

I. An Overview of Mesa State College and Western Colorado

Public colleges and universities are inextricably linked to the regions and communities in which they are located. A college often is a significant partner in regional economic development. Not only can it be a major employer, but it also is a business that purchases a large volume of goods and services having a substantial local impact. A campus frequently is a social and cultural focal point that enhances, in its broadest sense, the quality of life of area residents. Be it art or athletics, a college brings activities and programs that otherwise would not be so readily accessible to a community. As a public institution, a college also serves as an information resource to which a region looks for answers to questions with which it is grappling. By its very nature, a college must be responsive and responsible to public needs in ways that are appropriate to its strengths. At the core of its responsibilities, though, a public college exists to deliver education to those who support it.

Mesa State College is a regional public institution established to serve the educational needs of Western Colorado. Founded in 1925, the college has evolved into a higher education center of nearly 6,200 students and now offers academic and technical programs at the undergraduate and graduate levels in Grand Junction, Montrose, and surrounding communities. This report examines the impact of Mesa State on Western Colorado. It begins with the college's contributions to educational attainment by residents of Colorado's Western Slope, followed by a description of the many ways in which the college better the region's quality of life. While the documentation is largely qualitative in nature, the college's influence nonetheless is significant. The third perspective is economic in nature and examines Mesa State's impact on the regional economy. Diverse as these contributions are, the common thread running through the three major chapters of this report is the way in which Mesa State College is working to achieve a higher degree of leadership in Western Colorado.

The College

The founding of Grand Junction State Junior College in 1925, with 39 students enrolled in seven classes, marked the beginning of postsecondary education on Colorado's Western Slope. As Mesa County Junior College, the number of students



grew to 270 by fall 1937; headcount increased to 1,300 by 1963. Over that period, the range of community college programs expanded, and an area vocational school was added in 1967. By 1974, the college had evolved into a baccalaureate-granting institution, leading enrollment to triple in 16 years and reach 3,891 students in fall 1979.

Finally, in 1994, the Colorado legislature authorized Mesa State to offer selected graduate degrees as the needs of the region grew. With the addition of graduate programs, Mesa State College became the only four-year institution in Colorado to offer a full range of undergraduate programming that spans

vocational certificates, associate degrees (both academic and vocational), and baccalaureate programs in addition to master's degrees. With the growth in enrollment and the expanded role and mission¹, degrees awarded by the college increased significantly in scope and number. Table 1-1 summarizes the changes in award activity for specific years over the last decade.

Mesa State College began a unique cooperative relationship with Mesa County School District 51 and local businesses in 1991. Through the Board of Cooperative Educational Services (BOCES) partnership, the college and school district direct the operations of the Unified Technical Education Center (UTEC) offering vocational and technical trades to students in grades 9 – 12. Largely through UTEC, then, the college serves as the major provider of secondary and postsecondary technical education, job training, and career counseling that prepares the region's workforce.

The growth of Mesa State College, particularly over the last decade, has paralleled the development of Western Colorado. Between 1993 and 2003, the college's enrollment

¹Mesa State College's role and mission, reenacted in C.R.S. 23-53-101, is described as: "There is hereby established a college at Grand Junction, to be known as Mesa State College, which shall be a general baccalaureate and specialized graduate institution with moderately selective admission standards. Mesa State College shall offer undergraduate liberal arts and sciences, teacher preparation, and business degree programs and a limited number of graduate programs. Mesa State College shall also maintain a community college role and mission, including vocational and technical programs. Mesa State College shall receive resident credit for two-year course offerings in its commission-approved service area. Mesa State College shall also serve as a regional education provider.

Table 1-1. MESA STATE COLLEGE DEGREES AND CERTIFICATES AWARDED BY LEVEL

Level Award		
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increased by 31.5%. Similarly, Planning Region II—which encompasses Garfield, Mesa, Moffat, Rio Blanco, and Routt Counties—grew by approximately 25%, while the population of Grand Junction expanded nearly 50% between 1990 and 2000. The city’s population is projected to continue growing at a similar rate for the next 10 years.

With its increased size, Mesa State has become a major economic figure in the region in terms of employment. In 2003, the college employed 1,194 full- and part-time faculty, staff, and students, ranking third in total employees in Mesa County after School District 51 and St. Mary’s Hospital and Medical Center. With a payroll in excess of \$22.5 million, the college also ranked third in size of payroll in the county.

The most recent step in the college’s maturation came in 2003 when the Colorado General Assembly designated Mesa State College as the Regional Education Provider² for the 14 Western Slope counties shown in Figure 1-1: Delta, Eagle, Garfield, Grand, Jackson, Mesa, Moffat, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Miguel and Summit. With this responsibility will come growing demands to provide education and technological skills that meet the needs of the region’s changing workforce.

The Western Slope Region of Colorado

With its origins as a community college, Mesa State College historically focused on serving the educational needs of Mesa County residents through traditional program delivery. With its recent designation as a Regional Education Provider, however, the college now is responsible for meeting the educational needs of a more diverse and dispersed population, either through delivering the courses directly or arranging for another institution to do so. The 14 counties that comprise the college’s service region represent nearly 28% of Colorado’s total area and are very different in their demographic, economic, and geographic characteristics. The sheer physical area of the region—28,535 square miles—as well as the significant topographic divisions, create major challenges for the college as it develops and delivers programs for the region’s residents.

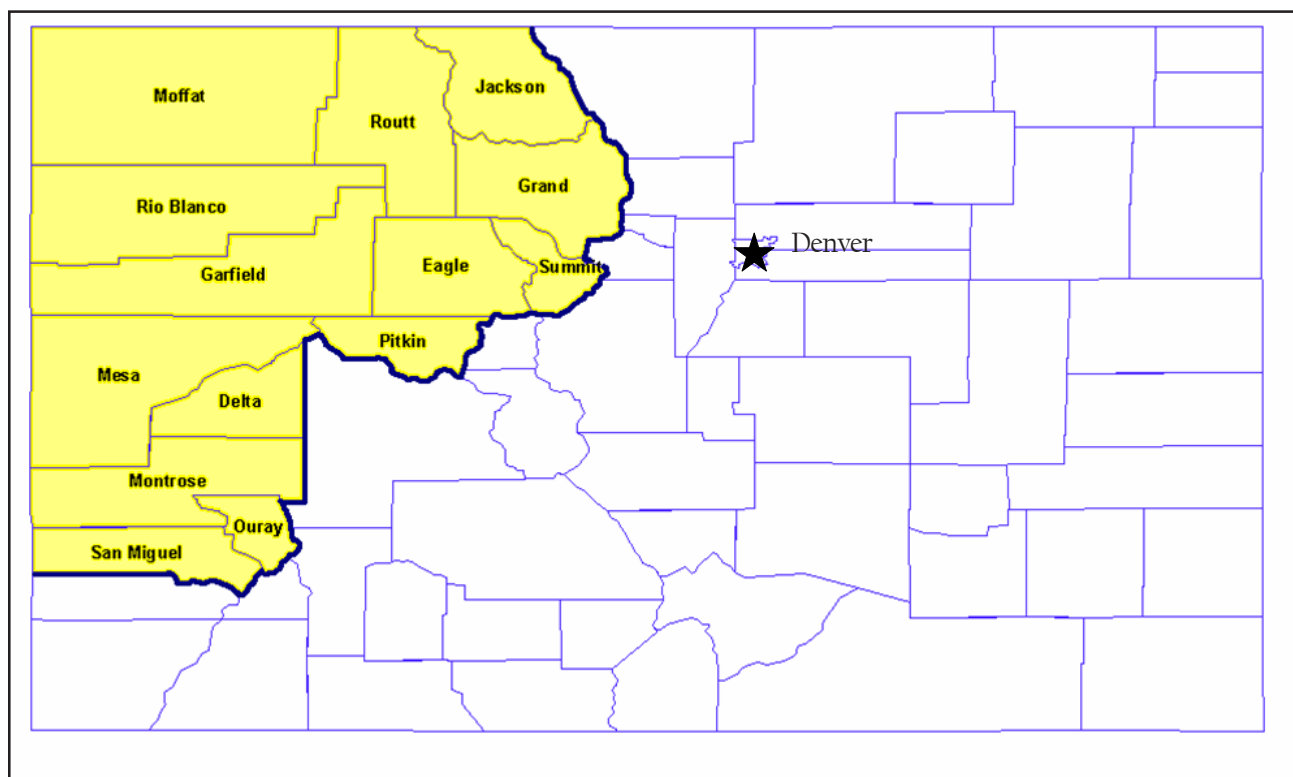
²Mesa State College’s responsibilities as a Regional Education Provider are described in C.R.S. 23-1-127:

(1) “As regional education providers, Adams State College, Mesa State College, and Western State College of Colorado shall have as their primary goal the assessment of regional educational needs and, in consultation with the Colorado Commission on Higher Education, the allocation of resources for the purposes of meeting those needs.”

(2) A regional education provider’s initiatives to meet its regional needs may include, but need not be limited to, the following:

- (a) Extension of existing programs;
- (b) Creation of new undergraduate programs;
- (c) Development of partnerships with two-year institutions; and
- (d) Facilitation of the delivery of graduate education through existing graduate institutions.

Figure 1-1. COUNTIES DESIGNATED TO BE SERVED BY MESA STATE COLLEGE
AS A REGIONAL EDUCATION PROVIDER



Population

Mesa State College's service region is primarily one of small populations, illustrated by the fact that three of the counties—Rio Blanco, Ouray, and Jackson—have fewer residents than the enrollment at the college. Mesa County, with 120,000 residents or 32% of the region's population, has the greatest concentration. Grand Junction and the surrounding communities in the Grand Valley comprise the sole metropolitan statistical area on the Western Slope. The next most populous county—Garfield—focuses on the city of Glenwood Springs and is approximately 40% of the size of Mesa County.

As summarized in Table 1-2, population growth between 1990 and 2000 in Western Colorado was uneven. The highest percentage gains—exceeding 80%—were associated with the resort counties of Eagle, Summit, and San Miguel. By contrast, Jackson and Rio Blanco Counties experienced a slight decrease in residents. Counties with an equal or higher share of their respective populations under 18 years of age than the statewide average (25.6%) included Moffat, Garfield, Montrose, Rio Blanco, and Jackson Counties. Those counties with a proportion of their population greater than Colorado's average for 65 year olds and older (9.7%) were Delta, Mesa, Montrose, Jackson, Ouray, and Rio Blanco. The demographic profile for Montrose,

Table 1-2. MESA STATE COLLEGE 14-COUNTY SERVICE REGION BY TOTAL POPULATION IN 2000

County	Total Population	Population Chg (1990 - 2000)	Projected Population (2010)	Percent Persons in 2000 Census Who Were --	
				Under 18 Yrs Old	65 Yrs & Older
Mesa	119,281	24.8%	143,591	25.0%	15.2%
Garfield	45,521	46.1%	58,558	27.1%	8.8%
Eagle	43,027	90.0%	56,819	23.5%	3.0%
Montrose	34,572	36.9%	43,371	26.8%	15.2%
Delta	28,421	32.7%	34,405	24.0%	19.7%
Summit	24,225	82.8%	32,427	17.4%	3.3%
Routt	20,255	39.8%	24,390	22.6%	5.0%
Pitkin	14,810	17.5%	18,906	16.7%	6.8%
Moffat	13,154	16.1%	14,526	28.5%	9.4%
Grand	12,711	56.2%	16,740	21.8%	7.8%
San Miguel	6,951	80.5%	8,919	17.6%	3.4%
Rio Blanco	5,945	-1.1%	6,548	26.5%	11.2%
Ouray	3,882	63.1%	4,648	22.8%	12.2%
Jackson	1,589	-1.7%	1,720	25.6%	13.1%
14-County Total	374,344		465,568		
Colorado	4,417,714	30.6%		25.6%	9.7%

Source: Colorado Data Book. Downloaded 6/28/04. http://www.state.co.us/oed/bus_fin/contents.html.

Rio Blanco, and Jackson Counties was above the state's averages for both age categories.

Colorado is a highly educated state. In the 2000 census, approximately 32.7% of its residents reported having a baccalaureate degree or higher. Half of the 14 counties in Mesa State's service region had higher averages of educational attainment than the state. Educational levels for the region are discussed in greater detail in Chapter II.



Economy

The economic base of the region's 14 counties, by some measures, is quite similar while other indicators reflect significant differences. Table 1-3 presents the counties according to per capita income. Half of the counties—those with more highly educated populations—rank above the statewide average for per capita income. The resort counties of Pitkin, San Miguel, Eagle, Routt, Summit, Grand, and Ouray are highly affluent and contrast with the remaining seven that are relatively more rural and remote. Those with

Table 1-3. MESA STATE COLLEGE 14-COUNTY SERVICE REGION BY PER CAPITA INCOME (1999)

County	Total Population	Per Capita Money Income (1999)	% Persons Below Poverty (1999)	% Business Establishments 1 - 4 Employees	% Business Establishments 50+ Employees	Largest Occupation Type* (% in Category)
Pitkin	14,810	\$40,811	6.2%	61.7%	3.2%	MPR (42.1%)
San Miguel	6,951	\$35,329	10.4%	61.3%	2.1%	MPR (35.8%)
Eagle	43,027	\$32,011	7.8%	63.3%	3.2%	MPR (33.3%)
Routt	20,255	\$28,792	6.1%	62.4%	3.6%	MPR (34.5%)
Summit	24,225	\$28,676	9.0%	61.2%	2.4%	MPR (30.8%)
Grand	12,711	\$25,198	7.3%	65.2%	1.9%	MPR (30.0%)
Ouray	3,882	\$24,335	7.2%	75.7%	0.0%	MPR (37.2%)
Garfield	45,521	\$21,341	7.5%	61.7%	2.0%	MPR (26.9%)
Mesa	119,281	\$18,715	10.2%	56.5%	3.7%	MPR (29.3%)
Moffat	13,154	\$18,540	8.3%	60.1%	2.6%	CEM (23.3%)
Jackson	1,589	\$17,826	14.0%	70.0%	0.0%	MPR (33.7%)
Rio Blanco	5,945	\$17,344	9.6%	60.8%	1.8%	MPR (29.8%)
Montrose	34,572	\$17,158	12.6%	59.6%	2.3%	MPR (25.9%)
Delta	28,421	\$17,152	12.1%	64.7%	2.1%	MPR (28.0%)
14-County Total	374,344					
Colorado	4,417,714	\$24,049	9.3%			

*MPR = Management, Professional, & Related; CEM = Construction, Extraction, & Maintenance.

Source: Colorado Data Book. Downloaded 6/28/04. http://www.state.co.us/oed/bus_fin/contents.html.

lower income levels have economies that are oriented more toward agriculture, ranching and/or mining, and often are the counties where more affordable housing is available for those working at ski resorts.

The region is one of small businesses. At least three out of every five establishments have four or fewer employees. Only Mesa, Routt, Pitkin, and Eagle Counties have more than 3% of their businesses employing 50 or more persons. Of those four counties, Mesa County is the only one with a more diversified, non-resort, economic base. As different as these counties' economies may appear, however, the largest sector for all but Moffat County is in the management, professional, and service occupations.

In conclusion, meeting the educational needs of the Western Slope region poses both opportunities and challenges for Mesa State College. As shown in Table 1-4, there is a clear correlation between educational attainment and earning power. Thus it appears that future economic gains in the region are highly interrelated with the college's ability to deliver the type of education needed by its region. As the next three chapters document, the college already has a significant presence in Western Colorado, and this influence is sure to grow as the college expands its leadership role as a Regional Education Provider. ■

**Table 1-4. COLORADO EARNINGS BY EDUCATIONAL
ATTAINMENT, 2000***

Educational Level	Median Earnings
Not a high school graduate	\$21,757
High school graduate	\$28,765
Some college	\$32,294
Bachelor's degree	\$42,237
Advanced degree	\$53,528

*Data limited to year-round, full-time employed Coloradoans aged 21 to 64 years in 2000 who worked 50+ weeks and 35+ hours per week in 1999.

Source: Census Bureau, "Earnings by Occupation and Education". Downloaded 8/27/04. <http://www.census.gov/hhes/income/earnings/call1coboth.html>.



II. Balancing Access with a Quality Education: The Educational Impact of Mesa State College

As an institution with education as its primary responsibility, it is logical to begin with the impact that Mesa State College has had on postsecondary education participation in Western Colorado. This chapter focuses on the college's educational contributions and is divided into three sections. The first presents an overview of changes in educational attainment that have occurred over the past two decades, both regionally and statewide. Increases in college participation have paralleled an expansion in degree levels and programs offered by Mesa State College. This is followed by a description of the college's efforts to expand educational access to the region's residents, be it into new parts of its region or to different populations of the Western Slope who have not participated in higher education. In each case, the college has sought to do so in a manner that has balanced the commitment to access with that of delivering a quality educational experience to its students. Finally, the third section summarizes some quality indicators of the college, both in the forms of inputs to the educational process and outcomes from student experiences.

An Overview of Western Colorado's Educational Attainment

Colorado consistently ranks as one of the most highly educated populations in the United States as measured by the proportion of persons 25 years of age and older who have completed a baccalaureate degree. In 2000, the Bureau of the Census reported that 32.7% of Coloradoans held a baccalaureate degree or higher. Table 2-1 summarizes how the educational attainment of residents in the 14-county region of Western Colorado compares and contrasts to the state, with the counties ranked according to the percentage of the population completing a bachelor's degree. Half of the counties—Pitkin, San Miguel, Summit, Eagle, Routt, Grand, and Ouray—are dominated by resort communities. Their residents have attained levels of education significantly above the statewide percentage due to the highly educated population that has migrated into these counties.

**Table 2-1. DISTRIBUTION OF EDUCATIONAL ATTAINMENT BY BACCALAUREATE DEGREE COMPLETION
IN MESA STATE COLLEGE'S 14-COUNTY REGION, 2000**

County	Population 25 Year Olds & Over														
	Total	Less than 9th Grade		10 - 12 Grade, No Diploma		High School Graduate (incl		Some College, No Degree		Associate's Degree		Baccalaureate Degree		Graduate/First Professional Degree	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Pitkin	11,322	168	1.5	249	2.2	1,237	10.9	2,610	23.1	592	5.2	4,531	40.0	1,935	17.1
San Miguel	4,762	117	2.5	186	3.9	717	15.1	1,217	25.6	217	4.6	1,741	36.6	567	11.9
Summit	15,795	369	2.3	697	4.4	2,788	17.7	3,176	20.1	1,135	7.2	5,751	36.4	1,879	11.9
Eagle	27,178	1,956	7.2	1,684	6.2	4,490	16.5	5,665	20.8	1,797	6.6	8,887	32.7	2,699	9.9
Routt	13,267	175	1.3	452	3.4	2,347	17.7	3,563	26.9	1,090	8.2	4,121	31.1	1,519	11.4
Grand	8,571	147	1.7	514	6.0	2,060	24.0	2,346	27.4	543	6.3	2,152	25.1	809	9.4
Ouray	2,741	62	2.3	120	4.4	591	21.6	777	28.3	181	6.6	644	23.5	366	13.4
Garfield	27,884	1,633	5.9	2,451	8.8	7,499	26.9	7,502	26.9	2,154	7.7	4,918	17.6	1,727	6.2
Mesa	76,358	3,492	4.6	7,961	10.4	23,154	30.3	19,606	25.7	5,381	7.0	11,174	14.6	5,590	7.3
Montrose	22,089	1,618	7.3	2,656	12.0	7,373	33.4	5,264	23.8	1,057	4.8	2,933	13.3	1,188	5.4
Jackson	1,098	60	5.5	91	8.3	396	36.1	272	24.8	61	5.6	143	13.0	75	6.8
Rio Blanco	3,857	163	4.2	285	7.4	1,234	32.0	1,100	28.5	323	8.4	495	12.8	257	6.7
Delta	19,330	1,335	6.9	2,511	13.0	6,569	34.0	4,581	23.7	934	4.8	2,411	12.5	989	5.1
Moffat	8,404	567	6.7	1,146	13.6	2,812	33.5	2,348	27.9	484	5.8	708	8.4	339	4.0
14-Cnty Region	242,656	11,862	4.9	21,003	8.7	63,267	26.1	60,027	24.7	15,949	6.6	50,609	20.9	19,939	8.2
Colorado	2,776,632	134,348	4.8	228,691	8.2	644,360	23.2	667,610	24.0	193,868	7.0	599,028	21.6	308,727	11.1

Source: Bureau of the Census.

The majority of these individuals likely was educated elsewhere prior to locating in Western Colorado (Table 2-2 and Figures 2-1, 2-2). While the order of the counties varies between tables, data in Table 2-2 document that the greatest gains in baccalaureate degree completion across three census periods occurred in the same counties. The counties in the top half of Table 2-1 also correlate with the seven having the highest per capita income in Table 1-3.

While generally achieving higher educational attainment across the three census periods, the balance of the 14 counties has not reached the state average. Historically these counties—Garfield, Mesa, Montrose, Jackson, Rio Blanco, Delta, and Moffat—have had less mobile populations and/or are generally more rural and physically isolated. These demographic and geographic characteristics make it more likely that these counties' residents have attended college closer to home, such as at Mesa State, or transferred to Mesa State after attending a local community college or vocational school. Thus it is far more likely that Mesa State College can claim credit for the gains in educational levels by residents in these counties, particularly at the two- and four-year levels.

Expanding Access to Higher Education To College-Level Students

With the authority to offer a full-range of awards—from vocational certificates to master's degrees—the college's enrollments are approaching 6,200 students. As

**Table 2-2. EDUCATIONAL ATTAINMENT IN MESA STATE COLLEGE'S
14-COUNTY REGION, 1980 - 2000**

County	Percent Persons 25 Years and Older Who Were Baccalaureate Degree Completers in --			Percentage Point Change 1980 - 2000
	1980	1990	2000	
Pitkin	46.2%	49.8%	57.1%	10.9
San Miguel	35.9%	40.3%	48.5%	12.6
Summit	38.7%	39.7%	48.3%	9.6
Eagle	34.6%	33.0%	42.6%	8.0
Routt	31.7%	34.7%	42.5%	10.8
Ouray	24.6%	27.9%	36.8%	12.2
Grand	21.2%	30.2%	34.5%	13.3
Colorado	23.0%	27.0%	32.7%	9.7
Garfield	20.2%	21.6%	23.8%	3.6
Mesa	16.3%	17.4%	22.0%	5.7
Jackson	13.4%	15.3%	19.9%	6.5
Rio Blanco	18.0%	37.9%	19.5%	1.5
Montrose	13.8%	15.4%	18.7%	4.9
Delta	12.2%	13.6%	17.6%	5.4
Moffat	14.7%	15.4%	12.5%	-2.2

*General Social and Economic Characteristics: Colorado . 1980 Census of Population. PC80-1-C7.

Washington, D.C.: Bureau of the Census, June 1983.

**General Social and Economic Characteristics: Colorado . 1990 Census of Population. CP90-2-7.

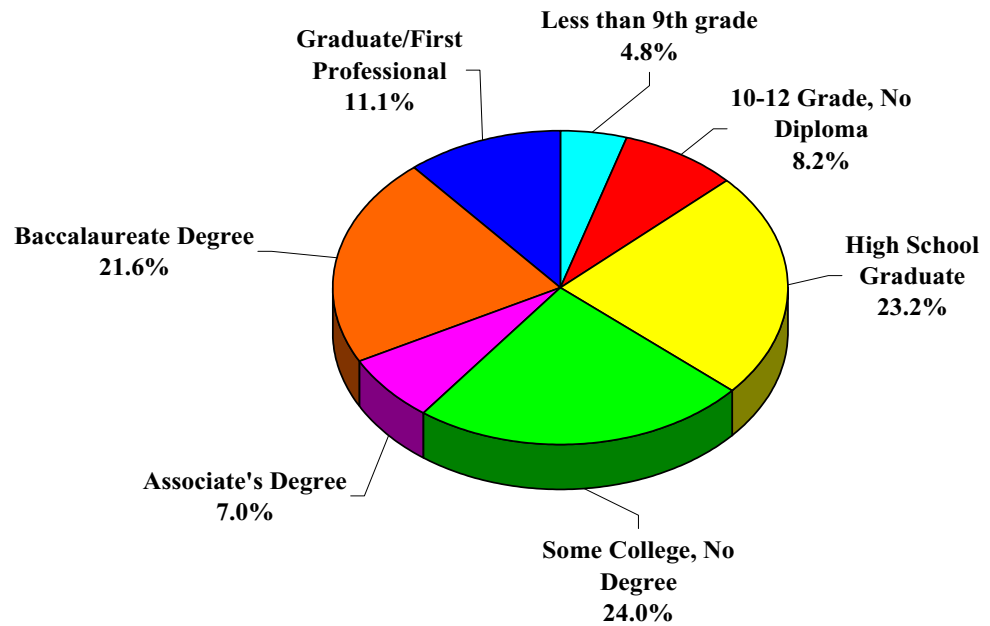
Washington, D.C.: Bureau of the Census, June 1993.

***Compiled by Demography Unit of Colorado Department of Local Affairs from U.S. Census Bureau Records.
Downloaded 7/24/2004.

shown in Table 2-3, the college has experienced an enrollment growth of nearly 18% between fall semesters 1998 and 2003 alone, with the institution now reaching out to populations that have not fully participated in higher education in the past. Of special note in Table 2-3 is the expanded geographic access summarized for undergraduates. The institution draws the largest number of students, not surprisingly, from the three counties in closest proximity to Grand Junction—Mesa, Montrose, and Delta—with these counties representing approximately two-thirds of the college's enrollments in fall 2003. But the college's growing emphasis on the use of a variety of instructional modes to deliver education is broadening its geographic base, as shown in the enrollment growth from the 14-county region. The college has developed a campus in Montrose, and technology is enabling the use of distance learning in various forms to expand program linkages with other institutions such as Colorado Mountain College. The enrollments from the 14-county region that Mesa State College is designated to serve have grown by nearly 26% for the five years prior to the legislative designation in 2003.

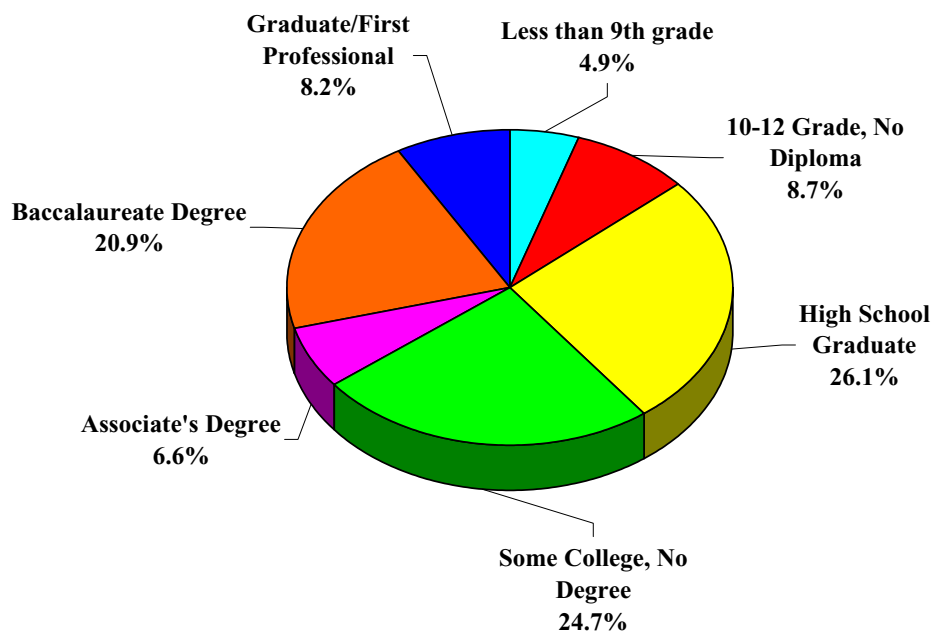
Measuring how an institution expands access goes beyond where educational opportunities are made available to populations that now participate in larger numbers. Perhaps the most striking change over the five-year period between

Figure 2-1. EDUCATIONAL ATTAINMENT OF COLORADO RESIDENTS, 2000



*Source: Bureau of the Census, 2000

Figure 2-2. EDUCATIONAL ATTAINMENT OF RESIDENTS IN MESA STATE COLLEGE'S 14-COUNTY REGION, 2000



*Source: Bureau of the Census, 2000

Table 2-3. MESA STATE COLLEGE STUDENT PROFILE, COMPARISON OF FALL 1993, 1998, and 2003*

Demographic/Academic Characteristic	Headcount Enrolled in Fall --						Change 1993 - 2003		Change 1998 - 2003	
	1993		1998		2003					
	#	% of Total	#	% of Total	#	% of Total	#	%	#	%
ALL STUDENTS*										
Student Level										
First-Year	1,828	41.7%	1,793	36.6%	2,272	39.4%	444	24.3%	479	26.7%
Sophomore	1,150	26.2%	1,127	23.0%	1,253	21.7%	103	9.0%	126	11.2%
Junior	479	10.9%	649	13.3%	688	11.9%	209	43.6%	39	6.0%
Senior	834	19.0%	1,124	23.0%	1,044	18.1%	210	25.2%	-80	-7.1%
High School	13	0.3%	44	0.9%	308	5.3%	295	2269.2%	264	600.0%
Non-Degree Seeking	79	1.8%	114	2.3%	134	2.3%	55	69.6%	20	17.5%
Undergraduate Subt	4,383	100.0%	4,851	99.1%	5,699	98.9%	1,316	30.0%	848	17.5%
Graduate	0	0.0%	42	0.9%	65	1.1%	65	--	23	54.8%
Total	4,383	100.0%	4,893	100.0%	5,764	100.0%	1,381	31.5%	871	17.8%
Degree Level										
Certificate	57	1.3%	38	0.8%	67	1.2%	10	17.5%	29	76.3%
Associate--AAS	455	10.4%	327	6.7%	357	6.2%	-98	-21.5%	30	9.2%
Associate--AA/AS	924	21.1%	665	13.6%	952	16.5%	28	3.0%	287	43.2%
Baccalaureate	2,855	65.1%	3,663	74.9%	3,876	67.2%	1,021	35.8%	213	5.8%
Non-Degr--High Sch	13	0.3%	44	0.9%	308	5.3%	295	2269.2%	264	600.0%
Non-Degr--Other UG	79	1.8%	114	2.3%	139	2.4%	60	75.9%	25	21.9%
Undergraduate Subt	4,383	100.0%	4,851	99.1%	5,699	98.9%	1,316	30.0%	848	17.5%
Master's	0	0.0%	42	0.9%	61	1.1%	61	--	19	45.2%
Non-Degr--Other GR	0	0.0%	0	0.0%	4	0.1%	4	--	4	--
Total	4,383	100.0%	4,893	100.0%	5,764	100.0%	1,381	31.5%	871	17.8%
UNDERGRADUATE STUDENTS*										
Credit Hour Load										
Part-time (9 hrs or less)	790	18.0%	860	17.7%	1,260	22.1%	470	59.5%	400	46.5%
Full-time (10 hrs. or more)	3,593	82.0%	3,991	82.3%	4,439	77.9%	846	23.5%	448	11.2%
Total	4,383	100.0%	4,851	100.0%	5,699	100.0%	1,316	30.0%	848	17.5%
Age										
17 years or younger	52	1.2%	71	1.5%	312	5.5%	260	500.0%	241	339.4%
18 - 24 years	2,577	58.8%	3,270	67.4%	3,700	64.9%	1,123	43.6%	430	13.1%
Traditional Age Subt	2,629	60.0%	3,341	68.9%	4,012	70.4%	1,383	52.6%	671	20.1%
25 - 34 years	902	20.6%	798	16.5%	958	16.8%	56	6.2%	160	20.1%
35 - 44 years	650	14.8%	445	9.2%	431	7.6%	-219	-33.7%	-14	-3.1%
44 years and older	202	4.6%	267	5.5%	298	5.2%	96	47.5%	31	11.6%
Non-trad Age Subt	1,754	40.0%	1,510	31.1%	1,687	29.6%	-67	-3.8%	177	11.7%
Total	4,383	100.0%	4,851	100.0%	5,699	100.0%	1,316	30.0%	848	17.5%
Gender										
Male	1,924	43.9%	2,162	44.6%	2,410	42.3%	486	25.3%	248	11.5%
Female	2,459	56.1%	2,689	55.4%	3,289	57.7%	830	33.8%	600	22.3%
Total	4,383	100.0%	4,851	100.0%	5,699	100.0%	1,316	30.0%	848	17.5%
Race/Ethnicity										
Asian/Pacific Islander	43	1.0%	62	1.3%	112	2.0%	69	160.5%	50	80.6%
Black, Non-Hispanic	45	1.0%	64	1.3%	89	1.6%	44	97.8%	25	39.1%
Hispanic	279	6.4%	349	7.2%	433	7.6%	154	55.2%	84	24.1%
Amer Indian/Alaska Native	38	0.9%	60	1.2%	74	1.3%	36	94.7%	14	23.3%
Subtotal	405	9.2%	535	11.0%	708	12.4%	303	74.8%	173	32.3%
White, Non-Hispanic	3,797	86.6%	4,242	87.4%	4,722	82.9%	925	24.4%	480	11.3%
NR Alien	79	1.8%	45	0.9%	39	0.7%	-40	-50.6%	-6	-13.3%
Unknown	102	2.3%	29	0.6%	230	4.0%	128	125.5%	201	693.1%
Total	4,383	100.0%	4,851	100.0%	5,699	100.0%	1,316	30.0%	848	17.5%
Geographic Origin										
Mesa County	2,344	53.5%	2,441	50.3%	2,892	50.7%	548	23.4%	451	18.5%
Delta County	249	5.7%	270	5.6%	479	8.4%	230	92.4%	209	77.4%
Montrose County	236	5.4%	223	4.6%	387	6.8%	151	64.0%	164	73.5%
Garfield County	141	3.2%	144	3.0%	162	2.8%	21	14.9%	18	12.5%
Jefferson County	147	3.4%	163	3.4%	162	2.8%	15	10.2%	-1	-0.6%
Subtotal	3,117	71.1%	3,241	66.8%	4,082	71.6%	965	31.0%	841	25.9%
Other Colorado	879	20.1%	1,074	22.1%	1,058	18.6%	179	20.4%	-16	-1.5%
Other States	314	7.2%	491	10.1%	519	9.1%	205	65.3%	28	5.7%
International	73	1.7%	45	0.9%	40	0.7%	-33	-45.2%	-5	-11.1%
Total	4,383	100.0%	4,851	100.0%	5,699	100.0%	1,316	30.0%	848	17.5%
REP 14-County Total	3,189	72.8%	3,335	68.7%	4,189	73.5%	1,000	31.4%	854	25.6%

*Excludes students enrolled exclusively in the Extended Campus Program.

1998 and 2003 is Mesa State's attraction of more than 300 high school students who are enrolled concurrently in college-level classes and now make up approximately five percent of the college's enrollment (Figures 2-3 and 2-4). In fall 2003, academic courses were most often selected, with 97% of the registrations in the liberal arts and sciences. English composition and college algebra were the most common choices. In addition to serving concurrently enrolled students, nearly 500 area high school students attend classes daily at UTEC. The UTEC classes provide students with skills and knowledge which enable them to go to work at higher wages than a typical high school graduate who has no specialized training.

Access also has been extended to students from underrepresented races or ethnic groups. The number of undergraduates who have identified themselves as Asian/Pacific Islander, Black (non-Hispanic), Hispanic, or American Indian/Alaskan Native origin increased by approximately one-third between 1998 and 2003. The percentage of undergraduates from these groups for fall 2003 was 12.4%, a proportion that is similar to that of the region's population (13.9%, based on adults aged 25 and older). The largest numeric gain among the underrepresented groups for the five-year period was recorded for Hispanic students—an increase of 84 undergraduates—who now account for 7.6% of the headcount. The college must continue to work more aggressively, however, to recruit and retain a more diverse student body.

Part-time undergraduates showed a substantial increase, partly a response to the decline of the state's economy of the late 1990s plus the growth of high school enrollments. Many of these students are non-degree-seeking (7.6%) and are a mix of those seeking to upgrade their job skills, high school students concurrently enrolled in college courses, and those with a previously-earned baccalaureate degree who are pursuing courses for teacher certification. More than three-fourths of the undergraduates are enrolled full-time, even though their share of the total student body has declined over time.

Finally, while not shown in Table 2-3, college records provide some insight into the college's ability to reach first generation college students (defined as a financial aid applicant where neither parent attended college). Based on a count of the recipients between Academic Years 1999 and 2003, the number of first generation undergraduates attending Mesa State increased 22% and represented 37% of all aid recipients. The college's ability to reach these students is one of the ultimate efforts in improving educational attainment. A second is working in precollegiate environments to encourage students to continue their education beyond high school.

To Precollegiate Students

Mesa State extends access by making its resources available to precollegiate students through a variety of projects that are consistent with the college's role as a Regional

Figure 2-3. AGE DISTRIBUTION OF MESA STATE COLLEGE STUDENTS, FALL, 1993

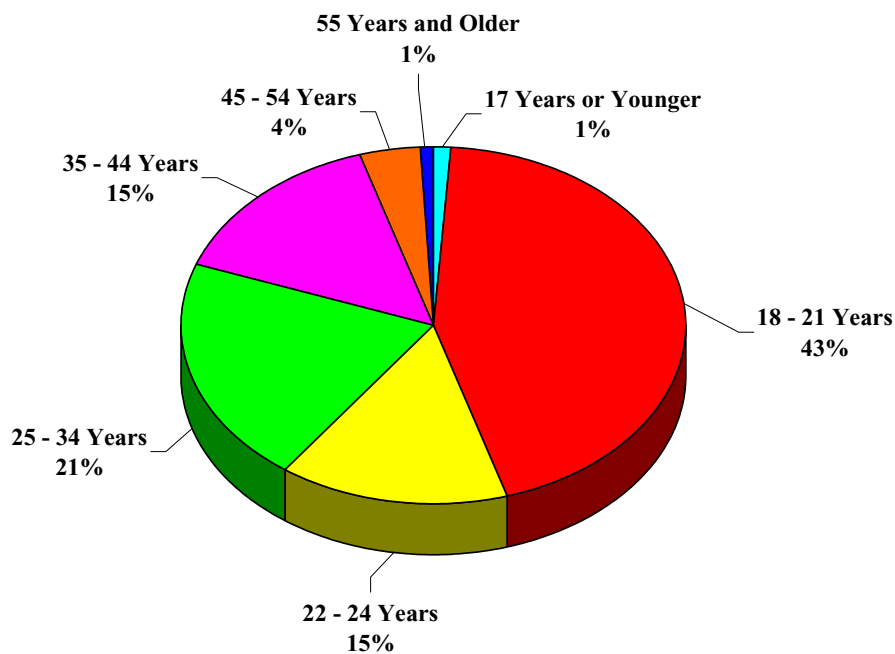
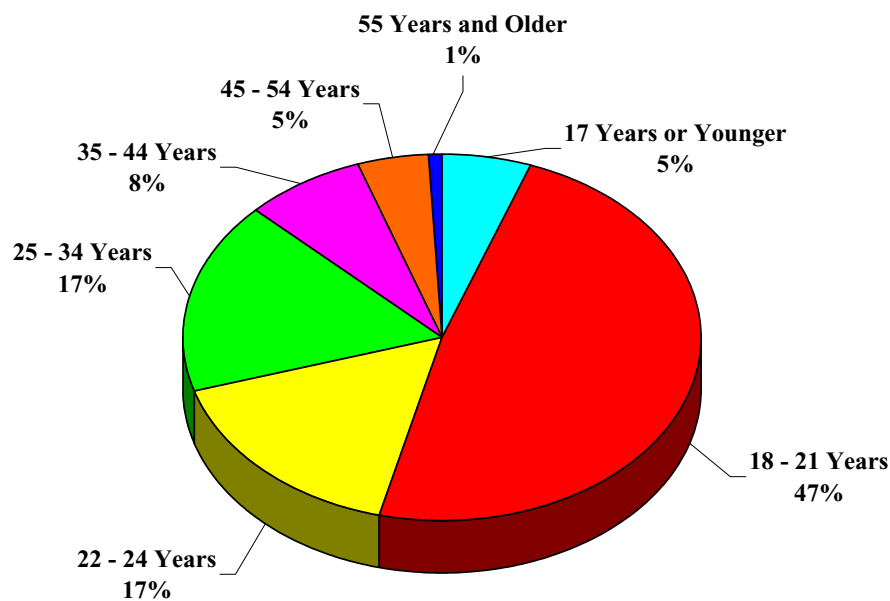


Figure 2-4. AGE DISTRIBUTION OF MESA STATE COLLEGE STUDENTS, FALL, 2003



Education Provider. When a student enrolls in courses that award high school and college credit, it not only reduces the cost of receiving a college education but also gives the student a head start on a college degree. Equally important, Mesa State's concurrent offerings serve as an incentive for students to continue their education beyond high school. The need to improve the college-going rate of high school students is a statewide priority for all of Colorado higher education.

Examples of how Mesa State provides access to precollegiate educational opportunities are found in the following entries as well as those in Chapter III:

- The Century Program (TCP) began in 2003 in collaboration with the Foundation for Excellent Schools. The program partners high school students with college mentors to encourage the students to plan beyond high school and complete a college education. Mesa State's program involved two of the initial five high schools in Colorado—Delta and Montrose—and in 2004, Olathe High School was added as a partner with Mesa State. Each high school's program involves 100 students. In addition to meeting with mentors, TCP students participate in activities promoting early college awareness, learning through community service, and discovering how to set and achieve goals.
- In the areas of mathematics and the sciences, the Shideler Center for Science Learning fosters closer collaborations between the faculty and students of Mesa State College and K-12 teachers and children by providing field science experiences. Funded initially by the Colorado Institute of Technology and more recently by the Shideler family, students and teachers from area school districts participate in field trips with Mesa State faculty and students. The team develops field guides and teaching aids based upon each trip. Each spring, forty MSC students volunteer as part of Math Extravaganza. Other events sponsored by the college include robotics workshops, the Science Fair, Math Counts, Computers for Kids, and Physics Outreach.



- The High School Leadership Conference, Distributive Education Clubs of America (DECA) workshops, and the LaRaza Leadership Conference exemplify efforts to enhance diversity and leadership.
- Sports, health, and wellness are represented through sports camps in baseball, basketball, football, soccer, softball, and volleyball, physical education workshops, and a home school physical fitness education program.

- Media Day annually recognizes the work of approximately 300 Western Slope high school students with newspaper and yearbook awards, and invites working professionals for lectures and workshops.
- The Advanced Learning Center (ALC), a collaborative effort between Mesa State and Mesa County School District 51, enables high school juniors and seniors to earn Advanced Placement and Mesa State College credits. ALC's interdisciplinary and academic content is hands-on, problem-based, and technologically-oriented. Its approach differs from traditional education in that students form theories about how the world works and then revise those theories or adopt new ones when previous ideas no longer fit their observations.

According to the U. S. Census Bureau, the socio-economic status of the residents of Western Colorado ranged from a per capita income of \$40,811 for Pitkin County to \$17,152 for Delta County in 2000. Approximately 9.3% of persons 25 years and older in the 14-county region reported living below the poverty level in 1999, mirroring the proportion for the state. The fact that a considerable share of the region's residents are at these income levels has critical implications for the role of Mesa State College as a Regional Education Provider. Discretionary spending is limited, and only a fixed set of colleges are affordable to the place-bound segment of the region's population. Accessibility and affordability, therefore, become crucial considerations in whether or not these populations will participate in higher education. That Mesa State College is often characterized as both accessible and affordable is a testament to its significance in raising educational attainment of Western Slope residents.

Balancing Access with Quality

As significant as broadening access to educational opportunities is, it must be balanced with the assurance that academic programming is of high quality. Maintaining the balance of access and quality is difficult enough, but for a college to do so in times of severe resource constraints, as Mesa State has experienced recently, makes quality program delivery even more challenging.

What, then, are the indicators that the college is succeeding in achieving a balance? This section documents examples of quality indicators from multiple perspectives. The most powerful assessments come from those served by the college—its students. Institutional surveys of entering undergraduates, as well as program graduates, provide the best measures of satisfaction with the quality of academic programs. Additionally, in April 2004, eight advisory groups of campus and community members met with Mesa State's Board of Trustees, and the perceptions of these groups offer other insights into the college's strengths. Yet other evidence

relates to the learning environment that the college offers its undergraduates. The following section summarizes some findings from each of the above.

Entering Student Perceptions of Academic Program Quality

An initial indication of quality begins with why students choose to attend Mesa State College. Without question, location and affordability are important considerations for why some students select the college. Particularly for those students who largely are place-bound in the region, Mesa State College is the closest geographic option relative to most other higher education campuses. Similarly, as an institution of access, Mesa State College can take pride in the perception held by the region's residents that it is financially accessible by keeping its tuition affordable.

It would be erroneous, however, to conclude that students attend Mesa State only because of its proximity and/or affordability. First, a number of institutions—both public and private—bring programs into Western Colorado, either by faculty coming to the region in person or via distance education. These programs directly compete for students with Mesa State College, providing students with other postsecondary academic opportunities. The college's recent enrollment growth indicates that Mesa State is competing successfully with its competitors. Second, but equally significant, evidence exists that a growing share of students are electing to attend Mesa State for academic reasons.

As part of the Entering Student Survey administered in fall semesters 2000 and 2004, incoming undergraduates were asked to rate the college at the time of admission. Comparing the two fall terms, incoming undergraduates were asked to share their impressions of Mesa State College. Their responses are summarized in Tables 2-4 and 2-5.

Table 2-4. COMPARISON OF FACTORS AFFECTING DECISION TO ATTEND MESA STATE COLLEGE BY STUDENTS ENTERING IN FALL 2000 and 2004

College Impressions	Percentage of Respondents Indicating Factor Was Very Important or Moderately Important in --	
	Fall 2000	Fall 2004
How important was each of the following in your decision to attend this college?		
1. Academic Reputation of the College	63.6%	85.4%
2. Availability of a Particular Program	67.9%	85.4%
3. Location of the College	85.7%	73.3%
4. Cost of Attending the College	78.1%	71.3%
5. Availability of Financial Aid/Scholarship	71.4%	70.9%

Source: ACT Entering Student Survey, Section III, A; MSC Entering Class, Fall 2000 and 2004

**Table 2-5. COMPARISON OF PERCEPTIONS OF MESA STATE COLLEGE
BY STUDENTS ENTERING IN FALL 2000 and 2004**

College Impressions	Percentage of Respondents Indicating They Strongly Agree or Agree with Statement --	
	Fall 2000	Fall 2004
Indicate your level of agreement with each statement about this college.		
1. College has high-quality academic programs	65.9%	70.9%
2. College has high-quality program in the subject area I plan to pursue	49.8%	67.4%
3. Cost of attending this college is reasonable	73.2%	75.7%

Source: ACT Entering Student Survey, Section III, B; MSC Entering Class, Fall 2000 and 2004

Table 2-4 reflects the growing importance placed on Mesa State's academic programs—both in terms of quality and availability—as students make decisions about their college of choice. While location and affordability continue to outrank academic factors, the point is that academic considerations are of increasing significance as students select where they want to go to school. A second indicator is found in Table 2-5, which asked students their level of agreement with the three listed statements. In this case, the statement that experienced the highest increase in agreement—more than 17 percentage points—was that Mesa State College “has [a] high-quality program in the subject area I plan to pursue.” Taking these points collectively, it is clear that the quality of the college's academic programs is beginning to compete with location and affordability as reasons to attend Mesa State College.

Indicators of Academic Program Quality

Mesa State College values teaching, learning, and student-faculty interaction, and the quality of these activities is fundamental to everything that the college represents. As Mesa State has evolved from a two-year institution to one now offering graduate education, it has carefully expanded a diverse range of programs that encompasses the liberal arts, professional, and vocational areas of study.

Some of what defines quality are indicators considered inputs—resources allocated to support the instructional role of the institution. The college's values statement clearly articulates the importance the college places on teaching, and the fact that only about four percent of the college's budget is allocated to central administration underscores this point. Inputs go beyond financial commitments, however, to include other criteria such as the following.

Faculty

One measure is the level of degree attainment of the college's faculty. For AY 2003 - 04, 61% of the full-time academic faculty held a doctorate, first professional, or other terminal degree. At least six faculty have been recognized as Fulbright scholars, enabling them to study, teach, and conduct research in a foreign country as part of a worldwide exchange of ideas. At UTEC, the technical faculty members are licensed experts in their respective fields based on formal education and training. Equally noteworthy, Mesa State's faculty have made a professional commitment to an institution where effective teaching is its highest priority.

The college's ratio of students to faculty for fall 2003 was 18:1. The importance of this measure is that Mesa State is a teaching institution where the faculty is available to students in a more intense manner and provides an important support system. The accessibility of the faculty and the ability for students and faculty to interact were commonly cited strengths by nearly all of the Trustees' advisory groups.

Special Academic Program Offerings

As an approach to learning, a liberal education expects students to wrestle with important issues and grow intellectually. This philosophy of education produces individuals who are informed, active, and responsible citizens. It has its strongest impact when studies extend beyond the classroom, requiring students to apply analytical skills to the world around them.

An element that distinguishes Mesa State College's undergraduate programs from many others in the state is the extent to which students have opportunities to participate in learning activities, typically off-campus, that supplement traditional classroom activities. Each year, an average of 250 students are placed in some form of applied learning that integrates academic study with problem-solving experience. These opportunities take many forms; among them are internships, structured research, clinical assignments, cooperative education placements, and service learning. These

experiences enrich the curricula by providing a structured opportunity to link theory and practice as students apply the knowledge and skills learned in the classroom to real world problems. They strengthen students' educational development, enable participants to assess if an academic major truly matches their career goals, and advance a sense of professionalism in the selected field of study long before students leave the campus. Table 2-6 documents the diversity of the college's applied learning opportunities.



Table 2-6. EXAMPLES OF APPLIED LEARNING EXPERIENCES
FOR MESA STATE COLLEGE UNDERGRADUATES

Academic Program	Student Experiences
Accounting:	Students in the Volunteer Income Tax Assistance (VITA) program, started in 1980, prepare approximately 200 tax returns per year.
Art:	<p>Art students in the foundry classes have been commissioned to design and produce sculptures by businesses and organizations, such as Norwest Banks, Redlands and Mount Garfield Middle Schools, Wingate and Columbus Elementary Schools, the college and its Alumni Association. Additionally, students have been commissioned to design and produce bronze awards for the Grand Junction Arts Council and have been juried into the Grand Junction Art on the Corner Exhibit, the Delta Downtown Permanent Art Exhibit, and the Gunnison Outside Art Exhibit.</p> <p>The foundry program has a liaison program established with School District 51 to produce original artwork for the various campuses, utilizing sculpture students as mentors to the middle and secondary school art students. All processes of the wax, investing and casting are done at the college. The Western Colorado Center for the Arts juried student show is an annual event held during the spring semester. Students submit work from the current school year and a juror (hired from outside the College) selects the work for the show. During the fall semester, ceramic students donate their artwork to the annual Empty Bowls fundraiser event, benefiting the Catholic Outreach, held at The Art Center.</p>
Biological Sciences:	More than 80 biology students earn credit hours for internships or research experience in several specialties. For example, findings have assisted the Redlands Mosquito Control District in that agency's capacity to control mosquitoes, many species of which harbor West Nile Virus. Other students are placed in internships and volunteer to work with the Department of Wildlife, the Bureau of Land Management, the Colorado Bureau of Investigation, and the Colorado Department of Health, especially during the summer.
Business:	<p>The marketing research and advanced marketing classes frequently have real businesses with which they work. Students participated in the development of a "best ad" marketing campaign for the new Honda Element, Mesa State's team placed 4th among the 24 schools participating in the competition. A significant number of business students intern with local and state businesses that include: Western Colorado Center for the Arts, Colorado Division of Wildlife, Walt Disney World, 3D Systems, Hamilton Sunstrand, City of Grand Junction, the Colorado legislature, the Incubator Center, St. Mary's Hospital, Walgreens, A G Edwards, and Wells Fargo Financial.</p>
	(continued)

Table 2-6. EXAMPLES OF APPLIED LEARNING EXPERIENCES
FOR MESA STATE COLLEGE UNDERGRADUATES

Academic Program	Student Experiences
Graphic Arts:	An internship is required of all graphic art majors during their senior year. This 135-clock-hour internship provides on-site job experience outside of classroom conditions. These experiences have occurred locally at businesses in Grand Junction and Western Slope communities and throughout Colorado. Additional placements have occurred in California, New York, and most recently, in the United Kingdom.
Human Performance and Wellness:	Between 20 and 30 students annually perform 20 hours each in the school system and community working with disabled individuals for the course Adapted Physical Education. Approximately 10-15 students perform internships each year, and an additional 5-10 students work with home-schooled children for physical education. Numerous students also are involved in health fairs throughout the year.
Mathematics and Computer Science:	<p>The software engineering class has designed software for local businesses and organizations, completing approximately 18 projects to date. The mathematics program sends one or two teams to a modeling competition each year, and approximately 10 of Mesa State's mathematics students participate in the National Putnam Exam, a mathematical competition administered each year by the Mathematical Association of America.</p> <p>For many years, computer science has put together one or two teams that compete in the ACM Regional Scholastic Programming Contest. Over the past two years a pair of students has worked with Pacific Northwest National Laboratory (PNL) to develop and test software that is used by the Department of Defense, Department of Energy, Environmental Protection Agency, and the National Research Council. This affords students the opportunity to get jobs with PNL when they graduate. Another group of computer science students has worked with Colorado West Mental Health to write programs to help process patient survey data.</p>
Mass Communications:	<p>Mass communications majors, numbering approximately 25 – 30 per year, enroll in internships where they work in various TV and radio studios, on newspapers and magazines across the Western Slope, and in various public relations offices and firms across the state.</p> <p>The community-based projects from the Public Relations Campaigns class and the Senior Seminar provide public relations services for area community organizations (e.g., publicity for the Child and Migrant Workers 50th anniversary activities in spring 2004). On-campus opportunities also are afforded through KMSA-FM, the student newspaper, <i>The Criterion</i>, and <i>Horizon</i> magazine. The focus of a recent edition of <i>Horizon</i> magazine was "Diversity: Celebrating Grand Valley Culture." That edition won third place in the nation for best overall Society of Professional Journalists magazine, finishing behind the Columbia University School of Journalism, and the University of Oregon.</p> <p>(continued)</p>

Table 2-6. EXAMPLES OF APPLIED LEARNING EXPERIENCES
FOR MESA STATE COLLEGE UNDERGRADUATES

Academic Program	Student Experiences
Music:	<p>Students in the music program gain experience working as music aids in school districts and performing with the Grand Junction Symphony, as well as churches in the community. Additionally, music education students assist Mesa County School District 51 with the Colorado West Marching Band Festival, solo and ensemble contests for instrumentalists and vocalists, and the Colorado West Music Festival.</p>
Nursing:	<p>Mesa State nursing students give 29,700 hours back to the community each semester through clinical assignments at local hospitals, long-term care and mental health facilities and through a variety of community outreach programs. Examples of these efforts include flu clinics, health fairs, car seat safety checks, health promotion teaching in the schools, and hearing and vision screening in the schools.</p>
Physical and Environmental Sciences:	<p>Faculty and students in the environmental science and technology program provide expertise and workers for a number of non-profit agencies, private companies, and local, state and federal agencies. Approximately 35 students per year are involved in projects ranging from assessment of hospital safety practices to revegetation projects on National Park Service lands to contamination assessments and remediation of abandoned mine lands.</p> <p>Students in the geology program work during the summer for the Bureau of Land Management and the U.S. Geological Society on geology-related projects ranging from river bank morphology to ground water contamination. Five students worked during 2004. After graduation, geology students have found permanent employment with these agencies. Students in the GIS minor are employed as interns by the Bureau of Land Management and the U.S. Forest Service. Class projects, conducted during the academic year, benefit a number of local and regional government agencies and private companies. Faculty and students in the biology and chemistry programs collaborate with local wineries to provide research expertise in viticulture.</p>
Social and Behavioral Sciences:	<p>Various disciplines in the Social and Behavioral Sciences provide more than 30 student internships per year to private, non-profit agencies, governmental agencies, and professional corporations. These have included placements at the Department of Social Services, the District Attorney's Office, and the Division of Youth Services. One particularly successful program is the legislative internship, which places Mesa State College students in legislative offices at the state and federal level. Some successful interns have run for and been elected to political offices.</p> <p>(continued)</p>

Table 2-6. EXAMPLES OF APPLIED LEARNING EXPERIENCES
FOR MESA STATE COLLEGE UNDERGRADUATES

Academic Program	Student Experiences
Spanish:	Mesa State's Spanish major is involving students in community-based experiences, such as working for more than 120 hours at the Judicial Center of the Mesa County Combined Court House to provide assistance to the Spanish-English interpreting squad.
Teacher Education:	Approximately 350 students in the Teacher Education Program (TEP) work in P-12 classrooms throughout the region. In Academic Year 2004 – 05, Mesa State College's TEP will recommend 100 student teachers for initial licensure. Many of those student teachers also work in AmeriCorps schools across the 14-county region.

Beyond these applied experiences, the college offers a rich array of opportunities that enhance undergraduate research skills. More than 1,000 Mesa State students annually engage in structured research, topics, independent studies, and seminars. The Student Scholars Symposium, held each spring, demonstrates undergraduates' passion for learning and the value of participating in scholarly activities from academic programs across the campus. In languages and literature, the department publishes *Pinyon Poetry*. It hosts Pinyon Press, which publishes short stories or a novel annually and gives students the opportunity to develop editorial skills and their critical acumen. *Literary Review* features Mesa State students' artistic and literary creations. Each year, 2-3 students in computer science and 4-5 students in mathematics have been involved in structured research projects with faculty.

Of special note is the Honors curriculum, which offers advanced, stimulating courses beyond the normal college-level classes. Because the program emphasizes intensive, challenging, active learning, it has grown from 30 students in fall 2000 to the current enrollment of 180. The Honors thesis option is patterned after a graduate school format and requires independent thought and mastery of research methodology appropriate to the program of study.

All of these special study opportunities provide students with multiple benefits. Beyond linking classroom learning with real world applications, many have gained valuable experience for further study at the graduate level. It should be noted that Mesa State graduates continue to be admitted to some of the nation's most prestigious colleges and universities for graduate study.

Tomlinson Library

In addition to the traditional classroom environment, the college offers an extensive network of academic support that is constantly being expanded and updated. A

significant starting point is the availability of materials through Tomlinson Library, both in terms of hard copy as well as on-line resources. Consider the following points related to the library's holdings:

- The library is part of the statewide Colorado Library Card borrowing system. Through the Marmot Regional Library Network, a shared automation cooperative, library staff works closely with others at the 19-member libraries, of which 16 are in the college's service region.
- As part of the statewide CLC borrowing system, anyone with a Colorado public, academic, or school library card may borrow from Tomlinson Library.
- The library joined with 46 Colorado libraries to provide a new virtual reference service. Mesa State librarians answered 1,510 online reference questions from the 13 Western Colorado counties in a six-month period last year.
- As part of a Grand Valley Library Consortia, the library jointly purchases databases and shares in the development and implementation of the *Daily Sentinel Index*. Over 6,600 queries were placed on that online database last year.
- The library web page was revamped to ease use of the extensive collections, and now 70 databases can be accessed off-campus by college students, faculty, and staff. These changes are particularly noteworthy in light of the stunning increase in use of electronic library resources. Database searching increased by 27% in one year (FY 2003 – 04) to over 133,000 searches, while full text downloads increased by 44% to 164,600 items retrieved. Adding these statistics to the library's print use clearly demonstrates that library research continues as a vital part of the students' educational experience.



Information Technology

Technology is an essential part of Mesa State College, both in its primary role of teaching and in the support that it provides to that mission. In that context, the institution's philosophy toward technology is changing from being a tool focusing on infrastructure issues—networks, hardware, and accessibility issues—to one of a utility and how technology can be used to enhance both teaching and learning. Mesa State College has embraced that mission by:

- developing a high-speed infrastructure which connects all campuses, buildings, computer labs, and residence halls to facilitate delivery of multi-media content and Internet access;



- upgrading most classrooms and laboratories to aid in the delivery of interactive course content;
- developing a real-time video teleconferencing system through the college's extended campuses that uses a state-of-the-art large bandwidth inter-structure for the delivery of specialized graduate and undergraduate programs. This system allows instruction to be directed to students within outreach areas and may be their only access to higher education;
- addressing the sustainability of technology advancement in an era of limited resources. A plan is in development, which will equitably and efficiently advance the technological needs of academic instruction and improve the current support systems; and
- implementing additional wireless "hotspots" to allow mobile access to the network resources. The technology plan will consider the outreach requirements—including online coursework—to better address the needs of the rural students in the college's 14-county service area.

Each of the above elements is important to the educational process, and to a certain extent, provides some indication of academic quality. The truest measures of quality, however, lie in the results of the educational experience—student outcomes. The next section presents some findings about student performance and satisfaction.

Assessing the Quality of Experience by Mesa State Graduates

The college is collecting information on student success on exit exams. To date, most of the data are preliminary and the number of student test-takers often is too small to report valid results. In several fields of study, however, standardized test results are available due to state or national licensure/accreditation requirements. The results of graduates from Mesa State's professional programs are summarized below:

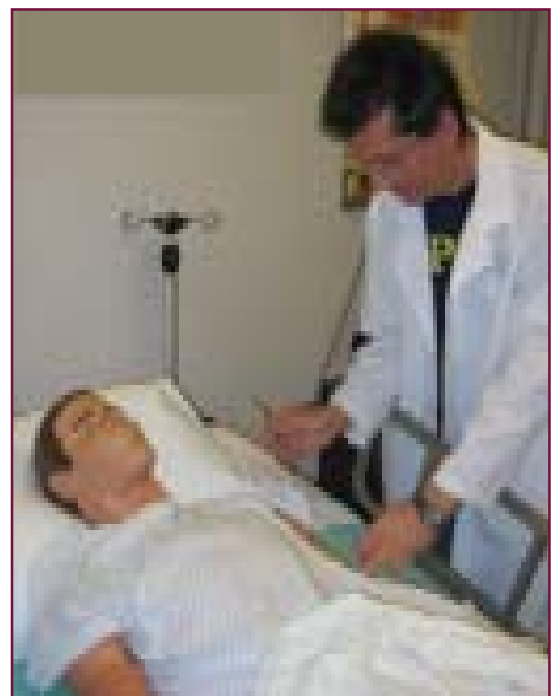
- Nursing students taking the National Council Licensure Exam for Registered Nurses (NCLEX-RN) typically have an annual pass rate of 90% or higher.

- Graduates of the radiologic technology program have achieved a 100% pass rate on the national certifying examination for the past five years.
- The Program for Licensing Assessment for Colorado Educators (PLACE) measures a student's knowledge in the content area before being recommended for initial licensure in teacher education. Mesa State students in this program scored a 95% pass rate in elementary education and a 90% pass rate for students seeking secondary education licensure.
- Business scores on Educational Testing Service's Major Field Test have continued to improve, with the most recent administration reaching an average score of more than 160, two points higher than the prior testing session.

As data become available for more academic programs, the college will be better able to assess the quality of a broader range of students' experiences.

The best overall indicator of how well the college is fulfilling its mission, however, is to ask its graduates to grade the college at the time they complete their program of study. On a national survey of student satisfaction, Mesa State graduates scored their college experiences significantly higher than students from other institutions, particularly on measures related to academic quality. The results for Academic Year 2003 – 04 are summarized in Table 2-7. Because the college uses a survey from American College Testing (ACT), results for Mesa State College can be compared with those for other public colleges across the U.S. as well as a national sample of colleges. The findings are quite striking. Mesa State respondents place a high value on the effectiveness of classroom instruction (average = 4.22), interaction with faculty (average = 4.24), and class size (average = 4.30). The graduates overall assessment of their collegiate experience averaged 4.12 on a scale where 5.00 was the highest.

Similar indicators of satisfaction with the quality of instruction are found in other assessments. In a survey of students enrolled at Mesa State College's Montrose campus, 92% of the respondents indicated that they would recommend Mesa State College-Montrose to other students. Second, from a follow-up survey of 2002 – 2003 UTEC graduates, 97% rated instruction as very good or good and 90% scored course content similarly.



**Table 2-7. PERCEPTION OF MSC's ACADEMIC ENVIRONMENT
BY STUDENTS GRADUATING DURING AY 2004**

Academic Indicator	Mesa State College Avg. Score	Public Colleges Avg. Score	National Sample Avg. Score
	Average Score (5 = Very Satisfied)		
Instruction in Your Major Field	4.22	3.88	3.93
Course Content in Your Major Field	4.07	3.87	3.90
Attitude of Faculty Toward Students	4.24	3.89	3.99
Out-of-Class Availability of Your Instructors	4.21	3.85	3.93
Class Size Relative to the Type of Course	4.30	4.04	4.14
Availability of Your Advisor	4.18	3.73	3.82
Value of Information Provided by Your Advisor	4.02	3.68	3.76
The College in General	4.12	3.87	3.90

Source: ACT Student Opinion Survey, MSC Graduating Class AY2004 (Response Rate = 79%)

Concluding Remarks

As a regional public institution, Mesa State College has been a major contributor to the improvement in educational attainment by residents of Colorado's Western Slope. With its designation in 2003 as the Regional Education Provider for a much larger geographic area, the college is faced with the daunting challenge of trying to continue the balance of educational access with academic quality in this era of unpredictable resource availability. As it attempts to respond to this challenge, the college must be more creative and flexible in what and how it delivers programming to meet the educational needs of the residents it is mandated to serve. ■

III. Contributing to the Region's Quality of Life

A regional education provider designation defines the educational responsibilities of an institution, but most public colleges typically have some level of engagement in their community without that specification. An engaged institution is one in which its members provide voluntary and professional service as part of a broader responsibility to apply their knowledge toward the betterment of society. Often times, faculty research addresses issues that are defined by the community and simultaneously involves college students in the process of learning. In other cases, sharing knowledge in the K-12 classroom links higher education with its elementary and secondary partners. Service clearly is expanded well beyond the confines of department and college committees and into professional associations that offer expertise and talent that enhance a region's quality of life.

Quality of life is a value-laden notion that refers to the status, or well-being, of a region's population when compared to others. Though a nebulous concept, indicators exist that measure a region's quality of life, among them being the cultural environment in the broadest sense of the phrase. In addition to its educational role, a college frequently serves as a focal point for the social and cultural environment of a region, thereby making it a more attractive place in which to live. This chapter highlights the many forms that Mesa State's programs, outreach activities, and volunteerism take and include:

- educational activities (e.g., high school outreach, athletics, lectures and forums, in-service programs for teachers, community education);
- cultural programs in art, music, theatre, and dance;
- professional expertise shared by faculty and staff through community service and research;
- volunteerism performed by students and AmeriCorps participants; and

- college facilities made available to the public (e.g., Tomlinson Library and the College Center).

Without a doubt, the impact of these programs and activities is varied, but they share a common denominator: bettering the quality of life of Western Colorado.

Educational Activities and Programs

High School Outreach Activities Sponsored by Academic Programs

The influence of the college's academic programs extends beyond the traditional classroom environment. Mesa State College faculty and students participate in a

number of outreach activities that enhance the education of school children, teachers, and citizens of the region.

The following events illustrate that point:



- Each year Mesa State hosts the Western Colorado Regional Science Fair. Faculty and students serve many roles from fair director to judges to logistical support. On average, 300 middle school and high schools students, teachers, and parents from thirteen counties around Western Colorado participate.
- Faculty in the mass communications program hosts a Media Day where 200-300 students from eight to 12 high schools around Western Colorado attend a day of workshops and competitions. Over 100 prizes are awarded for excellence in high school journalism.
- Math Extravaganza is a yearly event hosted by the faculty and students in mathematics. Approximately 100 students from seven high schools in the region come to Mesa State for a day of classes and workshops, culminating in a competition where prizes are awarded for excellence in mathematics.
- The Mesa State College Writing Conference features workshops and lectures by guest writers as well as faculty and majors in creative writing. The conference also includes a writing contest with a \$1,000 scholarship to Mesa State as the prize. This conference is open to high school students on the Western Slope, and generally, between 200-300 attend.
- Faculty and students in the nursing and human performance and wellness departments participate in numerous health fairs held throughout the region each year.

- Mesa State hosts History Day, a regional history competition for middle and high school students. Over 90 students and their parents attend. Mesa State faculty, students, and community members serve as judges for the competition.
- The music department hosts a number of competitions and festivals that bring over 1,000 middle and high school students from around the Western Colorado region to Mesa State's campus each year. The Fall Choral Invitational and Best of the West Select Band involve 160 high school musicians who take master classes with Mesa State faculty and perform joint concerts with Mesa State choirs and bands. The Colorado West Music Festival is a three-day event that averages 500 middle and high school students per day on the campus for competitions and performances.
- Every year, the theatre department holds a one-act play contest for high school students. Between 50 and 100 students from 6 - 8 schools come to compete. Since 2002, the department has sponsored a summer dance festival for teens and adults that includes two public performances, one presented by the festival attendees and faculty and the second by the Colorado Ballet.

Intercollegiate Athletics and Summer Camps

As one of the college's most visible programs, intercollegiate athletics frequently has been a significant contributor to the area's quality of life, as well as an effective means for attracting the region's residents to Mesa State College. The men's program at Mesa State, with 191 players, includes baseball, basketball, football, and tennis. For Academic Year 2004 - 05, 113 women played basketball, cross-country, golf, soccer, softball, tennis, or volleyball.

The most obvious effect that the program has on the region is that it provides spectator sports. According to MSC's Department of Athletics, approximately 44,650 individuals attended games in 2003 - 04, led by basketball and football. Involvement in the region, however, extends well beyond those competitions. For example, one of the most popular activities is the summer camp program, which taught baseball, basketball, football, soccer, and volleyball skills to 4,540 campers last year. These experiences develop participants' athletic knowledge and team concepts under the supervision of college personnel. Other examples of activities in which the athletic program is involved in the community are:



- offering a reading program and math tutoring in local elementary schools;
- partnering with Grand Junction Parks and Recreation for free, hour-long football, basketball, and baseball clinics for 150 – 200 youth;
- teaching softball athletic skills and sportsmanship to 30 children who are physically challenged through the Challenger Program;
- building and maintaining an outdoor sand volleyball court at the Tree House as well as volunteering hours; and
- hosting a middle school mini-tennis tournament for area schools, with two teams from each school competing in a tournament following the three-week training.

Mesa State additionally hosts numerous regional high school competitions in tennis, basketball, and wrestling, while the annual tennis tournament welcomes over 400 participants from the Grand Valley as well as out-of-state.

Lectures and Forums

Mesa State builds on the expertise and interests of its faculty by sponsoring guest lecturers who bring their own unique scholarship, diversity and opinions to the community. The following is a partial listing of guest lecturers who presented at the college during Academic Year 2003 - 04:

- Ann Cooper, executive chef and director of wellness and nutrition for the Ross School in East Hampton, New York;
- Maryo Ewell, noted community arts advocate and former associate director of the Colorado Council on the Arts;
- John P. Alsobrook, a pharmaceutical industry consultant and affiliate faculty member of the Yale School of Medicine;
- Joseph Kempler, Holocaust survivor;
- David Horowitz, president of the Center for the Study of Popular Culture and nationally-known writer, editor, and political commentator;
- Craig Childs, award-winning author, noted naturalist, adventurer and desert ecologist; and
- Rich Kelley, trumpet player for Boston Brass.

In-Service Activities for Teachers

Mesa State College, through its Extended Campus Program, initiated in-service programming for teachers in spring 2004 serving 215 professionals. The following is illustrative of the offerings:

- “Quality Childcare” – 12 students in Montrose funded through a state childcare grant.
- “The Valued Link” – a cooperative program with the Uncompahgre BOCES for 63 students in paraprofessional educator training.
- “AP Vertical Training in Mathematics” – a cooperative program with the Colorado Department of Education for 27 students. A similar program in English was offered for 16 students.
- Library Education course – a cooperative program with the Regional Library system in Grand Junction.



A dramatic increase in programs and participants is anticipated for the current academic year, with classes scheduled at new sites in Delta, Nucla, and Hayden High Schools.

Center for Economic Education and the Bureau for Economic and Business Research

The Mesa State business programs are active in the community, with many of their efforts directed at helping educate secondary teachers through the Center for Economic Education. The center was established to provide a link between Mesa State College, primary and secondary school districts, and the business community on the Western Slope. It also serves as a resource for K-12 economics teachers by providing workshops, seminars, curriculum development, information, and materials. The center presents 2 - 4 workshops each year, with about 20 Mesa County Valley School District 51 teachers typically attending each.

The Bureau for Economic and Business Research produces a quarterly newsletter distributed to 1,200 businesses and individuals in the community. The newsletters include an article of interest to the business community and present historical economic trend data and forecast leading and price change indicators.

Community Education

Mesa State College offers a wide array of courses that significantly expand the college's reach to audiences whose interests and needs are beyond those of the traditional academic environment. In Academic Year 2003 – 04, the college's Community Education Center enrolled nearly 1,700 adult learners in 174 personal enrichment and professional development community education classes. Personal enrichment encompassed diverse topics that included health, astronomy, yoga, nutrition, identity theft, photography, personal finance, software training, and organizational skills.

In recent years, the center has added customized business training for dozens of area businesses, such as specialized classes that provide company employees with skills in new software or on-site instruction in conversational Spanish. For example, conversational Spanish classes were given to 75 employees from St. Mary's and Community Hospitals and at Ute Water. Another 60 employees of St. Mary's took basic computer courses. Yet a third example is the result of an agreement between the college and the Associated Landscape Contractor of Colorado (ALCC) whereby UTEC serves as one of 17 training and testing centers used by ALCC to train individuals for landscaping careers. The availability of a test site in Grand Junction not only allows easier access for Western Slope residents, but also offers the opportunity for local landscape contractors to upgrade their professional skills and become Certified Landscape Technicians (CLT). The first session was held in June 2001, and annual sessions have averaged 46 attendees from around the state.

Cultural Programs: the Fine and Performing Arts

For many, cultural programming is one of the most obvious measures of quality of life, and in that context, Mesa State College has been a major contributor, serving as the center of culture in Western Colorado for decades. Mesa State has a variety of programs in the fine and performing arts, all of which offer high quality cultural

experiences to students and to the larger community. Many of the college's graduates then become the mainstays of the regional arts community. Programs in art, music, theatre and dance provide regular events for the public. The arts combined result in over 20,000 visits to campus for cultural events.

Art

The Johnson Art Gallery, located in the college center, provides a dedicated space for art exhibits open to students, faculty, and the Grand Junction community. The gallery hosts four types of shows:



student shows, faculty shows, invitationals, and juried shows of professional artists. It has an active schedule, averaging ten to twelve shows each year, providing both Mesa State College and the community at large with artistic cultural experiences. More than 40 people a day wander into the gallery. Senior studio art majors are required to have an exhibit during the spring before graduation. Along with these exhibitions, gallery talks, receptions to introduce the artists, and critiques are available to the students.

Each show is accompanied by a reception for the public, with the artist(s) present to speak and answer questions. Reception attendance is usually between 70 and 110. Between reception attendees and gallery visitors, more than 8,000 people a year take advantage of the art department's shows.

Many art education graduates remain in Western Colorado and teach art in the public schools. Recent Mesa State art education graduates have taken jobs in Mesa County, Rifle, Plateau Valley, and Debeque. The department has hosted the Western Slope Art Education Conference for renewal or graduate credit. Last year 85 art educators from 22 Western Slope communities attended.

Music

In 2003 the Moss Performing Arts Center opened, giving Mesa State not only more classroom and other student spaces, but more public performance spaces as well. The new facility is home to the 288-seat Recital Hall, the only public building in the Grand Junction area built specifically with acoustics for musical performance. The college schedules music performances in the 600-seat Robinson Theatre as well. During the course of the academic year, the department offers over thirty performances to the community. Nearly 4,300 tickets were sold for concerts during the 2003 – 04 season.

The Music at Mesa Guest Artist Series brings in 4 - 6 nationally or internationally prominent musicians annually. Faculty ensembles and student ensembles make up the rest of the 25 performances on the annual concert schedule. Student groups include six large performing ensembles: Chamber, Concert, and Women's Choir, Symphony Orchestra, Wind Symphony, and Jazz Band. The Holiday Concert alone fills the Robinson Theatre. Other concerts command audiences of generally between 100 and 200 people. The choirs also perform annually with the Grand Junction Symphony Orchestra.

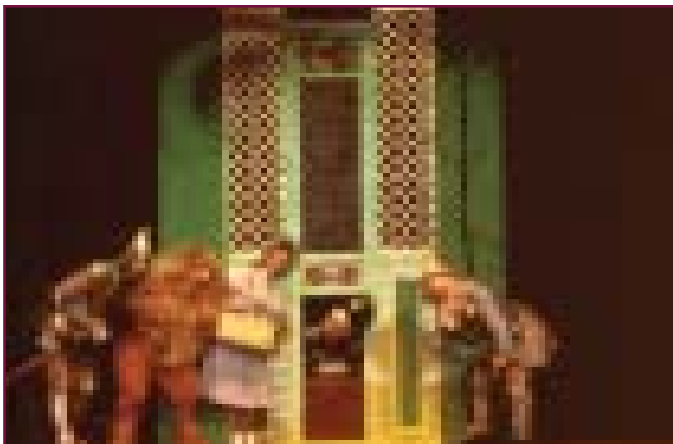


The applied teachers from Mesa State hold the principal positions in the Grand Junction Symphony Orchestra (GJSO), and the symphony's director teaches for the college's music department. Mesa State's music faculty organized and continue to perform in the Western Colorado Jazz Orchestra (WCJO), the newest group in the Grand Junction Musical Arts Association. The group performs contemporary and classic jazz big band repertoire with the highest professional standards. Just as the GJSO presents musical works from the western classical music tradition, the WCJO similarly performs musical works from all eras and styles of the American jazz tradition.

The department is host to a number of special events during the year, many of which are for K-12 teachers and students. These include the Colorado Bandmasters' Association Honor Jazz Band, All-State Choir Auditions, the Colorado West Music Festival, the Best of the West Select Band, the Sonatina Festival, and solo and ensemble contests in strings, choir and band. The faculty serves as resources for music teachers around the region, and they often adjudicate and hold clinics in high schools across the state.

Theatre, Music Theatre, and Dance

The four annual main-stage productions of Mesa State's theatre program have been central to the region's theatre life for decades, since the time that the college's productions were the only show in town. In the last ten years the community has become home to many more theatrical organizations. More often than not, however, they depend on the college's graduates and current students for much of their talent. Despite the competition, the college is still home to the Western Colorado's big productions and straight plays.



In 2003 - 04, the audience number totaled nearly 6,300 for the four main-stage productions: "Chicago," "Les Liaisons," "Trojan Women," and "Fortinbras." Beginning in 2004, the experimental theatre began offering less-known, more unusual performances. Also in 2003, the Rocky Mountain Theatre Festival came to Mesa State, bringing more than 500 college students from the Rocky Mountain region to compete and participate with local students.

Dance faculty and students also present two concerts a year. The concerts are perennially popular with the community. Last year 1,500 people attended one of four nights of concerts.

Professional Expertise Shared by Mesa State Faculty and Staff

Faculty at Mesa State College have the primary responsibility for the formal education that occurs in the classroom. The faculty's collective knowledge transfers a body of knowledge that enables the college to offer eight vocational certificate programs, 17 associate-level programs (either for transfer or in an applied science area), 29 baccalaureate programs, and a master's degree in business administration. But a significant role that has an equally important bearing on the college's service region is the faculty's participation in research on, or service to, the local community.

College faculty are engaged in a myriad of research projects. Funding varies from nationally-competitive agencies (e.g., National Science Foundation) to local, private support, to college resources. The list found in the "Contributions" section of this report offers a sense of the variety of research projects in Western Colorado communities in which the faculty is engaged. The list also documents the significant volume of community service provided each year by faculty to elementary and secondary schools in the 14 Western Slope counties.

The college's staff, as well as its faculty, frequently share their expertise with numerous civic groups and serve on community boards. The compilation of contributions should be viewed as a sampling of the lectures, performances, seminars, adjudicated contests, and workshops in which the faculty and staff participate, as it is quite likely that this summary understates their collective contributions.

Finally, six educational presentations are made each year by faculty to the campus community and the public through the Faculty Colloquium Series. Sample topics from the series include Fulbright scholars discussing their experiences abroad in Norway, Belgium, and Hungary, as well as faculty presenting research on subjects such as: measurements of the ancient Maya; diaries from early American history; Spanish poetry; agents of bioterrorism; and the effects of livestock grazing on plant cover, water runoff, and sediment production.



Volunteerism

Community Service by Scholarship Students

Some Mesa State College scholarships require that the recipients perform community service hours. Fifty hours per academic year is the typical contribution. The service is supervised volunteer work for organizations serving the general public, and enables students to use their skills and talents while

helping others in the community. Examples of locations where volunteers have provided community service are hospitals, senior centers, daycare facilities, police and fire departments, and federal, state or city government offices. Nearly 400 students completed 17,500 hours of community service in FY 2003 – 04.

AmeriCorps

Mesa State's AmeriCorps Program is part of the Corporation for National and Community Service and was established through a grant to the college in 1997. The program serves incarcerated, homeless, expelled, pregnant, physically- and mentally-challenged, and academically-delayed youth at approximately 20 sites within Mesa County. The program is beginning its eighth year with a mission "to develop and support interagency collaborative efforts that strengthen available resources to youth in Mesa County" and relies on approximately 35 volunteers annually.

The AmeriCorps Program started a tutoring and mentoring program at seven sites in 1997. By its sixth year—2003—the program had expanded to 38,900 documented hours of community service, volunteered at 12 non-profit agencies and six school sites. Over 10,000 youth participated in at least one Mesa State AmeriCorps function. The tutoring and mentoring program exceeded its goal of providing direct service to at-risk youth. Other accomplishments of the program include:

- supporting the creation of Tree House, a drop-in and referral center for teens;
- developing a support group for young fathers at Dos Rios;
- providing outdoor recreation experiences for 50 youth with severe physical and mental challenges;
- developing a readers' group for 16 incarcerated girls;
- linking adult writers' groups as mentors for 29 young writers at four alternative schools;
- assisting eight expelled youth to start a farmer's market;
- initiating a mentoring program at the homeless shelter;
- developing an education component at Hope Haven, a home for pregnant teens, which led to 37 youth receiving a GED or high school diploma; and

- designing a collaboration between the local school district, three non-profits and the detention center to provide wrap-around services to 137 youth.

AmeriCorps members also organize and participate in community service days. In 2003, the program was instrumental in collecting and shipping more than one and one-half tons of supplies to U.S. troops stationed overseas in honor of Colorado Cares Days. The Tree House—providing after school programs to 275 middle school youth—was selected as the 2004 Colorado Cares Days project site. As part of the project, AmeriCorps members planted gardens, installed a patio, painted the facility, and provided patio furniture.

College Services and Facilities Available to the Public Tomlinson Library

Tomlinson Library, dedicated in 1986, contains over 190,000 volumes. It includes a large government documents collection and world class geology library and is equipped with state-of-the-art computer technology. The library brings a growing collection of resources to the Western Slope that is unmatched within the 250-mile radius that extends to Denver and Salt Lake City, Utah. Developed largely to support the college's instructional and research needs, the library's staff, facility, and technology serve a far broader clientele, numbering more than 350,000 patrons during FY 2003 - 04. The library engages in a number of activities in Western Colorado illustrated by the following:

- loaning materials to citizens throughout the region through Interlibrary Loan. During FY 2003 - 04, over 1,000 items were loaned to 57 libraries on the Western Slope.
- implementing new technologies. College employees consult routinely with other libraries' staff and travel throughout the region to provide training and helping libraries establish procedures.
- offering five to ten library instruction classes annually to external organizations, such as regional high school classes, Grand Junction Business Incubator, in-service teacher training for District 51, and to other local organizations on a request basis.
- hosting library training programs for the public library and the district. Each year, the library hosts a series of national teleconferences for librarians from the region.



- delivering library sciences courses through the college's Center for Teacher Education. These classes are attended by working paraprofessionals employed in schools or public libraries in Glenwood, Telluride, Montrose, Delta, and Mesa counties. The courses are highly rated and improve the quality of library services through better-trained staffing.
- participating in the "One Book, One Community" project. Co-sponsored with the public library and the school district, this project promotes literacy.



W. W. Campbell College Center

The Campbell College Center is home to two dining facilities, as well as the college bookstore, student government, art gallery, outdoor program, game room, and the Cultural Diversity Center. It also contains Liff Auditorium and several meeting rooms that are made available to the public for a nominal fee. During FY 2003 – 04, approximately 325 businesses (local and non-local), individuals, and non-profit agencies used space in the college center, accommodating 18,500 visitors.

Concluding Remarks

Mesa State College is responsible for and involved in a wide-range of activities and programs that have a significant impact on the surrounding region's educational, social, and cultural environment. Whether it is the obvious contributions ranging from the availability of recreational and cultural events to providing opportunities above and beyond the traditional academic offerings, the college is clearly an active and proactive participant in the region. Though often subtle and sometimes amorphous, it is clear that there are a great many contributions made by Mesa State to the quality of life experienced by the residents of Western Colorado.

IV. Estimating the Economic Impact of Mesa State College

The impact of Mesa State College on its surrounding counties extends well beyond an organization that delivers educational programs and enhances the region's quality of life. A third significant contribution is the economic impact of the college on the local economy. Beck and Elliot¹ define economic impact as, "... the difference between existing economic activity in a region given the presence of the institution and the level that would have been present if the institution did not exist".

This chapter details the economic impact of Mesa State College. The college's economic activity is examined, based on the 14 counties for which the college is the Regional Education Provider: Delta, Eagle, Garfield, Grand, Jackson, Mesa, Moffat, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Miguel and Summit Counties. It estimates an economic impact of Mesa State College for Fiscal Year 2003 - 04 and details increases in economic activity between 1999 and 2004.

An Overview of the Economic Impact of the College

The methodology for this section relied heavily on the American Council on Education model developed by Caffrey and Isaacs² which examines expenditures made by the college, employees, and students, as well as visitors attending college activities. This study included five areas of Mesa State College expenditures that have an economic impact upon the surrounding community:

- Employee expenditures: items purchased by Mesa State employees such as housing, clothing, food, etc.;

¹ Roger Beck and Donald Elliot, "Economic Impact Study of Regional Public Colleges and Universities," *Growth and Change*. Spring 1995, Volume 26, Issue 2, p. 245.

² John Caffrey and Herbert Isaacs, *Estimating the Impact of a College or University on the Local Economy*. (Washington: American Council on Education, 1971).

- College expenditures: goods and services purchased from the local community such as printing, janitorial supplies, health care, etc.;
- Capital expenditures: labor, materials, furnishings, etc. associated with the construction of new buildings and/or the renovation/refurbishment of existing structures;
- Student expenditures: purchases by Mesa State students such as food, books, supplies and transportation; and
- Visitor expenditures: items such as food and shelter, stated as a per diem amount, purchased by visitors as they attended various college activities.

In the following section, each of the five categories of expenditures is examined separately for its direct economic impact, as well as its indirect impact due to the multiplier effect. The multiplier effect suggests since a dollar spent by an individual becomes the income of another person, the initial dollar being “respent” will have a greater impact on the economy than just the original dollar. Hence, dollars spent “grow” as they are “respent” throughout the economy. When the expenditure categories were increased using a multiplier of 1.8, the college’s resulting estimated economic impact totaled \$144 million for FY 2003 - 04.

Expenditure Categories

Employee Expenditures

Employee expenditures include all those items purchased by employees of Mesa State College as they spend their paychecks in the local community. Purchases range from rent/mortgage payments to clothing to entertainment. According to the Bureau of Labor Statistics Consumer Expenditure Survey, housing and transportation are the two largest areas of consumer expenditures. Due to the location of Mesa State College, the majority of the dollars spent by MSC employees stay in the local economy. As noted previously, Mesa State employs 1,194 full- and part-time faculty and staff, and part-time students. The college thus has a significant impact on employment levels and economic activity in the surrounding community.

To determine employee expenditure dollar amounts, all monies budgeted for salaries for all departments and auxiliary accounts were included. Benefits, which included retirement, medical insurance, life insurance, etc. were excluded, and taxes estimated at 15% also were subtracted from the salary figures.

**Table 4-1. MESA STATE COLLEGE
SALARY EXPENDITURES, 1999 - 2004**

Year	Salaries	Less 10%	Total Added
1999-00	\$13,802,874	\$1,380,287	\$12,422,587
2000-01	\$14,313,533	\$1,431,353	\$12,882,180
2001-02	\$15,359,316	\$1,535,932	\$13,823,384
2002-03	\$15,552,807	\$1,555,281	\$13,997,526
2003-04	\$15,425,847	\$1,542,585	\$13,883,262

Again, due to the college's location, it is assumed there is little dollar leakage out of the area, particularly in the major areas of housing, food and transportation. Vacations and entertainment, however, are examples of dollars that may leave the local economy. For purposes of this study, it was assumed that 10% adequately accounts for leakage out of the 14-county area encompassed by this study. Employee salaries for FY 2003 - 04 totaled \$15.4 million after taxes (Table 4-1). Adjusting for leakage, \$13.8 million were added to the local economy through employee expenditures, an increase of approximately \$1.4 million over FY 1999 - 2000.

Using the Bureau of Labor Statistics Consumer Expenditure percentages, Table 4-2 documents how those salary dollars were spent in the local economy. The salary dollars exclude benefits and are adjusted for after-tax dollars and leakage out of the area. The table assumes an average income of \$40,000-\$49,999 for the Midwest Region, using the percentages for FY 2001 - 02, the most recent available data.

College Expenditures

Mesa State College purchases a variety of items from the surrounding community that range from printing to janitorial supplies to health care. In order to determine the economic impact of expenditures by Mesa State on the region, the following methodology was employed. Budgets for all departments and auxiliary accounts were totaled, and all items except out-of-state items were included as monies spent by the college. After review and analysis of vendor lists of college expenditures provided by the college's Office of Purchasing, it was concluded that approximately 50% of the total expenditure dollars were spent in the 14-county region.

**Table 4-2 MESA STATE COLLEGE
EMPLOYEE EXPENDITURES BY CATEGORY, 2003-2004**

<u>Category</u>	<u>Percent</u>	<u>Value</u>
Food		
Food at home	7.44%	\$1,032,915
Food away from home	5.40%	\$749,696
Total Food	12.84%	\$1,782,611
Alcoholic Beverages	1.25%	\$173,541
Housing		
Shelter	16.65%	\$2,311,563
Utilities, fuels, and public services	6.75%	\$937,120
Household operations	1.22%	\$169,376
Housekeeping supplies	1.33%	\$184,647
Household furnishings and equipment	3.79%	\$526,176
Total Housing	29.74%	\$4,128,882
Apparel and Services		
Men and boys	1.01%	\$140,221
Women and girls	1.57%	\$217,967
Children under 2	0.24%	\$33,320
Footwear	0.66%	\$91,630
Other apparel products and services	0.53%	\$73,581
Total Apparel and Services	4.01%	\$556,719
Transportation	20.97%	\$2,911,320
Health Care	6.16%	\$855,209
Entertainment	4.70%	\$652,513
Personal Care Products and Services	1.21%	\$167,987
Reading and Education	1.96%	\$272,112
Tobacco Products and Smoking Supplies	1.31%	\$181,871
Miscellaneous	1.89%	\$262,394
Cash contributions	3.19%	\$442,876
Personal insurance and pensions	9.99%	\$1,386,938
TOTAL (Differences due to rounding errors)	99.99%	\$13,883,262

As summarized in Table 4-3, college expenditures exceeded \$47 million for Fiscal Years 1999 - 2004 and averaged \$9.4 million per year. Expenditures increased by approximately \$2.4 million over the five-year time frame. The total dollar amount expended by the college was \$10.9 million for FY 2003 - 04. Assuming that 50% of those dollars were spent in the surrounding region, nearly \$5.4 million were added to the local economy by the presence of Mesa State College in FY 2003 - 04.

**Table 4-3. MESA STATE COLLEGE EXPENDITURES
1999 - 2004**

Year	Expenditure Amount	% Spent Locally	Total Added
1999-00	\$8,534,436	50%	\$4,267,218
2000-01	\$8,900,828	50%	\$4,450,414
2001-02	\$8,953,972	50%	\$4,476,986
2002-03	\$9,762,700	50%	\$4,881,350
2003-04	\$10,965,243	50%	\$5,482,622
5 Yr Total	\$47,117,179		\$23,558,590
Annual Avg	\$9,423,436		\$4,711,718

Capital Expenditures

Capital expenditures were evaluated on a year-to-year basis. During the time frame of this study, a variety of capital projects was completed/continued. The Fine Arts building was constructed during FY 2000 - 02, the technology infrastructure was upgraded and expanded, and Houston Hall, Walter Walker, Saunders and Tolman Residence Hall underwent major repairs/renovations.

Over the five-year study period, \$18.8 million were spent on capital projects, with an annual average of \$3.7 million (Table 4-4). Again estimating that 50% was spent in the region, Mesa State added approximately \$1.8 million to the local economy. Since capital projects vary greatly from year-to-year, a five-year average was used when determining the economic impact for FY 2003 - 04.

Student Expenditures

As students attend Mesa State College, many dollars are spent in the local economy. Furthermore, the majority of the dollars spent by MSC students will stay in the local economy, again, in large part due to the location of the college. Student expenditures were based on a formula used by the Financial Aid Office of Mesa State College.

**Table 4-4. MESA STATE COLLEGE
CAPITAL EXPENDITURES, 1999 - 2004**

Year	Project	Expenditure Amount	% Spent Locally	Total Added
1999-00	HSSI/WWI	\$1,304,972	50%	\$652,486
2000-01	Tech/HHS/WW	\$9,004,839	50%	\$4,502,420
2001-02	HHS/Saunders	\$6,597,117	50%	\$3,298,559
2002-03	No new activity	--	--	--
2003-04	Tolman/WW/HH/Library	\$1,905,659	50%	\$952,830
5 Yr Total Annual Avg		\$18,812,587 \$3,762,517		\$9,406,294 \$1,881,259

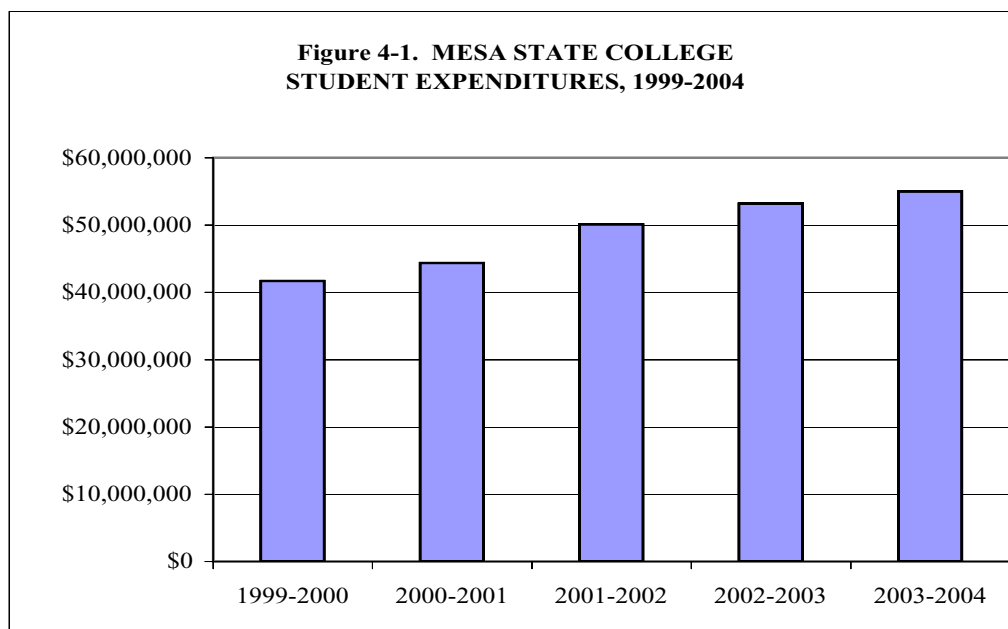
Non-tuition student expenditures were broken into five groups; books and supplies, board, personal expenses, room, and transportation. The same expenditure amounts were used for both on- and off-campus students. It was assumed that 90% of these dollars remained in the local economy.

The increase in dollars spent is indicative of the increase in student population. In fall 1999, enrollment at Mesa State College was 4,893 students, while 5,725 attended in fall 2003. Thus with an increase of 832 students, the dollars spent in the surrounding economy also increased. Over the last five years, there has been an increase of \$13.3 million dollars added to the economy due to growth in Mesa State College enrollments (Table 4-5 and Figure 4-1). On average, 5,725 students spent \$1,186 a month while attending the college during the 2003 - 04 Academic Year.

**Table 4-5. MESA STATE COLLEGE
STUDENT EXPENDITURES, 1999 - 2004**

Year	Student Expenditures	Less 10%	Total Added
1999-00	\$46,336,710	\$4,633,671	\$41,703,039
2000-01	\$49,291,359	\$4,929,136	\$44,362,223
2001-02	\$55,714,406	\$5,571,441	\$50,142,965
2002-03	\$59,147,280	\$5,914,728	\$53,232,552
2003-04	\$61,120,100	\$6,112,010	\$55,008,090

**Figure 4-1. MESA STATE COLLEGE
STUDENT EXPENDITURES, 1999-2004**



Visitor Expenditures

Visitor expenditures include all those items purchased by visitors as they attend Mesa State College activities/events. As visitors attend college events, they purchase lodging, food, entertainment and fuel. Also, since these dollars are out of area dollars, they are “new” dollars to the community. The per diem amount of \$98 was obtained from the Department of Defense for the Metropolitan Statistical Area of Grand Junction, Colorado.

In order to determine the number of visitors to Mesa State College, the various areas listed below were asked to provide their visitor numbers for the year 2003. Table 4-6 summarizes the information provided by the various areas.

**Table 4-6. NUMBER OF MESA STATE COLLEGE
VISITORS BY AREA**

<u>Area</u>	<u>Number of Visitors</u>
Tomlinson Library	5,520
Performing Arts	8,000
College Center	66,805
Athletics	46,269
Graduation (estimate)	<u>5,000</u>
Total	131,324

Of the 131,000 visitors, it is estimated that 30% were from out of the area and spent dollars in Mesa County due to the presence of Mesa State College. Thus, 39,397 people visited the area in 2003 attending college activities. Using \$98 as the per diem amount, \$3,860,906 was spent by visitors attending events at Mesa State College in 2003.

Multiplier Effect

The multiplier effect is important to consider when determining the total economic impact of Mesa State College on the surrounding community. Due to the multiplier effect any time a dollar is spent, that dollar spent increases as it travels through the economy as it becomes another person's income. Thus the economic impact is not just the original dollar but the dollar multiplied by an additional increase, the multiplier. Thus, since the dollars spent by Mesa State College grow into the income of others as they are spent in the surrounding community, the total economic impact of Mesa State is determined by multiplying the total original dollars spent by the multiplier.

When reviewing similar studies, a range of multipliers has been used to calculate the multiplier or indirect effect of dollars spent in the surrounding community. The following table lists differing studies and the multipliers used for those studies.

Table 4-7. MULTIPLIERS USED IN SELECTED ECONOMIC IMPACT STUDIES

Colorado State University	4.0
University of Idaho	1.50
Northern Arizona University	3.49
Montana State University	2.50
University of Colorado-Boulder	1.93-2.06
University of Colorado-Health Sciences Center	2.06-2.5
Mesa State (1999) RIMS Multipliers	1.595-1.87
Grand Valley Conv/Visit Bur RIMS Multipliers	1.477-2.649

For purposes of this study, the multipliers in Table 4-7 were averaged separately by the high and low ranges. The averages ranged from 2.319 to 2.571. A multiplier of 1.8 was chosen, one which is conservative when compared to others in the above table.

Labor Multiplier

A labor multiplier can be used to calculate the number of jobs created by the influx of the \$80 million into the surrounding community. These are jobs created in order to service original jobs. Again, as selected studies were reviewed, differing labor multipliers were applied. Table 4-8 presents a variety of studies and the labor multipliers used in those studies.

**Table 4-8. LABOR MULTIPLIERS USED
IN SELECTED ECONOMIC IMPACT STUDIES**

University of Nevada-Las Vegas	3.08
Colorado State University	1.5
Montana State University	1.67
University of Idaho	1.41
Mesa State College (1999)	1.4
Grand Valley Convention and Visitors Bureau	1.2-2.445
University of Colorado	1.8
Grand Junction Economic Partnership	3.0-7.0

Using an adjusted average from the referenced studies, a labor multiplier of 1.4 was used to estimate the additional number of jobs created in order to service expenditures made by Mesa State College employees. Using the current 1,194 employees at Mesa State, and the labor multiplier of 1.4, an additional 477 jobs have been created due to the presence of the college. These 477 jobs include both full- and part-time positions.³

Total Economic Impact

As documented throughout this report, Mesa State College makes significant contributions to the 14 counties of the Western Slope. Its economic impact is equally significant. Table 4-9 and Figure 4-2 summarize the direct dollars spent by expenditure category by Mesa State College in FY 2003 - 04, as well as the indirect impact due to the multiplier effect. The total impact is then determined. By combining all expenditure categories for the year and then applying a multiplier of 1.8, the direct impact of the \$80 million of expenditures generated approximately \$144 million as the dollars are multiplied throughout the region.

One of the major criticisms of economic impact studies conducted in-house is the temptation to increase the numbers, use larger multipliers and thus overstate the economic impact of the college on the surrounding community (Beck and Elliot, 1995). This study has used a very conservative approach in calculating dollars spent, multipliers used and the total economic impact of the college. It is likely, therefore, that the economic impact of Mesa State College is actually greater than the value of \$144 million estimated in this study.

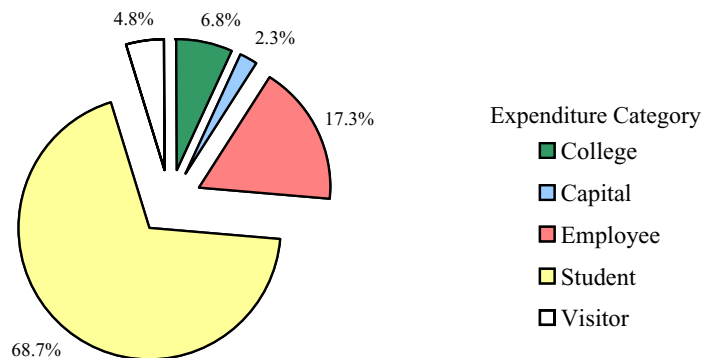
³Instead of using jobs, FTE can be used to calculate number of jobs created. Based on the 408.4 FTE currently at Mesa State and using the multiplier of 1.4, a total FTE of 571.8 were created. FTE are full-time equivalent positions, a number comparable to student FTE (full-time equivalent students) for reporting purposes. Calculating job creation another way, the \$144 million in total impact would be spent in the community. Of the total, wages and salaries would account for 5.3% according to the industry survey from BizStats.com. The \$144 million multiplied by 5.3% would create \$7.6 million in salaries/wages. Using retail, and a 2,000-hour job at \$7.00 an hour, 542 jobs would be created from the original \$144 million.

**Table 4-9. ECONOMIC IMPACT OF MESA STATE COLLEGE
BY EXPENDITURE CATEGORY, 2003 - 2004***

Expenditure Category	Direct Impact	Indirect Impact	Total Impact	% of Total
College	\$5,482,622	1.8	\$9,868,719	6.8%
Capital	\$1,881,259	1.8	\$3,386,266	2.3%
Employee	\$13,883,262	1.8	\$24,989,872	17.3%
Student	\$55,008,090	1.8	\$99,014,562	68.7%
Visitor	\$3,860,906	1.8	\$6,949,631	4.8%
Total	\$80,116,139		\$144,209,049	100.0%

*To avoid distortion from differing multipliers and inflation, total impact was calculated only for 2003-2004.

**Figure 4-2. ECONOMIC IMPACT OF MESA STATE COLLEGE
BY EXPENDITURE CATEGORY, 2003-2004**



Concluding Remarks

This chapter has outlined the ways in which Mesa State College has added significantly to the economic base of Western Colorado. Direct and indirect expenditures, coupled with construction projects, result in an estimated economic impact of \$144 million for FY 2003 - 04. Additionally, the college is the third largest employer in the region, with more than 1,000 full- and part-time employees. Finally, an estimated 477 jobs are created by these expenditures due to the multiplier effect. Taken collectively, these values document the college's role as a major stimulant to the economic development of the region. ■

V. Looking to the Future

There is no single indicator that measures the full impact of Mesa State College on its 14-county region. As this report documents, however, indicators within an educational, cultural, and economic framework enable one to begin an assessment of the college's contributions. Further, the college will continue to have a significant impact on the future economic development of the Western Slope as it expands educational programming to meet its regional education provider responsibilities.

The college's range of academic degrees—from vocational certificates to graduate programs—enables Mesa State to respond to a diversity of educational needs. These will lead ultimately to higher levels of educational attainment and, in turn, increase the earning ability of its area's residents. The college's cultural, social, and outreach functions are impressive and greatly enhance the region's quality of life. Beyond that, they affect how attractively businesses view Western Colorado as a potential site in which to locate. Equally important is the short-term impact that the college has on the economic activity in the region—estimated to be \$144 million—an amount great enough to support an additional 477 jobs.

What makes these accomplishments even more impressive is that the college does all of this and more with fewer resources than virtually any other four-year public institution in Colorado. For FY 2003 – 04, the college's allocation per full-time equivalent student from the state was among the lowest of Colorado's 13 four-year public institutions. Of equal importance, the college delivers these academic programs and support services with a very low proportion of its budget spent on administrative costs and one of the most affordable tuition rates in the state.

In 2004, the institution entered a new era: the Board of Trustees completed its first year of governance, a new president was selected, the college implemented activities associated with its regional education provider designation, and the institution shifted closer to fiscal flexibility as an enterprise in 2005. The challenge to the college community will be how it embraces these and other changes and builds on its strengths to achieve yet a higher degree of leadership in Western Colorado. ■

Regional Contributions by Mesa State College Faculty and Staff

Service on Community Boards

Tyre Bush (Admissions) — serves on the Mesa County Tobacco Education Council.

Jill Cordova (Human Performance and Wellness) — serves on the board of Colorado Discover Ability, a local organization offering individuals with disabilities the opportunity to participate in outdoor sports.

Jack Delmore (Music) — is currently a member of the Grand Junction Commission on the Arts which oversees selection, installation, and funding of art in Grand Junction as well as the funding of numerous community, District 51, and private artists.

Jill Eckardt (Housing) — is completing her three-year term on the Grand Junction Visitor and Convention Bureau Board.

Karen Ford (Psychology) — served as the President of the Rocky Mountain Psychological Association.

Gordon Gilbert (Physics) — serves on the Board of Directors of the Grand Junction Symphony.

Tom Graves (Psychology) — was appointed by two governors to represent Western Colorado on the State Board for Licensed Professional Counselors.

Bill Haggerty (Mass Communications) — has served on the board of directors for the Grand Valley Audubon Society.

Peter Ivanov (Theatre) — served seven years on the Grand Junction Commission for Arts and Culture and, for one year, served as the commission's chair.

Ben Keefer (Extended Campus) — serves on the Montrose Economic Development Corporation Board of Directors, Montrose Chamber of Commerce Board of Directors, Western Colorado Palliative Care Delta/Montrose Advisory Board, and the State of Colorado Library Advisory Board.

Nancy Kosmicke (Academic Services) — is Vice President for Programs of the Grand Junction chapter of the American Association of University Women.

Carrie McVean-Waring (Biological Sciences) — is a board member of the Redlands Mosquito Control District.

Janine Rider (English) — is one of only two persons from Western Colorado on the Board of Directors of the Colorado Endowment for the Humanities.

Wayne Smith (Culinary Arts) — is president of the Western Slope chapter of the Colorado Restaurant Association.

Deborah Snider (Teacher Education/Art) — is one of two elected higher education representatives on the Colorado Art Education Council.

Becky Wolford (Montrose Campus) — has served as District Ten Treasurer for Altrusa International, Inc for the four-state region of Colorado, New Mexico, Wyoming, Utah and is President-Elect for Altrusa International, Inc. of Montrose.

Contributions to the Region's K-12 Schools

Andres Aslan (Geology) — makes presentations each year at Tope Elementary as part of Earth Science Week.

Julie Barak (English) — shared her expertise about Kenya with Scenic Elementary and Redlands Middle School classes.

Cathy Barkley (Teacher Education) — makes presentations on the mathematics of the Maya in local elementary schools.

Michael Baron (Music) — performed for public school students in Grand Junction, Montrose, and Paonia.

Bruce Bauerle (Biological Sciences) — gives numerous talks and presentations at schools and retirement homes in the Grand Valley.

Steven Bradley (Art) — judged high school art competition for Meeker High School.

Esther Broughton (English) — has given writing lessons to 5th graders at Holy Family School, judged high school essays for the Mesa State High School Writing Conference, and meets regularly with District 51 teachers who mentor MSC students in the Methods of Teaching Secondary English course.

Paula Casey (Speech) — volunteers weekly at Appleton Elementary and the Dual Immersion Academy and is a district volunteer with the Art Heritage program.

Tony Coppola (Dance) — has offered several in-service training seminars for District 51 teachers.

Richard Cowden (Theatre) — hosts visits by school groups to MSC productions and facilitates tours, seminars, and talk-back sessions for productions (e.g., will host groups from Bookcliff Middle School and Greeley West High School for “Tommy”).

Maria Cuthbert (Foreign Languages) — taught a free French course to three middle-school students during the summer of 2002 and delivered a free six-month English course to 20 Spanish-speaking adults in 2004 at St. Joseph’s Church old school building.

Linda Drexel (Academic Affairs) — has served as a college coach for three to five high school seniors through the Daniels Fund for the past two years, helping students in the application process, identifying a major, interviewing techniques, and answering financial aid questions.

Forbes Davidson (Biological Sciences) — served as co-director of the Western Colorado Science Fair since its initial competition.

Carlos Elias (Music) — coaches sectionals in the local high schools numerous times a year, with at least 40 participants per session, and performs each year for over 500 students in area elementary schools.

Keith Fritz (Human Performance and Wellness) — implemented a physical education program for approximately 30 – 55 home-schooled students of Mesa County, with Mesa State students teaching classes under his supervision.

Gordon Gilbert (Physics) — works with students in elementary schools, such as Scenic and Tope, several times a year.

Chad Grabow (Computer Information Systems) — has developed a computer-based system for loading and monitoring student assessments requirements for District 51.

Kurt Haas (English) — was a question reader (a la Alex Trebek) for the Central High School Knowledge Bowl, which had about 150 participants from around the state and presented a workshop on Chaucer pronunciation for an English Literature class at Central High School.

Calvin Hofer (Music) — serves as a clinician for most of the high school bands in the region— Montezuma-Cortez, Delta, Paonia, Rangley, Steamboat Springs, Rifle, Glenwood Springs and all high schools in Grand Junction—and performs in the elementary schools with the Faculty Brass Quintet for more than 500 students.

Peter Ivanov (Theatre) — taught a Shakespeare class for teens and at-risk youth at the Performing Arts Conservatory and choreographed all stage fencing for “Romeo and Juliet” at Fruita Monument High School.

Phillip Kavanagh (Mathematics) — is Affiliate Director of the Colorado Space Grant Program where he is liaison to K-12 teachers and the general public to engage students of all ages in mathematics, physics, space science, and engineering.

Al Learst (English) — conducts a writing workshop with 7th graders at East Middle School and has worked on the college’s high school writing conference since 1999.

Richard Livaccari (Geology) — makes regular presentations on rocks and minerals to Tope Elementary School students.

Warren MacEvoy (Computer Science) — offered week-long Robotics Summer Workshops at Wingate Elementary, introducing students to Robotics, using LEGO Mindstorm kits as well as making mathematics presentations at Wingate Elementary and Redland’s Middle School.

Gary McCallister (Biological Sciences) — has given talks at schools and worked with local teachers on science education and the use of Logo Robotics in learning science.

John Nizalowski (English) — has been the director of the Mesa State Writing Conference, which has offered writing workshops for hundreds of Western Slope high school students since 1995.

Vincent Patarino (History) — initiated the first History Day in the region and involved students and faculty from eight regional high schools.

Gigi Richard (Geology) — made presentations in Tope Elementary, and Deep River School of Expeditionary Learning (Middle and High School) where she provides expertise and support materials for teachers for their expedition on rivers.

Gayla Jo Slauson (Computer Information Systems) — served on the District 51 Technology Committee for two years and provided > 50 hours of training in Microsoft Excel and Access for teachers in the school district during summers 2002 and 2003.

John Sluder (Technology Integration) — is an Intel Master Teacher I and has managed the training of more than 180 teachers in Mesa County School District 51 in Utilizing Technology in their Classroom.

Deborah Snider (Teacher Education/Art) — is planning an annual symposium in art education for the Western Slope of Colorado, after co-chairing a major conference in 2002 that served 85 art educators from 22 Western Slope communities.

William Tiernan (Physics) — as advisor of Society of Physics Students (SPS), sponsored an egg-launch competition for ten regional teams of high school students held at Bergman Field in November 2003.

Steve Werman (Biological Sciences) — made numerous presentations on amphibians and reptiles in local schools.

Sue Woodworth (Theatre) — worked with 15 speech programs last year, using parent volunteers, to identify children with self esteem problems.

Marilyn Wounded Head (Art) — has worked with Girls Inc. to create a series of activities to build self esteem of middle school girls, such as a “Carving and Construction Sculpture” class, which entered the Museum of Outdoor Arts competition and subsequently collaborated with New Emerson School on a school sculpture.

Sue Yeager (Human Performance and Wellness) — has her Methods of Folk and Square Dance (HPWA 220) class teach twice during the semester at Lincoln Park Elementary school, involving approximately 50 children.

Regional Research

Andres Aslan (Geology) — is a member of Grand Valley Selenium Task Force and has been awarded a grant of \$15,000 by the Bureau of Land Management to conduct a study with five students on the geology of Sieber Canyon, in the Colorado Canyons National Conservation Area.

Cathy Barkley (Teacher Education) — specializes in ethnomathematics, the connections of mathematics and cultures, which locally includes the study of mathematical coding of Ute beadwork from local museums in Western Colorado and the solstice/equinox marker of the Fremont in Pintado Canyon.

Bruce Bauerle (Biological Sciences) — assists the Colorado Department of Wildlife on the moose release project.

Christian Buys (Psychology) — produced many books that include pictorial histories of Colorado and of Aspen, Telluride, Leadville, and Aspen.

Rex Cole (Geology) — is involved in field research (GPS mapping) to determine the outcrop dimensions of fluvial sand bodies in the lower Williams Fork Formation near Palisade, with the published results used by natural gas companies active in Mesa, Delta and Garfield Counties.

Adele Cummings (Sociology) — involved students in a community survey of opinions about environmental issues.

Rick Dujay (Biological Sciences) — works closely with the Museum of Western Colorado as a forensics consultant and co-investigator.

Kristen Hague (English) — is researching Isabella Bird, a British writer who traveled the Colorado Rockies in 1873, and has just submitted a paper on her to the *Journal of the Museum of Western Colorado*.

Larry Jones (Geology) — is researching the Morrison Formation in eastern Utah and gives geological tours.

Tamera Minnick (Environmental Restoration) — received an \$11,086 grant from the National Park Service to explore the best method to restore ecologically-damaged areas and was funded for \$10,000 to research restoration techniques for cheatgrass-dominated areas at the Colorado Canyons National Conservation area.

Jerry Moorman (Business) — performed citizen-based research of Mesa County, Grand Junction, and Montrose households and, for the City of Montrose, a comprehensive marketing plan for the Pavilion, and an examination of the distribution of economic development funds by the city.

Maureen Neal (English) — served as the “scholar” for a national American Library Association project through the Mesa County library (one of only 40 libraries nation-wide to receive ALA funding for this project) called “National Connections” that involved teaching classic literature to adults who are just learning to read.

John Nizalowski (English) — has written about the Western Slope and his writings have been widely published, including journalistic pieces, personal essays, and research articles on Colorado authors Frank Waters and David Lavender.

Gigi Richard (Geology) — researched the flash flooding in the Colorado National Monument and the historic stability and impact of the changing morphology on native fish of the Yampa River in Moffat County.

Tony Schountz (Biological Sciences) — is conducting research on Hanta virus with the Saccomanno Research Institute.

Steven Schulte (History) — discussed his book about Wayne Aspinall, popular Western Slope Congressman and the water issues so crucial to the region, with students in several schools in the region.

Gene Starbuck (Sociology) — involved students in a community survey of opinions about environmental issues.

Brenda Wilhelm (Sociology) — involved students in a community survey of opinions about environmental issues.

Russell Walker (Environmental Restoration) — works with North Fork River Improvement Association to generate, manage, and interpret stream monitoring data and is funded for \$20,000 from the Colorado Division of Minerals and Geology to design and oversee closures for mine sites near Gateway.

Service to the Region

Thomas Acker (Foreign Languages) — served as a discussion leader on the Mesa County Reads project.

Nancy Angle (Mathematics) — volunteers weekly at the Community Homeless Shelter as part of the Winter Emergency Shelter program.

Monte Atkinson (Music) — directs the semi-professional Western Colorado Chorale, providing concerts of music for the area for choir and orchestra as well as serves as guest conductor, clinician and adjudicator for choral festivals and solo and ensemble events throughout the West.

Ellie Baldwin (Teacher Education) — works with the Colorado Discover Ability program at Powderhorn.

Julie Barak (English) — presented two lectures at the Museum of Western Colorado for 30 people.

Michael Baron (Music) — is a principal performer and on the Board of Directors of the Western Slope Chamber Music Series and performs 12-15 times annually for this series in Grand Junction, Montrose, and Paonia reaching approximately 3,000 audience members, and gives regular master classes and lecture recitals throughout the region.

Susan Becker (Psychology) — served on the Program Evaluation Research Project for Family Health West's Main Street Alzheimer's Care Unit.

Richard Berkey (English) — does volunteer editing work for Bureau of Land Management firefighters and field managers and edited an informational booklet for the dedication of a new paleontological interpretive trail in Fruita.

Ed Bonan-Hamada (Mathematics) — serves on the Member Advisory Committee for Western Rockies Federal Credit Union.

Catherine Bonan-Hamada (Mathematics) — is a member of Delta Kappa Gamma Honor Society International which raises money for a scholarship for a female student studying teacher education at Mesa State.

Steven Bradley (Art) — planned a major outdoor Grand Valley art fair for fall 2004 and raised \$10,000 in sponsorships for the event as Director of the Art Center.

Morgan Bridge (Business) — was one of four invited speakers at the Carbondale Chamber of Commerce Economic Symposium, speaking on the national economic forecast for the next 12 months and presented the Best Session paper entitled, "Higher Education Economic Impact Studies: Accurate Measures of Economic Impact?" at the International Business and Economics Research Conference.

Kim Burtard (Library) — volunteers with Habitat for Humanity by serving as a construction team member and fundraising volunteer.

Tyre Bush (Admissions) — volunteers for the American Cancer Society and Habitat for Humanity.

Nancy Conklin (Academic Services) — provides technical assistance in the area of assistive technology to the Center for Independence.

Tony Coppola (Dance) — directed and participated in the Summer Dance Festival that involved young dancers from the Western Slope, as well as from around the country, and offers the free project "Rhythkiddz" to younger children in the community.

Jill Cordova (Human Performance and Wellness) — donates approximately 100 hours serving 200 local children and adults with disabilities as part of the Colorado Discover Ability, a local organization offering individuals with disabilities the opportunity to participate in outdoor sports, and works in support of National Disabled Veterans Winter Sports Clinic, spending some 200 hours each year and serving more than 300 disabled veterans.

David Cox (Theatre) — was recognized for contributions as an "Up in the Clouds" sponsor for sponsoring the Mesa Youth production of "Fiddler on the Roof" which served nearly 100 young people, ages 4 to 18, from across the Grand Valley with audience attendance exceeding 1,100.

Richard Cowden (Theatre) — is appearing with the Symphony this year as both the narrator of the annual children's concert and as Alfred in their production of Strauss's "Die Fledermaus."

Beverly Craddock (Institutional Advancement) — designed Habitat for Humanity's billboard and provides marketing consultation for the R-5 Ski Swap.

Laurena Mayne Davis (Mass Communications) — oversaw the production of the 2004 Kids Voting voter guide which was written, edited and designed by Mesa State College student journalists and was distributed in *The Daily Sentinel* in October.

Jack Delmore (Music) — is a member of the Western Colorado Chorale and is frequently a soloist with this group when called upon as well as a soloist with the Grand Junction Symphony Orchestra.

Jeanne Durr (Human Resources) — was Co-Chair of the Colorado Mountain Winefest in 2004.

Carlos Elias (Music) — is concertmaster of the Grand Junction Symphony.

Byron Evers (Mass Communications) — produced an issue of Horizon magazine, focusing on volunteer organizations such as Foster Grandparents, Humane Society, Directors of Volunteers in Agencies, and Red Cross.

Heather Exby (Regional Programming) — volunteers in area schools for four hours a week and for two hours a week through Rotary.

Suzie Garner (Art) — coordinates student internships with businesses and non-profits in Grand Junction and Western Slope communities including Kiwanis, United Way, Grand Valley Transit, Mesa County Tobacco Education Coalition and the Downtown Grand Junction Association.

Chad Grabow (Computer Information Systems) — has developed computer systems for Partners of Mesa County and developed multiple systems and support for the One-on-Program and managed other similar programs; placing students in paying positions while helping the non-profits.

Kurt Haas (English) — adapted Archibald Macleish's play J.B. and directed a dramatic reading for the Crossroads United Methodist Church for three performances that served about 150 people.

Charles Hardy (Art) — works closely with the educational program of the Western Colorado Center for the Arts and is active in many valley-wide events and organizations.

Tim Hatten (Business) — was instrumental in developing the 2004 Western Colorado Venture Forum and served as a panelist that reviewed four Western Slope entrepreneurial business plans.

Jane Heitman (Library) — has presented three programs on creativity, the program "Using Poetry to Foster Literacy" to three groups, and volunteered three hours per week in the children's center of Mesa County Public Library.

Calvin Hofer (Music) — is a principal trumpet with the Grand Junction Symphony.

Deborah Hoefer (College Center) — is involved in the Grand Junction Chamber of Commerce Leadership program.

Jeanine Howe (Theatre) — was one of two adjudicators for the statewide conference of the Colorado Community Theatre Coalition in Aspen this summer, adjudicating 12 shows from around the state in four days as well as conducting workshops.

Darin Kamstra (Music) — directs the MSC Jazz Combo, which performs two or more concerts at community venues each semester, participates in the KAFM community radio fund drive by volunteering his services performing with the combo "Jazz City", and is a principal percussionist with the Grand Junction Symphony.

Gig Leadbetter (Human Performance and Wellness) — attends many local health fairs with students, conducting health screenings, blood pressure measurements, and various other health tests for the general population.

Richard Livaccari (Geology) — co-authored with Rex Cole the "Geological map of Colorado National Monument and adjacent areas, Mesa County, Colorado" which serves to educate the general public on the geology of the Monument and is a top seller at the CNM Visitors' Center.

Luis Lopez (English) — has given poetry workshops and readings at high schools and libraries in Paonia, Delta, Montrose, Ouray and Ridgeway combined, Glenwood Springs, and Avon, and done readings in Telluride and at the Botanical Garden's monthly outdoor concerts for approximately 100-150 attendees.

Warren MacEvoy (Computer Science) — directed the regional competition for Arizona, Utah, Colorado, Wyoming, Eastern Nevada, Idaho, Montana, New Mexico, Alberta and Saskatchewan for the members of the Association for Computing Machinery.

Curt Martin (Financial Aid) — offers presentations on paying for college to high schools and organizations.

Betsy McLoughlin (Foreign Languages) — gave a talk on Women Writers in Spanish (Spain and Latin America) and a presentation on the Day of the Dead—El día de los muertos at the public library, has been active in the Latin Anglo Alliance, and donated a portion of the proceeds from an art showing to LAA.

Betsy McNair (Institutional Advancement) — is a member of the Mesa County Communications Officers

Association, a group that advances the communications field and volunteers services to local non-profit organizations.

Carrie McVean-Waring (Biological Sciences) — volunteers in the Feral Cat Program in Grand Junction by performing spay/neuter surgeries when cats are captured by animal control.

Prasanta Misra (Physics) — hosts the weekly Physics Seminar that is open to the public and organizes various student functions such as Nerdapalooza, egg-drop contest, and physics and chemistry demonstrations.

Laverne Mosher (Art) — instructed his foundry/bronze classes in the creation of sculptures as liaison projects for Redlands and Mt. Garfield Middle Schools and Wingate and Columbus Elementary Schools and commissions from numerous local organizations.

Vicky Moyle (Mathematics) — counsels arts and education organizations such as the Western Colorado Association for Gifted and Talented and the Counseling and Education Center for low-income and uninsured clients.

Steve Murray (Human Performance and Wellness) — works with the Mesa County Health Department by serving on their Leadership Team and writing a monthly column about health care for the Business Times of Western Colorado.

Dana Nunn (Applied Technology) — has served on the board of the Mesa County Business Education Foundation for two years and has been a volunteer with the Mesa County Sheriff's Department as a victim advocate for seven years.

Carolyn Quinn-Hensley (Art) — exhibited work at the Western Colorado Center for the Arts in April 2004, organized an Advisory Committee for the Graphic Art program, and organized the Graphic Design in Western Colorado exhibit that showcased the work of professional designers.

Gary Rader (Computer Science) — provided copies of his music score editing program "MusicEase" to several District 51 elementary and high school music teachers and is in the process of providing his program "The MusicEase Traditional Songbook" to 20 district teachers.

Janine Rider (English) — is on the steering committee for Mesa County Reads and has contributed over 100 hours as a discussion leader for four different events.

Cheryl Roy (Nursing) — originated and coordinates the Sexual Assault Nurse Examiners (SANE) Program of Mesa County that provides medical, psychological, and legal support for adult and child victims of sexual assault, resulting in a 100% increase in conviction rates.

Robert Ryan (Human Performance and Wellness) — serves on the Health and Safety Committee and volunteers as an instructor and an instructor-trainer for the Western Colorado chapter of the American Red Cross.

Ann Sanders (Dance) — took seven students to participate in an original dance, "Unresolved," for an audience of 400 at the historic Wheeler Opera House as part of Aspen's Winter Delight concert sponsored by the Aspen Dance Connection.

Bette Schans (Radiologic Sciences) — offered seminars in Aspen, Glenwood, Rifle, Rangely, Grand Junction, Delta, Montrose, Ouray and other towns in the region for radiation technologists required to earn continuing education units.

Luis Silva-Villar (Foreign Languages) — served as a discussion leader on the Mesa County Reads project.

Hasson Tavossi (Physics) — served as a judge at the Western Colorado Science Fair for the ASM International Foundation and the International Society of Optical Engineering Awards.

William Tiernan (Physics) — is designing and building a low temperature cryostat that involves students from the physics program of Mesa State.

Richard Vail (Business) — facilitated a discussion session at the Mesa County Strategic Development Forum and participated in the Mesa County Workforce Center September Symposium.

Erik van de Boogaard (Facilities Services) — serves as musician, cantor, youth choir co-director, Finance Committee Vice President, and Building and Long Range Planning Committee member at St. Joseph Church.

Patti Ward (Radiologic Sciences) — offered seminars in Aspen, Glenwood, Rifle, Rangely, Grand Junction, Delta, Montrose, Ouray and other towns in the region for radiation technologists required to earn continuing education units.

Mayela Vallejos-Ramirez (Foreign Languages) — served as a discussion leader on the Mesa County Reads project.

Steve Werman (Biological Sciences) — has been a consultant for the Audubon sanctuary project, the United States Fish and Wildlife Service's boreal toad project, and the Mesa County Coroner's Office.

Marilyn Wounded Head (Art) — has been a guest speaker about tribal government, Lakota culture, and art.

Bill Wright (English) — organizes the Writers for Hunger reading every November (75 people), giving the proceeds (canned goods and monies) to the Local Food Bank.