direct relationships between student satisfaction and GSAMS equipment, or quality of the course and GSAMS equipment.

Effectiveness

Students were asked to rate the effectiveness of various aspects of the courses. Interaction with teacher was the highest rated, with 88% rating it very good and 12% rating it good. Interaction with students at other sites, however, had the lowest rating, with only 63% rating it very good and 26% rating it good. Of the 11% rating interaction with students at other sites as bad or very bad, all but one student were enrolled in the remote sites. The single student in the host site may have been the visually impaired student.

In a further analysis of this item by course, the majority of students in MSD 104 (83%) and FSC 161 (82%) rated interaction with students at other sites as very good. About 30% of the MAT 101 students rated it bad or very bad. The negative rating by the math students may be due to the individualized nature of the course. Students received a lecture and completed the course on their own; thus, group interaction was minimal.

Of those who rated the interaction with students at other sites as very good or good, 31% rated the quality of the course as better and 47% rated the quality as good as the other courses they have taken at the technical institute.
Regarding satisfaction, 96% of the students who rated interaction with students at other sites as good or very good were also satisfied overall with the GSAMS experience. Half of those rating interaction with others as bad or very bad also had a satisfying experience; the other half did not.

To summarize, the low rating of effectiveness in the interaction with students at other sites did not generally have an impact on the students rating of the quality of the GSAMS course, or on their overall level of satisfaction, except in a few cases. The low rating of interaction with other students is substantiated by certain communication factor ratings. In the area of communication, some students could not always see and hear the other students, which had the greatest impact on satisfaction and quality of the GSAMS experience.

In rating the effectiveness of various aspects of the course, student and faculty responses were varied. Students rated GSAMS equipment low in relation to most of the other areas, whereas it was the highest rated area by the faculty. Interaction with teacher was rated the highest by students, but lowest by instructors (one instructor response was missing). Next highest in the student ratings were teaching methods, and interaction with students at your site. Instructors rated teaching methods low, however, in relation to other categories, but interaction with students at their own site was ranked the same as students. All faculty rated all the areas as at least good. Students agreed with these ratings except for the areas of course materials, GSAMS equipment, and interaction with students at other sites. Students ranked these as the lowest.

**Attitudes**

The initial feelings of the instructors compare in part to those reported by students prior to the start of the first class session. In describing their feelings about teaching the course, most (67%) of the six faculty members claimed they were curious. This compares to 61% of the students also reporting feeling curious. Half of the faculty felt eager, confident and enthusiastic. Again, these feelings compare with 47% of the students who felt enthusiastic. However, only 37% felt eager, and only 23% felt confident.

The greatest changes in the feelings reported by faculty between the first and last class sessions were in feeling more excited and cautious. The students, however, reported feeling more confident but far less curious.

Of those students who reported being confident as of the first class session 20% were from the originating sites and 28% from the receive sites. By the last class session, the increase in confidence came mostly from the students at the remote sites, as the percentage increased by 32%. Students were much less curious about GSAMS at the end of the course (54% decrease). At the first class session, 57% of host and 72% of receive site students reported feeling curious. By the end, 50% fewer students at the host sites, and 64% fewer students at the remote sites were curious.
Skepticism and uncertainty also decreased by about 18% for students. By the end of the class, 21% fewer students at the originating sites, and 12% fewer students at the receive sites reported feeling skeptical. Twenty percent fewer host site students, and 16% fewer receive site students were uncertain by the last class session.

In describing their attitudes toward teaching the course, four instructors (67%) reported being very positive and the other reported being somewhat positive. Similarly, 65% of the students reported their attitude toward taking the course as very positive and 30% felt somewhat positive. By the end of the course, however, more students felt very positive and fewer felt somewhat positive. The change in faculty attitudes was the opposite. One was less positive and the others did not change.

Regarding their overall attitude toward the course as of the first class, 97% of the students in the originating sites, and all of those in the remote sites, had positive attitudes. This did not change by the end of the course.

Specifically, 20% more students in the originating sites, and 5% more in the remote sites, reported being very positive by the last class session. About 27% fewer students at the host sites, and 5% fewer students at the receive sites, were somewhat positive by the end. Only one student at the originating site reported being somewhat negative at the beginning and end of the course.

Motivation

The highest percentage of students at both originating and remote sites were motivated to take the course because it was required for their program. The second most popular reason was that the time or place was convenient. A high number of students in the originating sites (20) versus only eight in the remote sites took the course because they were curious about TV courses. Even though students were motivated to take the GSAMS course primarily because it was required and/or convenient, the majority still were satisfied with the experience and rated its quality as at least as good as the other courses they have taken.
Recommendations

The data from the faculty and student surveys indicate that there is overall satisfaction with the distance education experience at the technical institutes. However, recommendations can be made from the findings of this study in the areas of professional development, course design and delivery, technical support, and administrative support and organization.

Professional Development

Survey responses, as well as comments from faculty, indicate that instructors need professional development in the areas of teaching strategies and development of course materials. Only one instructor had received training on distance learning instructional methods. Several noted that they had taught themselves to use COMPEL, a presentation software package, in order to produce course materials. One instructor commented that it's necessary to be deliberate when teaching over GSAMS. Faculty must always be aware of their body movements and sounds, such as coughing. Training in instructional strategies and materials development for distance education classes are recommended.

Course Design and Delivery

Related to the need for professional development is the recommendation for different design and delivery techniques. The data indicate that instructors need to address different issues when they develop their courses for delivery over GSAMS. One issue is the need for interaction. Students reported that interaction with students at the other sites was not as frequent as other classroom activities, nor was interaction encouraged to the extent it might have been. They also noted that seeing and hearing other students at the other sites was sometimes difficult. Whereas this last statement may be related to technical issues, it can also be addressed through the use by instructors of activities that bring all students together more effectively. One instructor surprised his on-site students by inviting the remote class to the host site for a party at the last class. According to one student, the entire class was "a close group." They all interacted well and even the researcher could not identify which students were from which sites during her observations.

Another issue that instructors are recommended to address is to ensure that students, particularly those in the receive sites, are not just passively watching TV. Students noted that instructors did not change the pace, offer a variety of activities, or allow for students to make presentations during class as often as they conducted other activities. Some instructors multimedia software to develop audiovisual materials for delivery over the system and enhance their presentations. All instructors are recommended to learn such techniques for course delivery and design to increase interaction, change the pace of the course, and enhance presentation of material.
Technical Support

From the data, it is recommended that technical support personnel be on hand, whether at the site or contacted through a toll free number, to address technical problems as they arise. Also, a facilitator at each site is recommended, as is a technician who could operate the equipment.

The majority of the technical problems that were noted by the faculty dealt with the audio part of the system. Some noted difficulties with the remote microphones; others with the voice activated system which does not always allow for remote students to hear. Other instructors noted the appearance of echo problems and dial tones. One faculty member pointed out that using the toll free phone number to resolve technical problems did help.

All of the sites employed one or more support staff in some capacity. However, several of the faculty commented that having a technician operate the equipment during class would be beneficial for them. It would allow them to teach more freely. At some of the sites, instructors had students operate the equipment.

The location of the distance learning classroom at one site presented a problem. One wall of the room consisted of windows and was adjacent to another classroom. Students would move between the rooms to talk and visit with each other. This caused disruption for the other class members. The instructor noted that there was no facilitator at this remote site to handle these types of problems.

Administrative Support and Organization

It is recommended that administration demonstrate support for the faculty who teach over GSAMS by providing them with preparation time and release time.

Some instructors commented that their administration supported them in their efforts to utilize GSAMS, but did not always demonstrate the support with release time, preparation time, or recognition. Most of the faculty commented about the time involved in planning and delivering a course over GSAMS. Teaching a course over GSAMS entails extra work and more planning time, and time to develop course materials is needed. One instructor was provided with five hours of release time per week for planning the course, and another had a reduced teaching load for the quarter. These incentives are especially important for the first time a course is offered over the system.

One instructor noted that administration's main concern with GSAMS is cost, since remote sites grant the credit but do not pay the host site. It is recommended that the technical institutes develop policies or guidelines for using GSAMS so that these issues, such as cost and faculty incentives, are dealt with fairly and consistently. Additionally, the distance learning function is sometimes relegated to a media/library staff member in addition to their other responsibilities. It is recommended that each technical institute
provide at least one staff member dedicated to support and coordination of GSAMS activities.
University of Georgia
Occupational Research Group

Questionnaire on Student Experience in Georgia Statewide Academic and Medical System *(GSAMS) Credit Courses

Course Name: __________________________________________________________

School offering the course (do not abbreviate): _____________________________________________

Location where you are taking the course: __________________________________________________

*GSAMS is an instructional system which uses 2-way interactive audio and video equipment for distance learning programs in the state of Georgia.

Directions: Check the best response to each item or circle the rating scale for that item.

1) Rate your overall level of satisfaction with this course (Check one answer)
   a. 5 = satisfied 91.3%
   b. 4 = somewhat satisfied 7%
   c. 1 = not satisfied 1.8%

2) What was your experience with the following aspects of the course?
   Circle your choice: 1 = always, 2 = sometimes, 3 = seldom, 4 = never

   a. I was able to see the instructor
   b. I was able to hear the instructor
   c. I could see the students at each site
   d. I could hear students at each site
   e. I was able to see the visual materials
   f. I was able to hear the audio materials

   1  2  3  4
   5  6  7  8
   9  10 11 12
   13 14 15 16
3) In this class, how frequently did the instructor do each of the activities listed below? Circle your choice: 1=always, 2=sometimes, 3=seldom, 4=never (5=not appropriate for this class)

**Course Design:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. develop reviews or summaries of important points of lessons</td>
<td>1.44</td>
</tr>
<tr>
<td>b. use part of class time for students to practice skills or apply knowledge presented in the lesson</td>
<td>3.21</td>
</tr>
<tr>
<td>c. allow time for questions at frequent, regular intervals during class</td>
<td>3.54</td>
</tr>
<tr>
<td>d. avoid long periods of notetaking by students</td>
<td>3.37</td>
</tr>
<tr>
<td>e. offer a variety of activities and change of pace during each class</td>
<td>4.37</td>
</tr>
<tr>
<td>f. use a variety of formats in presenting information</td>
<td>4.34</td>
</tr>
<tr>
<td>g. help students visualize course content by using graphics, pictures, videotapes or demonstrations</td>
<td>4.35</td>
</tr>
<tr>
<td>h. allow for student presentations</td>
<td>5.37</td>
</tr>
</tbody>
</table>

4) In this class, how frequently did the instructor do each of the activities listed below? Circle your choice: 1=always, 2=sometimes, 3=seldom, 4=never (5=not appropriate for this class)

**Presentation Style:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. speak directly to remote sites at regular intervals</td>
<td>1.46</td>
</tr>
<tr>
<td>b. invite or request comments or questions from all the sites</td>
<td>1.56</td>
</tr>
<tr>
<td>c. call upon specific individuals by name at both live and remote sites</td>
<td>1.52</td>
</tr>
</tbody>
</table>
d. look into camera to establish eye contact with students at remote sites

e. describe visuals being broadcast
f. stay within the range of the camera while speaking
g. use a clear speaking voice

5) In this class, how frequently did the instructor do each of the activities listed below?
Circle your choice: 1=always, 2=sometimes, 3=seldom, 4=never (5=not appropriate for this class)

Interaction:

a. encourage interaction between sites

b. encourage student conferencing with instructor by phone, video or fax

c. encourage interaction and feedback from all students

Instructional Materials:

a. use print and graphic documents, photographs, slides and real objects on the graphics camera

b. provide instructional materials/handouts for each remote site in time for class

7) Overall, how well did the GSAMS equipment work?
(Check one answer)

a. 10 no problems - 17.7%

b. 45 some problems - 74.1%

c. 2 frequent problems - 3.5%
8) How important was the functioning or malfunctioning of equipment to your ability to learn effectively in this course? (Check one answer)
   a. very important 43.9%
   b. somewhat important 35.1%
   c. not important 19.3%

9) From your observation of its use in class, how would you rate the ease of use of the GSAMS equipment? (Check one answer)
   a. good 77.2%
   b. average 21.1%
   c. poor 1.3%

10) How much opportunity did students have to operate equipment during class? (Check the best/one answer)
    a. a lot at each session 17.3%
    b. a little at each session 34.3%
    c. only at a few sessions 17.5%
    d. none 33.0%

11) How did operation of equipment by other students during class (if this occurred) affect your learning experiences? (Check the best/one answer)
    a. it enhanced my learning 17.5%
    b. it made no difference in my ability to learn 30.7%
    c. it detracted me from learning 1.8%
    d. did not operate any equipment 37.8%

12) How did your own operation of equipment during class (if this occurred) affect your learning experiences? (Check the best/one answer)
    a. it enhanced my learning 24.0%
    b. it made no difference in my ability to learn 31.4%
    c. it detracted me from learning 1.8%
    d. did not operate equipment 42.1%
13) Rate how effective you found each of the following specific areas of the course.
   (Circle one answer in each area)
   Rating scale: 1=very good, 2=good, 3=bad, 4=very bad

<table>
<thead>
<tr>
<th>Area</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. GSAMS equipment</td>
<td></td>
</tr>
<tr>
<td>b. teaching methods</td>
<td></td>
</tr>
<tr>
<td>c. presentation of information</td>
<td></td>
</tr>
<tr>
<td>d. organization of course</td>
<td></td>
</tr>
<tr>
<td>e. interaction with teacher</td>
<td></td>
</tr>
<tr>
<td>f. interaction with students at your site</td>
<td></td>
</tr>
<tr>
<td>g. interaction with students at other sites</td>
<td></td>
</tr>
<tr>
<td>h. course materials</td>
<td></td>
</tr>
<tr>
<td>a. 1-30 2-25 3-2 4</td>
<td></td>
</tr>
<tr>
<td>b. 1-47 2-10 3 4</td>
<td></td>
</tr>
<tr>
<td>c. 1-45 2-12 3 4</td>
<td></td>
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<tr>
<td>d. 1-44 2-13 3 4</td>
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<tr>
<td>e. 1-50 2-7 3 4</td>
<td></td>
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<tr>
<td>f. 1-47 2-10 3 4</td>
<td></td>
</tr>
<tr>
<td>g. 1-36 2-15 3-4 4</td>
<td></td>
</tr>
<tr>
<td>h. 1-42 2-14 3-1 4</td>
<td></td>
</tr>
</tbody>
</table>

14) Check the words that describe your feelings about taking this course:

A. FIRST CLASS SESSION
   a. very excited
   b. skeptical
   c. reluctant
   d. eager
   e. scared
   f. curious
   g. resentful
   h. confident
   i. cautious
   j. uncertain
   k. very enthusiastic

B. LAST CLASS SESSION
   a. very excited
   b. skeptical
   c. reluctant
   d. eager
   e. scared
   f. curious
   g. resentful
   h. confident
   i. cautious
   j. uncertain
   k. very enthusiastic

l. OTHER: (specify)

__________

__________
15) How would you describe your overall attitude toward taking this course? (Check one answer in each column)

A. FIRST CLASS SESSION
   a. very positive
   b. somewhat positive
   c. somewhat negative
   d. very negative

B. LAST CLASS SESSION
   a. very positive
   b. somewhat positive
   c. somewhat negative
   d. very negative

16) What was your reason for taking this course? (Check all that apply)

a. curious about TV courses
b. convenient time or place
c. required in my program
d. like instructor
e. prefer TV courses
f. friend/counselor recommended it
g. OTHER (specify): ________________________________

17) How would you rate the quality of your first GSAMS course compared to other courses you have taken at this school? (Check only one answer)

a. better 96.1%
b. as good as 47.4%
c. worse 3.5%
d. no opinion (this is my first course) 21.1%
18) Before you started the course, what were your expectations about the level of difficulty of this course compared to others you have taken at this school?
(Check only one answer)
a. easier than other courses
b. about the same
c. harder than other courses
d. no opinion (this is my first course)

19) After you completed the course, how would you rate the actual level of difficulty of this course compared to others you have taken at this school? (Check only one answer)
a. easier than other courses
b. about the same
c. harder than other courses
d. no opinion (this is my first course)

20) Have you ever taken an interactive TV course before? (Check only one answer)
a. yes
b. no

21) Will you take an interactive TV course again if you have the opportunity?
a. yes 100%
b. no

If no, why not?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY!
Questionnaire on Faculty Experience in Georgia Statewide Academic and Medical System (GSAMS) Credit Courses

Course Name: ____________________________________________________________

School offering the course (do not abbreviate): ______________________________________

Directions: Check the best response to each item or use the rating scale for that item.

1) Rate your overall level of satisfaction with this course (Check one answer)
   a. very satisfied
   b. somewhat satisfied
   c. not satisfied

2) How much advance/prior notice did you have to prepare to teach this course?
   a. less than a week
   b. several weeks
   c. a month
   d. several months

3) Did you receive any release time to prepare for this course?
   a. yes
   b. no

4) How much time did you spend preparing for this course compared to other courses you teach at the TI?
   a. much less
   b. less
   c. the same
   d. more
   e. much more
5) Rate the support you received from your administration in each of the following areas: **Rating scale: 1=high, 2=med, 3=low**

<table>
<thead>
<tr>
<th>Area</th>
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<tbody>
<tr>
<td>Learning to operate GSAMS equipment</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Learning distance learning teaching strategies</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Preparing/organizing course lessons and instruction for GSAMS</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Preparing and distributing GSAMS course materials</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Providing technical support staff to operate equipment</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Providing extra time if necessary to teach on GSAMS</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Direct involvement with coordination of GSAMS offerings</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Commitment to success in instructional uses of GSAMS</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Commitment to expanding the uses of GSAMS for credit course offerings</td>
<td>1 2 3</td>
</tr>
<tr>
<td>Overall level of administrative support for instructional use of GSAMS</td>
<td>1 2 3</td>
</tr>
</tbody>
</table>

6) What are your reasons for teaching this course? (check the one best answer)

<table>
<thead>
<tr>
<th>Reason</th>
<th></th>
</tr>
</thead>
</table>
| a. 
 volunteered because I was curious/interested |         |
| b. volunteered because I enjoy working with technology |         |
| c. was asked by administration and agreed without reservation |         |
| d. was asked by administration and agreed with some reservations |         |
| e. was asked by administration and agreed with serious reservations |         |
| f. was assigned, had no choice |         |
| g. OTHER (explain): INCREASE GSAMS OFFERINGS |         |
7) Check any of the words below that describe your feelings about teaching this course: (ppQ1)

a. __ excited
b. __ skeptical
c. __ reluctant
d. __ eager
e. __ scared
f. __ curious
g. __ resentful
h. __ confident
i. __ cautious
j. __ enthusiastic
k. __ uncertain
l. __ OTHER (specify): __________________________________________

8) How would you describe your overall attitude toward teaching this course? (ppQ2)

a. __ very positive
b. __ somewhat positive
c. __ somewhat negative
d. __ very negative

9) How would you rate your level of preparedness to teach this course? (ppQ3)

a. __ high
b. __ average
c. __ low

10) How would you rate your level of ability/skill in using GSAMS equipment? (ppQ4)

a. __ high
b. __ average
c. __ low

11) How would you rate your level of ability/skills in using distance learning teaching strategies? (ppQ5)

a. __ high
b. __ average
c. __ low
12) In this class, how frequently did you do each of the activities listed below?
Rating scale: 1=always, 2=sometimes, 3=seldom, 4=never 
(5=not appropriate for this class)

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<td>h. allow for student presentations</td>
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</table>

13) In this class, how frequently did you do each of the activities listed below?
Rating scale: 1=always, 2=sometimes, 3=seldom, 4=never 
(5=not appropriate for this class)

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</tr>
<tr>
<td>c. call upon specific individuals by name at both live and remote sites</td>
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</table>
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14) In this class, how frequently did you do each of the activities listed below?  
Rating scale: 1=always, 2=sometimes, 3=seldom, 4=never  
(5=not appropriate for this class)  

Interaction:  

a. encourage interaction between sites  

b. encouraged student conferencing with instructor by phone, video or fax  

c. encourage interaction and feedback from all students  

15) In this class, how frequently did you do each of the activities listed below?  
Rating scale: 1=always, 2=sometimes, 3=seldom, 4=never  
(5=not appropriate for this class)  

Instructional Materials:  

a. use print and graphic documents, photographs, slides and real objects on the graphics camera  

b. provide instructional materials/handouts for each remote site in time for class  

16) Have you ever taught a course on GSAMS before?  

a. yes  

b. no  

If yes, which course(s):  

17) Did you receive training on the use of GSAMS equipment prior to this class?  

a. yes  

b. no  

If yes, who provided this?  

What did it consist of?
18) Did you receive training on appropriate instructional strategies for teaching with GSAMS?

a. yes
b. no

If yes, who provided this? ______________________________

What did it consist of? ______________________________

19) How much time did you spend in training and practice with GSAMS equipment prior to the course beginning?

a. # of hours on your own - 2, 3, 0, 3, 1, 0
b. # of hours with professional/technical assistance - 2, 3, 1, 3, 0, 2

20) Overall, how well did the GSAMS equipment work?

a. no problems
b. some problems
c. frequent problems

d. generally

21) If the GSAMS equipment malfunctioned, how important was this to your ability to teach effectively in this course?

a. very important
b. somewhat important
c. not important

d. not important

22) How would you rate the ease of use of the GSAMS equipment?

a. good
b. average
c. poor

d. poor

23) How much opportunity did students have to operate equipment during class?

a. a lot at each session
b. a little at each session
c. only at a few sessions
d. none
24) How did student operation of equipment during class (if this occurred) affect their learning experiences? (check the one best answer)
   a. \_\_\_ it enhanced student learning
   b. \_\_\_ it made no difference in student learning
   c. \_\_\_ it detracted from student learning
   d. \_\_\_ students did not operate any equipment

25) Rate how effective you found each of the following specific areas of the course
   Rating scale: 1=very good, 2=good, 3=bad, 4=very bad
   a. GSAMS equipment
      1 3 2 3 4
   b. teaching methods
      1 2 3 4
   c. presentation of information
      1 2 3 4
   d. organization of course
      1 2 3 4
   e. interaction with teacher
      1 2 3 4 N/A
   f. interaction with students at your site
      1 2 3 4
   g. interaction with students at other sites
      1 2 3 4
   h. course materials
      1 2 3 4

26) How would you rate the quality of this course compared to other courses you have taught at this TI?
   a. \_\_\_ better
   b. \_\_\_ as good as
   c. \_\_\_ worse

27) Would you teach another GSAMS course?
   a. \_\_\_ yes
   b. \_\_\_ no
   c. \_\_\_ maybe
   d. Why? _____________________________