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Mountain Plains Distance Learning Partnership

STARS

**Seamless Technology
for Access
by Rural Schools**

**Star Schools Project
Evaluation Report 1999-2000
November 30, 2000**

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Mountain Plains Distance Learning Partnership

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Mountain Plains Distance Learning Partnership

STARS

Seamless Technology for Access by Rural Schools

Star Schools Project

Evaluation Report 1999-2000

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Principal Evaluator
The Education Coalition

Evaluation Overview

This is the final evaluation report for the Mountain Plains Distance Learning Partnership STARS Project for the 1999-2000 grant year. This is the third year of the five year Star Schools Grant from the United States Department of Education. The grant began in 1997 and will continue through the year 2002.

Evaluation Activities

A number of evaluation activities were conducted. The full evaluation research design plan for the five years of the Project appears in Appendix A.

Evaluation activities included site visits, instrument statistical analysis, meetings required by OERI, planning for the Performance Indicators required by OERI, meetings with STARS Project administrators regarding the 1999-2000 research design plan to evaluate student and instructor learning impact. The evaluator also participated in the project's mid-point review held in Washington, D.C., January 2000.

Other evaluation activities included participation in the monthly Star Schools Evaluators' audio conference calls, attendance at the Star Schools Directors' and Evaluators' meeting in

1999, in Washington, D.C., and attendance at the Star Schools Evaluation Institute in Ann Arbor, Michigan, in August, 2000.

The evaluator conducted site visits for a total period of ten days. Several audio conference interviews were conducted. The evaluator attended three Partnership Board meetings, all of which were held in Riverton, WY. Site visits were made to Blanding, Utah and the surrounding area and to Cortez, Colorado and the surrounding area.

Focus interviews were conducted in person and through audio conferences with STARS Project administrators, staff, instructors, the STARS Project Board of Directors, and other participants in the grant. Full transcripts of the focus interviews appear in Appendix C of this report.

Electronic survey instruments were prepared by the evaluator for instructors and students. The STARS Project staff used Microsoft ACCESS to create data fields for quantitative and qualitative information. The surveys were posted to The Education Coalition World Wide Web site along with the database file. A variety of methods were used to inform instructors and students that the evaluation survey instruments were posted on the Web site and that they were to log on to the site and complete the survey there. E-mail messages were sent to instructors and students at e-mail addresses provided by the Project staff. Instructors were asked to make announcements in their classes encouraging students to complete the evaluation instruments online.

The instruments were prepared for use at the end of classes in December 1999. STARS Project staffing conflicts prevented the conversion of the instruments to ACCESS. However, the instruments were ready by late May, 2000 and the announcements were sent to instructors and students.

A limited number of surveys were returned which prevented drawing conclusions from the data. After discussions with the STARS Project staff, it was determined that a number of factors contributed to the lack of responses. The survey announcements went out too late for a timely completion of the instruments. E-mail addresses were either not current or

were not sent to the e-mail address used by the potential respondent. Announcements were not made in classes. The surveys appeared to be too long because of the formatting required by the ACCESS program, but were shorter than the previous year.

It was decided that a second round of surveys would be sent. However, the surveys were reduced in size. New e-mail lists were prepared and e-mail announcements were sent to students just as the school year began. Announcements were made in classes.

Numerous individual e-mails were sent to instructors and students asking them to complete the survey because of the need to evaluate the program's effectiveness and impact on learning.

The result was that a number of instructors and students did respond and filled in the surveys online.

For a class on substitute teaching, it was believed that most of the potential substitute teachers did not have Internet access. Because of this, the surveys were printed and handed to the students. Over fifteen surveys were mailed to the evaluator. Using the surveys, the evaluation staff input the data electronically into the online survey. The data was collected in the online database.

Because these surveys were received in late September, a delay in turning in the final report was requested and granted.

As the data was imported from the database file, it became apparent that the data were not aligned in the proper columns. As a result, the data had to be sorted manually. This resulted in further delays but the time was necessary to ensure that the data were analyzed according to the correct columns.

Instruments were prepared for instructors, college students, high school students, and adult education students. No surveys were returned by adult education students.

The questions on the instruments were both quantitative and qualitative. Statistical analyses were prepared for all instruments with respondents and are included in this report.

Qualitative matrices were prepared for all instruments with respondents and are included in this report.

Star Schools Performance Measures and Benchmarks

The Star Schools Performance Measures and Benchmarks materials were reviewed for the Project. Comments were forwarded to Westat, the organization that is working on the performance measures database. Because of the technology basis for the project's first two years, very little of the form was applicable. Of the courses that have been developed under the auspices of the grant, only a few pilot courses were offered which were able to use the broadcast systems put into place by the STARS Project.

In the third year of the project, other courses were developed and offered through the STARS Project distance education delivery system. Instructors and students did participate in the courses.

The STARS Project staff entered information in the database. Performance results will be entered upon completion of this report.

STARS Project Description

The Mountain Plains Distance Learning Partnership STARS Project is creating an electronic virtual campus to serve Wyoming, Colorado, Utah, and Montana. This is a vast, geographic area, which is largely rural. The institutions providing leadership for the Project are the College of Eastern Utah and Central Wyoming College.

STARS is an acronym for “Seamless Technology for Access by Rural Schools.”

The STARS Project utilizes a variety of technologies to provide two specific activities to its four-state service area.

- Create a telecommunications infrastructure
- Provide instructional programming for students who otherwise would not have access to such courses.

Telecommunications Infrastructure

A major activity of the STARS Project was to build a telecommunications infrastructure. The installation has taken place in phases. Phase I focused on the components of the system that were geographically the closest to Riverton, WY. The installation and build out of Phase I of the system took two years to complete. It provides connectivity for video and Internet. The system provides live, interactive, full motion, two-way audio and video capabilities. It uses a fully scalable, high speed, digital ATM microwave technology that provides extensive infrastructure for Wyoming.

Distance education sites feature electronic classrooms with both receiving and transmitting capabilities. Sites can also access available programming from satellites and the Internet.

The project uses microwave transmission. Microwave was selected because ongoing expenses are less for participating institutions. Many of the institutions have limited resources to operate the microwave system and to maintain it.

The low ongoing costs have been a great factor in gaining support and commitment from the community and educational institutions. Project administrators feel that the low costs will be a significant factor in the ongoing use of the project beyond the period of federal Star Schools funding.

The schools assume the cost of acquiring the video classroom equipment, providing an on-site facilitator, and providing some technical support.

Initially, the bandwidth is comprised of eight T-1 lines available to all of the schools in the Wyoming initial build-out. During at least the first eight years of the contract, there are to be no charges to the participating schools. Specifically there will be no hourly, monthly, line, or maintenance charges. It is a free distribution system to the schools.

The STARS Project has agreed to utilize the data services through the state system. It is up to the individual schools to contract with an Internet service provider (ISP).

During the third year of the project, the Wind River School and Jackson distance education classrooms were installed. Wind River is now operational but Jackson was not operational at this writing.

During the third year, the transmission system for the Colorado portion of the Mountain Plains Partnership began. The design and implementation was launched and specifications are in the process of being finalized. Negotiations are underway with REA NET as a partner for the telecommunication transport services. This has been a challenge because of the changing potential infrastructure on the Colorado side.

The status of the 36 classrooms is as follows:

Wyoming:	6 Completed Classrooms
	2 classrooms under development
	6 classrooms projected for future development
Utah:	13 classrooms completed
Colorado:	7 classrooms projected for the future
Montana:	2 existing classrooms sites

The status of the four Instructional Programming Centers is as follows:

Wyoming:	1 IPC completed
Utah:	2 IPCs completed
Colorado:	1 IPC completed
Montana:	0

Instructional Programming

The second major activity of the STARS Project is to provide instructional programming to be carried over the new distance education system. Courses were identified and developed during the first three years of the Project. Instructors received extensive professional development during this time period in the areas of instructional design, software use, and facilitation skills for video and the Internet.

Darrin Cheney, the Project's instructional designer conducted seminars for project instructors in Blanding, Utah, Cortez, Colorado and Riverton, Wyoming.

Providing Equitable Access

The STARS Project provides access to an economically depressed area. The population is small and widely dispersed throughout the four-state region served by the Project. In most cases, the courses that are being made available through the STARS Project would not otherwise have been available to students.

Native American Populations

A priority of the STARS Project has been to provide service to Native American populations. Complete courses on Native American language, literature, history, and culture have been or are in varying stages of development. Wherever appropriate, teachers have been directed to incorporate Native American issues such as culture into the curriculum materials as they are being developed.

Instructors

Prior to the STARS Project, most schools were able to provide only limited curricula because it is difficult to recruit qualified instructors in advanced core area subjects. Instructor retention is also a problem in this region.

The vehicle that now addresses many of these problems is the STARS Project. The technology serves as a bridge to provide student access to qualified instructors and courses that they need to improve their economic outlook and opportunities. This type of access has been available to urban and metropolitan schools, and in many cases has been made available to rural schools. However, this is the first project in the region that enables the collaboration between institutions to provide access for all learners.

Service Figures

The STARS Project has served 3,589 students (1,410 reporting period), 4,104 adults (2,724 reporting period), 809 teachers (368 reporting period) and 52 administrators (15 reporting period), through the delivery of 90 courses (35 reporting period). According to the Project's annual report, 7,693 individuals from rural communities within the MPDLP attendance area have enrolled in distance learning courses. A total of 1,035 high school students enrolled in college courses and received both high school and college credits concurrently. Thirteen students have now received a college associate degree along with a high school diploma.

The project has served thirteen school districts. This included twenty-one public schools and three Bureau of Indian Affairs Schools which were located on eleven Indian reservations (unduplicated total of 23 agencies). An additional five post high school and/or community centers were served.

Courseware: A total of 90 courses have been developed (35 for the reporting period). A total of 158 courses were delivered (64 for the reporting period). Some of the courses taught in Utah were developed previously under the Four Corners Project Star Schools Grant. Some courses are repeated each semester.

Courses include core subjects for Kindergarten through twelfth grade, and other courses were developed for adults. Core subjects focus on English, mathematics, and literacy. Courses for college level students have also been developed and cover a broad array of content.

Two unusual K-12 courses that were developed during the third year. The first course followed the Alaskan Iditerod race. The second course provided extensive information and assignments for students to write to newspapers and other groups to support and advocate their personal position so that they could have an impact in their community.

Student Support for Distance Education Courses

Students receive training and continuing support, in most cases, to guide their adjustment to the new telecommunications system.

Student orientations to online learning workshops were scheduled prior to the first day of class. In it, students and teachers are introduced, reviewed the course syllabus, and instructors answer student questions about the course.

Adult students who are returning to school need instruction on the requirements of a distance learning program and the options that are available to them. Most returning students have never experienced facilitation in the classroom and are not prepared to deal with it in the distance classroom.

Teacher/facilitators participated in seminars in the to help teachers understand the new needs that they will see in students, and how to provide support for students in distance delivered classes.

Based on student response, it is recommended that an introductory seminar be created for all types of distance learning students which covers the following content:

- The technology that is being used in the program
- The skills that they will need to use the technology
- Equipment (office or home) to access the courses
- Their learning styles and multiple intelligences and how to find resources to meet those preferences
- Becoming a self-directed and independent learner.
- Support services that are available for students including tapes, proctors, books, libraries, mailing, faxing and computer access to resources and personnel including their instructor
- Ongoing support to meet student needs as they arise during the course.

Currently, all students enrolled in distance education courses receive an information packet concerning that course. An orientation meeting is scheduled prior to the first day of class so that students and instructors are introduced. They review the course syllabus, and answer any questions the student may have concerning the course. Based on responses from students, this is not sufficient to help them easily transition into distance learning courses. Instructors and students should feel comfortable with the technology prior to the class beginning. Delivering and learning content while adapting to the technology is not optimal for instructors or students.

Teachers also need support services as they move into preparing and teaching distance learning courses. They should not be the entire support system for the student in making arrangements for reviewing tapes, grading papers, and providing proctoring services. Teachers need to have the same type of support services for students as they receive for traditional classes. Research has shown that teachers and students need more support services and tend to need them around the clock, in order for students to be successful in the program.

Professional Development for Instructors

The STARS Project provides comprehensive professional development for the instructors. Components of the professional development program cover the use of technology for curriculum development and techniques for effective course delivery via telecommunications.

Instructional Programming Centers: Instructional Programming Centers were established. The Centers provide instructors' access to state-of-the art technology and full-time support staff. Members of the staff act as coaches and mentors for instructors who are designing interactive multimedia instructional materials.

Workshops were scheduled and attended by instructors from Colorado, Utah, Wyoming, and Montana. Darrin Cheney, Instructional Technologist for the STARS Project,

provided training and technical support for instructors as they developed and then delivered courses as part of the STARS interactive multimedia curriculum. Hours of individualized professional development were provided to instructors as they converted courses from traditional classroom format to mediated instructional designs appropriate for an advanced distance learning system. These courses included a three credit intensive training class on technology integration, one-credit workshops on technology tools and teaching strategies.

Partner schools in Colorado and Utah were provided with technology training by Darrin Cheney. The training scope of work included Internet training, Web publishing software for teachers, Microsoft Word Training, Computer Basics for the Internet, and individual meetings. The day and evening sessions were attended by employees of partner schools.

Continuing professional development for instructors: Darrin Cheney is available to work with any teacher in the electronic classrooms to ensure that they are comfortable with the technology. He supports all teachers within the STARS Project partnership. If teachers or administrators identify specific needs, he will create a workshop to meet the needs. Workshops can be held at the teachers' site or at the Central Wyoming College site. Workshops can also be offered over the STARS Project Network. Each site has the ability to record the workshops and can use the tape for future reference.

Technical training opportunities were provided for K-14 teachers. The in-service workshops provided training in a variety of computer software programs, Internet software, distance learning syllabus development, CD-ROM development, PhotoShop, video presentations, PowerPoint presentations, and other necessary software content.

The courses specifically assisted K-14 teachers with the integration of technology into their curricular materials. Courses also helped teachers develop a level of comfort with technology so that they could easily use technology in their classrooms.

The classroom technology training classes included software programs such as Access, Windows 95-98-2000, Microsoft, PowerPoint, Microsoft Word, Microsoft Excel, Encarta

Encyclopedia, Magic School Bus Software, computer assisted Instruction, and Internet browsers.

A complete listing of STARS Project instructional programs and professional development programs for instructors which were offered during 1997, 1998, 1999 and 2000 is shown in Table 1.

Professional Development for Administrators

Administrators have received professional development to support their roles and responsibilities in the distance education program. An Administrators' Seminar was conducted by the Utah Education Network. Eighteen school administrators in Colorado and Utah participated in the seminar (see Table 1).

Other Development

Parents have participated in distance education activities. Many of these parents have Kindergarten through twelfth grade students who will take courses that will be delivered in the by the STARS Project.

Technical Training for Technicians

Telecommunications technicians supervised the installation of the telecommunications system and electronic classrooms. This included providing training for site technicians in Wyoming and other sites.

Control Center Supervisor, Bruce Fiordalisi, manages the Technical Operations Center at the Wyoming hub. He has provided professional development for instructors in skills to be successful in delivering courses over a video network. He has also trained support staff at the receiving classrooms. Staff and instructors have received training in Wyoming, Colorado and Utah (see Table 1).

Curriculum Development

During the period of time when the equipment and transport systems were sent out for bid, acceptance and installation, instructors were asked to submit proposals to teach courses on the new system. Proposals were received from the instructors and a number of them agreed to redesign their courses during 1997-1998. The Partnership approved twenty-seven projects for curriculum re-design. This represented about a twenty-five percent increase over what was originally proposed. Instructors report that they are anxious to begin to teach on the new system.

Another request for proposals for course design was mailed out during the Fall of 1999.

During the second year of the grant, thirty-eight courses were approved for development. Due to the fact that some teachers did not renew their contracts and would be returning to one of the partner schools, some redesign applications were voided. The final approved list contained thirty-three courses to be developed by Utah, Colorado and Wyoming.

During the third year (1999-2000) of the grant, 35 were approved for development.

The Partnership has produced hours of finished video and has assisted instructors with the development of CD-ROM based course materials and other course resources. A group of materials were produced for nursing and allied health courses. While the courses have been taped, they could not be delivered via distance because the system was still under installation. The videotapes and CD-ROMs have been used during the Fall of 2000.

Teachers from K-12 partner institutions have also participated in the workshops and received support from Darrin Cheney, STARS Project instructional technologist. Local teachers participated in multi-media training at Central Wyoming College. A number of sessions were held in 1999-2000. Each session lasted one week and was offered for three hours of credit.

Teachers had to apply to attend the workshop. Along with a letter of support from their principals and applications, they had to describe a multi-media project that they would use

in the classroom. The workshops provided custom training based on what they have defined as a need for their classroom.

Workshops focused on showing teachers how to integrate technology into their lesson plans. Curriculum development included preparing PowerPoint presentations, downloading resources from the Internet and incorporating them into the curriculum, and using a laptop and video projector. They practiced using the interactive video and audio provided by the network.

A third request for proposals was issued in September 1999. Sessions were held at Central Wyoming College for eight CWC faculty on September 28, 1999. A separate session was held at CWC and via the STARS Network on September 30, 1999, for K-12 faculty. Twenty-three people attended the session. Each session lasted 1.5 hours. Collaboration between college and high school educators in the development of a seamless curriculum in core subject areas was particularly encouraged in this round of proposals. Proposals for technology-based curricula designed for disadvantaged students, Native Americans, and ethnic minorities in core subject areas were highly encouraged.

The resources for successful applicants included stipends for course re-design, technical assistance, curriculum design assistance, and access to the latest software and hardware. Darrin Cheney facilitated the sessions.

As part of the curriculum development process, faculty prepare the following materials for their course:

- Cover with MPDLP copyright
- Instructor biography
- Program overview
- Course syllabus
- Course map

- Lesson plans
- Quizzes and/or examinations
- List of required teaching resources
- Course pre-requisites
- Copyright Clearance Letters
- Bibliography

The instructional technology is based on their prepared curriculum guide, the media files which they prepare, and an assessment plan.

The project assessment includes a project summary report which covers how they met their original proposal objectives, changes that were made and why the changes were made. A project assessment tool is produced. Finally, the project assessment produces the project results which includes the number of students participating in the course and the individual and collective student outcomes.

Table 1 has been prepared to show the entire range of courses that have been approved, redesigned, and produced during the first three years of the project. The table also includes all of the professional development courses that were offered for the instructors. The table was designed to be inclusive and shows an extensive amount of material about each course. Headings provide the course name, location, attendees (where the names are available), the total number of participants, the attendees location, the class length, non-credit or credit designation, instructor, the course produced deliverables, the date of approval for redesign, the date of redesign, and the date the course was first offered. The last two columns show when the course was offered in the 1997-1998, 1998-1999, or 1999-2000 school year.

Table 1 is intended to show the great depth of work that has been completed in curriculum development during the first three years of the STARS Project. Because the

STARS Project was proposed and approved as a total build-out and installation of a sophisticated telecommunications system, courses could not be offered until the system was built. No other telecommunications system existed in the geographic area to be served by the STARS Project.

A few courses were offered as pilots during the spring of 1999. However, the system was not yet complete and the courses could not be delivered over the system. The first semester that courses could be delivered over the system was Fall, 1999.

Teacher training, curriculum development, and programming have been emphasized in this part of the grant. The MPDLP Grant has offered programs and training to over 809 teachers in the use of technology and multi-media training in the classroom. During the 1999-2000 program year, 368 teachers were served.

**Table 1
STARS Project Instructional Programs and Professional Development**

Legend:

Curriculum = CUR
Approved = A
Redesigned = R

Spring = SP
Summer = SM
Fall = FL
Winter = WN

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Auto Electrical System	CO		NA				Robert Duncan	CUR	A 1998-1999				
Electric Science Field Trip	CO						Dave Umbarger Jan Lytle	How to Website	A 1998-1999				
Experiential Learning Series	CO		NA				Pat Thomas	CUR	A 1998-1999				
Fundamentals of Accounting I	CO						Wendy Brassfield	Video Website	A 1998-1999				
HS Drafting	CO						Jeffrey Wilson	Web Materials	A 1998-1999				
Multicultural Video	CO	Offered on the Internet. Unknown	NA	National	On going		Alice Wise Adult Basic Ed Grant Writer		R 1997-1998	FL 97 98		SP	
Rural EMS Course	CO						Randy Smith	CUR	A 1998-1999				
Technical GED Math Prep	CO		NA				Monique Clermont	CUR	A 1998-1999				
Tech Training 6-12	CO						Karen Webster	CUR	A 1998-1999				
UTE Contemporary Life	CO	Voided					George Schumpelt Geri Sanders-Klein C	Website	A 1998-1999				
UTE Mountain History Unit 1	CO		52	3 sites			Geri Sanders-Klein	Knowledge of Ute Mountain Ute History Unit 1	R 1997-1998			FL 98	
Vocabulary Development	CO	Voided					Stan Dunlap	CUR	A 1998-				

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Art 1010	UT		87	11 Sites-CEU, Ecar, SJC, Mont, Moab, Emer, EcarHS, SJCHS, MonthHS, EmeHS, GrivHS			Bergera	CUR Network					SP 00
Art 1010	UT		52	8 Sites-CEU, SJC, Mont, Whit, Moab, Emer, EmeHS, WEeHS			Pollan	CUR Network					SP 00
Commercial Art	UT		30	4-SJHS, MHS, WHS, MVHS			Tony Wolcik	CUR Network					FL 99
Biology II-LS1200	UT		NA				Mike King	CUR	A 1998-1999				
BUSN 1010	UT		13	3-CEU, SJC, Emery			Vogel	CUR Network					SU 99
BUSN 1010	UT		13	3-CEU, SJC, Emery			Vogel	CUR Network					FL 99
BUSN 1010	UT		32	6-CEU, SJC, Whit, Moab, Emery, MVHS			Olderog	CUR Network					FL 99
BUSN 1021	UT		20	6-Sites CEU, SJC, Mont, Griv, MV, EMEHS			Heugly	CUR Network					SP 00
BUSN 2010	UT		18	6-CEU, SJC, Mont, Moab, Emery, MVHS			Olsen	CUR Network					FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
BUSN 2390	UT		10	4- CeU, SJC, Whit, Moab			Donaldson	CUR Network					FL 99
BUSN 2020	UT		15	2-Sites CEU, Emer			Youngberg	CUR Network					SP 00
BUSN 2030	UT		13	4- CEU, SJC, Moab, Emery			Cox	CUR Network					FL 99
Calculus	UT		16	2- SJHS, MHS			Dennis Dalton	CUR Network					FL 99
Career Exploration	UT						LeAnn Shumway	CUR	A 1998-1999				
Chemistry CHM 1110	UT						George Uhig	CUR	A 1998-1999				
CHEM 1010	UT		43	11-Sites CEU, SJC, Mont, Moab, Griv, Pang, SJCHS, MonthHS, GranHS, PangHS, RichHS			Uhlig	CUR Network					SP 00
CHEM 1010	UT		49	8-Ceu, SJC, Whit, Moab, Emery, Griv, EcarHS, MoabHS			Black	CUR Network					FL 99
CJPS 1010	UT		82	11-CEU, SJC, Mont, Moab, Emery, MVHS, EcarHS, SJHS, MonthHS, MoabHS, WaynHS			Burge	CUR Network					FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CJPS 1330	UT		61	11- Sites CEU, SJC, Mont, Moab, Griv, MV, SJCHS, MonthHS, EmeHS, GrivHS, WayHS			Burge	CUR Network					SP 00
CJPS 1330	UT		8	3- CEU, Moab, MoabHS			Burge	CUR Network					FL 99
CJPS 1330	UT		8	3-CEU, Emery Moab			Burge	CUR Network					SU 99
CJPS 2630	UT		15	2-Sites CEU, Moab			Burge	CUR Network					SP 00
Complete Library Serv.	UT		31	4 sites	10 weeks	3	Jared Brown / technology		R 1997-1998	1 / 9 8	WNSP 97 98		
Eighth Grade Science	UT		188	4 sites			Monty Lee	Knowledge of 8 th Grade Science	R 1997-1998				FL 98 SP 99
ENGL 2010	UT		24	7-Sites CEU, Ecar, Mont, Moab Emer, Griv, EmeHS			Rawson	CUR Network					SP 00
ENGL 2500	UT		28	5-CEU, E. Car, SJC, Moab, Emery			Willey	CUR Network					SU 99, FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
ENGL 1010	UT		35	6- CEU, Whit, Moab, Emery, Griv, MVHS			Rawson	CUR Network					FL 99
ENGL 1010	UT		16	2 CEU, SJC Moab HS			Rawson	CUR Network					SU 99
ENGL 1010	UT		16	3-CEU, SJC, MoabHS			Rawson	CUR Network					FL 99
ENGL 1010	UT		96	14-CEU, SJC, Whit, Moab, Emery, Griv, MVHS, EcarHS, MonthHS, MoabHS, EmeHS, GreeHS, BryceHS, PangHS, Tintic			Templeton	CUR Network					FL 99
Business English	UT		37	5- SJHS, MHS, WHS, MVHS, Nav. M.tn			Joel Palmer	CUR Network					FL 99
FAML 2400	UT		31	5-CEU, E. Car, SJC, Moab, Emery			Roberts	CUR Network					SU 99
FAML 2400	UT		31	5-CEU, Ecar, SJC, Moab, EMery			Roberts	CUR Network					FL 99
FAML 1500	UT		40	8-CEU, Ecar, SJC, Whit, Moab, Emery, Griv, MVHS			Brown	CUR Network					FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Farm and Ranch	UT		19	1 site	30 hrs	N	Joseph Barton A Elementary School Teacher		R 1997- 1998	6 / 9 9		SM 99	
French 1	UT		30	3-SJHS, MHS, Nat. Mtn.			Lyle Nielson	CUR Network					FL 99
GEOL 1010	UT		71	12-CEU, SJC, Moab, Emery, Griv, MVHS, EcarHS, SJHS, MonthHS, MoabHS, Lake Powell HS, Alpine			Fleck	CUR Network					FL 99
GEOL 1010	UT		85	11-Sites CEU, Ecar, SJC, Mont, Whit Moab, Emer, Griv, MV, EcarHS, EmeHS			Smith	CUR Network					SP 00
Guidance/ Career Develop- ment	UT		NA				John Dowell	CUR	A 1998- 1999				
Health Occupation	UT		28	3-SJHS, MHS, WHS			Tracy Halliday	CUR Network					FL 99
HIST 1700	UT		38	4-CEU, E. Car, SJC, Moab HS			Coppersmith	CUR Network					SU 99
HIST 1700	UT		38	4-CEU, Ecar, SJC, MoabHS			Coppersmith	CUR Network					FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
HIST 1700	UT		131	12-CEU, Ecar, SJC, Mont, Shit, Moab, Emery, Griv, MVHS, SJHS, MonthHS, WaynHS			Coppersmith	CUR Network					FL 99
HIST 1700	UT		79	8-Sites CEU, SJC, Mont, Moab, Emer, MV, EcarHS, EmeHS			Coppersmith	CUR Network					SP 00
Human Physiology	UT		NA				Dean Bell	CUR	A 1998-1999				
Human Relations	UT		18	3-SJHS, WHS, MVHS, Nav. Mtn.			Paula DeJoshua	CUR Network					FL 99
Integrated Science	UT		23	2- MHS, WHS			Bruce Adams	CUR Network					FL 99
Keeping the Oral Tradition Alive	UT		NA				K.C. Benedict	CUR	A 1998-1999				
LFSC 1210	UT		79	14- CEU, E.Car, SJC, Moab, FRIV, MVHS, EcarHS, SJHS, MonthHS, EmeHY, GreeHS, KanabHS, Lake Powell HS, Pand HS			Irvine	CUR Network					FL 99
LFSC 1220	UT		14	2 CEU Moab HS			King	CUR Network					SU 99
LFSC 1220	UT		32	6-Sites CEU, SJC, Mont, Moab, Emer, EmeHS			Bell	CUR Network					SP 00

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
LFSC 1220	UT		14	2- CEU, MoabHS			King	CUR Network					FL 99
LFSC 1220	UT		59	8-Sites CEU, SJC, Mont, Whit, Moab, SJCHS, MonthHS, EmeHS			Bell	CUR Network					SP 00
LFSC 2350	UT		39	7Sites CEU, Ecar, SJC, Emer, Griv, EcarHS, GranHS			King	CUR Network					SP 00
LFSC 2350	UT		41	6- CEU, SJC, Whit, Moab, Emery, EcarHS			King	CUR Network					FL 99
MATH 0940	UT		11				Black	CUR Network					SU 99
MATH 0990	UT		16	4-CEU, E. Car, SJC. Emery			Bell	CUR Network					SU 99
MATH 2470	UT		20	3-CEU, SJC, Emery			Bianco	CUR Network					SU 99
MATH 1050	UT		42	9-Sites CEU, SJC, Mont Moab, Emer, Griv,MV, EcarHS, EmeHS			Borman	CUR Network					SP 00

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
MATH 0990	UT		31	8-Sites CEU, Ecar, SJC, Moab, Emer, MV, Tinti, TintiHS			Borman	CUR Network					SP 00
MATH 1050	UT		95	11-Sites, CEU, SJC Moab, Emer, Griv, EcarHS, MonthHS, GranHS, GrivHS, KanaHS, WDeHS			Gardner	CUR Network					SP 00
MATH 2470	UT		20	3-CEU, SJC, Emery			Bianco	CUR Network					FL 99
MATH 0910	UT		11	2-CEU, E.Car			Black	CUR Network					FL 99
MATH 0990	UT		16	4-CEU, Ecar, SJC, Emery			Bell	CUR Network					FL 99
MATH 1010	UT		55	9-CEU, Ecar, SJC, Whit, Moab, Emery, EcarHS, MoabHS, EmeHS			Gardner	CUR Network					FL 99
MATH 1100	UT		20	4-CEU SJC, Moab, MoabHS			Brewer	CUR Network					FL 99
Multi-Generational Family Literacy Reading CUR	UT						Carol Barton Special Ed & Adult Ed.		R 1997-1998				

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Music 1010	UT		84	12-Ceu, Sjc, Mont, Whit, Moab, Emery, Griv, MVHS, SJHS, Mont HS, GreeHS, Alpine			Wilson	CUR Network					FL 99
Native American Literature and Philosophy	UT		36	6 sites			Bob McPherson		R 1997-1998			SP 99	
NURS 1110	UT		42	3- CUE, SJC, Moab			Crawright	CUR Network					FL 99
Pathophysiology I	UT		NA				Pamela Decker Nursing Instructor		R 1997-1998				
Pathophysiology II	UT	Voided					Pamela Decker	CUR	A 1998-1999				
PHIL 1010	UT		30	4- CEU, E. Car, SJC, Moab			Latimer	CUR Network					SU 99
PHIL 1010	UT		61	9-CEU, SJC, Mont, Whit, Moab, Emery, MVHS, EcarHS, EmeHS			Latimer	CUR Network					FL 99
PHIL 1010	UT		30	4-CEU, Ecar, SJC, Moab			Latimer	CUR Network					FL 99
POLS11 American Government	UT		26	3- Ceu, Ecar, SJC, Moab, Emery			Coppersmith	CUR Network	YEAR 2 Re-design				FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
POLS 1100 American Government	UT		26	3-CEU, SJC, Moab HS			Coppersmith	CUR Network	YEAR 2 Re-design				SU 99
PSYH 1010	UT		29	4-CEU, E. Car, SJC, Emery			Simpson	CUR Network					SU 99
PSYH 1010	UT		29	4- CEU, Ecar, SJC, Emery			Simpson	CUR Network					FL 99
PSYH 1010	UT		64	6-Sites CEU, SJC, Mont, Moab, Emer, ECarHS			Simpson	CUR Network					SP 00
PSYH 1010	UT		33	4-Ceu, Moab, Emery, EmeHS			Roush	CUR Network					FL 99
PSYH 2830	UT		27	5-Sites CEU, Ecar, SJC, Moab, EMer			Roush	CUR Network					SP 00
PSYH 1100	UT		17	4- CEU, Moab, Emery, EmeHS			Brown	CUR Network					FL 99
Psychology Sociology	UT		40	6-SJHS, MHS, WHS, MVHS, Nav.Mtn			Monty Lee	CUR Network					FL 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Intro to Psych – PSY101	UT						Kevin Simpson	CUR	A 1998-1999				
Reading with Navajo Emphasis	UT		NA				Paul Dejoshua	Website	A 1998-1999				
SOSC 1010	UT		73	8-CUE, SJC, Emery, Griv. MVHS, EcarHS, SJHS, MonthHS			Simpson	CUR Network					FL 99
Summer English & Reading	UT		NA				Lyle Nielson	CUR	A 1998-1999				
ABE GED	WY		NA				Pauletta Augustine, Peggy Forbis	Internet	A 1998-1999				
Art 1110 Design 2D	WY		7	CWC	1 hr	3	Willis Patterson	CUR	R 1997-1998		FA 98		
Art 1110 Design 2D	WY		11	CWC	1 hr	3	Willis Patterson	CUR	R 1997-1998			FA 99	
Brainstorm Session to discuss ways to utilize the Star Schools interactive classrooms	WY	Partnership Schools: Beverly Wilhelm, Robyn Tillman, Molly Holf, Steve Hoff, David Treick, Kim McKinnon, Tammy Cox, Jerri Boesch, Blake Snyder, Chuck Gomendi, Garry Trautman, Jerry Mcdonnel, Emma Applehans, Joleen M. Quiver	14	Ft. Washakie, Riverton Middle School, Riverton High School, St. Stephens, Lander S. Elementary, Wind River High School, St. Stephens	5hrs		Darrin Cheney	Several innovative ways to utilize Stars Schools network were explored. Teacher training was one topic discussed	Meeting				3 / 12 / 99

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Clinical Assist. Training	WY		NA	Instruction of Adult Students in the workplace for Instructors. It is designed to be an introduction to provide the instructor with basic tools they will need to effectively instruct students in a Health Care environment			Deanna Dye Instructor of Physical Therapy		R 1997-1998				
Computing Safety	WY	Faculty, staff, and administrators	150	CWC			Darrin Cheney Kevin Shultz Jeff Hosking	Seminar				1/99	
CMAP 1515LA Internet	WY		16	Lander	1/11-2/8/99	1	Paula Hunker	Knowledge of Internet	SP99			1/1/99	
CMAP 1515DA Internet	WY		5	Dubois	3/15-4/19/99	1	Robert LeJeune	Knowledge of CMAP	SP99			3/15/99	
CMAP 1515LB Internet	WY			Canceled	4/24-25/99	1	Kent Simon	Knowledge of Internet	SP99			4/24/99	
CMAP 1515-LA Internet	WY		8	Wyoming Indian, Lander	5days 3 hrs/day	1	Lisa Hillmer	Knowledge of Internet	SU99			6/7/99	
CMAP 2490-01 Win '95	WY		4	Riverton	4days 8hrs a day	1	Bruce Roehrkas	Knowledge of Win'95	SP98			2/7/98	

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CMAP 2490-03 Basic Word	WY		19	Riverton, Shoshoni, Arapahoe, St. Stephens, Wind River	5 days 3hrs a day	1	Terri Svilar	Knowledge of Basic Word	SP98	2 / 18 / 98			
CMAP 2490-04 Basic Access	WY		15	Riverton, St. Stephens, Wind River, Arapahoe	5 days 3hrs a day	1	Terri Svilar	Knowledge of Basic Access	SP98	4 / 1 / 98			
CMAP 2490-05 Basic Excel	WY		15	Riverton, Arapahoe, Wyoming Indian, Lander	5 days 2 hrs a day	1	Donna Olsen	Knowledge of Basic Excel	SP98	1 / 12 / 98			
CMAP 2490-06 Basic Word	WY		15	Riverton, Arapahoe	5 days 2 hrs a day	1	Donna Olsen	Knowledge of Basic Word	SP98	2 / 23 / 98			
CMAP 2490-08 Intermediate PowerPoint	WY		15	Riverton, Lander	5days 3hrs a day	1	Beth Gray	Knowledge of Intermediate PowerPoint	SP98	2 / 19 / 98			
CMAP 2490-09 Intermediate PowerPoint	WY		9	Shoshoni, Riverton, Wyoming Indian, Lander	5days 3hrs a day	1	Beth Gray	Knowledge of Intermediate PowerPoint	SP98	4 / 2 / 98			
CMAP 2490-27 Basic Excel	WY		1	Thermopolis	4 days 3 hrs a day	1	Cheryl Peterson	Knowledge of Basic Excel	SP98	4 / 16 / 98			
CMAP 2490-28 Win '95	WY		5	ST. Stephens, Arapahoe	5days 3hrs a day	1	Cheryl Peterson	Knowledge of Win'95	SP98	3 / 2 / 98			

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CMAP 2490-28 Win'95	WY		5	Thermopolis	5 days 3hrs a day	1	Cheryl Peterson	Knowledge of Win'95	SP98	3 / 9 / 98			
CMAP 2490-29 Win'95	WY		1	Thermopolis	4 days 3 hrs a day	1	Troy Young	Knowledge of Win'95	SP98	3 / 16 / 98			
CMAP 2490-30 Basic Win'95	WY		14	Riverton	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SP98	1 / 19 / 98			
CMAP 2490-31 Basic Win95	WY		11	Wind River	3days 8hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SP98	3 / 7 / 98			
CAMP 2490-32 Basic Win 95	WY		9	Wind River	3 days 8hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SP98	3 / 14 / 98			
CMAP 2490-33 Basic Word	WY		13	Wind River	3 days 8hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Word	SP98	2 / 7 / 98			
CMAP 2490-34 Basic Excel	WY		15	Wind River, Wyoming Indian, Arapahoe	3 days 8hrs/day	1	Terri Svilar	Knowledge of Basic Excel	SP98	2 / 21 / 98			
CMAP 2490-35 Basic PowerPoint	WY		5	Wind River, Wyoming Indian	3 days 8hrs a day	1	Bob Hussa	Knowledge of Basic PowerPoint	SP98	4 / 11 / 98			

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CMAP 2490-50 Basic Excel	WY		13	Riverton, Wyoming Indian, St. Stephens, Lander	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Excel	SP98	1 / 14 / 98			
CMAP 2490-51 Basic Excel	WY		3	St. Stephens, Riverton	5 days 3hrs a day	1	Beth Gray	Knowledge of Basic Excel	SP98	1 / 14 / 98			
CMAP 2490-52 Basic Access	WY		10	Riverton	5days 3hrs a day	1	Beth Gray	Knowledge of Basic Access	SP98	2 / 18 / 98			
CMAP 2490-53 Basic Access	WY		8	Riverton	5days 3hrs a day	1	Beth Gray	Knowledge of Basic Access	SP98	4 / 11 / 98			
CMAP 2490-54 Basic Word	WY		18	Riverton, Wyoming Indian, Lander, Wind River	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Word	SP98	2 / 18 / 98			
CMAP 2490-55 Basic Access	WY		13	Arapahoe, Wyoming Indian, Wind River, Riverton, Lander	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Access	SP98	4 / 11 / 98			
CMAP 2490-56 Basic Win '95	WY		8	Riverton, Lander	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SP98	1 / 13 / 98			
CMAP 2490-57 Basic Win '95	WY		5	Riverton	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SP98	2 / 17 / 98			

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CMAP 2490-58 Basic Win '95	WY		13	Riverton, Arapahoe	5days 3hrs a day	1	Bruce Roehrkasse	Knowledge Basic Win'95	SP98	3 / 31 / 98			
CMAP 2490-59 Basic Excel	WY		19	Riverton, Shoshoni, Wind River, St. Stephens, Wyoming Indian	5days 3hrs a day	1	Terri Svilar	Knowledge Basic Excel	SP98	1 / 14 / 98			
CMAP 2490-80 Win '95	WY		6	St. Stephens	5days 3hrs a day	1	J. Morehouse	Knowledge Win'95	SP98	1 / 10 / 98			
CAMP 2490-81 Win' 95	WY		14	Lander	6 days 2hrs a day	1	Paula Hunker	Knowledge of Win'95	SP98	2 / 19 / 98			
CMAP 2490-82 Win '95	WY		9	Lander	6 days 2hrs a day	1	Kathy Klouda	Knowledge of Win'95	SP98	2 / 26 / 98			
CMAP 2490-83 Win'95	WY		13	Lander	5days 3hrs/day	1	CoraLee Reynolds	Knowledge of Win'95	SP98	3 / 9 / 98			
CMAP 2 490-91 Word	WY		3	Thermopolis	4days 3 hrs a day	1	Mindy Young	Knowledge of Word	SP98	2 / 23 / 98			
CMAP 2490-92 Win '95	WY		5	Thermopolis	4days 3 hrs a day	1	Erik Kay	Knowledge of Win '95	SP98	2 / 10 / 98			

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
CMAP 2490-93 Word	WY		5	Thermopolis	4days 3 hrs a day	1	Joan Fuchs	Knowledge of Word	SP98	3 / 3 / 98			
CMAP 2490-94 PowerPoint	WY		4	Thermopolis	4days 3 hrs a day	1	Joan Fuchs	Knowledge of Power-Point	SP98	3 / 2 3 / 98			
Creating Web Pages Beginning & Intermediate	WY	Dora Weller, Carol Baron, Brad Hishstreet, Chuck Gomendi, John Wood, Jeff Bradley, Gail Moravek, Ron Ankeny, Stephen Rains, Mike King, Darlene Hallam, Cheryl Peterson, Mark Noblitt, Carol Aanestad, Bonnie Hildner, Daria Wood	16	St. Stephens, Lander, Dubois, Wind River, Wyoming Indian, Ft. Washakie, Shoshoni, Riverton, Arapahoe, Thermopolis, Jackson	4 days 8hrs a day		NRhannon Jones Consultant of eNew Horizons Computer Learning - Centers, CO	Knowledge of Creating Web Pages	SP98	1 / 5 / 98			
Criminal Justice	WY		NA	Is using the interactive portion of this project for his Criminal Legal Procedures class as a tool in CUR			Jeff Hosking	Website Inter-active	A 1998-1999				

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<p>1. Distance Learning Opportunity for Students, and Using the Internet and Email in the Classroom.</p> <p>2. Using PowerPoint for Instruction and Student Presentation , Designing a Lesson</p> <p>3. Using word and the Internet with Students-Designing a Lesson</p> <p>4. Using Excel and the Internet with Students-Designing a Lesson</p> <p>5. Web Page Design for You and Your Students-Planning a Unit/Lesson</p> <p>6. Distance Learning, Web Page Design and Email</p>	WY Lab	Teachers, Staff, & Administration St. Stephens: Joe Chizek, Aleta Gould, Andrea Richardso, Babs Kruse, Chere' Gilbert, Christi Richard, Evelina Blackburn, Gerri Boesch, Gina Enos, Jake Bell, Lori Ute, Nancy Groover, Norm Moss, Steve Lanham, Virginia Widmayer, Maureen Matson, Darlene Powell, Kelly Johnson, Jodi Dieu, Joe Smith	21	St. Stephens	One 3-day class	1	Darrin Cheney					3 / 23 - 5 / 99	
Effective Reading & Writing	WY		NA				Mary Davis		A 1998-1999				

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Eighth grade Science Standards	WY		NA			11	Jeff Bradley Scott Hemmingway	CUR	A 1998-1999	Hope to use SP00			
English 1010-08	WY		19	Riverton, Lander-Senior HS	1 hr	3	Wes Connally	Video Network	A 1998-1999	FA 99		9-99	
English 1010-60	WY		9	Tallahasee FL, Riverton, Lander, Shoshoni, Arapahoe	Student paced	3	Wes Connally	Internet	A 1998-1999	FA 99		9-99	
ENGL 0610 Fundamentals of Composition 1	WY		12	3 sites			Princess Killebrew	Knowledge of ENGL 0610 Fundamentals of Composition 1	R 1997-1998			FL 98	
ENGL 1010*60 English Composition 1	WY		11	5(WY&FL) Riverton, Shoshoni, Lander, Arapahoe, Tallahassee (FL)			Wes Connally	CUR Internet	YEAR 1 Re-design				FL 99
ENGL 1010*08 English Composition 1	WY		16	2 Sites, Central Wyoming College, Lander			Wes Connally	CUR Network	YEAR 1 Re-design				FL 99
ENGL 1020*60 English Composition 11	WY		6	2 Sites- Lander, Riverton both Wyoming			Wes Connally	CUR Internet	YEAR 3 Re-design				SP 00

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ENGL 1020*04 English Composition 11	WY		23	Riverton			Wes Connally	CUR Network	YEAR 3 Re-design				SP 00
HLED-1270*60 Wellness	WY		20	8 Sites, Riverton, St. Stephens, Dubois, Arapahoe, Lander, Ethete, Jackson, Wilson, all Wyoming			Nancy Larson	CUR CD ROM	YEAR 2 Re-design				FL 99
Increase Reading & Writing Skills in Middle School	WY		NA				Mary Davis	Internet	A 1998-1999				
Interactive Video System	WY	9 faculty : Jeff Hosking, Roger Melton, Princess Killegrew, Donna Olson, Nancy Larson, Marilu Duncan, Billie Dutcher, Kris Greeny, Carol Reardin	9	CWC	1-1/2 day		Darrin Cheney or Bruce Fiordalisi	Each faculty member designed and taught a 5-minute lesson utilizing the technology in the MPDLP DL class				1/99	
Internet and PC Essentials	WY		13	Shoshoni		HS	Tony Olson	Knowledge of Internet and PC Essential	R 1997-1998				SP 99
Internet and PC Essentials	WY		6	Shoshoni		HS	Created by Tony Olson used this semester by Ron Ankeny	Knowledge of Internet and PC Essential	R 1997-1998				FA 99
Internet Research	WY		NA				Mindy Young	CUR / Website	A 1998-1999				

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
Intro to Computers/ PowerPoint Workshop	WY	Sylvia Miller, Ann Bennet, Becky Bertalan, Trisha DeClue, Felicia Wilson, Carol Healer-Ward	6	CWC	NA	0	Darrin Cheney	Skill in PowerPoint		8 / 99		8 / 99	
Introduction to Multi-Media	WY	Teacher education class	21	CWC	3 hrs	3	Darrin Cheney	Future teachers saw an example of how technology can be used in the class				3 / 99	
ITEC Teacher Education Class Multimedia Lecture / Demonstration	WY		21		3hrs 5days	3	Darrin Cheney					3 / 16 / 99	
ITEC 2100SA Basic Windows 95	WY		14	Riverton, Shoshoni, St. Stephens	2/18-3/18/99	1	Martha Brown	Knowledge of Basic Windows 95	SP99			2 / 18 / 99	
ITEC 2100SB Basic Windows 95	WY		9	Riverton, Ft. Washakie, Wind River	1/23/99-2/6/99	1	Martha Brown	Knowledge of Basic Windows 95	SP99			1 / 23 / 99	
ITEC 2101SA Basic Word	WY		14	Riverton, Shoshoni, St. Stephens	1/12/99-2/9/99	1	Terri Svilar	Knowledge of Basic Word	SP99			1 / 12 / 99	

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ITEC 2101SC Basic Word	WY		6	St. Stephens, Wind River, Shoshoni, Riverton	1/23/99,1/30/99	1	Terri Svilar	Knowledge of Basic Word	SP99			1/23/99, 1/30/99	
ITEC 2102SA Basic Excel	WY		11	Riverton, Arapahoe, Shoshoni, St. Stephens	2/16/99-3/16/99	1	Terri Svilar	Knowledge of Basic Excel	SP99			2/16/99	
ITEC 2103SA Basic Access	WY		10	Riverton, St. Stephens	4/1-29/99	1	Terri Svilar	Knowledge of Basic Access	SP99			4/1/99	
ITEC 2105SA Intermediate Win 95	WY		11	CWC, Riverton, St. Stephens, Wind River	4/1-29/99	1	Martha Brown	Knowledge of Intermediate Win 95	SP99			4/1/99	
ITEC 2105SB Intermediate Win 95	WY		9	Ft. Washakie, Shoshoni, Riverton, Lander	2/27/99,3/17/99	1	Martha Brown	Knowledge of Intermediate Win 95	SP99			2/27/99	
ITEC 2105TA Intermediate Win 95	WY		3	Thermopolis	2/2-18/99	1	Troy Young	Knowledge of Intermediate Win 95	SP99			2/2/99	
ITEC 2106SA Intermediate Word	WY		16	Riverton, CWC, Shoshoni, St. Stephens, Wind River	2/18-3/18/99	1	Terri Svilar	Knowledge of Intermediate Win 95	SP99			2/18/99	

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ITEC 2107SA Intermediate Excel	WY		7	St. Stephens, CWC, Shoshoni, Wind River, Riverton	3/30-4/27/99	1	Terri Svilar	Knowledge of Intermediate Excel	SP99			3 / 30 / 99	
ITEC 2110LD Encarta	WY		13	Arapahoe	1/27-3/17/99	1	Darlene Halam	Knowledge of Encarta	SP99			1 / 27 / 99	
ITEC 2106LA Intermediate Word	WY		13	Lander, Ft. Washakie	1/16-30/99	1	Paula Hunker	Knowledge of Intermediate Word	SP99			1 / 16 / 99	
ITEC 2101LA Basic Word	WY		15	Ft. Washakie	1/12-2/4/99	1	Jeff Bradley	Knowledge of Basic Word	SP99			1 / 12 / 99	
ITEC 2110LA Intermediate PowerPoint	WY		18	Lander	2/18-3/15/99	1	Lisa Hillmer	Knowledge of Intermediate PowerPoint	SP99			2 / 18 / 99	
ITEC 2110LB Intermediate PowerPoint	WY		13	Lander, Ft. Washakie, Wyoming Indian	4/6-22/99	1	Lisa Hillmer	Knowledge of Intermediate PowerPoint	SP99			4 / 6 / 99	
ITEC 2110DA Win 95	WY		NA	Not pd by Star Schools	4/16-4/20/99	1	Deborah LeJeune	Knowledge of Win 95	SP99			4 / 16 / 99	
ITEC 2104 DA Web Pages	WY		NA	Not Paid by Star Schools	1/25-3/1/99	1	Robert LeJeune	Knowledge of Web Pages	SP99			1 / 25 / 99	

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ITEC 2100DA Win 95	WY		NA	Not Paid by Star Schools	2/17-3/31/99	1	Barbara Grubb	Knowledge of Win 95	SP99			2 / 17 / 99	
ITEC 2100DB Op.Sys	WY		2	Dubois	2/18-4/1/99	1	Deborah Lejeune	Knowledge of Op Sys	SP99			2 / 18 / 99	
ITEC 2490, Designing Effective Multimedia for the Classroom	WY	Blake Snyder Barbara Snyder Carol Harper Tammy Cox Lita Allred Gerri Boesch Emma Applehans Joleen Quiver Maureen Matson	9	South Elem. Lander, Lincoln Elem. Riverton, St. Stephens Indian School	Four 1-day classes	1	Darrin Cheney	Lab computer instruction				4 / 8 , 15 , 21 , and 5 / 12 / 99	

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ITEC 2490, Preparing for 2000 and Beyond	WY	Jan McClaren, Bill Yankee, Gay Hughes, Terry Gallinger, John Howell, Vera Faerber, Millie Abernathy, Cady Shoutis, Lyn Fleak, Chuckie Aanestad, Susan Archer, Karin Muth, James Carton, Barbara Henderson, Sharon Higginbotham, Michelle Woodruff, Judy Newberry, Debra Fustos, Ann Hicks, Leann Sebade, Patricia Newlin, Kristy Richmond, Rosemary Graff, Sheryl Esposito, Cheryl Mowry, Kathy Rodgers, Cleo Goggles, Donna Hammer, Jeffrey Wilson	29	Riverton High School, Lander Valley High School, West Elementary, South Elementary, School Dist. 25, School Dist. 26, North Elementary, School Dist. 21, School Dist. 2, School Dist. 14, Montezuma-Cortez High School	Four 5-day sessions	3	Darrin Cheney					6	7/99
ITEC1200-JA CAI for Teachers	WY		8	Jackson	6 days 8hrs a day	1	Segerstrom	Knowledge of CA	SU98		8/13/98		

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Microsoft PowerPoint Workshop	WY	Social work class	8	CWC	3hrs	1	Darrin Cheney	Each student designed minute presentation				2/99	
NRST 1520 Client Comm I	WY		23	Thermopolis, Riverton, Jackson, Hudson, Lance Creek, Lander	40 Hrs clinical required Student paced	2	Lita Burns	Website	A 1998-1999	FA 99		9-99	
NRST 2130 Med Surg Nurse II	WY	Voided					Billie Dutcher Sherry Herbert	CW131/Video Tape	A 1998-1999				
NRST 1525 Client Comm II	WY	Voided					Jane Rogalski	Website	A 1998-1999				
NRST 1110 Mental Health & Illness	WY						Vicki Ferris Asst. Professor of Nursing		R 1997-1998				
NRST 1400 LPN Transitions	WY		NA				Jan McCoy Division Chair of Allied Health		R 1997-1998				
NRST 1050-60 The Older Adult	WY		32	Thermopolis, Arapahoe, Riverton, Jackson, Juliet MT, Lander Afton, Sundance		1	Jan McCoy	Internet	R 1197-1998	FA 98			
NRST 1050-60 The Older Adult	WY		23	Lander, Riverton, Jackson, Dubois, Ft. Washakie, Thermopolis, Pavillion, Shoshoni		1	Jan McCoy	Internet	R 1197-1998	FA 99		9-99	
NRST 1120 Medical Surgical Nursing	WY		22	4 sites	CWC, Lander, Jackson, Thermopolis		Lita Burns	Knowledge of Medical Surgical Nursing	R 1997-1998			SP 99	
NRST 1050 Older Adult	WY		34	6 sites			Jan McCoy	Knowledge of NRST 1050 Older Adult	R 1997-1998			FL 98	
NRST 1680 Pharmacology 1	WY		19	Cedar Ridge CO, Arapahoe, Lander,			Billie Dutcher	Knowledge of NRST	R 1997-1998			FL 98	

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				Jackson, Thermopolis, Riverton, Wilson, Douglas				1680 Pharmacology 1 CD/Video					
NRST 1000 Fundamentals of Nursing	WY		8	Jackson			Jane Rogalski	Knowledge of NRST 1000 Fundamentals of Nursing Video	R 1997-1998			FL 98	
Real World Math	WY		NA	Used as a tool for his class, but not offered as a course at this time.			Roger Melton Professor of Mathematics		R 1997-1998				
Request for Proposal Workshop for CWC Faculty	WY	Donna Olsen, Jeff Hosking, Dick Winslow, Rob Richards, Jacque Taylor, Susan Lawson, Carol Rardin, Helsha Acuna	8	CWC	1.5 hrs	0	Darrin Cheney	New course proposals 3 rd year		9 / 28 / 99		9 / 28 / 99	

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Request for Proposal Workshop for Partner Schools	WY	Jeri Boesch, Kris Anderson, Martha Blankenship, Karleen Armajo, Jessica Sehnert, Holly Miller, Virginia Widmay, Jerry McDonnel, Kido Clark, Kija Craft, Doug Brenneman Sandy Barton, Bill Reiter, Karen Werth, Kim McKinnon, Alleta Baltas, Sherman Flism, Matt Soper, Bonnie Hildner, Lynette Fleak, Chuckie Aanestad, Debra Smalley, Joanne Jeffres	23	CWS and St. Stephens Indian School STARS Network	1.5 hrs		Darrin Cheney	New course proposals 3 rd year		9 / 30 / 99		9 / 30 / 99	
Seventh Grade Science Standards	WY		25	FT. Washakie			Scott Hemingway	Knowledge of 7 th Grade Science Standard	R 1997-1998			SP 99	

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Seventh Grade National Science	WY		25	Ft. Washakie		Elementary	Jeff Bradley Technology Coordinator		R 1997-1998	SP 99			
Intro Spanish Language	WY		NA				Troy Young Spanish Teacher		R 1997-1998				
Spanish	WY		NA				Troy Young	Website	A 1998-1999				
Span 1010 Spanish 1	WY		32	Dubois, Riverton, Lander, Kinneer, Shoshoni, St. Stephens, Jackson, Ft. Washakie, Thermopolis, Ethete, Rawlins, Kelly	Tele-course	4	Marilu Duncan Instructor of Spanish	Video	R 1997-1998	FA 99		9-99	
Student Orientation Online Learning Medical Terminology Freshmen	WY	Pamela Chavez, Amber Gunsauullu, Jessica Ferlayson, Cody Hendrickson, Sara Luckenbach, David Garbeck, Sheri Allen, Elizabeth Johnson, Vicki Moss, Shane Odenbach	10	CWC	NA	0	Darrin Cheney	Oriention		8/99		8/99	

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Student Orientation Online Learning Client in the Community Second year College Students	WY	John Hunslar, Donna Lechner, Tammi Gunter, Deanette Brandt, Suzy Messer, Suzanne Nelson, Jeanne Deaton, Lora Kolnig., Chris Bentley, Anita Richins, Leticia Jolley, Jessica Ferrel	12	CWC	NA	0	Darrin Cheney	Ori-entation		8 / 99		8 / 99	
SURG 1600 Orientation to Surgical Techniques	WY		4	4 sites			Dean Kendall	Know-ledge of Surgical Tech-niques	R 1997-1998			SP 99	
Web Design Workshop	WY	Lita Burns, Jeff Hosking, Carol Rardin, Kelly Dempster, Jay Jeude, Sonja Mathews	6	CWC	2 day	1	Darrin Cheney	Web design skill		7 / 21 / 99		7 / 21 / 99	
Wellness	WY		18	Riverton, Lander, St.Stephens, Wilson, Jackson, Dubois, Arapahoe, Ethete		2	Nancy Larson	CD-ROM	A 1998-1999	FA 99		9 - 99	
Writing for Science "Sense of Place"	WY		NA				Stephen Raines / Michael King	Website	A 1998-1999				
Writing Center	WY		NA				Ann Avery	Website	A 1998-1999				
Wyoming & American Government	WY		19	2 Sites-Lander, Riverton			John Forsyth	CUR Network					SP 00
ZOO 2015	WY		66	3 sites			Nancy Larson	Know-	R			FL	

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Human Anatomy								ledge of ZOO 2015 Human Anatomy	1997-1998			98	
2100-SD Basic Win 95	WY		7	Thermopolis, Riverton, Shoshoni	5 Days 3hrs a day	1	Bruce Roehrkas	Knowledge of Basic Win'95	SM98		6/1/98		
2110-SC Intermediate PowerPoint	WY		2	Riverton	5 days 3hrs a day	1	Terry Svilar	Knowledge of Intermediate PowerPoint	SM98		6/1/98		
2105-LA Intermediate Win 95	WY		4	Lander	4 Days 3 hrs a day	1	Kathy Klouda	Knowledge of Intermediate Win'95	SU98		6/1/98		
2103-SA Basic Access	WY		7	Riverton, Wyoming Indian, Lander	5 Days 3 hrs a day	1	Terry Svilar	Knowledge of Basic Access	SU98		6/1/98		
2101-SA Basic Word	WY		13	Riverton, Lander, Thermopolis	5 Days 3 hrs a day	1	Terry Svilar	Knowledge of Basic Word	SU98		6/1/98		
2106-SA Intermediate Word	WY		9	Riverton	5 days 3hrs a day	1	Margaret Peart	Knowledge of Intermediate Word	SU98		6/1/98		
2100-SA Basic Win 95	WY		7	Riverton, Arapahoe	5 Days 3 hrs a day	1	Bruce Roehrkas	Knowledge of Basic Win'95	SU98		6/1/98		

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2100-SB Basic Win 95	WY		6	Riverton, Shoshoni	5 days 3 hrs a day	1	Bruce Roehrkas	Know- ledge of Basic Win'95	SU98		6/ 1/ 98		
2105-SD Intermediate Win 95	WY		6	Lander, Riverton	5 days 3hrs a day	1	Bruce Roehrkas	Know- ledge of Inter- mediate Win'95	SU98		6/ 1/ 98		
2106-SC Intermediate Word	WY		4	Wind River, Riverton	5 days 3hrs a day	1	Margaret Peart	Know- ledge of Inter- mediate Word	SU98		6/ 15 /9 8		
2102-SB Basic Excel	WY		2	Riverton, St. Stephens	5 days 3hrs a day	1	Terry Svilar	Know- ledge of Basic Excel	SU98		6/ 15 /9 8		
2107-SC Intermediate Excel	WY		1	Riverton	5 days 3hrs a day	1	Margaret Peart	Know- ledge of Inter- mediate Excel	SU98		6/ 15 /9 8		
2101-SB Basic Word	WY		10	Riverton, St. Stephens, Shoshoni, Thermopolis	5 days 3hrs a day	1	Terry Svilar	Know- ledge of Basic Word	SU98		6/ 2/ 98		
1515-30 Internet	WY		11	Riverton	5 days 3hrs a day	1	Bruce Roehrkas	Know- ledge of Internet	SU98		6/ 2/ 98		
2110-SB Inter- mediate PowerPoint	WY		4	Wyoming Indian, Riverton	5 days 3hrs a day	1	Terry Svilar	Know- ledge of Inter- mediate Power- Point	SU98		6/ 22 /9 8		

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2100-SC Basic Win 95	WY		11	Riverton, St. Stephens, Shoshoni	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	SU98		6/22/98		
2105-SE Intermediate Win 95	WY		6	Shoshoni, CWC, Riverton, Lander	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Intermediate Win 95	SU98		6/22/98		
2112-LA Rain Forest	WY		NA	Not paid by Star Schools		1	Darlene Hallam				6/8/98		
2102-LA Basic Excel	WY		5	Lander	4 days 3hrs a day	1	Kathy Klouda	Knowledge of Basic Excel	SU98		6/8/98		
2105-SB Intermediate Win 95	WY		9	Riverton, Wyoming Indian, Lander, St. Stephens, Shoshoni	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Intermediate Win'95	SU98		6/8/98		
2108-SA Intermediate Access	WY		3	Wind River, Arapahoe	5 days 3hrs a day	1	Terry Svilar	Knowledge of Intermediate Access	SU98		6/8/98		
2102-SA Basic Excel	WY		8	Riverton, Shoshoni, Wind River, Thermopolis	5 days 3 hrs a day	1	Terry Svilar	Knowledge of Basic Excel	SU98		6/8/98		
2107-SA Intermediate Excel	WY		4	Riverton	5 days 3 hrs a day	1	Margaret Peart	Knowledge of Intermediate Excel	SU98		6/8/98		

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2105-SA Intermediate Win 95	WY		2	Wind River, Shoshoni	5 days 3 hrs a day	1	Bruce Roehrkasse	Knowledge of Intermediate Win'95	SU98		6/8/98		
2111-LA ENCARTA 98	WY		3	Lander	2 days 4hrs a day	1	Darlene Hallam	Knowledge of Encarta	SU98		6/8/98		
2100-SA Basic Win'95	WY		9	Riverton, CWC, Wyoming Indian, St. Stephens, Shoshoni	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Win'95	FA98		10/7/98		
2100-DA Basic Win'95	WY		3	Dubois	6days 2 hrs a day	1	Barbara G.	Knowledge of Basic Win'95	FA98		10/13/98		
2101-SA Basic Word	WY		13	St. Stephens, CWC, Riverton, Wyoming Indian, Arapahoe, Shoshoni	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Word	FA98		10/6/98		
2101-LA Basic Word	WY		12	CWC, Lander, Arapahoe, Riverton, St. Stephens	6 days 2hrs a day	1	Cora Lee Reynolds	Knowledge of Basic Word	FA98		10/22/98		
2102-SA Basic Excel	WY		12	Riverton, Wind River, CWC, St. Stephens, Shoshoni	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Basic Excel	FA98		11/10/98		
2102-LA Basic Excel	WY		7	Riverton, Lander, St. Stephens	6 days 2hrs a day	1	Lisa Hillmer	Knowledge of Basic Excel	FA98		9/9/98		

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Redesign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
2105-SB Intermediate Win'95	WY		8	CWC, Riverton, Lander, St. Stephens	5 days 3hrs a day	1	Bruce Roehrkasse	Knowledge of Intermediate Win'95	FA98		11/9/98		
2105-SC intermediate Win'95	WY		1	Riverton	3 days 8hrs a day	1	Martha Brown	Knowledge of Intermediate Win'95	FA98		10/24/98		
2106-SA Intermediate Word	WY		8	CWC, Riverton, St. Stephens	5 days 3 hrs a day	1	Beth Gray	Knowledge of Intermediate Word	FA98		10/7/98		
2107-SA Intermediate Excel	WY		6	CWC, Riverton, St. Stephens	5 days 3hrs a day	1	Beth Gray	Knowledge of Intermediate Excel	FA98		11/1/98		
2108-SA Intermediate Access	WY		5	CWC, Shoshoni, Riverton, St. Stephens	3 days 8hrs a day	1	Terri Svilar	Knowledge of Intermediate Access	FA98		11/21/98		
2110-SA Intermediate PowerPoint	WY		8	Riverton, CWC, St. Stephens	6 days 2 hrs a day	1	Beth Gray	Knowledge of intermediate PowerPoint	FA98		10/6/98		
2110-SB Intermediate PowerPoint	WY		2	Riverton, Shoshoni	3 days 8hrs a day	1	Terri Svilar	Knowledge of Intermediate PowerPoint	FA98		10/31/98		
1515-30 Internet	WY		13	St. Stephens, Wind River, CWC, Riverton, Arapahoe	6 days 2 hrs a day	1	Bruce Roehrkasse	Knowledge of Internet	FA98		9/10/98		

Course	Location	Attendees	# Total	Attendees Location	Class Length	Credit	Instructor	Course Produced Deliverables	Approved & Resign	Date First Offered	Offered 97-8	Offered 98-9	Offered 99-2000
1515-31 Internet	WY		15	St. Stephens, Riverton, CWC, Wyoming Indian	6 days 2hrs a day	1	Martha Brown	Know- ledge of Internet	FA98		10 /2 /98		
1515-TA Internet	WY		5	Thermopolis	6 days 2 hrs a day	1	Eric Kay	Know- ledge of Internet	FA98		10 /1 /98		
1515-DC Internet	WY		1	Dubois	6 days 3 hrs a day	1	Robert L.	Know- ledge of Internet	FA98		10 /8/ 98		
1515-01 Basic Win'95	WY		1	Riverton	3 days 8hrs a day	1	Martha Brown	Know- ledge of Basic Win'95	FA98		9/ 2 /6/ 9 8		

State Instructional Programming Administration

Because of the vast distances between the systems and service areas serviced by the MPDLP, it was agreed by the partners that each state would need its own group of committees to provide guidance in assessing needs for instructional programming.

Utah and Wyoming have each established four committees:

Public Education Committee

Postsecondary Committee

Adult Education Committee

Bilingual/Cultural Committee

Colorado has initially established an Instructional Programming Committee which it may expand in the future.

Montana has not set a committee structure.

Native American Focus for all Courses

To ensure that courses were redesigned and incorporated a Native American focus, the following letter was sent to instructors on February 17, 1999

February 17, 1999

Dear _____:

This letter is in regard to your Star Schools course redesign proposal for the current (1998-99) year. As you are probably aware, this year the Mountain Plains Distance Learning Partnership (MPDLP) Board has recommended teachers incorporate a Native American focus in the Star Schools curriculum redesigns where appropriate. In order to facilitate this, the MPDLP staff is willing to work with you and provide additional help, if desired.

Please contact Darrin Cheney (855-2292), Scotty Ratliff (855-2155) or the undersigned (Mohammed (855-2186) if you need any assistance. Thank you.

Sincerely,

Mohammed Waheed
Associate Director
Mountain-Plains Distance Learning Partnership

Teachers responded in a positive manner to the request. A compilation of the changes was made and appears in the 1998-1999 STARS Evaluation Report.

Statewide Infrastructure

STARS Project TeleCommunications Transport System

The STARS Project will ultimately provide a telecommunications transport system to four states. The infrastructure system is being installed in phases.

Wyoming Infrastructure System

The STARS Project has built a statewide infrastructure system that significantly enhances and strengthens the Wyoming State Technology Plan and its outreach to Wyoming citizens.

Initially, the bid process for this system was delayed because of other Wyoming State projects. However, this was resolved during the first year of the project and the project began the build-out in the second year of the project. The Project has the full endorsement of the Wyoming Governor James Geringer.

The Wyoming infrastructure and classroom equipment installation components of the STARS Project were close to completion and were being tested during the September, 2000 site visit conducted by the evaluator.

Harris/Farinon, the contracting vendor, has ensured that it would provide continued services once the grant was complete and extend that through a ten year period.

The first four electronic classrooms were completed in March, 1999 and the STARS Project staff began to identify and correct system problems. The telecommunication transport system has been built so that it has the ability to integrate new technologies if and when they became available.

Eventually, the local schools in Fremont County will be linked to sites in Jackson and Thermopolis, as well as Utah, Colorado, and Montana. The system is also compatible with the Wyoming Equality Network, a compressed video system which is being linked across the state of Wyoming.

Utah Infrastructure System

A previous Star Schools project provides the statewide infrastructure for a portion of Utah. The Four Corners Star School Project operated during the previous round of Star Schools funding. It provided a microwave infrastructure, which was installed in Eastern Utah. The central hub was installed at the College of Eastern Utah in Blanding, UT. It has since been connected to the Utah EdNet system and to Cortez, CO.

Colorado Infrastructure System

Cortez, CO was a member of the Four Corners Project as well. Connections are between electronic classrooms and the Instructional Programming Centers. These completed components of the Four Corners Star Schools Projects are now being utilized for the current STARS Project.

State-to-State Infrastructure Connections

The connections to Utah and Colorado which were scheduled to occur in the third year of the grant, began in September, 1999. The hub and control center is ready to accept those connections. The connection to Montana is scheduled for the fourth year of the grant. In the fourth year of the grant all four states involved in the project are scheduled to be connected.

STARS Project School Site Identification – Wyoming

STARS Project staff conducted visits to each school district in the target areas to formally introduce the STARS program. The staff conducted a needs assessment for each district. The assessment identified curriculum that was needed by the district that could be delivered over the new distance learning STARS Project system. The needs assessment identified existing telecommunication infrastructure. The information gathered during the assessment was used to plan the design and scope of the infrastructure and to set the parameters of the system-wide capacity.

A total of twenty-eight sites in remote communities were originally identified as possible locations for development of classrooms to receive the STARS Project educational programming. Eleven of the sites have been developed and are receiving classes through resources other than the current STARS Project grant.

Classrooms and Classroom Equipment - Wyoming

A second request for proposal (RFP) was developed for classroom equipment to bring the programming into the classroom over the statewide transport system. A bid was accepted for the installation of the control hub from CEAVCO Audio-Visual, Inc.

The hub design is modular and can accommodate a variety of technologies linking distant sites including those using the following technologies:

- analog or digital telephone

- analog or digital microwave
- satellite delivery
- fiber optic cable delivery
- MPEG-2 digital
- H.320 conferencing standard

The hub can easily be expanded to approximately double the current capacity for future linkages with additional schools.

The Control Center and hub links all Wyoming schools in a multipoint conferencing system. The system allows two-way audio and two-way video; fully interactive live course delivery, and video-on-demand. School sites that are currently connected are able to receive courses at any time from a video storage server system.

School sites include a new, fully integrated, wired classroom that connects with the control hub and an existing wired classroom.

The Control Center and hub was completed in August 1998 and was fully operational to tape classes in the Fall of 1998. The telecommunications transport system is in place, and the hub is able to link to schools where the classroom equipment installations are completed.

The hub was built to initially accommodate up to twenty sites with six simultaneous conferences and/or video classes on demand. According to the staff, it can easily be expanded to approximately double that capacity for future linkages with additional schools. Eleven distance sites are currently planned.

Other features of the Control Center and Hub are as follows:

- MPEG-2 Digital transmission
- Able to handle six simultaneous conferences
- Able to handle eleven distance sites

- Full distance site monitoring/routing
- Connectivity with the WY State Equality Network
- Video Production Facilities
- Duplication Facilities
- Satellite Connectivity

Electronic Classroom Sites – Wyoming

Riverton High School, Riverton, WY

- Completed and fully functional
- Able to receive/send two-way full motion audio visual communications
- Received software programming updates
- Administrators, faculty and staff have had full demonstrations of the electronic classrooms, capabilities were explained and questions answered by Bruce Fiordalisi, Control Center Supervisor 8/24/99

St. Stephens Indian School, St. Stephens, WY

- Completed and fully functional
- Able to receive/send two-way full motion audio visual communications
- Received software programming updates
- Administrators, faculty and staff have had full demonstrations of the electronic classrooms, capabilities were explained and questions answered by Bruce Fiordalisi, Control Center Supervisor 9/14/99

Fort Washakie Indian Schools, Fort Washakie, WY

- Completed and fully functional
- Able to receive/send two-way full motion audio visual communications
- Received software programming updates
- Administrators, faculty and staff have had full demonstrations of the electronic classrooms, capabilities were explained and questions answered by Bruce Fiordalisi, Control Center Supervisor 8/24/99

Lander Valley High School, Lander, WY

- Completed and fully functional
- Able to receive/send two-way full motion audio visual communications
- Received software programming updates
- Administrators, faculty and staff have had full demonstrations of the electronic classrooms, capabilities were explained and questions answered by Bruce Fiordalisi, Control Center Supervisor 9/7/99

Central Wyoming College, Riverton, WY

- Completed and fully functional
- Able to receive/send two-way full motion audio visual communications
- Received software programming updates

Phase II Site Inspection

A site inspection was made from May 25-27, 1999 of the Phase II area of the STARS Project Telecommunications Transport System. This includes Copper Mountain, a mountain ridge which must be crossed in order to provide a microwave signal to

Thermopolis. The site inspection included a review of existing towers, buildings and microwave dishes.

Other areas included in Phase II are Hotsprings County, Dubois Windy Ridge, Jackson Hole High School, and Rendezvous Mountain.

Participants in the Phase II site inspection were:

Harris Communications: Rich Peters, Field Design Engineer

Wyoming Public Television: Bob Connelly, Transmitter Engineer

MPDLP STARS Project: Mike Nielsen, Telecommunication Technician

Phase II Update on Connectivity

Phase II will provide a connection from the STARS Project to the Jackson High School, Jackson Hole, WY. The site is not operational as of this writing.

Through June 30, 1999, the following work was completed

- Engineering and architectural work to designate routes, relays, towers, buildings mounts, etc., for the two-way interactive digital microwave connection were completed.
- Central Wyoming College received clearance from the Federal Aviation Administration (FAA) stating that the proposed installations posed no hazard to air safety in the Jackson area.
- Teton County Planning Department (TCPD) accepted the Conditional Use Permit application for review. Hearings were held before the Board of County Commissions on August 3, 1999.
- Central Wyoming College is coordinating efforts with the architectural firm responsible for the new Jackson High School site,

- A contract was signed with the Harris Corporation to extend the signal from Copper Mountain to Jackson High School. Installation was scheduled to be completed by the December 31, 1999.
- The STARS Project staff has worked with the Jackson High School administration to assist in the selection of equipment for the electronic classroom which will be utilized as a receive and origination site.

Through June 30, 1999, the following work was completed

- Coax cable was pulled through the Central Wyoming College business office and classroom wings to connect the satellite feeds to the control room and conference rooms. It was also pulled through the service tunnels to connect Wyoming Public TV to the control center.
- Debugging is done on a weekly basis. No major malfunctions have occurred.
- Harris Communications tower and civil crews started the Phase II installation in July, 1999. Towers, antennas, microwave radio and dishes, and satellite dishes have been installed for Wind River High School, Thermopolis High School, Shoshoni High School, Thermopolis repeater site, and the Copper Mountain site. Equipment was fine tuned to ensure signal reliability
- The Copper Mountain site took a week longer for installation than was expected because construction equipment was not available when it was needed.
- The equipment for Windy Ridge was delivered. Installation was delayed by the telephone company which was burying underground power and communications cable along the road to Windy Ridge. This made the road impassable.
- The Windy Ridge installation was rescheduled for the second week of October. A tower exists at Windy Ridge to which the MPDLP dishes can be attached once the engineering company has approved the integrity of the tower foundation.

Phase II Sites and Classrooms Update

In Phase II of the project four schools are being provided with electronic classrooms. These include four Wyoming sites -Thermopolis, Shoshoni, Dubois, and Jackson. As of November 30, 2000, Thermopolis and Jackson are still not complete.

Thermopolis High School

- Received signal by the end of Summer 1999
- Needed to install their electronic classroom in order to utilize the signal.
- Towers, antennas, microwave radio and dishes, and satellite dishes have been installed

Shoshoni Indian School

- Received signal by the end of Summer 1999
- Needed to install their electronic classroom in order to utilize the signal.
- Towers, antennas, microwave radio and dishes, and satellite dishes have been installed

Dubois High School

- Received signal by the end of Summer 1999
- Needed to install their electronic classroom in order to utilize the signal.
- Harris Communications and CWC's Mike Nielsen started installation on the Dubois High School and the Dubois Outreach Center.

Wind River Indian School

- Received signal by the end of Summer 1999
- Needed to install their electronic classroom in order to utilize the signal.
- Towers, antennas, microwave radio and dishes, and satellite dishes have been installed.
- Bruce Fiordalisi met with administrators and technical coordinators to discuss the location and equipment needed for the new electronic classroom. Most of the equipment is ordered and will be installed when it arrives.

Jackson High School

Jackson High School can receive a signal (completed December, 1999) however, the classroom is not yet completed.

Wyoming Indian High School

This high school is part of the Phase II expansion.

Technical Operations Center

Installation was completed for a C-band/KU-band satellite downlink. This enabled the STARS Project to downlink the PBS Adult Learning Service broadcasts, Star Schools broadcasts, and other educational programming.

Collaborations

A goal of the STARS Project has been to foster and develop collaborations with other projects. The most promising collaboration to date is with NASA.

NASA Connect: The NASA Langley Research Center has nationwide responsibility for collaborations in distance education without actually offering courses as the agency is not meant to be an educational arm of the government.

Dr. Thomas Pinelli, Educational Technology and Distance Learning Officer, was searching for strategies to meet a Presidential Executive Order to enhance efforts to serve Native American populations as well as other generally underserved populations. Dr. Pinelli's other objective was to establish relationships with the various PBS stations across the county to make *NASA Connect* generally available to the public. *NASA Connect* is a series of video and Web based program which provides integrated mathematics and science program for middle school students. Each video segment is meant for a 30 minute time frame.

Teachers visit the *NASA Connect* Web site to register for the program <<http://edu.larc.nasa.gov/dl.html>>. They download an application form from the site. The programs are free and do not carry a copyright.

NASA currently has an estimated 26,000 teachers and 1.8 million students registered in the *NASA Connect* program which is mostly comprised of people located east of the Rocky Mountains. NASA's objective for the 1999-2000 series was to significantly involve teachers and students west of the Rocky Mountains.

The seven *NASA Connect* programs for 1999-2000 had a fundamental math look and feel. The focus areas were measurements, portionality, ratios, basic geometry, and basic algebra. NASA will begin with the math and will apply math via science. NASA research will be added to the programs to dramatize how all the math and science fit together in the

workplace. When a student asks why or where they would ever use the information, they will see real world situations.

Each *NASA Connect* program features a classroom activity with the math and science teachers working together. The children on the program explain the day's activity to the audience. There is a challenge segment where the students challenge the viewers to answer a set of questions based on that day's activities.

With each set of programs, the teacher will receive a packet of information on a specific daily event. A new component to help students visualize data was included in the packet. This was a chart or graph with the project data plotted. A separate sets of questions was included that strictly deal with the plotted data.

There was also a strong interactive Web component. An example would be aircraft noise where the objective would be to make the aircraft as quiet as possible. There were three Web-based activities associated with this project.

1) NASA sound quiz: the student is given a series of questions with multiple choice questions where one answer is correct. If the student chooses an incorrect answer, he/she is told why it is incorrect.

2) The Sound Machine which encompassed a wide variety of sounds, pictures, terminology, and definitions.

3) Career Corner where there were six to eight people who were involved in some way professionally with noise. An example would be a NASA researcher working on acoustics or someone who works on a sound stage. The student was given a series of questions that were directed at these professionals. For example, what does science and math have to do with my job, or how did I become interested in this profession? The professionals then answer the questions.

Two of the NASA CONNECT programs for the 1999-2000 series were produced with Native American middle school students from MPDLP schools in Wyoming. The programs aired November 16, 1999 and April 20, 2000.

Langley Aerospace Research Summer Scholars Program: Rafaela Schwan, the coordinator of the Langley Aerospace Research Summer Scholars Program (LARSS), had also wanted to increase participation by Native American students and teachers in NASA programs. LARSS was established in 1986. It benefits undergraduate juniors and seniors and first-year graduate students who are pursuing degrees in aeronautical engineering, mechanical engineering, electrical engineering, materials science, computer science, atmospheric science, astrophysics, physics, chemistry, or selected space.

Two primary elements of the LARSS Program are:

- 1) a research project to be completed by each participant under the supervision of a researcher who will assume the role of a mentor for the summer; and,
- 2) attendance at technical lectures by prominent engineers and scientists.

Additional elements of the program include tours of LARC wind tunnels, computational facilities, and laboratories. Library and computer facilities will be available for use by the participants.

The main objectives of the LARSS program to encourage high-caliber college students to both pursue and earn graduate degrees and to enhance their interest in aerospace research by exposing them to the professional research resources and facilities of Langley Research Center.

Through these objectives the LARSS program directors hope to further educational excellence and provide students with the opportunity to study in their field of interest. At the same time, the LARSS program provides students with an environment in which they can also learn from each other. Since 1986, the LARSS program has served over 1,000 students.

The opportunities for research that are available at Langley through the LARSS program are numerous. They cover, but are not limited to, the fields of engineering and science. Schwan mainly deals in higher education where she works with college students. At the University level, NASA has a program called Langley Summer Schools where

NASA brings in approximately 100-130 students to conduct research. The students are paid \$4,200 for a ten week period. There is also a program called “NEW” where teachers are sent to the NASA centers for two weeks of hands-on training. The teacher must apply for admission; if accepted all of their expenses are paid by NASA.

Another program targets preservice teachers which is offered three times a year in May, June, and August. The American Science Center for Educators (ASCE) brings faculty to NASA to conduct research. These faculty are paid \$11,500 for a ten week period to include \$500 for travel and \$1000 for dislocation.

NASA also offers a graduate program where the student is paid \$22,000 a year for three years to conduct research. This can be applied toward their masters degree.

MASTAP – a program which relates to teacher certification and is a two-or three week program. The URL www.nasa.gov Murad site has announcements for proposals and other related information.

A Memorandum of Understanding (MOU) was signed with NASA by the MPDLP and the Wyoming Public Television station WPTV which is located on the campus of Central Wyoming College.

A number of initiatives have resulted from the NASA collaboration and MOU.

- Two of the 1999 NASA CONNECT segments were produced at and featured MPDLP students and schools that were predominantly Native American.
- Four Native American students participated in a ten-week summer 1999 program with NASA. NASA covered the \$4,200 cost for each student.
- Two Native American teachers were approved to participate in a two-week program at NASA Langley Research Center during the summer of 1999.

- NASA is furnishing the rights to receive and use the NASA Connect video program series. This is designed for use in middle schools to promote mathematics and science education. Supplementary programs are provided through the Web.
- NASA initiated a project that will locate equipment and other resources to further enhance the integration of instructional technology for the MPDLP.
- NASA assisted in securing \$40,000 to purchase equipment for the instructional programming center at the Colorado site, to facilitate the development of interactive multimedia programming.

Other projects have been initiated with the Utah Education Network, Tri Corners Telecommunications, Mid-Continent Regional Educational Laboratory (MCREL), Arlington Public Schools and SERC, San Juan Forum, the National Alliance of Business and US Chamber of Commerce, Annenberg/CPB, and the University of Georgia Distance Learning Link.

Programming from STEPStar-ESD-101 and PBS Adult Learning Services was downlinked and distributed over the system to participating sites. Currently 45 hours per week is broadcasts to Wyoming schools for evaluation of the programming for use in their district curricular programs.

Online resources from TEAMS and TIE were also utilized.

The CLASS project at the University of Nebraska and MCET (Massachusetts Corporation for Educational Telecommunications) has been contacted. Staff are reviewing the programming to see how it might be utilized over the STARS network.

Additional Grants

Two new grants were awarded to Central Wyoming College.

Upward Bound is providing funds to work with high school students and with educationally disadvantaged students to show them that college is not out of their reach. Fifteen students were selected in the county to work with the college.

CHAMP GEAR UP, the second grant, is a partnership grant began in October, 1999. It involves the entire seventh grade class of Title I schools.

CHAMP GEAR UP is an acronym for "Community, Host, Academic, Mentoring Partnership – Gaining Early Awareness and Readiness for Undergraduate Programs.

The grant focuses on the entire system and community. The grant is following the seven grade students from 1999 forward through their graduation. In each year following, the grant will pick up a new seventh grade class and follow that group through to graduation.

It is hoped that grant-funded academic coaches can be hired for the schools. Counseling assistance will be provided through Central Wyoming College. The grant will provide an opportunity for staff training, curriculum development, and improvement of student tracking.

One of the strengths of the grant is its ability to be flexible to meet needs and collaborate with projects that are already established. The first task of CHAMP staff will be to coordinate and design activities that will enhance projects and coordinate with the STARS Project.

PBS TeacherLine Project

The PBS television station located at the College of Central Wyoming has received a grant as part of the PBS TeacherLine Project. For the first year of the grant, the station will provide training and a web site for teachers who become involved with the program.

Summary

The STARS Project is current with its schedule as submitted in its original proposal. The equipment installation is almost completed, classrooms have been built and equipment

installed and tested. Pilot courses were conducted in the Spring of 1999. The project is moving forward with its delivery of courses at the college level and the K-12 level.

The first three years of the project have been the preamble to the true focus of the project – bringing educational services to rural students. The learning impact that the project has had to date on the instructors has been substantial. It forecasts a significant change in education in the four states served by the STARS project.

Site Visit, January 22, 2000

Formative Evaluation and Implementation Interventions

The project officers and evaluator identified problems during the January 17-22, 2000 site visit to Riverton, WY. Because it was felt that many of these implementation items needed immediate interventions, the project officers and evaluator outlined the problems, and the benchmarks that would indicate that the problems had been remedied. Dates were set by which the intervention was to be completed. A final interview was done with the project staff during the April, 2000 evaluation site visit. Site observations showed that most interventions had been completed.

Several problems were based in funding and solutions were delayed until the fourth year of the project when new funding could be allocated.

1) Course Needs Assessment

A needs assessment should be conducted immediately as part of the evaluation. It should be directed at administrators, superintendents, principals, adult educators and others identified by the staff, and board members. Questions should include:

- a. What courses are needed?
- b. What courses can be produced collaboratively?
- c. What courses can be used which are produced by other Star Schools projects?

The needs assessment should be developed as a Web based instrument. It should allow specific courses to be chosen through radio buttons as well as allow courses to be suggested through filling in a blank line. The instrument should be posted on the Project's Web site by February 4, 2000 and data gathering should close February 14, 2000.

The needs assessment received responses from forty teachers and administrators.

Benchmarks: Course Needs Assessment

An open-ended needs assessment was developed by project officers.

It was posted on the Project's Web site

Forty responses were received

Demographics

A total of 40 teachers and administrators completed the on-line programming survey. Fifteen (approximately 37 percent) of the respondents were teachers and administrators located at partner with MPDLP Classroom. Approximately 63 percent (25) were teachers and administrated located at partner sites without installed MPDLP classrooms.

There were 31 (78 percent) Kindergarten through eight grade teachers and administrators respondents. The remaining 12 percent (nine respondents) were ninth through twelfth grade teachers and administrators.

Areas of Programming Requested: The respondent identified the following curricula areas to be delivered via the MPDLP Video Network. The largest number of responses were for lesson plans and curriculum development as well as for staff development. Math, language arts, computer science and science program held the first four places in student curriculum (see Table 2).

**Table: 2 Needs Assessment:
Programming Requested by Respondents**

<u>Curriculum Content</u>	<u>Requests</u>
Lesson Plans / Curriculum Development	17
Staff Development	17
Math	16
Language Arts	14
Computer Science	13
Science	13
Special Programs	10

Art	9
Foreign Language	8
History/Government	8
Other	8
Music	5
Social Science	5

2) Proposals

Proposals should be accepted after the needs assessment is analyzed only for the courses that need to be developed. Needs should drive the curriculum development rather than what teachers want to develop.

Benchmarks: Proposals

Project staff reviewed the existing and new proposals in relationship to the courses identified as being needed on the needs assessment survey.

A number of positive benchmarks are now met by each teacher as they develop their course.

Darrin is to draw up a proposal to using the curriculum funding differently for the 2000-2001 funding year. It will propose using material from other Star Schools Projects and to pay teachers to adapt it to the local needs where there are differences. Professional Development would be provided to the instructors in adapting materials. This will provide a base to sustain the project.

Existing courses developed under the auspices of the Four Corners project and those developed by Mt. Plains instructors who have departed, will also be reviewed for repurposing.

3) Course Approval and Acceptance

An ongoing problem for curriculum development has been that teachers want to do a minimal amount of course development to qualify for the stipend.

Courses should be reviewed at the department level and the Project for mutual acceptance of a well-developed quality course.

Benchmarks: Course Approval and Acceptance

Teachers are involved

Only some are from the college

Approved at district level – done at WY, starting to do at Utah

Strict benchmarks and requirements set around course development

There is an approval signature from the teacher's principal on the application form.

This has been in place since the project's first year.

4) Summer Sessions

Development should be based on the needs assessment outcomes.

Incentives for teachers should be part of any courses offered.

Benchmarks: Summer Sessions

Summer sessions become a part of the regular Project program. This was not accomplished during the Summer of 2000. Summer is not now the focus of a major offering

Will summer 2001 be the first summer to offer courses in the rooms

Wind River has now gone on line

There will be staff development

Concentrate on Dubois and Shoshone schools which are behind

Consider hosting the Star Schools Summer Institute (Darrin will prepare a proposal for this and submit it to project management).

5) Regional Coordinator

A position needs to be created and paid for by the STARS Project, for a person who will provide marketing and dissemination about the availability of the courses.

The person should also recruit students for courses and recruit teachers to teach at the K-12 level.

Sandy Barton may be a candidate for the position as she currently works with BOCES

Specific job functions should be defined which include quotas of students to take courses, recruitment of K-12 teachers to teach (with specific courses and quotas assigned).

Promotion and marketing should be included in this position with a marketing plan executed to be implemented with the coordinator.

Benchmarks: Regional Coordinator

Sandy Barton has a ten-month contract position which she didn't want to extend

Part of her job is to work with STARS and Star Schools offerings

She is officially required to spend 15 percent of her time on STARS

BOCES board has been supportive

She will see that the work is done

BOCES is providing her with clerical support

She gets college benefits now and is on the CWC payroll

Increasing her time is a consideration for 2000-2001

Several STARS presentations were made at BOCES meetings

6) Marketing Plan

A strong marketing plan needs to be written and executed immediately.

It should include hospitality times when the distance learning classrooms will be open, meetings with teachers, principals, superintendents and other interested community members. Elements should include articles in the school newspapers, PTA newsletters, and presentations at faculty meetings and departmental meetings about the courses and the need to enroll students and enlist teachers.

Benchmarks: Marketing Plan

Meet with several superintendents and principals

Sponsored by BOCES

Hold another meeting with Fremont county administration

Attend BOCES meeting 2/24/00

Developed catalog and newsletter – being sent

Revamped the Web site and made it more user friendly

Will post the time for the electronic courses

Make up a report, schedule of marketing pieces

PBS channel – use to market STARS

Advertise the STARS schedule, placement in the high school schedules list

Go to parent teachers meetings

Work with the Star Schools DLRN Dissemination Project

Sent DLRN materials for Success stories

Sending letters out to Senators about merger

Working with Senators in Wyoming, Utah; house has voted yes

Next Generation Technology innovation – the main umbrella

A classified person was hired to support Sandy's work (not paid by STARS)

Marketing efforts are to be ongoing

7) Student Recruiting

Student recruiting needs to begin immediately. Realistic goals need to be set.

Having one to five students taking one course is not an effective use of the system.

Benchmarks: Student Recruiting

BOCES work

2.2 electronic conferences – St. Stephens, Ft. Washakie – discussions

looking at common programming

St. Stephens doesn't have a music program and Ft. Washakie will provide this over the network.

Met with University of Wyoming developers – bring and channel it through SS and do teaching training courses and bring in those.

Met with field officers to tie into the University of Wyoming

8) Teacher Recruitment to Teach on STARS

Teachers need to be recruited immediately to develop their courses to teach on the system to meet the needs identified in the needs assessment.

Teachers also need to be recruited to team teach so that rooms are used.

Benchmarks: Teacher Recruitment to Teach on STARS

University of Wyoming

Intensive teacher programming – train the trainer program

Majority of work going on in summer. Will try to do in the spring.

Ask administrators to select two or more teachers who will teach the course.

Recommendation: hold a teachers' academy – spring and summer.

Darrin Cheney will conduct the training.

9) ESES Director of Distance Learning

The CWC director of distance learning needs to fully support and promote Project courses. Support includes marketing, recruiting, and enrolling students in Project courses.

If the project is to be sustained after funding by Star Schools funding is over, it is clear that the department and director will need to support the courses, teachers, and students.

The support that this director could provide now could be an invaluable intervention that is needed immediately.

Benchmarks: ESES Director of Distance Learning

Position of Director of Distance Learning was created last January. Jan McCoy is the director of extended studies

Ms. McCoy is in charge of offering courses in a number of cities

For a number of years - there was no top coordinator for field coordinators.

Jan is to ensure everyone has standard procedures, working with personnel issues, cleaning up some of the transferred telecommunication courses to her, with the staff

She came from the nursing division which used video and CD-ROM for delivery technologies

Her focus has been on extended studies

Distance Learning brochures – probably has included STARS courses and will include them in the next brochure

Distance Learning will have a Web page. STARS will have a link on it.

10) Dual Platforms for Internet Learning Environments

The established Internet learning environment platform across the Partnership is Top Class.

ESES choice of Blackboard as a second platform to support severely taxed the ability of the College and the STARS Project to support both learning management system platforms. The two platforms effectively do the same thing. Both programs are good. Only one program should be supported by STARS.

This model has been established and followed by large distance learning organizations such as UCLA, University of Phoenix, and UC-Berkeley. These well-funded organizations understand the economics of trying to support dual platforms and have wisely chosen to support only one platform.

The goal of cost effectiveness demands that the CWC and STARS Project choose and use only one platform across all the distance education projects at the college.

Benchmarks: Dual Platforms for Internet Learning Environments

Top Class Software – will continue to be used by STARS

Blackboard – will not be supported by STARS

Darrin Cheney will be required to support First Class. He will not be required to support Blackboard.

11) Professional Development to teach on Video

A course needs to be put into place immediately to help teachers teach on video. They lack the skills to present well using the video medium and other forms of multiple media that the STARS classrooms provide. They need instructional strategies for video that involves students at all sites.

This intervention needs to be provided to existing teachers immediately. New instructors need to receive the professional development as part of their curriculum development and familiarization with the room equipment.

Darrin Cheney and Bruce Fiordalisi have the skills to collectively provide this professional development and provide it as ongoing professional development so those teachers continue to improve their skills.

An additional administrative assistant may need to be hired by the project to reduce their collective workloads so that this can be added to their duties.

Benchmarks: Professional Development to Teach on Video

The following was proposed for the Summer of 2000, a class which was to be professionally developed in the studio. This did not occur but should be planned for the Summer of 2001.

Bruce Fiordalisi will do the script. He is concentrating on getting the other sites on line – and video streaming for the high schools.

Course: existing and new faculty who are teaching

Graphics support – work with selected teachers

Sandy Barton is working with other instructors; one from Riverton and one from Lander. They also need graphics and support.

12) Project Leadership and Staffing

Darrin Cheney and Bruce Fiordalisi have taken on extensive responsibilities in the project. The project needs a full time Wyoming project director to oversee the project and develop solutions for the problems identified in this formative report. However, the funding did not allow this during the remainder of the grant year.

Darrin Cheney should move to one-on-one work with instructors as his primary duty focus (at least 75 percent of his time.) The STARS Project staff needs to continue to work with existing teachers to improve their video and Internet instructional skills and strategies.

Bruce Fiordalisi: programming director should be added to his job functions.

Dr. Mohammed Waheed: workload for other projects needs to be reduced so that he can provide the ongoing oversight and direction for the STARS Project.

The implementation phase of the project (now through the next 2.5 years) will require increasing amounts of his time.

If this is not possible, consideration should be given to naming others who are appropriate as co-managers of the project with a redefinition of their scope of work and areas of authority and approval.

A graphic technologist should be appointed to work with Bruce and Darrin on technology related and graphics related support work. Sonja Mathews may develop the skills necessary to move into this position.

Benchmarks: Project Leadership and Staffing

Dr. Waheed is able to devote more time to the project and hold regular staff meetings

Institutionalize Darrin's position

Darrin Cheney is spending 75 percent of his time on STARS

Sonja Mathews is working with Bruce. She is developing skills to be more valuable after the grant is completed. She is working on budget monitoring, She is working with Bruce to learn how to operate the system control center.

Sonja is being cross-trained.

Sonja still helps Darrin when necessary.

13) New Staffing

Clerk: hire a new clerk who will have responsibility for scheduling training, answering phones, copying, filing, collecting figures, budgets, board meeting work, quarterly and year-end reports. This should not be student help

Instructor: An additional qualified instructor to work with the project should be hired to train teachers in PowerPoint and other courses offered on a large group basis. This might be part time initially.

Benchmarks: New Staffing

Will review and will be written in for the next budget year

The USDE also made recommendations about new staffing and relief for existing personnel.

14) Organization Support

Additional support is needed from budgeting, registration and information technologies to support the heavy data gathering required by the STARS Project. Part of this will be required by GPRA. These duties should be moved to the CWC organization quickly so that curriculum support can be increased.

Benchmarks: Organization Support

The Information Technology group is very supportive and they are working with STARS to serve the Project

In 2000-2001 there will be some flexibility and review.

The College has provided staff members to help in the financial and business area which is outside of Star Schools. This is one of the results of the grant impact.

The PBS station at the College is a major collaborator and that is being using as an in-kind support for the STARS Project.

15) Broadcast Schedule

The broadcast schedule reflects a minimal use of the distance learning classrooms. If the Step-Star programming is removed from the programming schedule, only 15-20 percent of the capacity of the system is being used. The rooms should have a full schedule from early morning to late evening. The rooms should be used in the evening for the adult population and other community needs when STARS academic programming is not airing.

Schools funded their rooms to some extent and had expectations that programming would be provided. Their expectations are not being met. This needs an immediate intervention. Courses need to be selected and produced to air next September. Schools need to know that the courses will be offered by mid-February.

Benchmarks: Broadcast Schedule

The schools need to be online to offer programs. The originally projected installation is close to complete.

Contacted Nebraska and TEAMS, PBS ALS-GED series

SS developed benchmark and working with partners. A major improvement should be shown through the schools working together. Four classes are scheduled for the fall 2000 semester.

Three more courses are in negotiation, Biology 1010 may be offered outside of STARS funding. The instructor was given the lab for development. He did not receive a STARS stipend, but worked on his own.

16) Adult Education

Curriculum for adult education has not been developed. Courses for this need to be identified and carried over the STARS system. The needs assessment should provide additional priorities for this area.

Benchmarks: Adult Education

Potential Course: Kentucky Ed GED which is offered as a telecourse

Potential Course: ALS-GED – new computer based program - ready summer 2000 and want to offer it.

Potential Course: Working with Plato – developmental program for different levels

Sandy Barton will discuss this with the BOCES as schools wanted supplemental materials.

The NOVAnet materials were reviewed. However, this is a decision that the school districts will make.

17) Native American Component

Helsha Acuna was named as the liaison for Native American Components of programming developed under the auspices of the STARS Project. She needs clarification on the role she is to play. An effective method would be to have her review existing materials to recommend appropriate Native American additions to the courses. She would also work with new instructors as they develop materials to ensure that appropriate Native American components are included.

Reviewing existing materials will ensure that materials are used that do not offend users and that innovative methods are used.

It is also necessary to set aside a stipend for community members who contribute to the courses. The stipend should be a set aside from the instructor's stipend.

Benchmarks: Native American Component

The Indian Advisory committee met with Helsha Acuna.

Programming will contain Native American components where suitable and this will be set as a priority of the STARS Project.

A Utah consultant should be named for Native American incorporation.

18) Curriculum Supervisors

Curriculum supervisors need to be included in all planning so that the courses will be fully utilized by their districts.

Benchmarks: Curriculum Supervisors

They are included, based upon a meeting with BOCES.

19) Student Support and Training for Distance Education

Students need support to be distance education students. They need information on how to learn in this environment, how to work with the instructor to make sure that they are included in discussions, collaborations, and activities.

Benchmarks: Student Support and Training for Distance Education

Identify the needs and hold orientations for students.

Monitor students to ensure that they are participating in courses and understand their duties as students in facilitated and distance learning students.

Course development for the fall semester

20) Existing Distance Learning Curriculum

At least 17 teachers who were paid to develop curriculum for Wyoming have now left the project. While new people are teaching the courses at CWC, only a few have adopted the materials that the STARS Project paid to develop. If the cost per course was \$6,000 for 17 instructors, the total amount invested was \$162,000

New instructors need to use the materials and use them on the system.

Benchmarks: Existing Distance Learning Curriculum

Mindy Young's materials will be used.

Troy Young's material will be used and the course will be taught by someone else.

List and work with department chairs to identify new teachers for fall.

Develop a list of the courses that are not being taught either because the original instructor is gone or the original instructor no longer wants to teach in the STARS distance learning program.

Purchase ready-made curriculum and have some standard materials.

21) Teachers No Longer Teaching on the System

An exact number has not been determined, but it appears that at least several teachers have elected to stop teaching on the system. They are using the materials in their traditional classes. If they cannot be persuaded to return to teaching on the system, another instructor needs to be recruited who will use the materials.

Mr. Melton and Dick Scott are examples of this problem

Benchmarks: Teachers No Longer Teaching on the System

Mr. Melton (Lander) was supposed to teach calculus last semester but the equipment was not ready and he wasn't happy. However, this was unusual.

Dick Scott will be teaching 1010 this fall

Will put this into the contract

22) New Contracts

As new teachers are recruited to teach on the system and develop curriculum, a contract needs to be put into place that requires that the teacher use the material and teach on the system for at least three to five years with incremental updates to the materials as necessary. It should no longer be an option to be paid to develop the curriculum and then refuse to teach on the system. Teachers who will not agree to this should not be funded.

New contracts need to be put into place that cover the continuing use of the materials.

Benchmarks: New Contracts

Validate new contracts

23) Teacher Incentives

Incentives for teachers to teach on the system need to be put into place so that they want to continue to teach on the system. If new money cannot be allocated, it is possible to reduce the original development stipend and reserve two years of incentive funding – perhaps at \$500 per semester - or \$2,000 to reserve.

Benchmarks: Teacher Incentives

\$200 per semester – in addition to whatever is the normal stipend.

24) Courses Developed by Utah, Colorado and Wyoming

Courses developed by the STARS Project in all three states should be used by all three states. If the connectivity between the states is not put into place until year five of the grant, there is too much curriculum that is being developed and used only by one site.

Benchmark: Courses Developed by Utah, Colorado and Wyoming

CWC is developing a course that will be used in Utah. Collaboration and trading is in place. It is not extensive, but it is beginning to occur.

25) Courses Developed by Montana

If Great Falls, Montana is providing courses, they should be put on the system so that they can be used. This relationship needs to be clarified.

Benchmarks: Courses Developed by Montana

The STARS Project is receiving courses from the University of Montana

The University of WY has a monopoly. CWC has a good working relationship with the University

STARS is providing University of Wyoming students with facilities, equipment, computers, video, VCRs and TV and meeting rooms, phone and fax. The University of Wyoming students are part of CWC graduation ceremony

List of the courses – human services.

Site visits should be made by STARS project personnel.

26) Step-Star Programs

The Star Schools Funded Step Star Programs are being shown on a regular basis on the STARS System. However, the STARS rooms at the schools are locked and teachers are not viewing the materials.

Benchmarks: Step-Star Programs

Let principals and teachers know when the courses are available. This is brand new to them. Have the rooms unlocked when programming is being shown.

The Superintendents have asked the STARS Project to slow down. Project personnel feel they are not moving as fast as they should, and the superintendents feel their faculty have limited technology backgrounds. Thus they feel they need to have more time and project personnel should have more patience with the pace of change.

Meetings in the classrooms, working with teachers. St. Stephens and Ft. Washakie are very supportive.

Sharing classes between Riverton and others.

27) Other Star Schools Project Programs

Many other Star Schools projects provide programming which may be appropriate for the Project. These include Nebraska University at Lincoln's high School course project, and TEAMS science and math for 1-8 grade.

Benchmarks: Other Star Schools Project Programs

TEAMS, Step Star and Nebraska (already branching off to a profit making group) asked for their catalog.

The Mid-Point Review Panel also recommended that other Star Schools Projects be used to improve the level of number of courses offered.

28) Student Achievement Assessment

For all courses that have been developed, an assessment should be prepared according to a rubric system. This will enable reporting of student achievement due to the project across the wide variety of age group and course content.

Benchmarks: Student Achievement Assessment

Darrin Cheney will work with teachers during course development

Assessment rubrics will be developed for new courses

29) Teacher Conference

A teacher conference should be written into the proposal for new funding. Collaboration at one site would be beneficial, but other work could be conducted through the classroom system on a regular basis.

Benchmarks: Teacher Conference

Resource conference: a selected group of instructors could go to Colorado and Utah areas. Logistics: distances are 12 hours to drive.

30) Cost Reduction

Currently, the cost benefit is not realized and this goal will not be met.

Benchmarks: Cost Reduction

The State of Wyoming went from 447,000 residents to 400,000; numbers will be small

Wyoming is searching for cash because the numbers are very low.

A return on investment formula will be based on the cost per student served with all costs for the development of the infrastructure and system removed. This is the true cost benefit ratio for the project that should be used a comparison figure with other projects. Most other states have large populations and infrastructure service providers that have moved ahead. This was not the case in Wyoming.

STARS Instructor Survey Instruments

A Mountain Plains Distance Learning SARS Instructor Survey was developed as an electronic instrument and the Microsoft ACCESS software was used for survey form development and database collection. All materials were put on the evaluator's Web site. E-mails were sent to instructors to go to the Web site and fill in the instructor survey.

The research design called for the surveys to be administered to instructors immediately after the course was complete. The survey was to be completed and posted so that data could be retrieved for the Fall 1999 courses. However, STARS personnel who were to put the survey into Microsoft ACCESS, could not be released to do this as outlined in the agreement between the project and the evaluator.

The survey was completed and posted in May 2000 for instructors who taught classes during the entire school year of 1999-2000. Only several surveys were returned and this was attributed to the onset of the summer when STARS instructors are not teaching and a survey that was thought by some to be too long. This survey incorporated all of the Government Performance and Reporting Act (GPRA) requirements as specified by the U.S. Department of Education OERI GPRA benchmarks document for Star Schools Projects.

A number of questions were removed to shorten the survey and this was posted on the evaluator's web site on August 15, 2000. A week before school began for the Fall 2000 semester, e-mails were sent to instructors asking them to go to the evaluator's Web site and complete in the evaluation survey form.

While substantially more STARS Project instructors returned the survey, it was not until it was too late to meet the Star Schools deadline of September 30, 2000. An extension was granted so that the survey responses could be processed for qualitative and quantitative data. At that point it was determined that the data was not formatting correctly as it was moved from the database and into Microsoft Excel or Statview. Database alignment took an additional three weeks.

Methodology

Data gathered through the Web-based Mountain Plains Distance Learning Instructor Survey were downloaded from the database server and cleaned using a standard text editor. The data were then loaded into the StatView (version 5) statistical program. Each applicable survey question was analyzed in turn using descriptive statistics, and the results are displayed in the paragraphs below. The number system of the original survey is preserved in the following paragraphs to facilitate comparison with the original survey questionnaire.

The majority of quantitative questions used a four-point Likert scale for response. The Likert scale analyses involved illustrating response frequency, enumerating any missing responses, computing a mean, and assigning a verbal label. The verbal label was assigned consistent with the following formula: means ranging from 1 to 1.75 were labeled “very low” (or equivalent); means greater than 1.75 and less than 2.25 were labeled “moderately low” (or equivalent); means ranging from 2.25 to 2.75 were labeled “neutral”; means above 2.75 and less than 3.25 were labeled “moderately high” (or equivalent); and, means ranging from 3.25 to 4 were labeled “very high” (or equivalent).

Qualitative responses were reported verbatim (i.e., no editing was done grammatically or otherwise, except for the removal of certain commas and “hard returns” that, when left unedited, confounded the proper alignment of variable fields and data in the statistical program). Additionally, if appropriate, the qualitative responses were grouped by obvious response categories to enhance further understanding and higher-level analysis. Under the table boxes listing the qualitative responses to any particular question, is a “group summary” table that details the frequency that responses fell within the various groups assigned. Since some responses may fall under several groups, the numbers in the “group summary” table may exceed the number of responses.

There are eleven valid survey responses in this analysis, completed by eleven instructors in the Mountain Plains Distance Learning Program (n=11). Not all instructors

answered every question. The number of responses will be reported when necessary with each item of the survey summary below.

Instructor Survey Questions, Responses and Analyses

Previous Distance Courses

Instructors were asked to list the distance education class(es) and the semester in which they taught. A total of nine college instructors responded to this question, five at CWC Riverton, three at CEU-Blanding and one at CEU-Price (see Table 3). A total of five high school instructors responded to this question which included two each in Wyoming and Utah, and one in Colorado (see Table 4). No one reported teaching in an adult education program.

Table 3: Location of College Instructors

Site	CWC-Riverton, WY	San Juan Basin VocTech Cortez, CO	CEU Blanding, UT	CEU Price, UT
Instructors	5	0	3	1

Table 4: Location of High School Instructors

Wyoming Sites	Riverton	Lander	Wind River
Instructors	1	1	0

Utah Sites	Monument Valley	Monticello	San Juan
Instructors	0	1	1

Colorado Sites	Cortez-Montezuma	Dove Creek	Dolores	Mancos
Instructors	0	0	1	0

College and High School Courses Taught by STARS Instructors

Instructors were asked which courses they taught in the distance learning environment for the STARS Project. Instructors reported a total enrollment of 438 students. (See Table 5) At the time the survey was taken, the teachers reported a total of 295 students enrolled in their classes.

Table 5: College and High School Courses Taught by STARS Instructors

Instructor	Course	Level	Times Taught	Site	Enrollment
Janice McCoy	The Older Adult	College	8	CWC Riverton	24
Lita A. Burns	Client in the Community	College	1	CWC Riverton	20
John Forsyth	POLS 1000	College	1	CWC Riverton	21
John Forsyth	Am. Gov.	High School	1	Lander, WY	
John Dowell	Life Skills	High School	3	Monticello, UT	20
Robert S. McPherson	Nat. Amer. Hist/Cult	College		CEU Blanding	70
John Metcalfe	Substitute Teaching	College	1	CWC Riverton	38
Silvia Stubbs	GED	College	5	CEU Blanding	30
Silvia Stubbs	GED	High School		San Juan, UT	
Mitzi Wallace	Creating with Current Events	College		SJB Cortez	18
Mitzi Wallace	Creating with Current Events	High School		Dolores, CO	
Billie Dutcher	Pharmacology I	College	1	CWC Riverton	17
Billie Dutcher	Fund of Nursing	High School	1	Riverton, WY	
Ruthellen Pollan	Intro to Visual Art	College		CEU Blanding	60
Clifford Coppersmith	American Civilization	College	3	CEU Price	120
Total Enrollment					438

Instructors' Geographic Area

Ninety-one percent of instructors were located in rural areas (n=10) and nine percent (n = 1) reported working in a suburban area (see Table 6).

Table 6: Instructors' Geographic Area

Rural	Urban	Suburban
10	0	1

Instructor Gender and Age

Instructors were asked what gender they are. Five instructors or 45 percent are male and six instructors or 55 percent are female.

Instructors were asked about the age group into which they fell. The majority (n=5) or 46 percent were in the age range of 41-50 (see Table 7).

Table 7: Instructor Age Group

Age Group	Number of Instructors	Percent of Instructors
21 – 30	2	18
31 – 40	2	18
41 – 50	5	46
51 – 60	2	18

Instructor Ethnicity

Instructors were asked about their ethnicity. Seventy-three percent are Caucasian (n=8). Eighteen percent are Hispanic (n=2) and nine percent (n=1) are Native American (Navajo). See Table 8.

Table 8: Instructor Ethnicity

African American	Asian	Caucasian	Hispanic	Native American specify	Pacific islander	Other – please specify
0	0	8	2	1 Navajo	0	0

Instructor Degrees and Credentials

Instructors were asked which degrees and credentials they held. Seventy-two percent (n=9) held a masters degree or a doctorate. Only one held a teaching certificate (see Table 9).

Table 9: Instructor Degrees and Credentials

Degree or Credential	Number of Instructors	Percentage of Instructors
Ph.D.	3	27
J.D.	1	9
Masters	5	46
Bachelor Arts	1	9
Teaching Certificate	1	9
Enrolled in a credential program	0	0
Emergency credential	0	0

Length of Instructor Teaching Experience

Instructors were asked how many years that would have taught at the end of the 1990-2000 school year. The mean was 15.8 years of teaching experience. The range of responses was from nine to twenty-three years.

Instructors' Rated Responses about Students

In the next group of questions, instructors were asked rate their feelings about their students and their reactions to the distance learning class. They were asked to use a scale where four was high and one was low.

Instructors felt that their students achieved better in the instructor's traditional class. However, instructors felt they were almost equally prepared to teach either a distance education class or a traditional class. Instructor's indicated they preferred to distance education classes and felt that the distance education technology enhanced the class and helped students understand complex concepts which enhanced student achievement.

When asked why they taught the distance education class, responses were spread between volunteering to teacher, being required to each, and seeing this as a new opportunity. Of the three instructors who said that they were required to teach the class, two also indicated that they saw it as a new opportunity. See Table 10.

Table 10: Instructors' Rated Responses about Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Your students achieved better in your distance learning class	1	4	3	1	2	2.556
b. Your students achieved better in your traditional class.	4	3	1	1	2	3.111
c. You prefer a distance education class compared to a traditional class	2	3	2	3	1	2.40
d. Distance education technology enhanced your class.	5	3	3	0	0	3.182
e. Distance education technology got in the way of student learning.	2	2	3	3	1	2.33
f. The use of distance education technology helped students understand complex concepts and thus enhanced student achievement.	3	3	3	2	0	2.636
g. You were better prepared to teach your distance education class	6	2	2	1	0	3.182
h. You were better prepared to teach your traditional class	4	4	0	1	2	3.222
i. Why did you teach the distance education class? (Please check all that apply). (Choices were voluntary, required, new opportunity and other)**	Vol. 4	Req 3	New Op 5	Othe r 0	2	

**NOTE: On question i; Of the three "Required" responses two also checked "New opportunity".

Why do Instructors Like Teaching a Distance Education Class

In the next section, instructors were asked for a qualitative response to the question, "What do you like the most about teaching a distance education class? There were a variety of responses that included students changing to self-directed learners, reaching more students and reaching students who could not otherwise take the course, new ways for students to interact, convenience and flexibility. All responses are shown in Table 11 and a summary of responses is shown in Table 12.

Table 11: Why Instructors Like Teaching a Distance Education Class

Response	Response Group
Students become active learners.	Students change to self-directed learners
Not being bound to class times. The discussion that occurred between students.	Convenience Student Interaction
The ability for students to interact with more students	Student Interaction
Infrequently I have the opportunity of interacting with non-traditional students who really need the class and cannot get it the traditional way	Reach More Students Reach students who cannot be reached otherwise
I can reach more students.	Reach More Students
The lecture is completed ahead of time in a more controlled environment. Lecture time can be used to counsel students or prepare enrichment material.	Convenience New time to work with/for students
I really enjoy the added enhancement of the computer technology PowerPoint and Internet resources.	Integration of teaching technologies
The available media VCR Computer etc. to present different concepts and topics.	Integration of teaching technologies
Site interaction and the multi-media that is available for the variety of instruction	Student Interaction Integration of teaching technologies
Students were interested and I was more organized	Student Interaction Convenience

Table 12: Why Instructors Like Teaching a Distance Education Class Response Summary

Response Group	Number of Responses in Response Group
Students change to self-directed learners	1
Reach More Students	2
Reach students who cannot be reached otherwise	1
Student Interaction	4
Flexibility/Convenience	3
Integration of teaching technologies	3
New time to work with/for students	1

What Instructors Liked Least About Teaching a Distance Education Class

The next question asked instructors, “What do you like the least about teaching a distance education class?” There were a variety of responses. The biggest response concerned technology failure or what instructors perceived to be the inadequacies of the technology. It may be that instructors had not received enough professional development to work effectively in the distance education environment. Several responses indicated that instructors were relying on traditional classroom techniques to determine student learning such as reading body language rather than using the technology to determine what learning was taking place.

One instructor objected to the concurrent enrollment of high school students in a college venue and felt that students were not qualified. Another observed that students were shy using the microphone. This could be attributed to a lack of training for students in the use of the distance education technology or perhaps they seldom had a chance to use it. All of the qualitative responses to these questions are shown in Table 13 and a summary of the response groups is shown in Table 14.

Table 13: What Instructors Liked Least About Teaching a Distance Education Class

Response	Response Group
Online course management tool TopClass.	Dislike Software
The internet system going down so frequent caused a lot of disruption in the class	Tech failure
The technology was unreliable and failed at critical times. Key help in Riverton was unreliable and or unprofessional. Important documents were lost or misplaced again and again.	Tech failure Poor support Poor support
Technology problems	Tech Failure
Lack of control over the testing environment Dependency on unqualified and unmotivated facilitators Inability to interact with students on a one-on-one basis throughout the semester Concurrent enrollment of high school students without qualifications	Not trained to test in environment Poor support Not trained to evoke student interaction Unqualified Students
System failure and the shy attitude that students take on when in front of a camera with a microphone	Tech failure Students not trained for DE environment
The lack of contact with students and the limited interaction that was available due to the system	Isolation from Students Tech failure
Technological problems are very frustrating. I was unable to see students faces to gage whether they were understanding the lecture or not.	Tech failure Not trained to work in environment
Unable to see body language and other forms of communication. Unable to answer student's questions directly.	Not trained to work in environment Tech failure
Images are not as clear as I would like them to be	Tech failure

Table 14: What Instructors Liked Least About Teaching a Distance Education Class Response Summary

Response Group	Number of Responses in Response Group
Tech Failure	8
Poor support	3
Isolated from Students	1
Dislike Software	1
Unqualified Students	1
Not trained to work in environment	1
Not trained to evoke student interaction	1
Not trained to test in environment	1
Students not trained for DE environment	1

Instructor Interest in Teaching Another Distance Education Class

The next question asked instructors if they would teach another distance education class? If they responded negatively, they were asked to supply a reason. Space was provided for a qualitative positive answer as well. Eight instructors (89 percent) responded that they would teach another distance education course. Only one responded negatively and attributed the response to technical failure; two responses were missing.

The qualitative answers were as follows: "It is a dynamic format. It was enjoyable."
"Yes I would design another class as I have designed the one I am currently using."
"Because it is required in my current job description."

Instructor Suggestions for Improving Distance Education Classes

Instructors were asked what they would suggest to improve distance education classes for the STARS project? Responses were primarily focused on improving the technology and providing more professional development and training in the use of the technology. All the responses are shown in Table 15 and response groups are shown in Table 16.

Table 15: Instructor Suggestions for Improving Distance Education Classes

Response	Response Group
Online course management tool must be user friendly.	Improve technology
More time to work with all the software. I never really felt confident with the tools I was using.	Training to use technology
Get another administrator at the Riverton Career Center.	Improve support
Much more paid staff development time prior to using the system to learn how to use the system to it's best potential. Teaching via distance learning is remarkably different and instructors need the time and guidance to prepare.	Training to use technology
More flexibility in camera location. I would like to move around more	Improve technology
I believe the STAR Schools program does an excellent job within the limitations of the medium of distance learning as it is employed in the State of Utah	Improve technology
Nothing--I am totally satisfied	No improvements

Table 16: Instructor Suggestions for Improving Distance Education Classes Response Groups

Response Group	Number of Responses in Response Group
Improve Technology	3
Training in Use of Technology	2
Improve Support	1

Instructor Professional Development

In the next question, instructors were asked to use a list and check all professional development activities in which they had participated. Most had participated in the professional development provided through the STARS project. Only three reported participating in district or county professional development activities. No one reported that they had taken courses for an advanced degree (see Table 17).

Instructors indicated that that they had spent a mean of 116 hours in professional development during 1998-1999, but had increased this to 341 hours during the 1999-

2000 school years. The majority of this increase in professional development is due to the STARS Project (see Table 18).

Table 17: Instructor Professional Development Activities

Type of Professional Development	Instructors Responding	Percentage of Instructors Responding
a. STARS formal professional development	7	64
b. STARS - work with support staff in the Instructional Design Center	8	73
c. Other 1999 - 2000 District or County professional development	3	27
d. College credit courses toward an advanced degree in 1998 - 1999	0	0

Table 18: Instructor Professional Development Hours

	Total of all PD Hours	Mean of Instructors Responding
e. During the 1998-1999 school year, approximately how many hours did you spend in all types of professional development activities (hours)	700	116.7
f. During the 1999-2000 school year, approximately how many hours did you spend in all types of professional development activities (hours)	2,050	341.7

Instructors were asked if they felt they had received enough professional development for the work that was expected of you? Eight (73 percent) responded positively and three responded negatively.

Professional Development for Instructors Still Needed

Instructors were asked what professional development they needed now. Many of the responses focused on finding the time to practice on the technology. Two respondents wanted more technology training and two wanted more professional development in how to integrate technology into their distance learning classes (see Table 19). A summary of the response groups is shown in Table 20.

Table 19: Professional Development for Instructors Still Needed

Response	Response Group
Time to practice what I have learned.	Time to practice
Continued opportunity to do research and writing	Time to practice
I need to redesign my course based upon using the system and then have that redesign critiqued and improved.	Integrate tech into class
More training on the technology available and how to integrate it into my classroom computer programming skills	More tech training Integrate tech into class
One on one on the computer. I worked with an excellent technician but was busy teaching. The class as it was being developed - left me little time to absorb technical aspects (How to do it)	More tech training Time to practice
At this point I only require updating with changing technology	Continuing support

Table 20: Professional Development Still Needed Response Summary

Response Group	Number of Responses in Response Group
Time to Practice	3
Continuing support	1
Integrate technology into class	2
More tech training	2

Instructor Experience with Technology

Instructors were asked about their experience with technology.

If instructors chose the “c” option indicating that they perceive that they have extensive experience with technology and have integrated technology into the curriculum, they were asked to describe how they did this on a daily basis. There were five respondents. Two respondents used technology, one uses software, one uses Internet, and one indicates multimedia without specification. See Table 21. Qualitative responses are shown in Table 22. Response groups are shown in Table 23.

Table 21: Instructor Experience With Technology

Experience with Technology	Number of Respondents
a. Limited to the 1999 - 2000 STARS Project	3
b. Moderate: have used technology in my classroom for two years	3
c. Extensive: have integrated technology in to the curriculum	5

Table 22: Instructor’s Daily Use of Technology in the Classroom

Response	Response Group
I use multimedia presentations regularly.	Multimedia
I incorporate a variety of internet resources in my classes. We will engage in projects this year which link us to a variety of students around the world.	Internet
Depending on the class I use laser disc VCR, Elmo and PowerPoint (in all)	Variety of technology used
All lectures are Power Point slide presentations. All exams are Authorware formatted computerized tests. Sabbatical project is a computerized student learning module.	Variety of software used
I use all the STAR Schools support technology in all the classes I teach where access to technology is provided by my institution	Variety of technology used

Table 23: Instructors Daily Use of Technology in the classroom Response

Summary

Response Group	Number of Responses in Response Group
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Multimedia	1
Internet	1
Variety of Technology Used	2
Variety of Software Used	1

Instructor Access to Technology

Instructors were asked to indicate to which technologies they have access for use with the curriculum programming provided by the STARS Project.

Of the technologies specified, all respondents indicated they had access to a VCR, an IBM-compatible computer, a computer printer, and a CD-ROM player. In the range of 80 to 99 percent, respondents indicated that they had access to a television and Fax machine. In the range of 60 to 79 percent, respondents indicated they had access to a color monitor, a digital still camera and a telephone in the school building. In the range of 40 to 59 percent, respondents indicated they had access to an analog video camera, a digital video camera, and a modem. In the range of 20 to 39 percent, respondents indicated they had access to a Macintosh computer, an in-room conference receive telephone, a telephone in their classroom, a videodisk player, and a DVD player. Table 24 shows the responses by technology category. Table 25 shows the responses by a descending percentage of the respondents who have access to the technology.

Table 24: Instructor Access to Technology

Prime Technology	Specific Equipment	Number of Respondents	Percent of Respondents
a. Video			
	Television	9	82
	VCR	11	100
	Analog Video Camera	5	45
	Digital Video Camera	6	55
b. Computer			
	IBM-Compatible	11	100
	Macintosh	2	18
	Color Monitor	7	64
	Other	0	0

c. Telephone			
	In-room conference receive	4	36
	In school	8	73
	In my classroom	3	27
d. Peripherals			
	Modem	6	55
	Fax	10	91
	Printer	11	100
	Videodisk player	3	27
	CD-ROM player	11	100
	DVD player	2	18
	Digital still camera	7	64
	Other	0	0
e. Software correlated to program concepts		2	18

Table 25: Instructor Access to Technology by Descending Percentage

Specific Equipment	Number of Respondents	Percent of Respondents
VCR	11	100
IBM-compatible computer	11	100
Computer printer	11	100
CD-ROM player	11	100
Fax	10	91
Television	9	82
In school telephone	8	73
Color Monitor	7	64
Digital still camera	7	64
Digital video camera	6	55
Modem	6	55
Analog video camera	5	45
In-room conference receive telephone	4	36
Classroom telephone	3	27
Videodisk player	3	27
Macintosh	2	18
DVD player	2	18
Software correlated to program concepts	2	18

Has Technology Changed Teaching by Instructors

Instructors were asked if using supportive technologies had changed the way they teach their classes. Choices ranged on a four point rating scale from not at all (rated as one) to greatly (rated as four). The mean response is 2.909 indicating that 74 percent of respondents feel that the supporting technology has changed the way they teach their classes. See Table 26.

Table 26: Has Technology Changed Your Teaching Rated Responses by Instructors

Question	Rate 4	Rate 3	Rate 2	Rate 1	Percentage of Respondents
Not at all				0	0
Somewhat			3		27
Quite a bit		6			55
Greatly	2				18

Instructor Roles in the Classroom

Instructors were asked what percentage of the time they acted in the roles of lecturer, coach, mediator and facilitator. The respondents indicated that they almost evenly split their time in the classroom between the roles of lecturer at 38.5 percent and facilitator at 35.5 percent (see Table 27). One respondent did not reply.

Table 27: Instructor Roles in the Classroom

Instructor Role	Percentage of Time in this Role
Lecturer	38.5
Coach	17.5
Mediator	8.5
Facilitator	35.5

Review of Lesson Effectiveness

Instructors were asked if they reviewed the effectiveness of each lesson. Six respondents indicated that they did review the effectiveness. One said that the effectiveness was not reviewed and four respondents did not respond to the question which is an indicator that they do not review effectiveness of the lesson or check for learning. Those who responded yes were asked to describe what method they used to check for effectiveness. Only five of the six responded to this part of the question. Instructors indicated they used a mix of formal and informal assessment. The full responses are shown in Table 28 and the summary of responses group is shown in Table 29.

Table 28: Review of Lesson Effectiveness Qualitative Responses by Instructors

Response	Response Group
Continued monitoring formal assessment questioning	Informal Formal
Quizzes and instructional objectives	Formal
Informally I review how it went in my head.	Informal
Each lesson is evaluated informally by me for its effectiveness as I observed during implementation and also a formal evaluation and discussion is conducted at the end of each unit with the students for their suggestions and feedback.	Formal Informal
So far only with quizzes. I would love some suggestions	Formal

Table 29: Review of Lesson Effectiveness Response Summary by Instructors

Response Group	Number of Responses in Response Group
Formal Assessment	4
Informal Assessment	3

Overall Assessment of Course Benefits for Students by Instructors

Instructors were asked if they did an assessment of the overall benefits of the course to their students? Five respondents indicated that they did an overall assessment. No respondents checked the “no” box. Six respondents did not provide a response which is an indicator that they do not do an overall assessment of course benefits to student.

Those who responded yes were asked to describe the assessment. These responses are shown in Table 30. One respondent relied on observation, one is relying on a state requirement, and two did not reflect assessment in the response.

Table 30: Overall Assessment of Course Benefits for Students by Instructors

Response	Response Group
I try to see behavior changes	Observation
Not sure I understand the question... I believe the subject matter of my course is teaching life skills that I believe my students will be able to use in real life.	Does not reflect assessment as an answer
They must have the information to pass the state licensure exam for RN	Does not reflect assessment as an answer
Utah higher ed is requiring a semester evaluation process--requiring a pre and post test	Outside requirement for assessment by state.

Instructor Course Improvement Activities

Instructors were asked what they were currently doing to implement the course they taught more effectively for their students? Two possible responses were provided on the survey. Six checked the “a” response. No one checked the “b” response. The responses are shown in Table 31.

Table 31: Instructor Course Improvement Activities Responses

Type of Course Improvement Activity	Number of Respondents
a. Fine tuning use of programming and pre and post activities for greater student outcomes	6
b. Individually finding ways to better integrate technology and other instructional activities	0

Instructor Concerns About the Course

Instructors were asked if they had any of the concerns about their course that were listed on the survey. Three respondents were concerned about preparation time for the telecast and pre/post activities. Four said they were concerned about the course having a positive impact on students. For also were concerned about knowing how to adjust the course to have a greater impact on students. One each said there was a concern about using the course and other instructional programs and the other one indicated a need for

technology improvements. The responses and the number of respondents are shown in Table 32. Four respondents did not provide data.

Table 32: Instructor Concerns About the Course

Type of Concerns About the Course	Number of Respondents
a. Prep time for telecast pre/post activities	3
b. Conflicts between using this course and other instructional programs	1
c. Knowing if the course is having a positive impact on my students	4
d. Knowing how to adjust your use of the course to have a greater impact on students	4
e. Other (please specify) – technology improvement	1

Student Skills Above and Below Grade Level by Instructors

Instructors were asked to estimate what percentage of their students had above, at or below grade level for mathematics, problem solving, reading and writing. In mathematics, instructors estimated that 48 percent of their students were at or above grade level. In problem solving, instructors estimated that 55 percent of their students were at or above grade level. Estimates for reading and writing at or above grade level were at 49 percent and 44 percent respectively. All estimates are shown in Table 33.

Table 33: Student Skills Above and Below Grade Level by Instructors

Skill	Percentage Above grade level	Percentage at grade level	Percentage Two years below grade level	Percentage Four or more years below grade level	Total Percentage At or Above grade level
Math	10	38	36	16	48
Problem Solving	18	37	28	17	55
Read at a comfort level	13	36	31	20	49
Writing ability	11	33	35	21	44

Instructor Comfort Level with Software Applications

Instructors were asked to rate their comfort level when using a software application alone and when using it with students. A scale of one to four was used where one was low and four was a high comfort level. Software programs included e-mail, Internet navigation, word processing, presentation and spreadsheet software. In all cases, instructors felt a higher comfort level using the software alone as compared to using it with students (see Table 34).

Table 34: Instructor Comfort Level with Software Applications Rated Responses

Comfort Level with Application	Rate 4	Rate 3	Rate 2	Rate 1	Missing Response	Mean Response
e-mail alone	6	1	0	1	3	3.5
e-mail with students	3	0	2	2	4	2.6
Internet navigation alone	6	0	1	1	3	3.4
Internet navigation with students	3	1	1	2	4	2.7
Word processing alone	6	1	0	1	3	3.5
Word processing with students	3	2	0	2	4	2.9
Presentations alone	5	2	0	1	3	3.4
Presentations with students	4	1	2	1	3	3.0
Spreadsheets alone	1	2	1	4	3	2.0
Spreadsheets with students	0	0	2	5	4	1.3

Support of Instruction through Technology by Instructors

Instructors were asked what their initial attitude was toward the support of instruction through technology as well as the role of technology in their classrooms as compared to

their attitudes now. Three instructors did not respond to this question. Reactions to this question were primarily positive with two negative responses where the respondents moved from positive to negative feelings. All responses are shown in Table 35 and the summary of response groups is shown in Table 36.

Table 35: Support of Instruction through Technology by Instructors

Response	Response Group
Much better in the beginning	Positive to negative
It is more difficult than I anticipated to use technology	Positive to negative
I was negative but have since changed my mind	Negative to positive
My initial attitude was fearful and apprehensive. I agreed to teach the course with reservations. After teaching the course I feel much better about the potential and think with a lot of work the course could be made as effective as a face to face course	Negative to positive
Hated computers. Wouldn't turn one on. Now I really enjoy building PowerPoint lectures for my classes and using Internet to research. At times still don't trust the things.... :)	Negative to positive
it is just another teaching tool it has it's good side and it's limitations	Neutral
My initial attitude was negative. My present attitude is positive.	Negative to positive
I have always been involved in using technology in the classroom when those resources were available	Positive

Table 36: Support of Instruction through Technology Response Summary by Instructors

Response Group	Number of Responses in Response Group
Negative to positive	4
Positive to negative	2
Positive	1
Neutral	1

Enhanced Student Achievement by Instructors

Instructors were asked in what way they saw student achievement being enhanced through support of instruction through technology. Three instructors did not respond to this question. Most of the responses indicated that they saw student interest and scores being enhanced, two indicated the ability to even take the course was an enhancement. All responses are shown in Table 37 and a summary of the response groups is shown in Table 38.

Table 37: Enhanced Student Achievement by Instructors

Response	Response Group
It has not been enhanced through this course.	No enhancement
Keeps interest at a higher level	Interest enhanced
The visual presentation helps maintain student interest and the fact that I can teach to outlying sites that would otherwise not have the opportunity for particular classes is a great benefit	Interest enhanced Ability to take course
I don't understand the question.	
When instruction can be more visual it is more effective. Technology does that.	Visually enhanced
Test scores	Scores enhanced
Numbers of students reached	Ability to take course
I personally believe that any medium which engages the student's interest will enhance learning and retention--however I have never seen or developed myself the data to prove that this actually happens	Interest enhanced

Table 38: Enhanced Student Achievement Response Summary by Instructors

Response Group	Number of Responses in Response Group
No Enhancement	1
Interest enhanced	3
Ability to take course	2
Scores enhanced	1
Visually enhanced	1

Professional Development for Instructional Strategies by Instructors

In the next question, instructors were asked if they felt they were learning effective instructional strategies that improve their teaching and their students' learning? Nine respondents indicated that they were and two did not respond. One observed that, "The process of developing curriculum improves organization as well as presentation of material.

Instructional Support by Instructors

Instructors were asked how professional development, the Instructional Design Center, staff, and other materials support their instructional program? The responses were

positive with the exception of one respondent who indicated that support was minimal. Four respondents did not provide answers. Three respondents indicated that technology support had been provided. Other support focused on visual uses, gaining confidence, integration technology into the classroom, and planning. All responses appear in Table 39 and the summary of response groups appears in Table 40.

Table 39: Instructional Support by Instructors

Response	Response Group
Support was minimal.	Support Lacking
Helped me with the project. I knew the curriculum they knew technology	Technology
They introduced me to PowerPoint presentations and helped me to integrate visuals into my presentations	Technology Moved to visual
The visits from staff at CWC were very helpful	Technology
Darrin Cheney's classes have helped BUNCHES!!! I have developed the confidence and the skills to try technology in my classroom	Personal confidence Tech integration
With know how and equipment	Technology
This last year in particular the folks involved at Central Wyoming College have provided more input and support in the process of developing the project--timelines guides and continued support via phone and email	Planning

Table 40: Instructional Support Response Summary by Instructors

Response Group	Number of Responses in Response Group
Technology	3
Moved to Visual use	1
Personal Confidence	1
Technology Integration	1
Planning	1
Support Lacking	1

Biggest Challenge in Delivering Technology Based Content by Instructors

Instructors were asked, “What has been the biggest challenge in delivering instruction supported by technology in the classroom?” Many of the responses to this question focused on the problem in having the chosen technology work all the time. Respondents blamed the technology in some cases and blamed themselves for lack of experience in other cases. Two respondents indicated that they encountered difficulty in gaining access to technology resources. One said that forty students in a distance learning situation was too many students. There were two respondents who did not provide answers to this question. All responses are shown in Table 41 and the summary of response groups are shown in Table 42.

Table 41: Biggest Challenge in Delivering Technology Based Content by Instructors

Response	Response Group
Our equipment	Technology failure
Equipment	Technology failure
Making all the electronic tools work all the time	Technology failure
Availability of hardware and the computer lab	Access to tech resources
Incompetence of the support staff.	Lack of Support
Learning technical procedure - i am not a technical person it is with great effort	Learning technology
Availability of technical resources and simply dealing with an overload of student enrollment— distance learning does not apply itself well to large enrollment classes (I'm talking over 40 students)	Access to tech resources Too many students
Reliability of equipment in long distance broadcast and student interaction	Technology failure Getting student interaction
Getting spontaneous interaction	Getting student interaction

Table 42: Biggest Challenge in Delivering Technology Based Content Response Summary by Instructors

Response Group	Number of Responses in Response Group
Technology failure	5
Access to technology resources	2
Learning technology	1
Getting student interaction	2
Too many students	1

Consistently Helpful Support by Instructors

The next question asked respondents to identify, “What support has been consistently helpful to you in using technology and implementing curriculum integration?” Five respondents did not provide answers to this question. All responses appear in Table 43. The consistently helpful support response summary by instructors is shown in Table 44.

Table 43: Consistently Helpful Support by Instructors

Response	Response Group
Heather Young is my support. Darren was very helpful when I called upon him	Staff
Meeting with CWC staff	Staff
The ability to get specialized technical help when there are problems with	Staff

equipment	
My local media center director.	Staff
Regular training on technology and instruction	Staff
Persistence on my part to get the help and things that I need	Personal persistence

Table 44: Consistently Helpful Support Response Summary by Instructors

Response Group	Number of Responses in Response Group
Support Staff	5
Personal Persistence	1

Project Strengths by Instructors

Instructors were asked, “What are the strengths of the Project?” There were a variety of responses to this including time to create and work on technology based courses. Five respondents did not provide an answer. All responses are shown in Table 45, and the response summary is shown in Table 46.

Table 45: Project Strengths by Instructors

Response	Response Group
Funds that buy time for the teacher to work on curriculum development and the opportunity to purchase visual materials	Time to work on course Purchase visual materials
Personnel and the support. Appreciation for teacher efforts Flexibility	Staff Appreciation
The positive approach on every level of experience. The well organized conference in San Francisco was a high light of the project. The presentations were informative insightful and contributed to my growing awareness of present and future developments	Positive approach Access to national conference/ideas
Providing the opportunity to develop curriculum connected to technology delivery	Develop mediated curriculum

Table 46: Project Strengths Response Summary by Instructors

Response Group	Number of Responses in Response Group
Time to work on course	1
Purchase visual materials	1
Staff	1
Appreciation	1
Positive approach	1
Access to national conferences/ideas	1
Develop mediated curriculum	1

Project Improvement Suggestions by Instructors

Instructors were asked, “What could be done to improve the Project for the next year?” Four respondents did not provide responses and an additional three did not suggest improvements. Suggestions focused on improving the technology and the salary. One suggested that instructors should be recruited to use the system, pay them to train and prepare for instruction over the system. All responses are shown in Table 47, and a response summary appears in Table 48.

Table 47: Project Improvement Suggestions by Instructors

Response	Response Group
Amount of money earned should reflect amount of time as well as the substance of the product. I do not agree with \$6000 across the spectrum.	Improve salary
Recruit instructors to use the system pay them to train and prepare for instruction over the system.	Improve training
No suggestions	Nothing
Nothing	Nothing
I believe this past year the project was well managed and facilitated. I really can't suggest any improvements--many have been made since my first experience three years ago	Nothing
Just keep the connections and training constant and steady. The personnel I have been involved with are great assets to the Project. Consistency of the same people is very helpful	Nothing
See 7 above.	Improve tech

Table 48: Project Improvement Suggestions Response Summary by Instructors

Response Group	Number of Responses in Response Group
Improve salary	1
Improve training	1
Improve technology	1
Nothing suggested	4

Instructors Home Computer and Software

In the next question, instructors were asked about the computer hardware and software that they used in their home. Eight had a home computer and four had Internet access. One instructor had two computers in their home. Of the respondents, 73 percent have at least one computer in their home. All responses are shown in Table 49.

Table 49: Instructors Home Computer and Software

Computer or Software	Number of Respondents
a. Win 95/98 Computer	7
b. Win 2000 Computer	0
c. Macintosh OS Computer	1
d. Modem	3
e. Cable modem	0
f. Internet access	4
g. Printer	4
h. Scanner	0

Operations and Support Quality by Instructors

In the next section of the instrument, respondents were asked to answer questions about the quality of specific items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. All operations and support rankings were above 3.0 indicating a good degree of satisfaction. Responses are shown in Table 50.

Table 50: Operations and Support Quality Rated Responses by Instructors

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Operations and Support Quality						
a. Adherence to timelines for providing catalogs, calendars, schedules	4	3	1	0	3	3.375
Support through Professional Development						
a. support through staff development telecasts	2	4	1	0	4	3.143
b. Support via phone, fax or Internet	4	2	2	0	3	3.250
Skills Developed Through Support and Professional Development						
a. Enthusiasm for the subject and content expertise	4	2	1	1	3	3.125
b. Enthusiasm for being the instructor for the course	5	2	1	0	3	3.500
c. Using new instructional methods	4	3	1	0	3	3.375
d. Presentation Style	5	1	2	0	3	3.375

Technical Dimensions by Instructors

In the next section of the instrument, respondents were asked to answer questions about the quality of the technical dimension of items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Technical dimension rankings ranged from 2.0 to 3.2 indicating some dissatisfaction with the technical dimension. The lowest ratings were given to the ability to provide interaction through the telecasts. The highest rating of 3.2 was given to the integration of computers and software to support instruction. Responses are shown in Table 51.

Table 51: Technical Dimension Quality Related Responses by Instructors

Technical Dimension: Production Aspects of the Telecasts	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Set and its use	1	3	2	1	4	2.571
b. Use of technical aspects to enhance learning such as camera work, graphics, audio and/or video clips	2	2	2	0	5	3.000
c. Overall	1	3	2	0	5	2.833
Interactivity of the Telecasts						
a. Studio's capability to answer incoming phone calls, e-mail and faxes for the program instructor	0	3	1	2	5	2.167
b. Announcement and use of upcoming question and answer periods, and time allotted to enhance learning	1	1	1	3	5	2.000
c. Clarify information based on viewer calls	1	2	1	2	5	2.330
Computer and Software						
a. Integration of use of Internet and e-mail for communications	1	1	3	1	5	2.333
b. Integration of use of computer and software to support instruction	2	2	1	0	5	3.200

Overall Program Design Quality by Instructors

In the next section of the instrument, respondents were asked to answer questions about the quality of the overall program design as that related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Overall program design quality rankings ranged from 2.6 to 3.4 indicating that there is a lack of consistency in this area even though the scores range at the high end of the scale. The lowest ratings were given to a lack of recognition of the learners' learning styles and multiple intelligences, ideas for pre and post-telecast activities, and a description of site teacher responsibilities during the telecast. The highest rating of 3.4 was given to the creation of a clear statement of goals, objectives, and learning outcomes. Responses are shown in Table 52.

Table 52: Overall Program Design Quality: Quality Related Responses by Instructors

Overall Program Design Quality: Program Series Content	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Clear statement of goals, objectives, and learning outcomes	4	2	1	0	4	3.429
b. Accurate, current, thorough	3	1	2	0	5	3.167
Telecast Design						
a. Motivates and involves students	1	3	1	0	6	3.000
b. Flexibility to vary pace, sequence and depth of instruction for various learners	0	3	2	0	6	2.600
c. Promotion of critical viewing, thinking and experimentation	2	2	1	0	6	3.200
d. Recognition of learning style / multiple intelligences of learners	0	4	1	0	6	2.800
Program Support (Print) Materials for Teachers						
a. Delineation of content of program and instructional methods	1	3	1	0	6	3.000
b. Ideas for pre and post-telecast activities	1	1	3	0	6	2.600
c. Outline of telecast activities	1	2	1	0	7	3.000
d. Description of site teacher responsibilities during telecast	0	3	2	0	6	2.600
Program Support (Print) Materials for Students						
a. Design of materials for specified learning outcome	2	2	2	0	5	3.000
b. Materials for initial learning, reinforcement and exploration	2	2	2	0	5	3.000

Student Progress

In the next section of the instrument, respondents were asked to answer questions about the quality of student progress for items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Student progress rankings ranged narrowly from 2.4 to 2.57 indicating some dissatisfaction with student progress. The lowest ratings were given to the ability to provide interaction through the telecasts. The design of materials for a specified learning outcome and the design of the

telecast, pre and post-activities which allow checking for understanding were the areas of focus. Responses are shown in Table 53.

Table 53: Student Progress Quality Related Responses by Instructors

Student Progress	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Design of materials for specified learning outcome	2	2	1	2	4	2.570
b. Design of telecast, pre and post activities, which allow checking understanding	0	2	3	0	6	2.400

Instructional Design

In the next section of the instrument, respondents were asked to answer questions about the quality of instructional design for items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Instructional design rankings ranged from 2.0 to 3.1 indicating a mixed level of satisfaction with the instructional design. The lowest ratings were given to the ability to use manipulative materials, actively engage students, promote questioning from students, and emphasize collaboration, which received a low 2.0. The highest scores were for diversity promotion, relating to personal and social needs (provides relevance), and begins with questions and phenomena that are interesting and familiar to students. Responses are shown in Table 54.

Table 54: Instructional Design Quality Related Responses by Instructors

Instructional Design Contexts of Subject Area	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Provides social and historical perspectives	3	2	1	1	4	3.000
b. Supports diversity	3	2	2	0	4	3.143
c. Relates to personal and social needs -- provides relevance	2	4	1	0	4	3.143
Instructional Methods						
a. Begins with questions and phenomena that are interesting and familiar to students	2	4	1	0	4	3.143
b. Promotes questioning from students	1	4	1	1	4	2.714
c. Actively engages students	0	4	3	0	4	2.571
d. Emphasizes collaboration	0	1	5	1	4	2.000
e. Uses various instructional techniques to help student achieve conceptual understanding	0	4	2	0	5	2.667
Thinking Processes						
a. Utilizes observing	2	2	2	0	5	3.000
b. Utilizes communicating	1	4	1	0	5	3.000
Instructional Practices						
a. Use of manipulative materials	1	2	2	1	5	2.500
b. Active involvement of students in exploring, conjecturing, analyzing and applying content	2	2	2	0	5	3.000
c. Assessing learning as an integral part of instruction	0	3	2	0	6	2.600

Instructor Program Evaluation

In the next section, respondents were asked to answer questions about the program evaluation as it related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Program evaluation ratings which focused on the success of the program series for students was at 2.5 indicating dissatisfaction. Responses are shown in Table 55.

Table 55: Instructor Program Evaluation Quality Related Responses

Program Evaluation	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
How successful has this program series been for your students?	0	5	1	1	4	2.570

Instructor Suggestions to Improve Course Value

In the next section of the instructor’s instrument, respondents were asked what would make the course more valuable. There were two responses which appear in Table 56 and the response summary appears in Table 57.

Table 56: Instructor Suggestions to Improve Course Value

Response	Response Group
If it were competently coordinated.	Improve coordination
I believe that creating the program as I was delivering was a difficult arduous task - Next semester will be more rewarding for students and instructor	Teach course for second time

Table 57: Instructor Suggestions to Improve Course Value Summary

Response Group	Number of Responses in Response Group
Improve coordination	1
Teach course for second time	1

Instructor Change Due to Participation in Course

In the next section, instructors were asked to rate the changes which have come about for them as a result of their participation in the course. The instrument provided a rating scale where four indicated a significant increase and one indicated a significant decrease. Mean responses ranged from a low of 1.8 to 3.2. The primary changes were in the instructors use of distance learning, interest in the use of instructional technology. All responses are shown in Table 58. Instructors were asked to list and describe other changes. One instructor provided a response which appears in Table 59.

Table 58: Instructor Change Due to Participation in Course Rated Responses

Instructor Changes	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Interest in use of distance learning	3	3	2	0	3	3.125
b. Interest in use of instructional technology	4	2	2	0	3	3.250
c. Interest in this subject area	3	2	3	0	3	3.000
d. Higher expectations for course grades	2	2	3	1	3	2.625
e. Use of new strategies to support students	1	4	3	0	3	2.750
f. Collaboration with students	1	0	4	3	3	1.875
g. Feelings of isolation from others	0	1	5	2	3	1.875

Table 59: Instructor Change Due to Participation in Course

Response	Response Group
Participation in the course had little to do with change in my interests etc. I was using variants of this technology long before this project I will be using them long after it.	No change

**Analysis of Mountain Plains
Distance Learning Course Survey
College/High School Students**

A Mountain Plains Distance Learning Course student survey was developed as an electronic instrument and the Microsoft ACCESS software was used for form development and database collection. All materials were put on the evaluator's Web site. E-mails were sent to the students college e-mail addresses which asked them to go to the Web site and fill in the student survey.

The original research design called for the surveys to be administered to students immediately after the course was complete. Data was to be collected immediately after the Fall 1999 courses. However, STARS personnel who were format the instrument for the Web on the Microsoft ACCESS application could not be released to do this as outlined in the agreement between the project and the evaluator.

The survey was completed and posted in May 2000 for students who took classes during the entire school year of 1999-2000. Only several surveys were returned and this was attributed to the onset of the summer when STARS students are not in school and a survey that was thought by some to be too long. E-mails that were sent to student college e-mail boxes were also thought to be a contributing factor as students did not access them. It was determined that most students had other e-mail addresses and had never received the notification to fill in the student survey. New lists of student private e-mail addresses were collected wherever possible by the STARS Project staff.

A number of questions were removed to shorten the survey and this was posted on the evaluator's web site August 15, 2000. A week after school began for the Fall 2000 semester, e-mails were sent to students private e-mail addresses asking them to go to the evaluator's Web site and fill in the electronic forms. Additionally, e-mails were sent to course instructors asking them to make class announcements. Some classes received visits by STARS Project staff to emphasize the importance of filling in the instruments.

While substantially more STARS Project students returned the survey, it was not until it was too late to meet the Star Schools deadline of September 30, 2000. An extension was requested and granted so that the survey responses could be processed for qualitative and quantitative data. At that point it was determined that the data was not formatting correctly as it was moved from the database and into Microsoft Excel or StatView. Database alignment took an additional three weeks.

Student Survey Methodology

Data gathered through the web-based Mountain Plains Distance Learning Course Student Survey were downloaded from the database server and cleaned using a standard text editor. The data were then loaded into the StatView (version 5) statistical program. Each applicable survey question was analyzed in turn using descriptive statistics, and the results are displayed in the paragraphs below. The number system of the original survey is preserved in the following paragraphs to facilitate comparison with the original survey questionnaire.

The majority of quantitative questions used a four point Likert scale for response. The Likert scale analyses involved illustrating response frequency, displaying a frequency percentage for each response, enumerating any missing responses, computing a mean, and assigning a verbal label. The verbal label was assigned consistent with the following formula: means ranging from one to 1.75 were labeled “very low” (or equivalent); means greater than 1.75 and less than 2.25 were labeled “moderately low” (or equivalent); means ranging from 2.25 to 2.75 were labeled “neutral”; means above 2.75 and less than 3.25 were labeled “moderately high” (or equivalent); and, means ranging from 3.25 to four were labeled “very high” (or equivalent).

Qualitative responses were reported verbatim. No editing was done grammatically except for the removal of commas and hard returns that, when left unedited, confounded the proper alignment of variable fields and data in the statistical program). Where appropriate,

the qualitative responses were grouped by obvious response categories to enhance further understanding and higher-level analysis. Under the table boxes listing the qualitative responses to questions, is a summary response table that details the frequency that responses fell within the various groups assigned. Since some responses may fall under several groups, the numbers in the response summary table may exceed the number of responses.

There were 81 valid survey responses in this analysis, completed by 81 students (77 completing the college survey and four completing the high school survey) in the Mountain Plains Distance Learning Program. Not all students answered every question. Missing responses are shown where appropriate with each question or section.

College Students and Sites

College students indicated the site where they were enrolled for distance education courses (see Table 60). Of the 77 students responding to the college survey, 56 reported residing in Utah and 21 resided in Wyoming.

Table 60: College Students and Sites

	CWC Riverton, WY	San Juan Basin VocTech Cortez, CO	CEU Blanding, UT	CEU Price, UT	Other (CEU Moab)
Number of Students	21	0	15	36	5
Percentage of Students at Site	27%	0	19%	47%	7%

High School Students and Sites

High school students indicated the site where they were enrolled for distance education courses (see Table 61). Of the four students responding to the high school survey, all four reported that they resided in Wyoming. The Course location and respondent enrollment summary appears in Table 62.

Table 61: High School Students and Sites

	River- ton, WY	Lander , WY	Wind River, WY	Monu- ment Valley, UT	Monti- cello, UT	San Juan, UT	Cortez- Monte- zuma, CO	Dove Creek, CO	Dol- ores, CO	Man- cos, CO
Students	1	3	0	0	0	0	0	0	0	0
Percentag e	25%	75%	0	0	0	0	0	0	0	0

Table 62: Course Location and Respondent Enrollment Summary

High School or College Location	Number of Respondents Enrolled	Semester	Course Title
CWC Riverton	18	Fall	Substitute Teaching
	3	Spring	English Composition
San Juan	1	Fall	Am. Civ/Hist 1700
CEU Blanding	15	Fall	Am. Civ/Hist 1700
CEU Price	36	Fall	Am. Civ/Hist 1700
Moab	3	Fall	Am. Civ/Hist 1700
HS Lander, WY	2	Spring	Am. Gov.
	1	Fall	Am. Gov.
HS Riverton, WY	1	Spring	Am. Gov.

Students' Geographic Area

Seventy-seven percent of students were located in rural areas (n=60), 18 percent (n=14) reside in urban areas, and five percent (n = 4) reported living in a suburban area (see Table 63). Three respondents did not provide an answer.

Table 63: Students' Geographic Area

Rural	Urban	Suburban
60	14	4
77%	18%	5%

Student Gender and Age

Students were asked what gender they are. Thirty-six or 45 percent are male and 45 students or 56 percent are female.

Students were asked about the age group into which they fell. The range of ages was from 15 to 58. The mean age was 24.3.

Student Ethnicity

Students were asked about their ethnicity. Seventy-nine percent are Caucasian (n=64). Six percent are Hispanic (n=5) and ten percent (n=8) are Native American (see Table 64).

Table 64: Student Ethnicity

African American	Asian	Caucasian	Hispanic	Native American specify	Pacific Islander	Other – please specify
1	1	64	5	8 Shoshone/ apache (2) Navajo (6)	0	2 East Indian Asian- American
1%	1%	79%	6%	10%	0	3%

Student Achievement Rated Responses

A number of questions were posed to students. The instrument provided a four point rating scale where four was high and one was low. All responses are shown in Table 65. The responses were to the questions were generally positive. Fifty-four percent of the students felt they did better in the distance learning class than a traditional class, yet fifty-one percent of the students said they did better in a traditional class. Forty-one percent said the use of distance education technology helped them understand complex concepts.

Table 65: Students Achievement Rated Responses

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. You did better in your distance learning class compared to a traditional class	12 15%	44 54%	23 28%	2 3%	0	2.800
b. You did better in a traditional class	19 23%	41 51%	17 21%	4 5%	0	2.926
c. You prefer a distance education class compared to a traditional class.	11 14%	25 32%	28 35%	15 19%	2	2.405
d. Distance education technology enhanced your class.	27 33%	25 31%	23 28%	6 8%	0	2.901
e. Distance education technology got in the way of my learning.	4 5%	14 18%	25 32%	36 45%	2	1.823
f. The use of distance education technology helped you understand complex concepts.	15 19%	32 41%	22 28%	10 12%	2	2.658

Reasons for Taking the Distance Education Class

Students were asked why they took the distance education class. They were provided with a list of three possible responses and could choose all that applied. Fifty responses indicated that the class was required in the program in which they were enrolled (see Table 66). Students were asked to provide other reasons for taking the distance education class and these responses appear in Table 67. A response group summary appears in Table 68.

Table 66: Reasons for Taking the Distance Education Class - Students

Required class in program	Self enrichment	Convenience (e.g., does not require travel)	Other
50	27	29	13

Table 67: Reasons for Taking the Distance Education Class - Other

Other Response	Response Group
It is a required class but is only offered over EDNet at this campus.	Only offered via DE
Many of the classes offered in Moab are distance education classes. .No option but have been very happy with this class.	Only offered via DE
That's how the class was being offered.	Only offered via DE
Traditional class was not offered at my particular location.	Only offered via DE
I received distance learning to receive credit for my high school program and classes are more challenging than high school classes.	Challenge
I lived in Riverton and didn't have to drive.	Convenience
It is only about 1 mile away and it was convenient I also needed to take a history class	Convenience Needed class
College credit	Needed class
I am trying to get my Associate degree before I graduate.	Concurrent Credit
wanted to take a college class while still in High School to get a start on my college credits.	Concurrent Credit
I wanted to start on my collage education early	Concurrent Credit
It was a good way to get ahead in my college learning.	Concurrent Credit
I got college credit for the class	Concurrent Credit
Means to an end would like to apply for teachers aide.	Future position
Didn't know it was distance.	Took by mistake
Fit in my time schedule	Convenient Time
the time of day it was taught	Convenient time
It was in trial and I was in the class that they first used it on	Beta tester

Table 68: Reasons for Taking the Distance Education Class Response Summary

Response Group	Number of Responses in Response Group
Only offered via DE	4
Challenge	1
Convenience	2
Needed class	2
Concurrent Credit (high school and college)	5
Took by mistake	1
Convenient time for schedule	2
Beta tester	1

Students Reasons for Liking Distance Education Class

Students were asked what they liked most about taking a distance education class.

Three students did not respond to the question. All responses are shown in Table 69 and a summary of responses appears in Table 70.

The prime reasons were access, collaboration, convenience and social reasons.

Students reasons for liking distance education class response summary appears on Table 71

Table 69: Students Reasons for Liking Distance Education Class

Response	Response Group
Even though the college is far away I'm able to still have the same advantages as the students taking it there at CEU.	Access
I get more of the education I couldn't of gotten in my regular classes because the distance education classes are more complex.	Access Challenge
If it was not an offered class over EDnet I would not get the class.	Access
can take a class from another institution rather than wait until another semester or another year classes	Access
That info was right there for you	Access
Can also be taken from rural areas	Access
It brings class this class and others down to this area where normally it was either not available or was offered later in the semester.	Access
It provides classes I would not otherwise be able to have.	Access
It makes more classes available in Moab	Access
When you're gone you can get a tape of the class	Access
Gives me the opportunity to take classes that I might not have otherwise have taken.	Access
You can record and watch the lecture over and over.	Access
I have more class options.	Access
They put a lot of the notes on the internet so you can go get them	Access to new resources
The notes were easy to take because of the computer screen notes.	Access to resources
That the teacher is not actually in the class.	Authority figure missing
The fact that the instructor cannot necessarily pick on a class he can only see on TV.	Authority figure missing
I just like learning harder things than in regular high school classes.	Challenge
Its more on my level of learning	Challenge
We were like guinea pigs for the distance learning program. I thought that it was neat that we could talk back and forth to Riverton. It's been a great experience.	Collaboration
listen to the people from other sites talk	Collaboration
interaction with people that we normally don't meet.	Collaboration
I like hearing what other students have to say about the subject indifferent parts of the states.	Collaboration
I like being able to hear many others input in the class.	Collaboration

Table 69: Students Reasons for Liking Distance Education Class (cont.)

You get to hear input from different people from different places and there is a different atmosphere	Collaboration
Everyone is involved. Everyone can hear one another's opinion	Collaboration
You get to hear more students input because there are more people in the class.	Collaboration
The fact that you can interact with other students and learn from their questions and point of views.	Collaboration
You get more information from other kids	Collaboration
You can get information from the others in your class.	Collaboration
Meeting new people over in the other town/city	Collaboration
Sharing of ideas with other sites	Collaboration
One of the advantages of distance education is that you can stay at or close to home and attend classes at a more convenient time.	Convenience
Goes faster than regular classes.	Convenience
Not going to class	Convenience
I can take the class whenever I have free time. It works around my schedule	Convenience
It is very convenient in that you do not have to travel to the college.	Convenience
The convenience of the class and not traveling to a college campus.	Convenience
Taught in high school.	Convenience
I like it because it is convenient (sic)	Convenience
It allowed me to go to a location convenient to me.	Convenience
The convenience	Convenience
Scheduling	Convenience
I didn't have to travel to another site for the class.	Convenience
The fact that I can attend college class and still live at home.	Convenience
Very convenient (sic) familiar atmosphere and savings of money.	Convenience Cost savings
No travel and exposure to other people	Convenience Social
I don't have to travel and the class size (in my room)is small.	Convenience Fewer students
Cheaper than paying room and board at a college	Cost Savings
They have no tuition	Cost savings
I get the college credit without having to go to the college.	Credit
You get college credit while you are still in high school	Credit
You get college credit	Credit
I get college credit by taking distance education classes in my home town.	Credit Access
The diversity of people.	Diversity
Usually based on the professor the classes are only every other day instead of everyday like high school.	Fewer classes
Not as many students in the class easier to understand.	Fewer students
Our teacher is a good far teacher and grades our papers the way i like them to be graded it is easy to see what you got and to see what you got wrong	Good instruction
The facilitator is great. This class teaches me a lot. The teacher seems know what he is talking about and he loves what he does.	Good instruction

Table 69: Students Reasons for Liking Distance Education Class (cont.)

The lack of a large number of set deadlines.	Instructional design
Made tests easier.	Instructional design
Less assignments	Instructional design
i like the T.V. it makes it easier to pay attention	Instructional design
It adds a little character to the class	Instructional design
Usually nothing however Dr. Coppersmith is very good with the system and the technology he utilizes (sic) very helpful and effective. I am surprised by how much I am learning from and enjoying this class.	Learning
I learned what I needed to learn.	Learning
Learning a lot about history	Learning
Worked at own pace	Self-paced
Relaxing	Social
Getting over somewhat of my fear of speaking in front of others.	Social
That you had a lot more students to interact with.	Social
It is so nice and you know most of the people you are in class with	Social
It is more relaxed	Social
Friendly	Social
Many students in the class	Social
It was cool at first. The teacher was nice and it was a new way of learning. Then the system didn't work we didn't get our work and it made it harder and harder	Technology

Table 70 : Students Reasons for Liking Distance Education Class Response Summary

Response Group	Number of Responses in Response Group
Access	14
Access to new resources	2
Authority figure missing	2
Challenge	3
Collaboration	13
Convenience	16
Cost savings	3
Credit	2
Diversity	1
Fewer classes	1
Fewer students	2
Good instruction	2
Instructional design	5
Learning	3
Self-paced	1
Social	8
Technology	1

Students Reasons for Disliking Distance Education Class

Students were asked what they liked least about taking a distance education class? The primary focus of the respondents was around the class structure, a lack of access to the instructor, and technology failure. Most of the responses indicated that the students were not self-directed and depended heavily on teacher access and structure. Nine respondents did not answer this question. All responses are shown in Table 71 and a response summary is shown in Table 72.

Table 71: Students Reasons for Disliking Distance Education Class

Response	Response Group
Distance	Access
The fact that we met on Mondays/Weds/Fridays one week and then on Tuesday/Thursdays the next week	Bell schedule
Majority of the students left the class	Class structure
It can be too relaxed	Class structure
Taking so long at times to get class started	Class structure
Sometimes the instructor and other students have conversations that exclude the sites.	Class structure
The class wasn't always ready at starting time.	Class structure
When attending class students talk laugh etc. making it hard to hear the instructor.	Class structure
When there is bad weather it sort of throws the course schedule behind	Inconvenience
The visuals	Instructional design
Hard to get all the info	Instructional design
it is really hard to pay attention	Instructional design
Hard to pay attention	Instructional design
They sometimes go too fast and ability to ask questions during class is limited.	Instructional design
It makes me feel like I am on a time schedule.	Instructional design
Sometimes it goes to fast and is hard to keep up with.	Instructional design
Sometimes the teacher moves too fast to keep up with the other students	Instructional design
it is all lecture	Instructional design
Not having the personal contact with the people	Lack of Collaboration

Table 71: Students Reasons for Disliking Distance Education Class (cont.)

my attitude	Not self-directed
That it was easy to forget about the work	Not self-directed
It is hard to keep your focus on what the teacher is saying because the teacher is not in your classroom watching you	Not self-directed No authority figure
If you miss it is hard to get caught up. It is also hard to keep your attention focused on what is being taught because the teacher isn't right there.	Not self-directed No authority figure
I do have internet access to correspond and the teachers have been very good about getting back to me promptly.	Teacher access
I don't have a long distance calling plan on my phone so it sometime makes it difficult to call the teacher.	Teacher access
Not being able to have the professor right there to help you	Teacher access
I wish with some of my classes that I was able to be there and talk with the teacher easier. Especially when they show hands on examples.	Teacher access
Not being able to talk face to face with the professor.	Teacher access
I can't talk to the instructor face to face and ask as many questions as I would like	Teacher access
Having the teacher in the room	Teacher access
I'm not there in person.	Teacher access
It is harder to interact with teacher. It is less convenient to ask questions get advice etc.	Teacher access
Not being able to talk to the teacher when I need to sometimes.	Teacher access
You don't really have a teacher in front of you. You can't necessarily talk to him about your grade after class. You have to call him or e-mail him.	Teacher access
The teacher is not there so you cannot ask as many questions	Teacher access
It's harder to communicate one on one.	Teacher access
Being removed from the Professor. However Dr. Coppersmith is so familiar and good with the EdNet system it really hasn't bothered me.	Teacher access
Not one-on-one interaction with teacher.	Teacher access
Taking college test and not being able to see your professor in real life.	Teacher access
Sometimes it was confusing because the teacher wasn't handy to ask questions.	Teacher access
No teacher in the room.	Teacher access
You really don't get the one on one and	Teacher access
You aren't right in the classroom with the professor	Teacher access
No instructor in classroom hard to ask questions - time consuming.	Teacher access
No direct communication w/instructor	Teacher access
No teacher in the class	Teacher access
There is very little one on one time with the teacher.	Teacher access
The teacher is not there so you can't ask them as many questions.	Teacher access
The isn't much interaction between the teacher and you. The teacher doesn't care to know you.	Teacher disinterest
Also you have to wait longer to get your assignments and tests back because he has 100+ students.	Teacher overload
Deadlines are really strict.	Teacher structure

Table 71: Students Reasons for Disliking Distance Education Class (cont.)

It's on TV	Tech
It is harder to talk to the professors.	Tech failure
The feedback from the television.	Tech failure
Making all the copies and sending them.	Tech failure
the technical problems	Tech failure
Many things needed to be worked out. A lot of wasted time working out the problems with the technology.	Tech failure
Missed some of information and instructions from background noises	Tech failure
Technical Difficulties.	Tech failure
The power going out or the system not working.	Tech failure
Sometimes the system is not clear enough to hear the instructor.	Tech failure
When class is cancelled in one site and the other sites has class.	Tech failure
some times the system would crash and we would miss class	Tech failure
It is harder to ask questions.	Tech failure
Sometimes communication with the teacher is difficult.	Tech failure
At time the system goes down and we at the distance sites may miss class until the problem is corrected.	Tech failure
Not as free if you wanted to have a class discussion.	Tech failure
That it took forever to ask a question	Tech failure
It was hard to ask questions because I felt more interruptive.	Tech failure
It some times can be disruptive.	Tech failure
communication problems and mailing.	Tech failure
Some times they talk to fast and you really can't understand them	Tech failure
Sometimes the technical difficulties were annoying.	Tech failure
Sometimes the sound wasn't there or it was too staticy. (sic.)	Tech failure
Or sometimes we couldn't even get through to Riverton or vice versa.	Tech failure
Poor implementation of technology creates a time lag between conversation and improper filters of background noise overrule the current conversation	Tech failure
Our teacher had to talk slower and repeat himself sometimes in order to let the students in the other town understand what he was talking about	Tech failure

Table 72: Students Reasons for Disliking Distance Education Class Response Summary

Response Group	Number of Responses in Response Group
Access	1
Bell schedule	1
Class structure	6
Inconvenience	1
Instructional design	8
Lack of Collaboration	1
Not self-directed	4
No authority figure	2
Teacher access	25
Teacher disinterest	1
Teacher overload	1
Teacher structure	1
Tech	1
Tech Failure	25

Recommend Class to a Friend

The next question asked students if they would recommend this class to a friend and if not, why? Sixty-six students (89 percent) said they would. Only eight or 11 percent said they would not recommend the class to a friend. Seven respondents did not answer the question. All responses are shown in Table 73 and a response summary is shown in Table 74.

The primary reason given for recommending the class to a friend was the learning. Access to teachers and technology failure were the two reasons given for not recommending the class to a friend.

Table 73: Recommend Class to a Friend

Positive Responses	Response Group
Yes and Definitely	5
It is a convenient way to take classes not available at the nearest college	Access
It easy to get needed info	Access to resources
It is different than that traditional setting	Different
It is a new experience.	Different
Because it is fun.	Fun
it is a good class just a tuff teacher	Good class
I think it's interesting	Interesting
I would recommend this class to a friend because you learn a lot about history. Distance learning is very helpful.	Learning
Yes it is a good class very informational and you learn a lot of things	Learning
I have learned a lot I didn't know before. I enjoy the class.	Learning
Because it is helping me get an early start on my future.	Learning
yep...it is a good class with tons of information to offer	Learning
For a high school student if they were interested in getting their associates before they graduate yes I wouldn't recommend it if they weren't getting it. You learn a lot but it's a lot of work when they also have to worry about high school classes and pass	Learning
Yes to get certified to sub	Learning
Yes if you plan going to college.	Learning
It have a lot of benefits	Learning
Yes I learned some great tips.	Learning
Yes. I felt like I learned several things that I could use in our classroom	Learning
Yes they also could advance themselves	Learning
yes I learned a lot and it is a fair class	Learning
Basically it depends on how the instructor handles his/her students assignments and questions that need to be answered without delay.	Teacher Access
Negative Responses	
No and I don't know	2
so sometimes I slack off and don't really pay attention.	Boring
No. I hate it.	Hated it
Hard to keep in touch with the professor	Teacher access
No because its hard to keep in touch with the professor	Teacher access
The technology needs to be improved.	Tech failure
Maybe it seems that it would work better once they get all of the bugs out	Tech failure

Table 74: Recommend Class to a Friend Response Summary

Response Group	Number of Responses in Response Group
Positive Responses	
Access	1
Access to resources	1
Different	2
Fun	1
Good class	1
Interesting	1
Learning	13
Teacher access	1
Negative Responses	
No	2
Boring	1
Hated it	1
Teacher access	2
Tech failure	2

Take Another Distance Education Class - Students

The next question asked students if they would take another distance education class and if not why they would not. Yes responses were given by 65 students (86 percent of the respondents) and no responses were given by 11 respondents (14 percent). Four respondents did not provide an answer. See Table 75 and the response summary appears in Table 76.

Table 75: Take Another Distance Education Class - Students

Positive Response	Response Group
Yes I would, Yes all in all it was fine.	4
I would take any class this way except a science or math where I feel I would need the hands on help.	Any class
Yes because it is so close probably next semester they will all be distance learning	Any class
Yes depending on subject	Based on subject
After experiencing a teacher who is familiar with the system and can use it well yes I would have no problem taking another.	Based on teacher use of system
Yes because you highly benefit from distance education classes by receiving full credit for just a semester class.	Credit
I like to get the college credit while filling my graduation requirements.	Credit
I enjoyed with interacting with the other students from the other town	Collaboration
yes...the are very cool and it's a nice change.	Different
Easier than a traditional class.	Easier
they are fun	Fun
Because it is fun.	Fun
Yes. Because I like learning	Learning
Good way of learning.	Learning
I think that it is a great thing for High School students to do.	Learning
Yes just because it saves gas money	Saves gas money
Taking the distance learning classes made it easier for me to schedule my classes because of busy work school schedules.	Scheduling
Yes. I currently am (taking a DL class)	Taking a DL class
Negative Responses	
no miss out on a lot	Miss too much
Not if I was able to transport myself.	Need transportation
I seem to do better in traditional classes.	Traditional class
They go to fast for me	Too fast
at least not until i was in college it was more challenging than i thought it would be	Too challenging

Table 76: Take Another Distance Education Class Student Response Summary

Response Group	Number of Responses in Response Group
Positive Responses	
Yes	4
Any class	2
Based on subject	1
Based on teacher use of system	1
Credit	2
Collaboration	1
Different	1
Easier	1
Fun	2
Learning	3
Saves gas money	1
Scheduling	1
Taking a DL course	1
Negative Responses	
Miss too much	1
Need transportation	1
Traditional class	1
Too fast	1
Too challenging	1

Student Suggestions to Improve Distance Education Classes

Students were asked what they would suggest to improve distance education classes? Most suggestions focused on improvement of technology and setting up technology before the class began. However, a number of suggestions asked for improvements in the way the instructor conducted the class. Students wanted teachers to slow their speech, conduct discussions more than lectures, include and teach to all sites, be more understanding of high school students. All responses are shown in Table 77 and the response summary is shown in Table 78.

Table 77: Student Suggestions to Improve Distance Education Classes

Response	Response Group
Not have copies made.	Access to notes

Distribution of materials would like to have a written copy of notes and maybe highlighted points.	Access to notes
I like it when teachers put their notes on the internet. I would suggest having a sight (sic) that with a password you could get your grades from.	Access to notes on Internet
Have the pupils sign in for attendance at the end of class. Hopefully the students may be more willing to stay and participate.	Class structure
Same rules that apply in a traditional class	Class Structure
Have more class discussions instead of lectures.	Discussions
more site discussion from other sites than Price	Discussion
More time in the class	Increase class time
I like working on the internet most.	Internet
less sites per teacher	Lower teacher workload
Try and make it more personal	More personal
Offer more courses for high school student's.	More courses
The Professor not talk so fast all the time.	Slower speech
slow it down	Slow content
More understandable teaching by college professors.	Teacher improvement
Make it easier to communicate with the professors when not in class.	Teacher access
The instructors needs to realize that he has students in other sites not just his traditional class.	Teach to all sites
It's really fine the way it is....although it would nice if the teacher came out to Blanding for one session.	Teacher visit site
That if possible the teacher should visit all of the sites so the students can get to know him or her better.	Teacher visit site
Less technical difficulties.	Tech improvement
Better technology	Tech improvement
It is hard sometimes because you can't hear what they are saying and they don't stop so you miss out on a lot of information	Tech improvement
Get a system that will have no technical difficulties.	Tech improvement
Making the system more reliable.	Tech improvement
Bigger TV screens faster feedback on assignments	Tech improvement Improve assignment feedback
Show the other sites occasionally and have instructors use distance students for comments and discussions as often as students in the room.	Tech Improvement
More emphasis in the classroom on using mic.'s. So that students at the remote sites can hear what is being discussed in the classroom.	Tech improvement
To hear more cleanly	Tech Improvement
To have things worked out ahead of time.	Tech Improvement
More preparation	Tech Improvement
Have the equipment set up prior to class so you can get started when you arrive	Tech Improvement
Getting the system set-up before class is scheduled to start.	Tech Improvement
Make sure systems function well	Tech Improvement
Response	Response Group
Make the speakers have less static and the delay time cut down maybe if you can	Tech Improvement
I wouldn't say anything right now. For our area it is a new thing and it will take time to get everything ironed out	Tech Improvement
The Distance Education Classes are a wonderful way to learn.	No Suggestion

They usually work and I am very impressed.	No Suggestion
I don't know I think they are just fine the way they are	No Suggestion
Everything is o.k. with the distance education classes. They do all that they can do.	No Suggestion
I can't think of any ways. I wish there was some improvement	No Suggestion
No suggestions	8 No Suggestion

Table 78: Student Suggestions to Improve Distance Education Classes Response Summary

Response Group	Number of Responses in Response Group
Access to notes	3
Class Structure	2
Discussions	2
Increase class time	2
Internet	2
Lower teacher workload	1
More personal	1
More courses	1
Slower speech	1
Slow content	1
Teacher improvement	1
Teach to all sites	1
Improve assignment feedback	1
Teacher visit site	3
Tech improvement	16
No Suggestion	13

Student Rated Responses

In the next section of the instrument, respondents were asked to answer questions about the quality of specific items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. All operations and support rankings were above 3.0 indicating a good degree of satisfaction. Responses are shown in Table 79.

Table 79: Operations and Support Quality Student Rated Responses

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Operations and Support Quality						
a. Adherence to timelines for providing catalogs, calendars, schedules	34 44%	30 39%	8 10%	5 7%	4	3.208
b. Adherence to timelines for providing student program materials and programs	29 36%	35 43%	13 16%	4 5%	0	3.099
Support						
a. Support through student orientation telecasts	25 32%	39 49%	12 15%	34%	2	3.089
b. Support via phone, fax or Internet	37 46%	32 39%	11 14%	1 1%	0	3.296
Aspects Demonstrated by the Course Instructor						
a. Enthusiasm for the subject and content expertise	45 56%	28 35%	5 6%	2 3%	1	3.450
b. Using new instructional methods	34 43%	33 42%	8 10%	4 5%	2	3.228

Technical Dimensions

In the next section of the instrument, respondents were asked to answer questions about the quality of the technical dimension of items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Technical dimension rankings ranged from 3.2 to 3.3 indicating satisfaction with the technical dimension. Responses are shown in Table 80 and the technical dimension of positive aspects or suggestions by students appears in Table 81.

Table 80: Technical Dimension Quality Related Student Response

Technical Dimension: Production Aspects of the Telecasts	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. set and its use by program instructor	32 40%	42 53%	3 4%	2 3%	2	3.316
b. Use of technical aspects to enhance learning such as camera work, graphics, audio and/or video clips	40 50%	30 37%	8 10%	2 3%	1	3.350
Interactivity of the Telecasts						
a. Studio's capability to answer incoming phone calls, e-mail and faxes for the program instructor	33 41%	39 49%	6 7%	2 3%	1	3.288
b. Announcement and use of upcoming question and answer periods, and time allotted to enhance learning	33 41%	38 47%	9 11%	1 1%	0	3.272
c. Clarify information based on viewer calls	36 45%	35 43%	9 11%	1 1%	0	3.309
Computer and Software						
a. Integration of use of Internet and e-mail for communications	37 49%	30 40%	7 9%	1 1%	6	3.373
b. Integration of use of computer and software to support instruction	39 49%	32 41%	7 9%	1 1%	2	3.380

Table 81: Technical Dimension Positive Aspects or Suggestions by Students

Response	Response Group
Very convenient better than traveling a long way.	Convenience
This teacher is very good and he knows his material very well. He seems to insult some religions though. Not very bad	Discrimination
Be careful not discriminate because of race or religion.	Discrimination
He describes thing really well and gives you things you can associate with so it makes it easier to remember.	Good instructor
My professor makes the seem subject fun. You can tell he likes history	Good Instructor
Simply a great class and a great instructor.	Good instructor
He uses a lot of the pictures and stuff to help us see where the people have been	Good visuals
The microphones need to be put in more places in order for the students over the telecast to hear better	Mic placement
This was a new experience and a good first impression	New Experience
Have more one-on-one interactions.	More Interaction
Answer more questions?	More Interaction
The instructors do give info on how to contact them if you are having a problem. And they work with you.	Teacher access
i like the use of windows programs	Windows
None 3	None

Overall Program Design Quality

In the next section of the instrument, respondents were asked to answer questions about the quality of the overall program design as that related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Overall program design quality rankings ranged from 2.8 to 3.4 indicating that there is a lack of consistency in this area even though the scores range at the high end of the scale. The lowest ratings were given to a lack of recognition of the learners' learning styles and multiple intelligences. The highest rating of 3.4 was given to the creation of a clear statement of goals, objectives, and learning outcomes. Responses are shown in Table 82.

Table 82: Overall Program Design Quality: Quality Related Responses by Students

Overall Program Design Quality: Program Series Content	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Clear statement of goals, objectives, and learning outcomes	44 54%	32 40%	5 6%	0 0%	0	3.481
b. Accurate, current, thorough	44 54%	33 41%	2 2%	2 2%	0	3.469
Telecast Design						
a. Motivates and involves students	30 37%	37 46%	12 15%	2 2%	0	3.173
b. Flexibility to vary pace, sequence and depth of instruction for various learners	18 22%	45 56%	16 20%	2 2%	0	2.975
c. Promotion of critical viewing, thinking and experimentation	30 38%	37 46%	13 16%	0 0%	1	3.212
d. Recognition of learning style / multiple intelligences of learners	14 18%	45 56%	16 20%	5 6%	1	2.850
Program Support (Print) Materials for Teachers						
a. Design of materials for specified learning outcome	33 41%	38 47%	9 11%	1 1%	0	3.272
b. Materials for initial learning, reinforcement and exploration	31 38%	43 53%	7 9%	0 9%	0	3.296

Student Progress

In the next section of the instrument, respondents were asked to answer questions about the quality of student progress for items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Student progress rankings ranged narrowly from 2.9 to 3.03 indicating student satisfaction with their progress. Responses are shown in Table 83.

Table 83: Student Progress Quality Related Responses by Students

Student Progress	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Process for monitoring student progress and assessment	25 31%	34 43%	18 23%	2 3%	2	3.038
b. Design of telecast, pre and post activities, which allow checking understanding	21 26%	40 50%	15 19%	4 5%	1	2.975

Instructional Design Responses by Students

In the next section of the instrument, respondents were asked to answer questions about the quality of instructional design for items related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. Instructional design rankings ranged from 2.9 to 3.4 indicating a mixed level of satisfaction with the instructional design. The highest score was for diversity. Responses are shown in Table 84.

Table 84: Instructional Design Quality Related Responses by Students

Instructional Design Contexts of Subject Area	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Provides social and historical perspectives	39 48%	31 38%	9 11%	2 3%	0	3.321
b. Supports diversity	41 50%	32 40%	8 10%	0 0%	0	3.407
c. Relates to personal and social needs -- provides relevance	31 39%	38 48%	10 13%	0 0%	2	3.266
Instructional Methods						
a. Begins with questions and phenomena that are interesting and familiar to students	34 43%	30 38%	14 18%	1 1%	2	3.228
b. Promotes questioning from students	29 39%	32 42%	12 16%	2 3%	6	3.173
c. Actively engages students	19 25%	37 49%	17 22%	3 4%	5	2.947
d. Emphasizes collaboration	20 25%	37 47%	20 25%	2 3%	2	2.949
e. Uses various instructional techniques to help student achieve conceptual understanding	27 35%	34 43%	14 18%	3 4%	3	3.090
Thinking Processes						
a. Utilizes observing	32 40%	36 46%	11 14%	0 0%	1	3.266
b. Utilizes communicating	31 38%	41 51%	6 8%	2 3%	1	3.263
Instructional Practices						
a. Use of manipulative materials	28 35%	38 47%	11 14%	3 4%	1	3.138
b. Active involvement of students in exploring, conjecturing, analyzing and applying content	24 31%	36 46%	16 20%	2 3%	3	3.051
c. Assessing learning as an integral part of instruction	30 38%	41 51%	8 10%	1 1%	1	3.250

Program Evaluation

In the next section, respondents were asked to answer questions about the program evaluation as it related to their course. They were provided with a rating scale where four indicated high quality and one indicated low quality. The program evaluation ratings which focused on the success of the program series for students was at 3.4 indicating student satisfaction. Responses are shown in Table 85.

Table 85: Program Evaluation Quality Related Responses by Students

Program Evaluation	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
How successful has this program series been for your students?	35 43%	43 54%	2 3%	0 0%	1	3.413

Student Suggestions to Make the Course More Valuable

In the next question, students were asked what would make the course more valuable. The responses are shown in Table 86. In this qualitative answer, students provided a great deal of information about the problems they had in learning through the class. Repeated references were made to slowing the presentation, being able to take notes, having interaction, less boring and fewer lectures. While many earlier lists of requested improvements focused on technology and class problems, this list focused primarily on improvements that could easily be made by course instructors. If instructors have received professional development in teaching over distance learning systems, they are not using it in the distance learning classroom.

Table 86: Student Suggestions to Make the Course More Valuable

Response	Response Group
The assignments were at sites a day or so earlier.	Assignment ready earlier
If I were there in person	Be at origination site
they would get better facilitators	Better facilitator
surround sound makes the videos more enjoyable/ fix the technology/get rid of lag in video and audio. Improve filters to get rid of background noise	Better technology
If teachers made sure students understand the course material.	Check for understanding
There was a different teacher. He disrespects Mormons and he does not grab my attention. It is a very boring class.	Different instructor
The Teacher would show more enthusiasm for the subject and work in quotes and literature from the time being discussed	Enthusiastic teaching
The student/teacher ratio was better	Fewer students
It had a different system that it could go through with no problems.	Improve Technology
if I had a little more background info on the context	More background
Offered more credit.	More Credit
It was more fun and less notes.	More fun
there was more interaction	More Interaction
If we didn't have to give presentations - too time consuming.	No student presentation
everyone felt as though we were in one class room	Not isolated
More sites participated like around U.S.	Other US sites
More preparation	Production preparation
It would just help a lot if he slowed down because he goes so fast that you have a hard time understanding and writing everything down	Slower presentation by teacher
We could go a little slower so I could grasp all the new concepts.	Slower presentation
We were able to see the teacher in person. We also move really fast. If it was a little slower it would be easier to follow and understand maybe for there to be more detail in what is being taught.	Slower Presentation Meet teacher in person
If the class was more uplifting and now the same thing every day. If there was something that could be used to help our understanding and if he didn't go so damn fast.	Slower Presentation
Instructor available	Teacher access
Instructors are willing to stay longer to answer questions from other sites.	Teachers stayed to answer questions
Teachers were better able to help students learn with different styles of teaching.	Teaching to meet learning styles
Were done with teacher in the site once in awhile.	Teacher site visits
the teacher had been willing to listen to the students concerns and question about the class	Teacher interested in student concerns
More time between tests.	Time between tests
I could get better notes taken	Time to take notes
You could have more time to copy down what's on the screen.	Time to take notes
This course is very interesting but there is so much information given- I feel like I can't grasp all of it but I would like to!	Too much information
We didn't have just a lecture every day. If he made it more interesting.	Too many lectures
got the student more involved and made the class more interactive	Student interaction
The equipment such as camera/computers were kept up to date.	Update equipment
I liked the class + it worked very well for me as it was.	No changes
I feel it is valuable enough.	No changes

I feel that the course is fine as it currently is.	No changes
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Student Change Due to Participation in Course

In the next section, students were asked to rate the changes which have come about for them as a result of their participation in the course. The instrument provided a rating scale where four indicated a significant increase and one indicated a significant decrease. Mean responses ranged from a low of 2.4 to 3.289. Primary changes were shown in all areas except a feeling of isolation from other students at 2.4 which indicated that students did not feel isolated from other students. All responses are shown in Table 87.

**Table 87: Student Change Due to Participation in Course
Rated Responses by Students**

Instructor Changes	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
a. Interest in use of distance learning	34 45%	30 39%	12 16%	0 0%	5	3.289
b. Interest in use of instructional technology	32 40%	34 42%	14 18%	0 0%	1	3.225
c. Interest in this subject area	30 38%	38 49%	9 12%	1 1%	3	3.244
d. Higher expectations for my course grade	32 42%	35 47%	8 11%	0 0%	6	3.320
e. Use of new strategies to support students	25 32%	41 52%	12 15%	1 1%	2	3.139
f. Collaboration with other students	23 29%	40 50%	16 20%	1 1%	1	3.062
g. Feelings of isolation from other students	15 19%	21 27%	30 38%	13 16%	2	2.481

Comparison of Student and Instructor Survey Instrument Responses

In many cases, the same questions were asked on the instructor and student surveys so that they could be compared.

In the following tables, instructors and students could not agree on whether achievement in distance learning classes was better than in a traditional class. Student scores were within a tenth of a point while instructress fluctuated six-tenths of a point. (See Tables 88 and 89)

Table 88: Comparison: Achievement in Class – Distance Learning

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Your students achieved better in your distance learning class	1	4	3	1	2	2.556
Student: You did better in your distance learning class	12	44	23	2	0	2.800

Table 89: Comparison: Achievement in Class – Traditional

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Your students achieved better in your traditional class.	4	3	1	1	2	3.111
Student: You did better in a traditional class	19	41	17	4	0	2.926

Instructors and students were in agreement on the preference for a distance education course as compared to a traditional class. The mean responses for instructors and students were 2.4 (see Table 90).

Table 90: Comparison: Preference for a Distance Learning Class

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
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Instructor: You prefer a distance education class compared to a traditional class	2	3	2	3	1	2.400
Student: You prefer a distance education class compared to a traditional class.	11	25	28	15	2	2.405

There was close agreement of instructors and students that the distance education technology enhanced the class. Instructors and students mean responses were 3.1 and 2.9 respectively (see Table 91).

Table 91: Comparison: Distance Education Technology Enhanced the Class

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Distance education technology enhanced your class.	5	3	3	0	0	3.182
Student: Distance education technology enhanced your class.	27	25	23	6	0	2.901

There was close agreement of instructors and students that the distance education technology did not get in the way of student learning. Instructors and students mean responses were 2.3 and 1.8 respectively (see Table 92).

Table 92: Comparison: Distance Education Technology Interfered with Student Learning

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Distance education technology got in the way of student learning.	2	2	3	3	1	2.330
Student: Distance education technology got in the way of my learning.	4	14	25	36	2	1.823

There was close agreement of instructors and students that the distance education technology helped students understand complex concepts. Instructors and students mean responses were 2.6 (see Table 93).

Table 93: Comparison: Distance Education Technology Helped Students Understand Complex Concepts

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: The use of distance education technology helped students understand complex concepts and thus enhanced student achievement.	3	3	3	2	0	2.636
Student: The use of distance education technology helped you understand complex concepts.	15	32	22	10	2	2.658

There was close agreement of instructors and students that the instructor exhibited enthusiasm for the subject and content expertise. Instructors and students mean responses were 3.1 and 3.4 respectively (see Table 94).

Table 94: Comparison: Instructor Exhibits Enthusiasm for the Subject and Content Expertise

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Enthusiasm for the subject and content expertise	4	2	1	1	3	3.125
Student: Enthusiasm for the subject and content expertise	45	28	5	2	1	3.450

There was close agreement of instructors and students that the instructor was using new instructional methods. Instructors and students mean responses were 3.3 and 3.2 respectively (see Table 95).

Table 95: Comparison: Instructor is Using new Instructional Methods

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Using new instructional methods	4	3	1	0	3	3.375
Student: Using new instructional methods	34	33	8	4	2	3.228

There was no agreement of instructors and students that the instructor used the set well. Instructors had a mean response of 2.5 and students gave the instructors a mean response of 3.3 (see Table 96).

Table 96: Comparison: Instructor Use of Set

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Set and its use	1	3	2	1	4	2.571
Student: Set and its use by program instructor	32	42	3	2	2	3.316

There was close agreement of instructors and students that the instructor's use of technical aspects to enhance learning such as camera work, graphics, audio and/or video clips. Instructors and students had a mean response of 3.0 and 3.3. respectively (see Table 97).

Table 97: Comparison: Instructor Use of Technical Aspects

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Use of technical aspects to enhance learning such as camera work, graphics, audio and/or video clips	2	2	2	0	5	3.000
Student: Use of technical aspects to enhance learning such as camera work, graphics, audio and/or video clips	40	30	8	2	1	3.350

There was no agreement of instructors and students about the studio's capability to answer in-coming phone calls, e-mail and faxes for the instructor. Instructors felt that the capability was much lower as indicated by the mean response of 2.1 as compared to the students' mean response of 3.2 (see Table 98).

Table 98: Comparison: Studio Capability for Interaction

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Studio's capability to answer in-coming phone calls, e-mail and faxes for the program instructor	0	3	1	2	5	2.167
Student: Studio's capability to answer in-coming phone calls, e-mail and faxes for the program instructor	33	39	6	2	1	3.288

There was no agreement of instructors and students about the announcement and use of upcoming question and answer periods, and time allotted to enhance learning. Instructors felt that this use was much lower than students. Instructors' and students' mean responses were 2.00 and 3.27 respectively. It should be noted that throughout the qualitative responses, students remarked about the inability to ask questions and interact with the instructor. Here seventy-one of the student respondents rated this capacity at three or four (see Table 99).

Table 99: Comparison: Use of Question/Answer Sessions

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Announcement and use of upcoming question and answer periods, and time allotted to enhance learning	1	1	1	3	5	2.000
Student: Announcement and use of upcoming question and answer periods, and time allotted to enhance learning	33	38	9	1	0	3.272

There was no agreement of instructors and students about the clarification of information based on viewer calls to the origination site. Again, instructors felt that this use was much lower than students. Instructors' and students' mean responses were 2.30 and

3.30 respectively. Seventy-one of the student respondents rated this at three or four (see Table 100).

Table 100: Comparison: Information Clarified Based on Viewer Calls

Question	Rat e 4	Rat e 3	Rat e 2	Rat e 1	Missing Respons es	Mean Respons e
Instructor: Clarify information based on viewer calls	1	2	1	2	5	2.330
Student: Clarify information based on viewer calls	36	35	9	1	0	3.309

Instructors and students did not agree about the integration of use of the Internet and e-mail for communications. Instructors' and students' mean responses were 2.33 and 3.33 respectively. Sixty-seven of the student respondents rated this at three or four (see Table 101).

Table 101: Comparison: Integration of use of Telecommunications

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Integration of use of Internet and e-mail for communications	1	1	3	1	5	2.333
Student: Integration of use of Internet and e-mail for communications	37	30	7	1	6	3.373

Instructors and students did agree about the integration of use of the computer and software to support instruction. Instructors' and students' mean responses were 3.23 and 3.38 respectively (see Table 102).

Table 102: Comparison: Integration of Use of Computer and Software to Support Instruction

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Integration of use of computer and software to support instruction	2	2	1	0	5	3.200
Student: Integration of use of computer and software to support instruction	39	32	7	1	2	3.380

Instructors and students did agree that there was a clear statement of goals, objectives, and learning outcomes. Instructors' and students' mean responses were 3.42 and 3.48 respectively (see Table 103).

Table 103: Comparison : Clear Statement of Goals, Objectives, and Learning Outcomes

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Clear statement of goals, objectives, and learning outcomes	4	2	1	0	4	3.429
Student: Clear statement of goals, objectives, and learning outcomes	44	32	5	0	0	3.481

Instructors and students were close in agreement that the material was accurate, current and thorough. Instructors' and students' mean responses were 3.16 and 3.46 respectively (see Table 104).

Table 104: Comparison: Accurate, Current, Thorough Content

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Accurate, current, thorough	3	1	2	0	5	3.167
Student: Accurate, current, thorough	44	33	2	2	0	3.469

Instructors and students were quite close in agreement that the instructor motivates and involves students. Instructors' and students' mean responses were 3.00 and 3.17 respectively (see Table 105).

Table 105: Comparison: Motivation and Involvement of Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Motivates and involves students	1	3	1	0	6	3.000
Student: Motivates and involves students	30	37	12	2	0	3.173

Instructors and students were close in agreement that the instructor provided flexibility and varied pace, sequence, and depth of instruction for various learners. However, the scores for this were somewhat low indicating that there is a need for improvement. Instructors' and students' mean responses were 2.60 and 2.97 respectively (see Table 106).

Table 106: Comparison: Flexibility of Pace, Sequence, Depth of Instruction for Various Learners

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Flexibility to vary pace, sequence and depth of instruction for various learners	0	3	2	0	6	2.600
Student: Flexibility to vary pace, sequence and depth of instruction for various learners	18	45	16	2	0	2.975

Instructors and students were in agreement that the instructor promoted critical viewing, thinking and experimentation. Instructors' and students' mean responses were 3.20 and 3.21 respectively (see Table 107).

Table 107: Comparison: Promotion of Critical Viewing, Thinking and Experimentation

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Promotion of critical viewing, thinking and experimentation	2	2	1	0	6	3.200
Student: Promotion of critical viewing, thinking and experimentation	30	37	13	0	1	3.212

Instructors and students were in agreement that the instructor recognized learning styles and multiple intelligences of learners. However, the scores were lower indicating that this is an area for improvement. Instructors' and students' mean responses were 2.80 and 2.85 respectively (see Table 108).

Table 108: Comparison: Recognition of Learning Style and Multiple Intelligences of Learners

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Recognition of learning style /multiple intelligences of learners	0	4	1	0	6	2.800
Student: Recognition of learning style /multiple intelligences of learners	14	45	16	5	1	2.850

Instructors and students were in agreement that the instructor designed materials for specified learning outcomes. Instructors' and students' mean responses were 3.00 and 3.27 respectively (see Table 109).

Table 109: Comparison: Design of Materials for Specified Learning Outcome

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Design of materials for specified learning outcome	2	2	2	0	5	3.000
Student: Design of materials for specified learning outcome	33	38	9	1	0	3.272

Instructors and students were in agreement that the instructor designed materials for initial learning, reinforcement, and exploration. Instructors' and students' mean responses were 3.00 and 3.29 respectively (see Table 110).

Table 110: Comparison: Materials for Initial Learning, Reinforcement, and Exploration

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Materials for initial learning, reinforcement and exploration	2	2	2	0	5	3.000
Student: Materials for initial learning, reinforcement and exploration	31	43	7	0	0	3.296

Instructors and students were not in agreement that the instructor designed materials for a specified learning outcome. Instructors' and students' mean responses were 2.50 and 3.27 respectively (see Table 111).

Table 111: Comparison: Design of Materials for Specified Learning Outcome

Student Progress	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Design of materials for specified learning outcome	2	2	1	2	4	2.570
Student: Design of materials for specified learning outcome	33	38	9	1	0	3.272

Instructors and students were in some agreement that the design of the telecast, pre and post activities was low in its ability to allow checking for understanding. Instructors' and students' mean responses were 2.40 and 2.9 respectively (see Table 112).

Table 112: Comparison: Design of Telecast, Pre and Post Activities, Which Allow Checking Understanding

Student Progress	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Design of telecast, pre and post activities, which allow checking understanding	0	2	3	0	6	2.400
Student: Design of telecast, pre and post activities, which allow checking understanding	21	40	15	4	1	2.975

Instructors and students were in agreement that the content provides social and historical perspectives. Instructors' and students' mean responses were 3.00 and 3.32 respectively (see Table 113).

Table 113: Comparison: Provides Social and Historical Perspectives

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Provides social and historical perspectives	3	2	1	1	4	3.000
Student: Provides social and historical perspectives	39	31	9	2	0	3.321

Instructors and students were in some agreement that the content supports diversity. Instructors' and students' mean responses were 3.14 and 3.40 respectively (see Table 114).

Table 114: Comparison: Supports Diversity

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Supports diversity	3	2	2	0	4	3.143
Student: Supports diversity	41	32	8	0	0	3.407

Instructors and students were in agreement that the content relates to personal and social needs – provides relevance. Instructors’ and students’ mean responses were 3.14 and 3.26 respectively (see Table 115).

Table 115: Comparison: Relates to Personal and Social Needs - Provides Relevance

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Relates to personal and social needs -- provides relevance	2	4	1	0	4	3.143
Student: Relates to personal and social needs -- provides relevance	31	38	10	0	2	3.266

Instructors and students were in agreement that the course begins with questions and phenomena that are interesting and familiar to students. Instructors’ and students’ mean responses were 3.14 and 3.22 respectively (see Table 116).

Table 116: Comparison: Begins with Questions and Phenomena That are Interesting and Familiar to Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Begins with questions and phenomena that are interesting and familiar to students	2	4	1	0	4	3.143
Student: Begins with questions and phenomena that are interesting and familiar to students	34	30	14	1	2	3.228

Instructors and students were in some agreement that the course promotes questions from students. Instructors’ and students’ mean responses were 2.71 and 3.17 respectively (see Table 117).

Table 117: Comparison: Promotes Student Questioning

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
----------	--------	--------	--------	--------	-------------------	---------------

					es	e
Instructor: Promotes questioning from students	1	4	1	1	4	2.714
Student: Promotes questioning from students	29	32	12	2	6	3.173

Instructors and students were in some agreement that the course promotes questions from students. Instructors' and students' mean responses were 2.71 and 3.17 respectively (see Table 118).

Table 118: Comparison: Actively Engages Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Actively engages students	0	4	3	0	4	2.571
Student: Actively engages students	19	37	17	3	5	2.947

Instructors and students were in low agreement that the course does not emphasize collaboration. This is an indicator that this area needs more work. Instructors' and students' mean responses were 2.00 and 2.94 respectively (see Table 119).

Table 119: Comparison: Emphasizes Collaboration

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Emphasizes collaboration	0	1	5	1	4	2.000
Student: Emphasizes collaboration	20	37	20	2	2	2.949

Instructors and students were in agreement that the course uses various instructional techniques to help student achieve conceptual understanding. Instructors' and students' mean responses were 2.66 and 3.09 respectively (see Table 120).

Table 120: Comparison: Uses Various Instructional Techniques to Help Student Achieve Conceptual Understanding

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Uses various instructional techniques to help student achieve conceptual understanding	0	4	2	0	5	2.667
Student: Uses various instructional techniques to help student achieve conceptual understanding	27	34	14	3	3	3.090

Instructors and students were in agreement that the course utilizes observing. Instructors' and students' mean responses were 3.00 and 3.26 respectively (see Table 121).

Table 121: Comparison: Utilizes Observing

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Utilizes observing	2	2	2	0	5	3.000
Student: Utilizes observing	32	36	11	0	1	3.266

Instructors and students were in agreement that the course utilizes communicating. Instructors' and students' mean responses were 3.00 and 3.26 respectively (see Table 122).

Table 122: Comparison: Utilizes Communicating

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Utilizes communicating	1	4	1	0	5	3.000
Student: Utilizes communicating	31	41	6	2	1	3.263

Instructors and students were in some agreement that the course uses manipulative materials. Instructors' and students' mean responses were 2.50 and 3.18 respectively (see Table 123).

Table 123: Comparison: Use of Manipulative Materials

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Use of manipulative materials	1	2	2	1	5	2.500
Student: Use of manipulative materials	28	38	11	3	1	3.138

Instructors and students were in agreement that the course uses active involvement of students in exploring, conjecturing, analyzing and applying content. Instructors' and students' mean responses were 3.00 and 3.05 respectively (see Table 124).

Table 124: Comparison: Active Involvement of Students in Exploring, Conjecturing, Analyzing and Applying Content

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Active involvement of students in exploring, conjecturing, analyzing and applying content	2	2	2	0	5	3.000
Student: Active involvement of students in exploring, conjecturing, analyzing and applying content	24	36	16	2	3	3.051

Instructors and students were in low agreement that the course assesses learning as an integral part of instruction. Instructors' and students' mean responses were 2.60 and 3.25 respectively (see Table 125).

Table 125: Comparison: Assessing Learning as an Integral Part of Instruction

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Assessing learning as an integral part of instruction	0	3	2	0	6	2.600
Student: Assessing learning as an integral part of instruction	30	41	8	1	1	3.250

Instructors and students were not in agreement about the success of the program for students. Instructors' and students' mean responses were 2.57 and 3.41 respectively (see Table 126) which indicates that instructors did not feel that the program series had been successful for students even though students felt that it had been successful for them.

Table 126: Comparison: Success of the Program for Learners

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: How successful has this program series been for your students?	0	5	1	1	4	2.570
Student: How successful has this program series been for you?	35	43	2	0	1	3.413

Instructors and students were in agreement that the course had increased their interest in the use of distance learning. Instructors' and students' mean responses were 3.12 and 3.28 respectively (see Table 127).

Table 127: Comparison: Interest in Use of Distance Learning

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Interest in use of distance learning	3	3	2	0	3	3.125
Student: Interest in use of distance learning	34	30	12	0	5	3.289

Instructors and students were in agreement that the course had increased their interest in the use of instructional technology. Instructors' and students' mean responses were 3.25 and 3.22 respectively (see Table 128).

Table 128: Comparison: Interest in use of Instructional Technology

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Interest in use of instructional technology	4	2	2	0	3	3.250
Student: Interest in use of instructional technology	32	34	14	0	1	3.225

Instructors and students were in agreement that the course had increased their interest in the subject area. Instructors' and students' mean responses were 3.00 and 3.24 respectively (see Table 129).

Table 129: Comparison: Interest in This Subject Area

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Interest in this subject area	3	2	3	0	3	3.000
Student: Interest in this subject area	30	38	9	1	3	3.244

Instructors and students were in low agreement about a higher expectation for course grades. Instructors felt that grades would be lower. Students expected higher grades. Instructors' and students' mean responses were 2.62 and 3.32 respectively (see Table 130).

Table 130: Comparison: Higher Expectations for Course Grade

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Higher expectations for course grades	2	2	3	1	3	2.625
Student: Higher expectations for my course grade	32	35	8	0	6	3.320

Instructors and students were in low agreement about the use of new strategies to support students. Instructors' and students' mean responses were 2.75 and 3.13 respectively (see Table 131).

Table 131: Comparison: Use of New Strategies to Support Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
----------	--------	--------	--------	--------	-------------------	---------------

	e 4	e 3	e 2	1	Responses	Response
Instructor: Use of new strategies to support students	1	4	3	0	3	2.750
Student: Use of new strategies to support students	25	41	12	1	2	3.139

Instructors and students were not in agreement about the course ability to promote collaboration with students. Instructors' and students' mean responses were 1.87 and 3.06 respectively (see Table 132). This indicates an area that needs more development.

Table 132: Comparison: Collaboration with Students

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Collaboration with students	1	0	4	3	3	1.875
Student: Collaboration with other students	23	40	16	1	1	3.062

Instructors and students were in some agreement about the course ability to reduce feelings of isolation from others. Instructors' and students' mean responses were 1.87 and 2.48 respectively (see Table 133). The low scores indicated low feelings of isolation. However, students still are indicated a sense of isolation from other students. This is an area for further development.

Table 133: Comparison: Feelings of Isolation from Others

Question	Rate 4	Rate 3	Rate 2	Rate 1	Missing Responses	Mean Response
Instructor: Feelings of isolation from others	0	1	5	2	3	1.875
Student: Feelings of isolation from other students	15	21	30	13	2	2.481

Appendix A

Mountain Plains Distance Learning Partnership

Five-Year Evaluation

October 1, 1997-September 30, 2002

Mountain Plains Distance Learning Partnership

Five-Year Evaluation

October 1, 1997 - September 30, 2002

**Carla Lane, Ed.D.
Principal Evaluator
The Education Coalition
San Clemente, CA 92672**

Project Goals

Goal 1 Demographics

Reach underserved learners of all ages throughout the target area at a minimum

1a. Identify and work with at least 24 sites

1b. Enroll at least 3,000 students of all ages in distance learning classes

Performance Indicators:

To what extent were 24 sites with 3,000 students of all ages enrolled in distance learning classes?

Goal 2 Instructional Design and Educational Goals

Expand instruction in core subject areas, literacy and vocational education

2a. Develop 160 courses for distance learning which use multimedia

2b. Educational institutions will integrate technology into the curriculum

2c. Improve student achievement due to integration of technology

Performance Indicators:

- To what extent were 160 distance learning classes developed?
- To what extent did the educational institution integration of technology into the curriculum actually improve student achievement.
- Was the integration of technology the only significant variable; what were others?

Goal 3 Professional Development for Instructors

Provide professional development for instructors that will be sustained over a period of time.

3a. All distance learning instructors will participate in training

3b. Teachers will have an 80 percent continuation rate after training

3c. Teacher productivity will increase as a result of training

3d. Student learning will improve as a result of professional development

3c. All target schools will remain active in the use of distance learning

Performance Indicators:

- To what extent did all teachers participate and complete training.
- To what extent did teachers participate after training

- To what extent did teacher productivity increase which is directly attributable to the training
- To what extent did student learning improve as a result of professional development
- To what extent was distance learning used to provide staff development in other areas
- After training, to what extent did teachers move through the stages of adoption of technology according to the Concerns Based Adoption Model (CBAM)

Goal 4 Adoption of Technology

Employ a variety of electronic technologies and tools for distance education.

- 4a. A distance learning telecommunications system will be built to serve 24 sites.
- 4b. The system will use a variety of technologies
- 4c. The system will establish 4 origination studios and 24 electronic classrooms
- 4d. The system will establish 3 electronic faculty assistance labs for multimedia curriculum development

Performance Indicators:

- To what extent were the 24 sites connected to the telecommunications system
- To what extent did the system use a variety of technologies/tools
- To what extent were 4 origination studios and 24 electronic classrooms built in a timely manner and used easily by teachers and students
- To what extent were 3 electronic faculty assistance labs established, staffed, and used by faculty to develop courses for the system.
- What was the frequency of use and satisfaction with the labs by faculty
- To what extent did student learning improve because of multimedia materials?
- To what extent did technology provide courses to students which would otherwise not have been available to them?
- To what extent did the project provide equitable access to content for underserved populations

Goal 5 Foster Partnerships and Collaboration

The project will foster partnerships in at least four states.

- 5a. The project will establish the Mountain-Plains Distance Learning Partnership which will be lead by an Executive Council of CEOs or their designees

Performance Indicators:

- To what extent did the partnership continue to foster collaboration over the years of the project
- To what extent did the partnership benefit its members in four states
- To what extent did the use of technology foster and enable collaboration

Goal 6 Improve the Cost-Benefit Ratio

The project will demonstrate an improved cost-benefit ratio

- 5a. The project will demonstrate a favorable cost-benefit ratio due to the use of distance learning strategies

Performance Indicators:

- To what extent did the project demonstrate an improved cost-benefit ratio
- To what extent was a model developed that could be used to ensure other groups of a return on investment from distance learning or an improved cost-benefit ratio
- To what extent can this model be replicated by other areas
- To what extent did the improved cost-benefit ratio encourage others who were not originally partners to participate in the partnership
- Were cost-savings so sufficient that the project was institutionalized after the fifth and final funding year

Part 1: Purposes of the Evaluation

The purposes of the five-year evaluation of the Mountain-Plains Distance Learning Partnership are to:

1. Document the implementation of the project, in terms of participants, activities, accomplishments, and impact
2. Determine to what extent the project has met its goals and objectives
3. Determine to what extent the project has been integrated with other projects and services to leverage the resources and effectiveness of each
4. Document and evaluate components of the project, which are unique to this Star Schools Project
5. Collect data required by the Star Schools evaluation criteria set by OERI, U.S. Department of Education

Part 2: Questions to be Answered by the Evaluation

This evaluation is designed to answer the following questions:

1. Were tasks completed, with successful results and adequate resources?
2. Were the objectives reached; if not, why not; were they realistic?
3. Were the goals achieved; if not, why not; were they realistic?
4. Were initial and identified program quality criteria met?
5. Have facilities been adequate?
6. Have project staff and other external personnel carried out assigned tasks according to schedule and in a satisfactory manner?
7. Has the budget been sufficient and appropriately distributed among line items?
8. What plans have been made for institutionalization and expansion?

Part 3: Program Quality Criteria

The following criteria will be used as indicators of the quality of the program:

1. Educational Gains
 - Learners demonstrate progress toward attainment of basic skills and competencies that support their educational needs
 - Learners advance in the instructional program and complete program educational requirements that allow them to continue their education or training
2. Program Planning
 - Program has a planning process that is ongoing and participatory, guided by evaluation and based on a written plan that considers community demographics

3. Curriculum and Instruction
 - Program has curriculum and instruction geared to individual student learning styles and levels of student needs
4. Staff Development
 - Program has an ongoing staff development process that considers the specific needs of its staff, offers training in the skills necessary to provide quality instruction, and includes opportunities for practice and systematic follow-up. There is evidence that the content taught in the staff development process is applied in courses taught by instructors receiving staff development
5. Support Services
 - Program identifies students' needs for support services and makes services available to students directly or through referral to other educational and service agencies with which the program coordinates
6. Recruitment
 - Program successfully recruits population in the community identified in the Adult Education Act as needing literacy services
7. Retention
 - Students remain in the program long enough to meet their educational needs

Part 4: Evaluation Plan and Activities

The evaluation plan will be conducted to meet the purposes of this evaluation and to answer the evaluation questions.

- | | |
|-----------------------------|---|
| A. Implementation Schedule: | Dates met; Reasons for delays (if any);
Goals met; Objectives met |
| B. Implementation Model: | What is the model. Identification of problems and solutions.
Did it help/hinder meeting goals; Adjustment;
Needs Analysis from target audience segments |
| C. Hiring and Personnel: | Quality of personnel; Hiring of personnel |
| D. Unique Components: | Identify, document, evaluate, compare and contrast unique aspects of this Star Schools Project |
| E. OERI Data Requirements | Establish methods to collect all data across all Star Schools Projects required by OERI, U.S. Dept. of Education |
| F. Accomplishments | |

Accomplishments - Evaluation Areas	Data Resources
Course/Curriculum Development Model for teachers	
What strategies used to develop courses? What strategies used to train instructors?	Documentation; Interviews;

Accomplishments - Evaluation Areas	Data Resources
	Surveys
<p>Teacher Inservice to Teach at a Distance and to Meet Standards, Guidelines</p> <p>What techniques of instruction were taught; Were they beneficial? Did the teachers change their teaching methods? Were constructivist methods part of the inservice? Did teachers adopt the program and instructional methods?</p>	<p>Documentation; Interviews; Surveys Review curriculum, manuals/other materials, teacher inservice</p>
<p>Courses: Review Courses</p> <p>What courses were developed? Were the curriculum development model strategies followed that were taught in inservices? Were the courses offered? What were the learning outcomes: Did students like and learn from the courses? Did the courses take full advantage of media or resort to traditional methods? Field test courses -evaluation of the evaluation design and results, and revisions?</p>	<p>Documentation; Interviews; Surveys; Review tapes of live transmissions; computer programs; print materials; constructivist methods utilized</p>
<p>Engineering Design</p> <p>Smooth integration path Upgradable; Expandable; Interoperable Use of multiple technologies Location of classrooms; Location of studios Design of classrooms; Design of studios Problems; Recommendations</p>	<p>Documentation; Interviews; Surveys Photos of installations</p>
<p>Coordination with Other State Networks</p> <p>Efficient use of existing networks Build on existing infrastructure in partner states Smooth integration of networks Smooth transition to services</p>	<p>Documentation; Interviews; Surveys</p>
<p>Teacher Training Model</p> <p>Define; instructors - interest, proficiency, changes Compare special populations to other populations Review of training curriculum development for adjustments- identify problems and solutions; did revisions work? Retention of teachers in training Retention of teachers in distance learning classes</p>	<p>Documentation; Interviews; Surveys Evidence of: staff interest; equipment proficiency; continuing use; adoption and diffusion</p>
<p>Student Outcomes</p> <p>Demographics of students - diversity and age</p>	<p>Documentation;</p>

Accomplishments - Evaluation Areas	Data Resources
Enrollment patterns Teacher evaluation of student outcomes Was the delivery method effective Does multimedia affect learning, better, worse, different Did the use of computers affect learning, better, worse, different Comparison of special populations to other populations- Title 1, American Indian	Interviews; Surveys Evidence of student interest; equipment proficiency; content proficiency; change observed by parents
District/or Area Adoption Additional Funding Other Resources Other evidence of commitment	Documentation; Interviews; Surveys
Build the System Upgrade/expand studios Upgrade/expand sites/classrooms	Documentation; Interviews; Surveys
Strengthen curriculum and academic offerings or students in rural, geographically isolated communities in target area through use of DL strategies. <ul style="list-style-type: none"> • Plan/establish computerized curriculum development lab to enhance the preparation of quality multimedia instructional programs and materials • Plan/implement a program for training teachers in curriculum development and techniques of instruction via telecommunications through workshops, conferences and seminars. • Develop and implement instructional course offerings -160 courses/instructors • State of the art curriculum development labs at three sites 	Documentation; Interviews; Surveys

Part 5: Products of the Evaluation

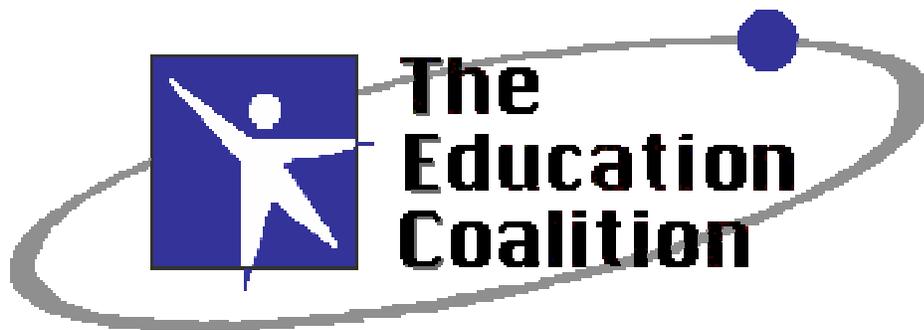
- Final Evaluation Design
- Identification of the Implementation Model
- Instrumentation for Measuring Participation, Accomplishments, Impact
- Cost-benefit Ratio Model
- Formative Reports
- Final Report - Year 5

Appendix B

Mountain Plains Distance Learning Partnership

Student and Instructor

Survey Instruments



Student Distance Learning Course Survey HS

Our records show that you were recently enrolled in a distance education class supported by a Federal Star Schools Grant. This class was re-designed for distance education as part of the grant. We are required as part of our continued funding to provide feedback on classes designed and delivered via distance education. Please complete the following survey about your distance education class and return it electronically by January 30, 2000. Thank you for your assistance!

1. Please complete the following information. Your name and e-mail address will be included in a drawing for \$25 from the Central Wyoming College.

Name _____ Student ID # _____
 e-mail _____ State _____

2. Please list the distance education class (es) and the semester in which you were enrolled.

Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____

High School:

Wyoming: _____ Riverton _____ Lander _____ Wind River
 Utah: _____ Monument Valley _____ Monticello _____ San Juan
 Colorado: _____ Cortez-Montezuma _____ Dove Creek _____ Dolores _____ Mancos

Semester _____ Year _____

Geographic Area Is: Rural _____ Suburban _____ Urban _____

Gender: Male _____ Female _____

Age: _____

Ethnicity (please check the categories which best describe your ethnicity)

African American _____ Asian _____ Caucasian _____ Hispanic _____ Native American specify _____

Pacific islander _____ Other-please specify _____

3. Please rate the following items in terms of two criteria by circling the appropriate number for each where one is low and four is high

- | | | | | |
|--|---|---|---|---|
| a. You did better in your distance learning class compared to a traditional class. | 1 | 2 | 3 | 4 |
| b. You did better in a traditional class | 1 | 2 | 3 | 4 |
| c. You prefer a distance education class compared to a traditional class. | 1 | 2 | 3 | 4 |
| d. Distance education technology enhanced your class. | 1 | 2 | 3 | 4 |
| e. Distance education technology got in the way of my learning | 1 | 2 | 3 | 4 |
| f. The use of distance education technology helped you understand complex concepts | 1 | 2 | 3 | 4 |
| g. Why did you take the distance education class? (Please check all that apply) | | | | |

- (1) _ Required class in program
 (2) _ Self enrichment
 (3) _ Convenience (e.g., does not require travel)
 (4) _ Other _____
4. What do you like the **most** about taking a distance education class?

5. What do you like the **least** about taking a distance education class?

-
6. Would you recommend this class to a friend? __ Yes __ No
 If not why?

-
7. Would you take another distance education class? __ Yes __ No
 If not why?

-
8. What would you suggest to improve distance education classes?

- the **quality** of each item related to the course - from 1 (low quality) to 4 (high quality)
- how **critical** a factor the item is in the outcomes (success or non-success) of the course - from 1 (not critical) to 4 (very critical)

Operations and Support

Quality

Criticality

9. Operations

- | | | |
|--|------|------|
| a. Adherence to timelines for providing catalogs, calendars, schedules | 4321 | 4321 |
| b. Adherence to timelines for providing student program materials | 4321 | 4321 |
| c. Adherence to telecast schedule | 4321 | 4321 |
| d. Clarity as to what hands-on materials are needed for each telecast | 4321 | 4321 |
| e. Clarity as to what print materials are necessary for each telecast | 4321 | 4321 |

10. Support

- | | | |
|---|------|------|
| a. Support through student orientation telecasts | 4321 | 4321 |
| b. Support via phone, fax or Internet | 4321 | 4321 |
| c. Course content defined and described in the course support materials | 4321 | 4321 |
| d. Course methodology defined and described in the course support materials | 4321 | 4321 |

11. Aspects Demonstrated by the Course Instructor

- | | | |
|---|------|------|
| a. Enthusiasm for the subject | 4321 | 4321 |
| b. Enthusiasm for being the instructor for the course | 4321 | 4321 |
| c. Content expertise | 4321 | 4321 |
| d. Using new instructional methods | 4321 | 4321 |
| e. Presentation style | 4321 | 4321 |
| f. Assistance via phone or fax | 4321 | 4321 |

Technical Dimensions

12. Production Aspects of the Telecasts

- | | | |
|---|------|------|
| a. Set and its use by program instructor | 4321 | 4321 |
| b. Camera work | 4321 | 4321 |
| c. Graphics | 4321 | 4321 |
| d. Video clips | 4321 | 4321 |
| e. Audio | 4321 | 4321 |
| f. Use of technical aspects to enhance learning | 4321 | 4321 |

g. Overall	4321	4321
13. <u>Interactivity of the Telecasts</u>		
a. Studio's capability to answer in-coming phone calls to the program instructor	4321	4321
b. Studio's capability to take in-coming fax information	4321	4321
c. Announcement of upcoming question and answer periods, and time allotted	4321	4321
d. Use of question and answer periods to enhance learning and the telecast	4321	4321
e. Modification of telecast to clarify information based on viewer calls	4321	4321
f. Other positive aspects (please describe)_____	4321	4321
g. Suggestions for improvement (please describe)_____	4321	4321

Quality

Criticality

14. <u>Computer and software</u>		
a. Integration of use of Internet and e-mail for communications	4321	4321
b. Integration of use of computer and software to support instruction	4321	4321

Overall Program Design

15. <u>Program Series Content</u>		
a. Value of course content	4321	4321
b. Clear statement of goals, objectives	4321	4321
c. Identification of learning outcomes	4321	4321
d. Accurate, current, thorough	4321	4321
e. Meaning-centered	4321	4321
f. Appropriate presentation design	4321	4321
g. Meets general guidelines for roles of women, minorities, aged, handicapped	4321	4321

16. <u>Telecast Design</u>		
a. Motivates and involves students	4321	4321
b. Enhances content learning	4321	4321
c. Flexibility to vary pace, sequence and depth of instruction for various learners	4321	4321
d. Promotion of critical viewing, thinking and experimentation	4321	4321
e. Recognition of cultural diversity of learners	4321	4321
f. Recognition of gender diversity of learners	4321	4321
g. Recognition of linguistic diversity of learners	4321	4321
h. Recognition of learning style diversity of learners	4321	4321
i. Recognition of geographical locations of learners	4321	4321

17. <u>Program Support Materials for Students</u>		
a. Design of materials for specified learning outcomes	4321	4321
b. Materials for initial learning	4321	4321
c. Materials for reinforcement	4321	4321
d. Materials to further exploration	4321	4321
e. Camera-ready reproducible student materials	4321	4321
f. Description of student responsibilities/activities during telecast	4321	4321
g. Balances activities for individuals, small groups and entire class	4321	4321

18. <u>Student Progress</u>		
a. Process for monitoring student progress	4321	4321
b. Design of telecast, pre and post activities, which allow checking understanding	4321	4321
c. Assessment process	4321	4321
d. Assessment items	4321	4321
e. Process for reporting to parents	4321	4321

Please rate each item as to the quality as it is exhibited in this program series.
Circle one number: use 4 (excellent quality) to 1 (poor quality).

- xii. It provides experiences and resources to which participants have no direct access
- xiii. It provides motivation for becoming more involved with the discipline
- xiv. It helps students make a transition from school to work
- xv. It helps to create a community of distance learners
- xvi. It provides opportunities to interact with participants of diverse backgrounds
- xvii. It is of high quality
- xviii. I learn from it
- xviiii. Other: Please Specify _____

b. If no, why not (check all that apply)

- i. It is of poor quality
- ii. It does not fit a major need of my students
- iii. It is too costly
- iv. It takes too much preparation time
- v. Other: Please Specify _____

25. The course would be more valuable if: (please describe) _____

26. For each of the following categories, rate the changes which have come about for you as a result of participating in the course (please circle the most appropriate number to rate each item):

	Significant Decrease		Significant Increase	
a. Interest in use of distance learning	1	2	3	4
b. Interest in use of instructional technology	1	2	3	4
c. Interest in this subject area	1	2	3	4
d. Instructional time used for this subject area	1	2	3	4
e. Use of different instructional methods	1	2	3	4
f. Teaching of different content	1	2	3	4
g. Comfort level with taking this course	1	2	3	4
h. Use of hands-on instructional materials	1	2	3	4
i. Questioning at higher levels of thinking	1	2	3	4
j. Higher expectations for my course grade	1	2	3	4
k. Use of new strategies to support students	1	2	3	4
l. Collaboration with other students	1	2	3	4
m. Feelings of isolation from other students	1	2	3	4
n. Other (describe) _____	1	2	3	4



Student Distance Learning Course Survey College

Our records show that you were recently enrolled in a distance education class supported by a Federal Star Schools Grant. This class was re-designed for distance education as part of the grant. We are required as part of our continued funding to provide feedback on classes designed and delivered via distance education. Please complete the following survey about your distance education class and return it electronically by January 30, 2000. Thank you for your assistance!

1. Please complete the following information. Your name and e-mail address will be included in a drawing for \$25 from the Central Wyoming College.

Name _____ Student ID # _____
 e-mail _____ State _____

2. Please list the distance education class (es) and the semester in which you were enrolled.

Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____

College: ___ CWC-Riverton ___ San Juan Basin-Voc Tech-Cortez ___ CEU-Blanding ___ CEU-Price
 ___ Other State _____

Semester _____ Year _____

Geographic Area Is: Rural ___ Suburban ___ Urban ___

Gender: Male ___ Female ___

Age: _____

Ethnicity (please check the categories which best describe your ethnicity)

African American ___ Asian ___ Caucasian ___ Hispanic ___ Native American specify _____

Pacific islander ___ Other-please specify _____

3. Please rate the following items in terms of two criteria by circling the appropriate number for each where one is low and four is high

- | | | | | |
|--|---|---|---|---|
| a. You did better in your distance learning class compared to a traditional class. | 1 | 2 | 3 | 4 |
| b. You did better in a traditional class | 1 | 2 | 3 | 4 |
| c. You prefer a distance education class compared to a traditional class. | 1 | 2 | 3 | 4 |
| d. Distance education technology enhanced your class. | 1 | 2 | 3 | 4 |
| e. Distance education technology got in the way of my learning | 1 | 2 | 3 | 4 |
| f. The use of distance education technology helped you understand complex concepts | 1 | 2 | 3 | 4 |
| g. Why did you take the distance education class? (Please check all that apply) | | | | |
| (1) ___ Required class in program | | | | |
| (2) ___ Self enrichment | | | | |
| (3) ___ Convenience (e.g., does not require travel) | | | | |
| (4) ___ Other _____ | | | | |

4. What do you like the **most** about taking a distance education class?

5. What do you like the **least** about taking a distance education class?

6. Would you recommend this class to a friend? ___ Yes ___ No
 If not why? _____

7. Would you take another distance education class? __ Yes __ No
 If not why?

8. What would you suggest to improve distance education classes?

- the **quality** of each item related to the course - from 1 (low quality) to 4 (high quality)
- how **critical** a factor the item is in the outcomes (success or non-success) of the course - from 1 (not critical) to 4 (very critical)

Operations and Support	<u>Quality</u>	
Criticality		
9. <u>Operations</u>		
a. Adherence to timelines for providing catalogs, calendars, schedules	4321	4321
b. Adherence to timelines for providing student program materials	4321	4321
c. Adherence to telecast schedule	4321	4321
d. Clarity as to what hands-on materials are needed for each telecast	4321	4321
e. Clarity as to what print materials are necessary for each telecast	4321	4321
10. <u>Support</u>		
a. Support through student orientation telecasts	4321	4321
b. Support via phone, fax or Internet	4321	4321
c. Course content defined and described in the course support materials	4321	4321
d. Course methodology defined and described in the course support materials	4321	4321
11. <u>Aspects Demonstrated by the Course Instructor</u>		
a. Enthusiasm for the subject	4321	4321
b. Enthusiasm for being the instructor for the course	4321	4321
c. Content expertise	4321	4321
d. Using new instructional methods	4321	4321
e. Presentation style	4321	4321
f. Assistance via phone or fax	4321	4321
Technical Dimensions		
12. <u>Production Aspects of the Telecasts</u>		
a. Set and its use by program instructor	4321	4321
b. Camera work	4321	4321
c. Graphics	4321	4321
d. Video clips	4321	4321
e. Audio	4321	4321
f. Use of technical aspects to enhance learning	4321	4321
g. Overall	4321	4321
13. <u>Interactivity of the Telecasts</u>		
a. Studio's capability to answer in-coming phone calls to the program instructor	4321	4321
b. Studio's capability to take in-coming fax information	4321	4321
c. Announcement of upcoming question and answer periods, and time allotted	4321	4321
d. Use of question and answer periods to enhance learning and the telecast	4321	4321
e. Modification of telecast to clarify information based on viewer calls	4321	4321
f. Other positive aspects (please describe)_____	4321	4321
g. Suggestions for improvement (please describe)_____	4321	4321

Quality Criticality

14. Computer and software
- | | | |
|---|------|------|
| a. Integration of use of Internet and e-mail for communications | 4321 | 4321 |
| b. Integration of use of computer and software to support instruction | 4321 | 4321 |

Overall Program Design

15. Program Series Content
- | | | |
|---|------|------|
| a. Value of course content | 4321 | 4321 |
| b. Clear statement of goals, objectives | 4321 | 4321 |
| c. Identification of learning outcomes | 4321 | 4321 |
| d. Accurate, current, thorough | 4321 | 4321 |
| e. Meaning-centered | 4321 | 4321 |
| f. Appropriate presentation design | 4321 | 4321 |
| g. Meets general guidelines for roles of women, minorities, aged, handicapped | 4321 | 4321 |

16. Telecast Design

- | | | |
|---|------|------|
| a. Motivates and involves students | 4321 | 4321 |
| b. Enhances content learning | 4321 | 4321 |
| c. Flexibility to vary pace, sequence and depth of instruction for various learners | 4321 | 4321 |
| d. Promotion of critical viewing, thinking and experimentation | 4321 | 4321 |
| e. Recognition of cultural diversity of learners | 4321 | 4321 |
| f. Recognition of gender diversity of learners | 4321 | 4321 |
| g. Recognition of linguistic diversity of learners | 4321 | 4321 |
| h. Recognition of learning style diversity of learners | 4321 | 4321 |
| i. Recognition of geographical locations of learners | 4321 | 4321 |

17. Program Support Materials for Students

- | | | |
|---|------|------|
| a. Design of materials for specified learning outcomes | 4321 | 4321 |
| b. Materials for initial learning | 4321 | 4321 |
| c. Materials for reinforcement | 4321 | 4321 |
| d. Materials to further exploration | 4321 | 4321 |
| e. Camera-ready reproducible student materials | 4321 | 4321 |
| f. Description of student responsibilities/activities during telecast | 4321 | 4321 |
| g. Balances activities for individuals, small groups and entire class | 4321 | 4321 |

18. Student Progress

- | | | |
|--|------|------|
| a. Process for monitoring student progress | 4321 | 4321 |
| b. Design of telecast, pre and post activities, which allow checking understanding | 4321 | 4321 |
| c. Assessment process | 4321 | 4321 |
| d. Assessment items | 4321 | 4321 |
| e. Process for reporting to parents | 4321 | 4321 |

Please rate each item as to the quality as it is exhibited in this program series.
Circle one number: use 4 (excellent quality) to 1 (poor quality).

Quality

19. Contexts of Subject Area

- | | |
|--|------|
| a. Provides social and historical perspectives | 4321 |
| b. Supports roles of females and minorities | 4321 |
| c. Relates to personal and social needs -- provides relevance | 4321 |
| d. Promotes aesthetic responses -- ties in with literature, art, creative expression | 4321 |

20. Instructional Methods

- | | |
|--|------|
| a. Begins with questions and phenomena that are interesting and familiar to students | 4321 |
| b. Promotes questioning from students | 4321 |
| c. Engages students actively | 4321 |
| d. Emphasizes collaborative approach | 4321 |

e.	Emphasizes group learning	4321
f.	Encourages students to combine process and knowledge	4321
g.	Implements the collection and use of evidence	4321
h.	Provides abundant experience in using tools	4321
i.	Results in clear oral/written expression	4321
j.	Emphasizes understanding over vocabulary	4321
k.	Uses various instructional techniques to help student achieve conceptual understanding	4321
l.	Uses authentic assessment to chart teaching and learning	4321
21. <u>Thinking Processes</u>		
a.	Utilizes observing	4321
b.	Utilizes communicating	4321
c.	Utilizes comparing	4321
d.	Utilizes ordering	4321
e.	Utilizes categorizing	4321
f.	Utilizes relating	4321
22. <u>Instructional Practices</u>		
a.	Use of manipulative materials	4321
b.	Cooperative work	4321
c.	Discussion of Mathematics	4321
d.	Questioning	4321
e.	Justification of thinking	4321
f.	Problem-solving approach to instruction	4321
g.	Content integration	4321
h.	Use of computers	4321
i.	Active involvement of students in exploring, conjecturing, analyzing and applying content	4321
j.	Assessing learning as an integral part of instruction	4321

Program Evaluation

Overall Ratings

23. How successful has this program series been for you and your students? **Unsuccessful** **Very Successful**

1 2 3 4

24. I would like to continue to use this program series: Yes/No

a. If yes, I would continue to use this program series because: (check all that apply)

- i. I responded well to it
- ii. It is of great benefit to students
- iii. It provides career awareness
- vii. It provides instruction consistent with national standards and/or recommendations
- viii. It provides otherwise unavailable instruction/curriculum
- ix. It provides rich, challenging and valuable content
- x. It provides otherwise unavailable simulations
- xi. It provides access to real work with professionals in the content area
- xii. It provides experiences and resources to which participants have no direct access
- xiii. It provides motivation for becoming more involved with the discipline
- xiv. It helps students make a transition from school to work
- xv. It helps to create a community of distance learners
- xvi. It provides opportunities to interact with participants of diverse backgrounds
- xvii. It is of high quality
- xviii. I learn from it
- xvii. Other: Please Specify _____

b. If no, why not (check all that apply)

- i. It is of poor quality
- ii. It is too costly
- iii. Other: Please Specify _____
- iv. It does not fit a major need for me
- v. It takes too much preparation time

25. The course would be more valuable if: (please describe) _____

26. For each of the following categories, rate the changes which have come about for you as a result of participating in the course (please circle the most appropriate number to rate each item):

	Significant Decrease		Significant Increase	
	1	2	3	4
a. Interest in use of distance learning	1	2	3	4
b. Interest in use of instructional technology	1	2	3	4
c. Interest in this subject area	1	2	3	4
d. Instructional time used for this subject area	1	2	3	4
e. Use of different instructional methods	1	2	3	4
f. Teaching of different content	1	2	3	4
g. Comfort level with taking this course	1	2	3	4
h. Use of hands-on instructional materials	1	2	3	4
i. Questioning at higher levels of thinking	1	2	3	4
j. Higher expectations for my course grade	1	2	3	4
k. Use of new strategies to support students	1	2	3	4
l. Collaboration with other students	1	2	3	4
m. Feelings of isolation from other students	1	2	3	4
n. Other (describe) _____	1	2	3	4



Student Distance Learning Course Survey Adult

Our records show that you were recently enrolled in a distance education class supported by a Federal Star Schools Grant. This class was re-designed for distance education as part of the grant. We are required as part of our continued funding to provide feedback on classes designed and delivered via distance education. Please complete the following survey about your distance education class and return it electronically by January 30, 2000. Thank you for your assistance!

1. Please complete the following information. Your name and e-mail address will be included in a drawing for \$25 from the Central Wyoming College.

Name _____ Student ID # _____
 e-mail _____ State _____

2. Please list the distance education class (es) and the semester in which you were enrolled.

Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____
 Class Number _____ Class Name _____

Adult Education: ___ CWC ___ SWBOCS ___ CEU-SJ ___ CEU-Price

Semester ___ Year ___

Geographic Area Is: Rural ___ Suburban ___ Urban ___

Gender: Male ___ Female ___

Age: _____

Ethnicity (please check the categories which best describe your ethnicity)

African American ___ Asian ___ Caucasian ___ Hispanic ___ Native American specify _____

Pacific islander ___ Other-please specify _____

3. Please rate the following items in terms of two criteria by circling the appropriate number for each where one is low and four is high

- a. You did better in your distance learning class compared to a traditional class. 1 2 3 4
- b. You did better in a traditional class 1 2 3 4
- c. You prefer a distance education class compared to a traditional class. 1 2 3 4
- d. Distance education technology enhanced your class. 1 2 3 4
- e. Distance education technology got in the way of my learning 1 2 3 4
- f. The use of distance education technology helped you understand complex concepts 1 2 3 4
- g. Why did you take the distance education class? (Please check all that apply)
 - (1) Required class in program
 - (2) Self enrichment
 - (3) Convenience (e.g., does not require travel)
 - (4) Other _____

4. What do you like the **most** about taking a distance education class?

5. What do you like the **least** about taking a distance education class?

6. Would you recommend this class to a friend? ___ Yes ___ No
 If not why? _____

7. Would you take another distance education class? Yes No
 If not why?

8. What would you suggest to improve distance education classes?

- the **quality** of each item related to the course - from 1 (low quality) to 4 (high quality)
- how **critical** a factor the item is in the outcomes (success or non-success) of the course - from 1 (not critical) to 4 (very critical)

Operations and Support
Criticality

Quality

9. Operations

- | | | |
|--|------|------|
| a. Adherence to timelines for providing catalogs, calendars, schedules | 4321 | 4321 |
| b. Adherence to timelines for providing student program materials | 4321 | 4321 |
| c. Adherence to telecast schedule | 4321 | 4321 |
| d. Clarity as to what hands-on materials are needed for each telecast | 4321 | 4321 |
| e. Clarity as to what print materials are necessary for each telecast | 4321 | 4321 |

10. Support

- | | | |
|---|------|------|
| a. Support through student orientation telecasts | 4321 | 4321 |
| b. Support via phone, fax or Internet | 4321 | 4321 |
| c. Course content defined and described in the course support materials | 4321 | 4321 |
| d. Course methodology defined and described in the course support materials | 4321 | 4321 |

11. Aspects Demonstrated by the Course Instructor

- | | | |
|---|------|------|
| a. Enthusiasm for the subject | 4321 | 4321 |
| b. Enthusiasm for being the instructor for the course | 4321 | 4321 |
| c. Content expertise | 4321 | 4321 |
| d. Using new instructional methods | 4321 | 4321 |
| e. Presentation style | 4321 | 4321 |
| f. Assistance via phone or fax | 4321 | 4321 |

Technical Dimensions

12. Production Aspects of the Telecasts

- | | | |
|---|------|------|
| a. Set and its use by program instructor | 4321 | 4321 |
| b. Camera work | 4321 | 4321 |
| c. Graphics | 4321 | 4321 |
| d. Video clips | 4321 | 4321 |
| e. Audio | 4321 | 4321 |
| f. Use of technical aspects to enhance learning | 4321 | 4321 |
| g. Overall | 4321 | 4321 |

13. Interactivity of the Telecasts

- | | | |
|--|------|------|
| a. Studio's capability to answer in-coming phone calls to the program instructor | 4321 | 4321 |
| b. Studio's capability to take in-coming fax information | 4321 | 4321 |
| c. Announcement of upcoming question and answer periods, and time allotted | 4321 | 4321 |
| d. Use of question and answer periods to enhance learning and the telecast | 4321 | 4321 |
| e. Modification of telecast to clarify information based on viewer calls | 4321 | 4321 |
| f. Other positive aspects (please describe)_____ | 4321 | 4321 |
| g. Suggestions for improvement (please describe)_____ | 4321 | 4321 |
-

	<u>Quality</u>	
<u>Criticality</u>		
14. <u>Computer and software</u>		
a. Integration of use of Internet and e-mail for communications	4321	4321
b. Integration of use of computer and software to support instruction	4321	4321
Overall Program Design		
15. <u>Program Series Content</u>		
a. Value of course content	4321	4321
b. Clear statement of goals, objectives	4321	4321
c. Identification of learning outcomes	4321	4321
d. Accurate, current, thorough	4321	4321
e. Meaning-centered	4321	4321
f. Appropriate presentation design	4321	4321
g. Meets general guidelines for roles of women, minorities, aged, handicapped	4321	4321
16. <u>Telecast Design</u>		
a. Motivates and involves students	4321	4321
b. Enhances content learning	4321	4321
c. Flexibility to vary pace, sequence and depth of instruction for various learners	4321	4321
d. Promotion of critical viewing, thinking and experimentation	4321	4321
e. Recognition of cultural diversity of learners	4321	4321
f. Recognition of gender diversity of learners	4321	4321
g. Recognition of linguistic diversity of learners	4321	4321
h. Recognition of learning style diversity of learners	4321	4321
i. Recognition of geographical locations of learners	4321	4321
17. <u>Program Support Materials for Students</u>		
a. Design of materials for specified learning outcomes	4321	4321
b. Materials for initial learning	4321	4321
c. Materials for reinforcement	4321	4321
d. Materials to further exploration	4321	4321
e. Camera-ready reproducible student materials	4321	4321
f. Description of student responsibilities/activities during telecast	4321	4321
g. Balances activities for individuals, small groups and entire class	4321	4321
18. <u>Student Progress</u>		
a. Process for monitoring student progress	4321	4321
b. Design of telecast, pre and post activities, which allow checking understanding	4321	4321
c. Assessment process	4321	4321
d. Assessment items	4321	4321
e. Process for reporting to parents	4321	4321

Please rate each item as to the quality as it is exhibited in this program series.
Circle one number: use 4 (excellent quality) to 1 (poor quality).

	<u>Quality</u>
19. <u>Contexts of Subject Area</u>	
a. Provides social and historical perspectives	4321
b. Supports roles of females and minorities	4321
c. Relates to personal and social needs -- provides relevance	4321
d. Promotes aesthetic responses -- ties in with literature, art, creative expression	4321
20. <u>Instructional Methods</u>	
a. Begins with questions and phenomena that are interesting and familiar to students	4321
b. Promotes questioning from students	4321
c. Engages students actively	4321

- d. Emphasizes collaborative approach 4321
 - e. Emphasizes group learning 4321
 - f. Encourages students to combine process and knowledge 4321
 - g. Implements the collection and use of evidence 4321
 - h. Provides abundant experience in using tools 4321
 - i. Results in clear oral/written expression 4321
 - j. Emphasizes understanding over vocabulary 4321
 - k. Uses various instructional techniques to help student achieve conceptual understanding 4321
 - l. Uses authentic assessment to chart teaching and learning 4321
21. Thinking Processes
- a. Utilizes observing 4321
 - b. Utilizes communicating 4321
 - c. Utilizes comparing 4321
 - d. Utilizes ordering 4321
 - e. Utilizes categorizing 4321
 - f. Utilizes relating 4321
22. Instructional Practices
- a. Use of manipulative materials 4321
 - b. Cooperative work 4321
 - c. Discussion of Mathematics 4321
 - d. Questioning 4321
 - e. Justification of thinking 4321
 - f. Problem-solving approach to instruction 4321
 - g. Content integration 4321
 - h. Use of computers 4321
 - i. Active involvement of students in exploring, conjecturing, analyzing and applying content 4321
 - j. Assessing learning as an integral part of instruction 4321

Program Evaluation

Overall Ratings

23. How successful has this program series been for you and your students? **Unsuccessful** **Very Successful**

1 2 3 4

24. I would like to continue to use this program series: Yes/No

a. If yes, I would continue to use this program series because: (check all that apply)

- i. I responded well to it
- ii. It is of great benefit to students
- iii. It provides career awareness
- vii. It provides instruction consistent with national standards and/or recommendations
- viii. It provides otherwise unavailable instruction/curriculum
- ix. It provides rich, challenging and valuable content
- x. It provides otherwise unavailable simulations
- xi. It provides access to real work with professionals in the content area
- xii. It provides experiences and resources to which participants have no direct access
- xiii. It provides motivation for becoming more involved with the discipline
- xiv. It helps students make a transition from school to work
- xv. It helps to create a community of distance learners
- xvi. It provides opportunities to interact with participants of diverse backgrounds
- xvii. It is of high quality
- xviii. I learn from it
- xvii. Other: Please Specify _____

b. If no, why not (check all that apply)

- i. It is of poor quality
- ii. It is too costly
- iv. It does not fit a major need for me
- v. It takes too much preparation time

iii. _ Other: Please Specify_____

25. The course would be more valuable if: (please describe)_____

26. For each of the following categories, rate the changes which have come about for you as a result of participating in the course (please circle the most appropriate number to rate each item):

	Significant Decrease		Significant Increase	
	1	2	3	4
a. Interest in use of distance learning	1	2	3	4
b. Interest in use of instructional technology	1	2	3	4
c. Interest in this subject area	1	2	3	4
d. Instructional time used for this subject area	1	2	3	4
e. Use of different instructional methods	1	2	3	4
f. Teaching of different content	1	2	3	4
g. Comfort level with taking this course	1	2	3	4
h. Use of hands-on instructional materials	1	2	3	4
i. Questioning at higher levels of thinking	1	2	3	4
j. Higher expectations for my course grade	1	2	3	4
k. Use of new strategies to support students	1	2	3	4
l. Collaboration with other students	1	2	3	4
m. Feelings of isolation from other students	1	2	3	4
n. Other (describe) _____	1	2	3	4



Teacher Evaluation 1999-2000

Our records show that you recently taught a distance education class as part of the grant awarded to the Mountain Plains Distance Learning Partnership. We are required as part of our continued funding to provide feedback on classes designed and delivered via distance education. Please take a moment to complete the following survey about your distance education class and return it in the enclosed envelope. Thank you for your assistance!

Please complete this questionnaire electronically and e-mail it to the evaluator by January 30, 2000:

1. Name _____ Telephone _____
e-mail _____ Address _____
City _____ State _____ Zip _____

2. How many students are enrolled in your classes? _____
Please list the distance education class (es) and the semester in which you taught.

College: CWC-Riverton San Juan Basin-VocTech-Cortez CEU-Blanding
 CEU-Price Other

State _____

Class Number _____ Class Name _____
Semester _____ Year _____

High School:

Wyoming: Riverton Lander Wind River

Utah: Monument Valley Monticello San Juan

Colorado: Cortez-Montezuma Dove Creek Dolores Mancos

Class Number _____ Class Name _____
Semester _____ Year _____

Adult Education: CWC SWBOCS CEU-SJ CEU-Price

Class Number _____ Class Name _____
Semester _____ Year _____

Geographic area is Rural Urban Suburban

Gender Male Female

I am in the following age range: (check one)

21 - 30 years 31 - 40 years 41 - 50 years 51 - 60 years over 60 years

Ethnicity (please check the category(ies) which best describe your ethnicity)

African American Asian Caucasian Pacific Islander
 Hispanic Native American Other: Please Specify _____

Which credentials do you hold ? _____

____ Emergency credential

____ Enrolled in an credential program in _____(content area) which began ____ (month/year) and will be completed _____ (month/year)

At the end of this school year, how many years will you have taught? _____

How many students are currently enrolled in all of your classes? _____

Please List the distance education class (es) you have taught as part of this project.

School	Location	Class	Semester
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	
_____	_____	_____	

3. In the next group of questions, four is high and one is low.

- a. Your students achieved better in your distance learning class. 1 2 3 4
- b. Your students achieved better in your traditional class. 1 2 3 4
- c. You prefer a distance education class compared to a traditional class. 1 2 3 4
- d. Distance education technology enhanced your class 1 2 3 4
- e. Distance education technology got in the way of learning. 1 2 3 4
- f. The use of distance education technology helped present complex concepts and thus enhanced student achievement. 1 2 3 4
- g. You were better prepared to teach your distance education class 1 2 3 4
- h. You were better prepared to teach your traditional class 1 2 3 4
- i. Why did you teach the distance education class? (Please check all that apply)
 - ____ Volunteered
 - ____ Required
 - ____ New opportunity
 - ____ Other _____

4. What do you like the **most** about teaching a distance education class?

5. What do you like the **least** about teaching a distance education class?

6. Would you teach another distance education class? ____ Yes ____ No
If not why?

7. What would you suggest to improve distance education classes for the STARS Project?

8. Professional Development: Please check the activities in which you participated.

- a) _____ STARS formal professional development
 - b) _____ STARS – work with support staff in the Instructional Design Center
 - c) _____ Other 1999 District or County professional development
 - d) _____ College credit courses toward an advanced degree in 1998-99
9. During 1998-1999 school year, approximately how many hours did you spend in all types of professional development activities? _____(hours)
10. During 1999-2000 school year, approximately how many hours did you spend in all types of professional development activities? _____(hours)
11. Do you feel that you had enough professional development for the work that was expected of you? ___ Yes ___ No

12. What professional development do you need at this point?

13. My experience with using technology to support curriculum in my classroom is: [check one]

- a) _____ Limited to the 1999-2000 STARS Project
 - b) _____ Moderate: have used technology in my classroom for two years
 - c) _____ Extensive: have integrated technology into the curriculum
- If "c" is checked, please describe how you do this on a daily basis.

14. For the program series, I have access to the following items: (check all that apply)

- a. Video: ___ TV ___ VCR ___ Analog video camera ___ Digital video camera
- b. Computer: ___ IBM-Compatible ___ Macintosh ___ Color monitor ___ Other
- c. Telephone: ___ In-room teleconference receive ___ In school ___ In my classroom
- d. Peripherals: ___ Modem ___ Fax ___ Printer ___ Videodisk player ___ CD-ROM player
 ___ Digital still camera ___ Other
- e. Software: ___ Correlated to program concepts

15. How much has using supportive technology changed the way you teach your classes? (check one)

- a) ___ Not at all b) ___ Somewhat c) ___ Quite a bit d) ___ Greatly

16. What percentage of the time do you think you act in each of the following roles:

- a) Lecturer ___% b) Coach ___% c) Mediator ___% d) Facilitator ___% Total 100%

17. How many hours per week does an average student use the computer in your classroom? _____

18. How many hours per week does an average student use the Internet in your classroom? _____

19. What percentage of your curriculum is based on the textbook and textbook driven lessons? _____%

20. What percentage of time do you spend in class on "worksheets" or practice to reinforce skills? _____%

21. What percentage of time do you spend in class on concept development? _____%

22. What textbook series are you using? _____

23. Do you review the effectiveness of each lesson? ___ Yes ___ No If yes, please describe.

24. Do you assess the overall benefits of the course to your students? ___ Yes ___ No If yes, please describe.

25. What are you currently doing to implement the course more effectively for your students?

- a. _ Organizing ways to better prepare for participation in the telecast, pre and post activities
- b. _ Fine tuning use of programming and pre and post activities for greater student outcomes
- c. _ Individually finding ways to better integrate technology with other instructional activities
- d. _ Collaborating with others to integrate technology with other classroom or school programs
- e. o Looking at major modifications in how the course is used, for greater impact on students

26. Do you have any of the following concerns about using the course?
- a. Understanding my role in using the course
 - b. Conflicts in scheduling
 - c. Difficulty in organizing materials
 - d. Prep time for telecasts and pre/post activities
 - e. Conflicts between using the course and other instructional programs
 - f. Knowing if the course is having a positive impact on my students
 - g. Knowing how to adjust your use of the course to have a greater impact on students
 - h. Others: Please Specify
-

27. How often do you use each of these pieces of equipment or applications with your students?

Equipment	Daily	Weekly	Monthly	Never
a. Computer				
b. Still digital camera				
c. VHS Camcorder				
d. CD-ROM				
e. Scanner				
Software				
f. E-mail				
g. Word Processor				
h. Web Browser				
i. Presentations/Slide shows				
j. Spreadsheets				
k. Encyclopedia/research				
l. Other				

28. Intellectual and Technology Applications Skills Progression: which of the following do you use in your classroom to support the curriculum and with what frequency?

Intellectual Skill (in bold) Technology Application Skill (indented and in normal font)	Daily	Weekly	Monthly	Never
a. Identification of Problems/Solutions				
b. structure/model a problem				
c. problem based learning				
d. concept based learning				
e. Information Gathering/Evidence				
f. conduct Internet searches on content areas such as math				
g. organize and store information				
h. evaluate Web resources				
i. use journals (interactive or other)				
j. spiral outward from topics from the basic to the complex through access to content resources				
k. support opinion with evidence and personal experience				
l. use inquiry learning methods – problem solving and research tasks to develop higher-order thinking skills and multiple abilities				
m. Analysis/Synthesis				
n. synthesize and analyze gathered information				
o. manipulate, analyze and interpret data				
p. develop critical thinking				
q. develop historical thinking				
r. Communications				
s. communicate clearly to multiple constituencies				
t. systematically teaching mathematics to students				

u. systematically teaching writing				
v. systematically teaching expository writing for reports and research				
w. communicate information as the result of investigations				
x. derive meanings of words - morphology				
y. Internet based interaction, such as chat rooms and e-mail, to communicate with students and teachers				
z. use the computer to plan, draft, proofread, revise, and publish written text				
aa. use the computer and TV for presentations				
bb. use video camcorder to demonstrate knowledge				
cc. access the online Encyclopedia Britannica				
dd. access the Web site for student resources				
ee. access the Web site for teacher resources				
ff. present oral reports illustrated with Internet resources				
gg. Authentic Learning Environments				
hh. support individualized learning				
ii. support collaborative and group work				
jj. compensate for a disability or limitation				
kk. consider alternative points of view and cultural context				
ll. present to parents, teachers, students at special cultural days				
mm. scaffolding - support students in dependent success; move toward independent success				

29. Estimate what percentage of your students have mathematical skills at:

- a) above grade level _____
- b) at grade level _____
- c) two years below grade level _____
- d) four or more years below grade level _____

30. Estimate what percentage of your students have problem solving skills:

- a) above grade level _____
- b) at grade level _____
- c) two years below grade level _____
- d) four or more years below grade level _____

31. Estimate what percentage of your students read at a comfort level:

- a) above grade level _____
- b) at grade level _____
- c) two years below grade level _____
- d) four or more years below grade level _____

32. Estimate what percentage of your students have a writing ability:

- a) above grade level _____
- b) at grade level _____
- c) two years below grade level _____
- d) four or more years below grade level _____

33. Rate your comfort level with the applications alone and using it with students using a scale of 1-4 where four is high.

Comfort Level with Application Alone	Low	----	High	Comfort Level with Application with Students	Low	----	High	
a. e-mail	1	2	3	4	1	2	3	4
b. Internet Navigation	1	2	3	4	1	2	3	4
c. Word Processing	1	2	3	4	1	2	3	4
d. PowerPoint	1	2	3	4	1	2	3	4
e. Spreadsheets	1	2	3	4	1	2	3	4
f. Other _____	1	2	3	4	1	2	3	4

34. What was your initial attitude toward the support of instruction through technology as compared to your attitude about it now as well as the role of technology in your classroom?

35. In what way do you feel that student achievement has been enhanced through support of instruction through technology?

36. Do you feel that you are learning effective instructional strategies that improve teaching and learning?

37. How did professional development, Instructional Design Center, materials support your instructional program?

38. What have been the biggest challenges in delivering instruction supported by technology in the classroom?

39. What have been your biggest concerns in adding technology to your instructional program?

40. What support has been consistently helpful to you in using technology and implementing curriculum integration?

41. Do you feel that the project is creating teacher leaders who will sustain the project's goals after funding ends?

42. In what way did the project enhance communications between teachers, schools, parents, the district, community, and other partners?

43.How often do you interact with parents and what ways?

44.What are the strengths of the Project?

45.What could be done to improve the Project for next year?

46.Home computer: Please check the computer equipment/software you use at your home:

a) ___ Win 95/98 Computer

b) ___ Win 2000 Computer

c) ___ Mac OS Computer

d) ___ Modem

e) ___ Cable modem

f) ___ Internet Access

g) ___ Printer

h) ___ Scanner

47. ___ We have more than one computer at home. If checked yes, how many computers? ___



Program Design

Please answer the following questions about the quality of each item as it relates to the course using a scale where four indicates high quality and one indicates low quality.

Operations and Support	<u>Quality</u>
48. <u>Operations</u>	
a. Adherence to timelines for providing catalogs, calendars, schedules	4321
b. Adherence to timelines for providing teacher and student program materials	4321
c. Adherence to telecast schedule	4321
d. Clarity as to what hands-on materials are needed for each telecast	4321
e. Clarity as to what print materials are necessary for each telecast	4321
49. <u>Support through Professional Development</u>	
a. Support through staff development telecasts	4321
b. Support via phone, fax or modem	4321
c. Program content defined and described in the program support materials	4321
d. Program methodology defined and described in the program support materials	4321
e. Written documents relate content and methods to national goals and standards	4321
50. <u>Skills developed through Support and Professional Development</u>	
a. Enthusiasm for the subject is projected	4321
b. Enthusiasm for being the instructor for the course	4321
c. Content expertise	4321
d. Using new instructional methods	4321
e. Presentation style	4321
f. Assistance via phone, fax or Internet	4321
Technical Dimensions	
51. <u>Production Aspects of the Telecasts</u>	
a. Set and its use	4321
b. Camera work	4321
c. Graphics	4321
d. Video clips	4321
e. Audio	4321
f. Use of technical aspects to enhance learning	4321
g. Overall	4321
52. <u>Interactivity of the Telecasts</u>	
a. Studio's capability to answer in-coming phone calls to the instructor	4321
b. Studio's capability to take in-coming fax information	4321
c. Studio's capability to take in-coming e-mail information	4321
d. Announcement of upcoming question and answer periods, and time allotted	4321
e. Use of question and answer periods to enhance learning and the telecast	4321
f. Modification of telecast to clarify information based on viewer calls	4321
g. Other positive aspects (please describe)_____	4321

h. Suggestions for improvement (please describe)_____	4321

	<u>Quality</u>
53. <u>Computer and software</u>	
a. Integration of use of computer and modem for communications	4321
b. Integration of use of computer and software to support instruction	4321

Overall Program Design Quality

54. Program Series Content

a.	Value of content selected for age and grade of participant	4321
b.	Sequencing	4321
c.	Clear statement of goals, objectives	4321
d.	Identification of learning outcomes	4321
e.	Accurate, current, thorough	4321
f.	Meaning-centered	4321
g.	Appropriate presentation design	4321
h.	Meets general guidelines for roles of women, minorities, aged, handicapped	4321
55.	<u>Telecast Design</u>	
a.	Motivates and involves students	4321
b.	Enhances content learning	4321
c.	Flexibility to vary pace, sequence and depth of instruction for various learners	4321
d.	Promotion of critical viewing, thinking and experimentation	4321
e.	Recognition of cultural diversity of the learners	4321
f.	Recognition of gender diversity of the learners	4321
g.	Recognition of linguistic diversity of the learners	4321
h.	Recognition of learning style/multiple intelligences diversity of the learners	4321
i.	Recognition of geographical locations of the learners	4321
56.	<u>Program Support (Print) Materials for Teachers</u>	
a.	Delineation of content of program	4321
b.	Delineation of instructional methods of program	4321
c.	Ideas for pre-telecast activities	4321
d.	Outline of telecast activities	4321
e.	Description of site teacher responsibilities during telecast	4321
f.	Description of student responsibilities/activities during telecast	4321
g.	Ideas for post-telecast activities	4321
h.	Balances activities for individuals, small groups and entire class	4321
i.	Overall	4321
57.	<u>Program Support (Print) Materials for Students</u>	
a.	Design of materials for specified learning outcomes	4321
b.	Materials for initial learning	4321
c.	Materials for reinforcement	4321
d.	Materials to further exploration	4321
e.	Camera-ready reproducible student materials	4321
f.	Description of student responsibilities/activities during telecast	4321
g.	Balances activities for individuals, small groups and entire class	4321
58.	<u>Student Progress</u>	
a.	Process for monitoring student progress	4321
b.	Design of telecast, pre and post activities, which allow checking understanding	4321
c.	Assessment process	4321
d.	Uses authentic assessment	4321
e.	Assessment items	4321
f.	Process for reporting to parents	4321

Instructional Design

Please rate each item as to the quality as it is exhibited in the course.

Circle one number: use 4 (excellent quality) to 1 (poor quality).

59.	<u>Contexts of Subject Area</u>	
a.	Provides social and historical perspectives	4321
b.	Supports roles of females and minorities	4321
c.	Relates to personal and social needs -- provides relevance	4321
e.	Promotes aesthetic responses -- ties in with literature, art, creative expression	4321

60. <u>Instructional Methods</u>	
a. Begins with questions and phenomena that are interesting and familiar to students	4321
b. Promotes questioning from students	4321
c. Actively engages students	4321
d. Emphasizes collaborative approach	4321
e. Emphasizes group learning	4321
f. Encourages students to combine process and knowledge	4321
g. Implements the collection and use of evidence	4321
h. Provides abundant experience in using tools	4321
i. Results in clear oral/written expression	4321
j. Emphasizes understanding over vocabulary	4321
k. Uses various instructional techniques to help student achieve conceptual understanding	4321
l. Uses authentic assessment to chart teaching and learning	4321

61. <u>Thinking Processes</u>	
a. Utilizes observing	4321
b. Utilizes communicating	4321
c. Utilizes comparing	4321
d. Utilizes ordering	4321
e. Utilizes categorizing	4321
f. Utilizes relating	4321

Please rate each item as to the quality as it is exhibited in this program series.
Circle one number: uses 4 (excellent quality) to 1 (poor quality)

	<u>Quality</u>
62. <u>Instructional Practices</u>	
a. Use of manipulative materials	4321
b. Cooperative work	4321
c. Discussion of Mathematics	4321
d. Questioning	4321
e. Justification of thinking	4321
f. Problem-solving approach to instruction	4321
g. Content integration	4321
h. Use of computers	4321
i. Active involvement of students in exploring, conjecturing, analyzing and applying content	4321
j. Assessing learning as an integral part of instruction	4321

Program Evaluation

Overall Ratings

63. How successful has this program series been for you and your students?

Unsuccessful **Very Successful**
1 2 3 4

64. I would like to continue to use this program series: ____Yes ____No
- a. If yes, I would continue to use this program series because: (check all that apply)
 - i. Students respond well to it
 - ii. It is of great benefit to students
 - iii. It provides career awareness
 - iv. It provides instruction consistent with national standards and/or recommendations
 - v. It provides otherwise unavailable instruction/curriculum
 - vi. It provides rich, challenging and valuable content
 - vii. It provides otherwise unavailable simulations
 - viii. It provides access to real work with professionals in the content area
 - ix. It provides experiences and resources to which participants have no direct access
 - x. It provides motivation for becoming more involved with the discipline
 - xi. It helps students make a transition from school to work

- xii. It helps to create a community of distance learners
- xiii. It provides opportunities to interact with participants of diverse backgrounds
- xiv. It is of high quality
- xv. The principal or department chair suggests I teach it via distance learning
- xvi. Other: Please Specify _____

b. If no, why not (check all that apply)

- i. It is of poor quality
- ii. It does not fit a major need for me
- iii. It is too costly
- iv. It takes too much preparation time
- v. Other: Please Specify _____

65. The program series would be more valuable if: (please describe) _____

66. This program series can be used most successfully if teachers: (check all that apply)
- a. Have had previous experience with distance learning
 - b. Participate in site-based planning to integrate this program into the curriculum
 - c. Participate in staff development programs provided for the program series via teleconference
 - d. Work together to identify strategies to best use the program series with their students

67. For each of the following categories, rate the changes which have come about for you as a result of participating in this course (please circle the most appropriate number to rate each item):

		Significant			Significant		
		Decrease			Increase		
		1	2	3	4	3	4
a.	Interest in use of distance learning	1	2	3	4		
b.	Interest in use of technology for instruction	1	2	3	4		
c.	Interest in this subject area	1	2	3	4		
d.	Instructional time used for this subject area	1	2	3	4		
e.	Use of different instructional methods	1	2	3	4		
f.	Teaching of different content	1	2	3	4		
g.	Comfort level with teaching this content	1	2	3	4		
h.	Use of hands-on instructional materials	1	2	3	4		
i.	Questioning at higher levels of thinking	1	2	3	4		
j.	Higher expectations for all students	1	2	3	4		
k.	Use of new strategies to support all students	1	2	3	4		
l.	Collaboration with other teachers	1	2	3	4		
m.	Feelings of isolation from other teachers	1	2	3	4		
n.	Other (describe) _____	1	2	3	4		

Student Information and Progress

Assign a number, beginning with 1, to each of your students. Describe the student, by circling yes or no for items a to e. In boxes f to p put in a number which describes the degree of the outcome for the student that can be attributed to the STARS Project.

4: great degree 3: some degree 2: very little 1: none

Please attach a copy of your student roster to show which student is number 1, 2, 3, etc.

Students 1-16 Criteria	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
a Female or Male	F/M															
b Chapter I or other financial support program	Y/N															
c LEP	Y/N															
d Gifted	Y/N															
e Special education	Y/N															
f Improved content knowledge and skills	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
g Improved critical thinking and problem solving	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
h Improved language skills	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
i Increased interest in subject area	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
j Improved quality of work	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
k Increased school interest	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
l Improved attendance	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
m Improved behavior	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
n Takes responsibility for own learning	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
o Greater confidence as a learner	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
p Higher self-regard	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321

Students 17-32 Criteria	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
a Female or Male	F/M															
b Chapter I or other financial support program	Y/N															
c LEP	Y/N															
d Gifted	Y/N															
e Special education	Y/N															
f Improved content knowledge and skills	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
g Improved critical thinking and problem solving	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
h Improved language skills	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
i Increased interest in subject area	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
j Improved quality of work	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
k Increased school interest	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
l Improved attendance	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
m Improved behavior	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
n Takes responsibility for own learning	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
o Greater confidence as a learner	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321
p Higher self-regard	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321	4321