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ABSTRACT

This study examines the perceptions of almost 2,500 external clients of the University of New Mexico College of Education for the purpose of identifying clients' needs and suggestions for change. Focus groups, surveys, and open-ended response formats were used to gather data from all current undergraduate and graduate students as well as alumni since 1980, and New Mexico educators. Areas of high concern for the future were seen to include knowledge and sensitivity to diversity among learners, the problem of increasing poverty, global competition, developing effective educational strategies, and multiple areas associated with educational technology. Clients served by the university were seen to be changing with more students working full time, more adult students, and increasing numbers of minority students. Survey respondents identified several areas of concern, including admissions and advisement procedures, research and inquiry skills, and quality and currency of coursework. Public education leaders in the state underscored the need for the college to develop and implement a coherent program which will insure the supply of capable, highly qualified graduates. They also expressed a need for the college to develop cutting-edge, relevant, high quality programs which will meet the needs of the state's changing and diverse population. (Contains 21 references.) (GLR)

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ED 363 202

THE UNIVERSITY OF NEW MEXICO

COLLEGE OF EDUCATION:

EXTERNAL PERSPECTIVES

ON

ENVIRONMENT AND NEEDS

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ACCOUNTABILITY AND DEVELOPMENT ASSOCIATES

MARCH, 1992

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EXECUTIVE SUMMARY

This study examines the perceptions of almost 2,500 external clients of the UNM College of Education for the purpose of identifying clients' needs and suggestions for change. Focus groups, surveys, and open-ended response formats were used to gather data from all current undergraduate and graduate students as well as alumni since 1980. Most respondents were also teachers or administrators in public and private schools, other educational agencies, and corporate settings. A stratified random sample of public education leaders in New Mexico also provided input regarding their future expectations for the College.

An extensive market environment assessment was conducted to provide educator demand projections and information regarding current and anticipated trends in education. Educational statistics and population projections demonstrate that demands for educators in New Mexico will continue to increase for at least the next two decades, in keeping with continued population growth for the state.

More specifically, the national growth rate for Hispanics is projected to be six times that of white non-Hispanics, creating an even greater need for educators who are culturally sensitive and knowledgeable. By the year 2010, New Mexico is projected to be a minority majority state with Hispanics expected to comprise 43% of the population; white non-Hispanics, 42.5%; Native Americans, 11%; and all others including Blacks and Orientals, 3%.

While the general population of the state is aging, the considerable growth rate in New Mexico is projected to include an increase in young people as well. This growth will create an increasing need for education at all levels, including the education of educators.

Several specific educational areas are expected to experience shortages in the next two decades. The ones identified as of greatest concern in national reports include several areas in mathematics and science, computer science, Spanish, and counseling. Several specialty areas in special education are already in short supply, and the demand is growing.

National Trends.

National reports are in consensus regarding the need for radical change in education. Areas of high concern include knowledge and sensitivity to diversity among learners; the many issues related to increasing poverty; global competition; developing effective educational strategies; and multiple areas associated with educational technology. Each of these trends was seen as relevant to the future development of the College of Education by its external clients.

College of Education.

The clients served by the College are also changing in many ways:

- More are working full time while attending school (54% of the graduate students responding to this study are currently working full time)
- More are adults returning to school several years after high school graduation (48% of the survey's undergraduate respondents were over 30 years of age)
- The population served by the College is increasingly comprised of minority students (approximately 20% of the college's undergraduates and graduate students are minorities and over 30% of the educational leaders in New Mexico are minorities)

In terms of self-appraisals of educational skills learned while a student at the College, and in a review of overall quality of College of Education's total instructional program, the larger percentage of respondents assigned an appraisal of "adequate." In some specific areas, such as quality of faculty, appraisals were somewhat higher; and in areas associated with knowledge and application of current educational methodologies, they were lower.

Survey respondents identified several areas of need which were amplified by open-ended responses. Areas which appear to be of widespread concern include admissions and advisement procedures, research and inquiry skills, and quality and currency of coursework. All respondent groups mentioned concerns related to a lack of awareness of the "real world" of today's educational environment evidenced by College faculty.

Public education leaders in New Mexico underscored the critical need for the College to develop and implement a coherent program which will insure the supply of capable, highly qualified graduates. They expressed the need for the College's leadership in developing a cutting-edge, relevant, high quality program which will meet the needs of New Mexico's changing and diverse population. They judged the College's current and recent programs as "adequate," "fair to good," or "mediocre," but expressed that several essential elements, including some outstanding faculty members, could contribute to a more progressive vision.

Some of the important observations synthesized from the suggestions for the future of the College include:

- Recognizing and incorporating current innovative trends as well as realities of the public school environment can contribute to the viability of the College.
- Educators should be trained to meet the educational needs of all students. Blending the strengths of all departments will create optimal conditions for comprehensive training to result.

- Students of the College must be introduced to public school classrooms when they enter their programs and continue involvement every semester.
- Restructuring means the difference between success and failure; without it any institution will die in a competitive, rapidly changing environment.
- The highest priority for immediate attention is relevance, rigor, and quality of course work.

INTRODUCTION

This study was designed to provide information regarding the viewpoints of the multiple external clients of the University of New Mexico College of Education (COE). For the purpose of this study, these clients were identified as current undergraduate and graduate students, alumni of the college, New Mexico educators, and business and community leaders from throughout the state.

The study was commissioned by the Interim Dean of the College of Education to provide external perspectives for use in future planning. This report focuses on clients' views and opinions on the current and future functioning of the COE, priorities for future consideration, and how the college can best meet the future needs of its constituents.

Approach

To develop the various external perspectives, a number of approaches were used.

- Surveys of students, alumni, and educational leaders in New Mexico;
- Focus groups, including educational, business and community leaders;

- Content analysis of responses to open-ended questions posed to all client subpopulations; and
- Review of documents.

Surveys

Utilizing records provided by the COE, surveys were mailed to all current undergraduate (N=630) and graduate (N=1200) students. Also, COE alumni from 1980 to present (N=6300) were mailed a survey. Additionally, surveys were distributed to all Superintendents (N=88), Principals (N=665), State Board of Education members (N=15), local Board of Education members (N=469) from all school districts, and a 20% stratified random sample of State Department of Education personnel (N=79), for a total of 1316.

Of the 9,446 surveys distributed, 2,434 were returned, for a total return rate of 25.8%.

Return rates for subgroups were as follows:

- | | |
|------------------------|--------|
| • Undergraduates | 33.0 % |
| • Graduates | 41.1 % |
| • Alumni | 21.1 % |
| • New Mexico Educators | 30.3 % |

Focus Groups

Six focus groups were conducted, with invited participants representing business, community, and education interests around the state. Of the 133 randomly selected invitees, 42 participated (31.6%). Those who were unable to participate in a focus group were asked to respond to a survey to assure the opportunity for input.

Content Analysis

Content analysis was conducted on all available responses to open-ended survey questions and focus group material.

Document Review

An extensive document review included pertinent business and economic projections, population projections, current and historic student demographic data, and national reports of educational trends.

Project Responsibility

This project was completed by Accountability and Development Associates. Specific responsibilities were conducted by Sandra W. O'Neal, Ph.D., and Carol Robinson-Singer, Ed.S.

Chapter Two

THE MARKET ENVIRONMENT

An understanding of the market environment for the College of Education is contingent on establishing the context in which it operates. In this chapter to develop the context, several factors will be explored such as the geography, location, local and state economy, population projections, job market possibilities for educators, and anticipated demands.

The Geographic Context

The College of Education is an integral component of the University of New Mexico (UNM), the largest of the six state-sponsored universities in the state. Situated in Albuquerque and Bernalillo County, geographically the College is in the north central quadrant of New Mexico. New Mexico's 121,412 square miles are bordered on the east by Texas, the largest state of the 48 contiguous states; on the north, Colorado; on the west, Arizona; and to the south, Mexico. New Mexico is the southern-most state in the Mountain region of the Southwest.

Mountains are the predominant geographic feature of the state, with about 85% of the state's land above 4,000 feet. While much of the state is forested, the eastern one third is an extension of the Great Plains. A variety of climate zones is represented, ranging from desert

to Arctic/Alpine. Temperatures vary according to the altitude with average lows in the teens or twenties occurring in January, and highs in the eighties to mid-nineties in July. The relatively temperate, dry climate of New Mexico has been cited as one reason for immigration to the state since outdoor activities are available somewhere in the state year round.

Bernalillo County and Albuquerque

Bernalillo County is home to approximately 500,000 people or about a third of the state's population. A large majority of the county's residents live in the city of Albuquerque which dominates a central physical location in the state at the intersection of Interstate Highways 40 and 25.

About 5,300 of the approximately 7,000 employees of the University of New Mexico work at the main campus in Albuquerque. The remainder are employed at branch campuses in Valencia County, Gallup, Santa Fe, and Los Alamos. The Albuquerque Public Schools (APS) is the largest school district in the state and the twenty-sixth largest in the nation. Education employees play a major role in the Albuquerque economy based on the large number of UNM employees combined with the approximately 11,000 employees of APS.

Albuquerque accounts for much of the economic diversity and activity in the state. Other large employers in this area include Kirtland Air Force Base and Sandia National Laboratories with about 21,000 employees; Southwest Community Health Services and

Lovelace Medical Center with about 5,100 employees, the largest health care delivery system in the state; and a number of local, state, and federal government and large financial institutions.

Economic Forecast

According to the National Center for Educational Statistics, June 1991, New Mexico is one of the eleven states in the U.S. which are categorized as having "low relative wealth," or in the least wealthy of the five categories used in rating educational expenditures. "The New Mexico Occupational Outlook to 1995," a report prepared by the New Mexico Department of Labor, describes projections of growth in the state's economy comparing rates in 1985 to projections for 1995. The following figure shows the overall trends for those points in time.

Figure 1: A Comparison of Actual and Projected Jobs in NM and Albuquerque

	New Mexico	Albuquerque
Actual Jobs 1985	520,700	220,300
Projected Jobs 1995	618,000	272,700
Increase	97,300	52,400
Percent	19%	24%

In the period from 1985-1995 the New Mexico economy is expected to generate over 97,000 new jobs or a 19% increase, which is slightly faster than the projected national growth rate of 15%. The Albuquerque economy is projected at an even faster growth rate of 24%. While these projections are positive, they are substantially slower than the 41 and 54 percent employment increases experienced in New Mexico and Albuquerque respectively during the 1975 - 1985 period of dramatic growth. Through 1995 both the mining and government sectors, directly and indirectly, will create an adverse impact, slowing the growth of the state's economy. During the period from 1985-1995, the employment losses across the range of mining activities are not expected to be reversed, while government expenditures are anticipated to level off or decline in some areas.

Positive offsetting economic factors include substantial employment growth in the services and trade sectors as a result of increased population and tourism as well as rapid growth in manufacturing. Other sectors projected to increase economically include finance, insurance, real estate, and construction.

The Department of Labor estimates that in addition to the 97,300 jobs created by industrial growth in the New Mexico market between 1985 and 1995, an additional 538,000 job openings will arise from workforce replacement needs caused by retirements, promotions, transfers, migration, death, disabilities, and temporary withdrawal from the labor force.

The presumption of moderate economic growth at the state level is based on the following

general assumptions for the national economy as projected by the U.S. Department of Labor to 1995:

- The price per barrel of imported crude oil will remain below the level of the mid-1980's.
- Federal grants to local and state governments will decline.
- A decline of federal expenditures will be proportional to the Gross National Product.
- Interest rates will stabilize at a percentage below the levels of the mid-1980's.
- Productivity, investment and technology will experience strong increases.
- The rate of unemployment will decline nationally.
- The situation related to foreign trade will improve.
- The industrial structure of the economy and the rate of economic growth will not be altered by upheavals such as major wars or price shocks.

Additionally, the New Mexico Department of Labor assumes that the state will be influenced by the following anticipated circumstances:

- High birth rates and in-migration will continue to cause population growth to exceed the national average.
- Personal incomes will continue to grow.
- Due to the natural features of the state, special events and promotions, tourism will increase.

- Federal government spending for all purposes will level off.
- Demand for the natural products of the extractive industry of the state will remain relatively low.
- Employment will increase as businesses relocate and manufacturing increases.

Though this report written in 1988 may present some of the best information available, some of the assumptions have already been violated, including the Persian Gulf War of 1991 and the current recession. It should be noted that all projections described in this report do not take into account the depth and length of the recession begun in 1991 that persists to the present time. However, the most recent release of major economic indicators for the state and Albuquerque, developed by the Bureau of Business and Economic Research at UNM and reported in the Sunday Albuquerque Journal (February 2, 1992), was optimistic and continued to support increased job growth and improved personal income.

Projected Population for New Mexico

Population is a key consideration in establishing the future market environment for the College of Education since the education enterprise is based on the number of potential students of the future. Both projected population numbers and the ethnic composition of the projected population have a bearing on the future planning of any organization that plans to serve the needs of New Mexico. The following table has been excerpted from population

projections prepared by the Bureau of Business and Economic Research (BBER) at UNM, to establish the potential education pipeline into the Twenty-first century. BBER is considered a respected authority in producing demographic projections for the state and has many users including the New Mexico Legislature.

Table 1: NM Projected Population by Ethnicity and Gender, 1990-2010

Ethnicity	1990	1995	2000	2005	2010
WHITE NON-HISPANIC					
Female	390848	400179	407207	413100	418722
Male	380202	387750	393058	397368	401447
Both	771051	787929	800265	810468	820169
HISPANIC					
Female	304493	333873	362601	392157	421436
Male	298720	327887	356438	385845	414648
Both	603213	661760	719038	778001	836085
NATIVE AMERICAN					
Female	72960	82773	93068	104060	115310
Male	66112	74314	82799	91813	100957
Both	139072	157087	175867	195873	216267
OTHER*					
Female	20155	22355	24492	26613	28693
Male	21758	24264	26679	28943	31041
Both	41913	46619	51172	55556	59734
ALL					
Female	788456	839180	887369	935930	985161
Male	766792	814215	858973	903969	948093
Both	1555249	1653395	1746342	1839898	1932254

*Includes Blacks, Asians, and Pacific Islanders, and all others not classified elsewhere.

Table 1 indicates that while the population of all ethnic groups will increase between 1990 and 2010, the ethnic composition of the state will change. According to projections, by 2010 the White Non-Hispanic group's (42.45%) share of the total population will be slightly less than Hispanics (43.27%). Also by that year, Native Americans will constitute 11 percent and Others will be about three percent of the total population. As a point of further comparison, in 1980 (not shown in Table 1), 53 percent of the state's residents were White Non-Hispanics; 37 percent Hispanics; eight percent Native American; and two percent Other. Planning for this change in the ethnic distribution which causes New Mexico to become a minority-majority state has implications for education in the state and the College of Education.

A further point of comparison includes the United States as shown in Table 2 below.

Table 2: Percentage Population Distribution of the United States and New Mexico by Ethnicity

Ethnicity	1980	1990	2000	2010
NEW MEXICO				
White Non-Hispanic	52.81	49.58	45.83	42.45
Hispanic	36.66	38.79	41.17	43.27
Native American	8.16	8.94	10.07	11.19
Other	2.37	2.69	2.93	3.09
UNITED STATES				
White Non-Hispanic	78.78	76.55	73.83	71.06

Hispanic	6.80	7.93	9.35	10.80
Black	11.89	12.52	13.29	14.03
Other**	2.53	3.00	3.53	4.10

**Includes Native Americans, Asians, Pacific Islanders and all others not classified elsewhere.

Over the next 20 years the share of White Non-Hispanics will decrease as the share of Hispanics in the total population and in New Mexico increases. The proportion of Native Americans, Blacks and other ethnicities will also increase in the same period. By 2010 the growth rate of White Non-Hispanics in New Mexico is projected to fall well below the national average and the growth rate for Hispanics will be six times that of White Non-Hispanics. The fastest growing group in New Mexico and the United States, however, is projected to be Native Americans during this period.

The Age Pipeline for New Mexico

The age distribution or pipeline for the state over the next 20 years will be important in planning for the educational enterprise in general as well as for the COE. Table 3 below shows the projected age distribution for the New Mexico population.

Table 3: Age of Projected Population for New Mexico

Age Group	1990	1995	2000	2005	2010
<5 years	136,821	134,919	133,928	139,088	144,906
5-9	138,706	137,635	135,767	134,793	139,750
10-14	119,571	140,088	139,025	137,145	135,840
15-19	114,560	120,251	140,734	139,652	137,483
20-24	117,431	114,682	120,409	140,789	139,457
25-29	135,222	118,260	115,614	121,343	141,306
30-34	131,836	136,692	119,902	117,316	122,617
35-39	126,425	133,015	137,917	121,299	118,413
40-44	106,027	126,402	132,992	137,929	121,293

The entire age distribution is not shown in Table 3 to focus on the part of the population which will be in public or private school as well as the potential pool of students who could attend colleges and universities. In general, the population is aging, but by 2010 New Mexico will retain a fairly young age structure with approximately 22% of the state's population in the 14 years or younger group. The age structure coupled with the ethnic proportions presents somewhat different challenges to the education community than in the past.

The Education-Related Job Market

While only a few years ago it appeared that the nation would be facing a grave teacher shortage, recent studies suggest that teachers may not be leaving the profession in the large numbers that had been forecast for the 1990's. Linda Darling-Hammond, Columbia University Teachers College, and C. Emily Feistritzer, an independent education researcher, have respected but divergent views of the issues related to teacher supply and demand.

Ms. Darling-Hammond focuses attention on the issue of teacher quality, estimating that about 20,000 unlicensed teachers are hired each year under provisions for emergency credentials. The use of emergency credentials obscures the potential of a teacher shortage which is muddied further by district practices which respond to teacher shortfall by reassigning teachers from other fields, increasing teacher workloads and class sizes, canceling course offerings, and limiting enrollment in upper level classes.

Ms. Feistritzer, on the other hand, believes that teaching is a "revolving door profession" currently attracting more people than are choosing to leave. She points out that of the public school teachers in her research, 28% had been "new" hires since 1985, with nearly half of those returning teachers. More than a third (38%) of all teachers responding have taken at least one break from teaching. Her study, Profile of Teachers in the U.S.-1990, conducted in Texas and New Jersey, highlights the following:

- The teaching force in the United States is getting older, whiter, and more female.

- Alternative routes attract more minorities than traditional certification plans.
- Teachers did not think they were well prepared when they first started regardless of the type of preparation program they had experienced.
- Teachers think the best way to prepare new people for all aspects of the profession is a combination of field-based experiences integrated with college coursework.
- Teachers prepared in non-traditional programs were more willing to teach in inner cities and believed that all students can learn, more than their counterparts prepared in traditional programs.

In the last five years, an estimated 12,000 people have become licensed through alternative certification programs in 33 states that do not require graduation from approved teacher-education programs. Willis D. Hawley, director of the Center for Educational Policy at Vanderbilt University, points out that teachers trained through alternative routes reduce any shortage, but are likely to teach the children who most need experienced teachers.

According to Education Week (September, 1990) many experts agree that the expected demand for public and private school teachers nationwide in this decade will be between 2 and 2.5 million, or about 200,000 teachers per year. This means that as many teachers may be hired within the next ten years as are teaching today. Approximately one third of America's teachers are 45 or older, creating a large number either currently or soon to be eligible to retire. Most, however, have remained on the job, at least in part, due to salary increases of the 1980's, which will improve retirement incomes when they do leave.

Research conducted by the American Federation of Teachers indicates that the average teachers' salary increased 78.5% from 1980-81 to 1989-90.

Clearly, the best indicator of demand for new teachers is the number of those who leave the profession each year. Jewell Gould, director of research for the American Federation of Teachers asserts that about six percent of the teaching force leave each year. Other variables used in projecting teacher need are projected student enrollment, pupil-teacher ratios, and courses required for graduation and to meet other existing standards.

The supply side of the equation must consider a complex variety of factors including the number of students graduating from teacher-education programs, the number of teachers certified by alternative routes, certified teachers re-entering the classroom after a break (sometimes known as the reserve pool), and those teachers who are certified under emergency provisions when no other qualified candidates can be found. Accurate predictions of teacher supply and demand have been thwarted by the lack of adequate information. However, the National Center for Educational Statistics has begun to release data collected in 1987-88 as the result of the Schools and Staffing Survey. It is expected that further refinements of this surveying process will yield a better database for future predictions.

Potential Areas of Shortage

The Association for School, College, and University Staffing (ASCUS) reported results of their 1990 survey which showed the potential for some shortage of teachers in 14 of 45 teaching fields. The survey of school and university placement officials showed considerable need in bilingual education, speech pathology and various types of special education. Some

shortage was reported in mathematics, physics, computer science, Spanish, chemistry, and counseling at the elementary and secondary levels.

New Mexico is in the Rocky Mountain region for this survey. Specifically in this region, the results showed the following:

Considerable to Some Need (in descending order)

- Speech Pathologist
- Special Ed - Multiple Hand.
- Special Ed - Deaf
- Special Ed - ED/BD
- English as a Second Language
- Bilingual Education
- Special Ed - Mental Hand.
- Special Ed - LD
- Special Ed - Other
- Spanish
- School Psychologist
- Computer Science
- Special Ed - Gifted

Considerable to Some Surplus (in descending order)

- Physical Education
- Social Sciences
- Health Education
- Home Economics
- Art

Projected Need for Educators in New Mexico

Figure 2 on the following page compares the 1985 actual openings and the 1995 projected

openings for various public education positions in the state prepared by the New Mexico Department of Labor.

Figure 2: Education Employment in New Mexico, 1985 and 1995

Occupation Title	Employment		Change	Total
	1985	1995	%	Annual Openings
Ed. Administrators	2,760	3,000	8.6	270
Teachers, Preschool & K	2,080	2,350	13.1	190
Teachers, Elementary	7,520	9,470	26.0	990
Teachers, Secondary	7,440	7,750	4.1	640
Teachers, Sp. Ed.	2,790	3,340	19.6	390
Instructors, Nonvoc. Ed	1,590	1,860	16.9	230
Instruct/Coaches Sports	1,340	1,710	27.7	220
Librarians, Professional	960	1,080	11.9	130
Library, Tech. Assist.	430	480	10.2	50
Audio-Visual Specialists	50	60	1.9	10
Voc. & Ed. Counselors	850	970	14.1	100
Instructional Coordinators	480	540	12.2	60
Teachers Aides	3,250	3,750	15.5	450
Recreation Workers	1,700	2,110	23.7	250

Since the school age population is projected to grow slightly through the mid-1990's, the number of education administrators is expected to increase more slowly than average. Job prospects for elementary teachers are expected to be good through 1995 due to increasing

enrollments and lower pupil-teacher ratios at that level. The number of college degrees in elementary education awarded by New Mexico universities has declined steadily since 1975 creating the possibility of more job openings for qualified applicants. A large reserve pool of former teachers in this area may assist in meeting the potential demand.

During the 1980's jobs for secondary teachers declined slightly, reflecting the changing high school population. As the high school population increases gradually in the 1990's, job opportunities will increase slightly. The demand for teachers in specific disciplines such as math and science is expected to be greater than in other areas. The shortage of special education teachers in the state is expected to continue since the number of college graduates in that field continue to decline while the needs for services for students with learning disabilities is on the rise.

What Do New Mexico Educators Think the Future Market Will Be?

In their current roles as District Superintendents, School Principals, State and Local Board of Education members, and State Department of Education Professional Educators, these leaders of education in New Mexico are primary observers and critical sources of information regarding future educational needs in the state.

To assist in COE planning, it is important to ascertain which areas of education are expected to increase and which are expected to decrease in demand in the next decade. New Mexico educators were asked to review 26 specific areas of expertise in the eight COE departments, and to provide observations regarding (1) anticipated level of future demand, and (2) emphasis which should be given to each area by the COE, based on anticipated needs of New Mexico school districts.

Anticipated Demand

Of the 26 categories, three were predicted as high demand areas for New Mexico education in the next ten years. From 48% to 59% of respondents to the New Mexico Educators survey selected these three areas as expected to "increase dramatically." They are, in rank order:

High Demand Areas

Educational Technology (Computers)
Special Education: Teaching
Special Education: Diagnosis

Many specialty areas are expected to "increase somewhat," according to New Mexico educators. Areas falling into this category of anticipated demand, in rank order according to strength of positive response in terms of anticipated demand, are:

Moderate Demand Areas

Family Studies
Counseling Education

Health Promotion
Elementary Education
Secondary Education
Adult Learning in Technology
Nutrition
Counseling Psychology for Clinical Settings
Corporate Training in Technology

New Mexico educators anticipate that most educational specialty areas will "remain about the same" between now and the year 2000. Twelve areas of the twenty-six listed fell into this category of predicted demand. They are listed in order of strength of response.

Remain the Same

Other Administration (other than school principals)
Physical Education
Principalship
Educational Research
Other Research
Parks and Recreation
Art Education: Secondary
Art Education: Elementary
Exercise Physiology
Learning Theory
Human Development and Anthropology in Ed.
Latin American Programs in Administration
Art Therapy

Very few of the New Mexico educators foresee a decrease or elimination of need for any of the specialty areas listed. From 1% to 18% of the respondents predicted a declining need or no need, when the two categories of response were combined, for any of the 26 areas listed. Those areas which were viewed in lower future demand by more than 10% of the respondents, listed in ranked order, are:

Lower Demand

Art Education: Elementary
Art Therapy
Art Education: Secondary
Latin American Programs in Administration
Parks and Recreation

Emphasis

New Mexico educators were asked to review the same 26 areas, from the eight College of Education departments, in light of the degree of emphasis recommended. Survey respondents were asked to rate how much emphasis each specialty should be given according to the needs of his/her organization. Choices given ranged from "top priority" to "should be eliminated." It was interesting to review not only the numbers of respondents identifying various choices, but also the range of responses to each specialty area, in comparison to the earlier question regarding prediction of future need. For example, in predicting future need of identified specialty areas, the range of percentages indicating that the demand "will increase dramatically" was from 5% to 59%. In this item, where respondents were asked to recommend the level of priority, percentages choosing the "top priority" response ranged from 7% to 72%. As a case in point, special education teaching was identified as expected to "increase dramatically" by 51% of the New Mexico educators; however, it received 72% "high priority" responses for the COE's future planning.

In a more extreme example, only 13% of the New Mexico educators (of which about half were school principals) predicted a "dramatic increase" in the principalship in the next decade. However, 50% recommended that the COE assign the principalship a "high priority" based on anticipated needs of their own organization, and an additional 41% chose the second response, indicating that the current emphasis should be continued.

Areas of specialty which received 50% or more responses in the "top priority" category regarding the degree of emphasis which should be assigned by COE, based on the needs of New Mexico's public educational agencies, were:

Top Priority

Educational Technology
Special Education Teaching
Elementary Education
Special Education Diagnosis
Secondary Education
Counseling Education
Principalship

Those areas receiving strong positive endorsement for continued emphasis, but secondary to the top priority areas listed above, were, in ranked order:

Secondary Priority

Family Studies
Health Promotion
Adult Learning in Technology
Learning Theory
Physical Education
Educational Research

Several areas received moderate responses as "secondary priority, but continue the current emphasis," as well as smaller percentages of support in both the "top priority" and "keep if resources permit" categories. These areas include, in ranked order:

Lower Priority

Nutrition

Counseling Psychology for Clinical Settings
Other Administration (other than school principals)
Art Education: Secondary
Art Education: Elementary
Other Research (other than educational research)
Exercise Physiology

Four areas received strong response to **keep if resources permit**, but were not included in most respondents' priority listings. They are, in ranked order, 1) Parks and Recreation, 2) Art Therapy, 3) Latin American Program in Administration, and 4) Corporate Training.

Chapter Three

NATIONAL TRENDS

It is commonly accepted, both in practice and in the literature, that the need for radical change in education is urgent. Dr. Willard Daggett, in a February, 1992, presentation to Albuquerque area education and business leaders, dramatized this need with a schematic which showed that, although educational change and improvement has been occurring, the pace of improvement has not kept up with the changes in society as a whole. Dr. Daggett, in his extensive study of educational systems of other nations, has observed that the United States has allowed itself to lag behind in not only the quality of education, but also in the length of school days and length of the school year required of students. He concludes that it will be essential to assess the educational needs of the nation, and move with all possible expediency to meet those needs. To simply attempt to "catch up" with other nations is fruitless, because as we progress they also will continue to change, creating a moving target .

Recent societal changes in America are dramatic, reflecting new demands of a magnitude greater than in any similar time period in the history of our country. Diversity, poverty, global competition, special needs, and increasing applications of technology are only a few of the major impacts on teachers and the children they teach. Colleges of Education will be a critical key in training future educators to meet the radically changing needs of children and youth in the public schools.

The Holmes Group, a consortium of research universities dedicated to improving teacher education and the profession of teaching, has explored the needs of children and the education of educators, and has developed a series of action plans as well as reports. Other nationally recognized educational leaders in both university and public school levels have proposed innovative changes aimed at major positive change in our schools. Some innovative approaches currently being piloted in schools in our state and across the nation include site-based management, Re:Learning, cooperative learning, various approaches to teacher empowerment, and broader perspectives and new methodologies of measuring student achievement and growth.

In planning for renewal or restructuring, it is imperative that the issues be identified and examined in detail. Restructuring simply for the sake of change is a useless or potentially damaging exercise. Some of the major considerations in preparation for change to meet today's challenges in education must include the following topics of concern:

Diversity

Educators must develop knowledge, capacities, and dispositions to respond wisely and sensitively to diverse learners.

This cornerstone principle, identified by The Holmes Group and others, includes three interrelated components: knowledge about the nature of human diversity as it affects learning and development; the capacity to continually acquire and utilize this knowledge in ways

which support learning and development; and a belief in and commitment to working with the education of all learners.

National educational statistics, census data, and other demographic information confirm that the modal teacher of the 1990's will be middle-class, female, and somewhat older than the average teacher of past decades. At the same time, over one-third of the nation's children will be minority. As shown earlier in this report, minority representation in the United States increased steadily in the last decade, and is projected to increase even more dramatically between 1990 and 2010. As discussed in Chapter Two of this report, New Mexico Hispanic and Native American populations are projected to increase from the 49% combined representation reflected in the 1990 census to over 51% in the year 2000, and 54% in 2010. A special challenge of Colleges of Education, in addition to the task of recruiting increasing numbers of teacher trainees from diverse cultural groups, will be to prepare all educators to meet the needs of this changing student population, and to reach and teach children of all cultures.

Considerable research exists to assist colleges of education in this challenge. Cazden and Mehan, in Knowledge base for the beginning teacher, (1989), explain that simply teaching teachers about cultures of different groups, while informative to those of limited cultural and social experiences, could be not only limited but potentially risky. The authors take the position that, first, too many cultures are represented in the classroom; and second, a smattering of knowledge may lead to stereotypes rather than to wisdom. They state,

Instead of trying to transmit information about specific cultures, teacher education can help beginning teachers learn how to learn experientially about students and their families and encourage them to reflect on their own cultural background rather than unthinkingly live it as an unexamined norm." (p.55)

Much of the literature suggests that teacher preparation programs can approach the issue of diversity best by conveying a set of orienting principles and assumptions about diversity; providing rich and appropriate examples; and supplying encouragement, models, and methods to support ongoing learning about students. This openness to foster increased understanding and appreciation of cultural differences must permeate the entire teacher training process, leading to a true integration of approaches and solutions.

According to Alpert (1991), in a study of students' resistance in the classroom, it is imperative that all educators understand the social, economic, and linguistic difficulties that complicate schooling for many minority children. Educators must also develop a keen comprehension of the institutional processes that interact in precipitating school failure and student resistance to schooling. As part of this approach, training of educators should include work in and learning about communities, and in reforming school practices that may contribute to school failure.

The centrality of language to the education of children must be understood by educators, not through just an extra course on "language," but through the study of children's home and school uses of talk and its relation to learning and higher order thinking. Professional studies in education must cultivate potential educators' desire to succeed with all children, to

appreciate the cultural and language diversity in classrooms, and to care for the growing numbers of children who are acknowledged to be "at-risk" in our schools.

In an anecdote quoted in the 1991 report of The Holmes Group (pg.32), the following story is related:

Lisa Delpit tells of an older African-American preschool teacher pointing to a child in a corner playing with a toy truck. "'You see that little boy over there?' she said. 'He's either going to grow up to steal my purse or be my doctor. I'm here to make sure he's going to be my doctor.'"

Those preparing to teach must envision their own futures as connected to the futures of the children they teach. Cultivating this vision along with the *will* to educate all children is a critically important mission for colleges of education. Delpit, writing in the Harvard Educational Review (1988), explains that

Our teachers must not only see themselves as professionals who set up temporary learning communities in their classrooms or schools, but as human beings whose well-being is intimately linked to the futures of the human beings in their care. When they can see themselves in that role, then they are likely to be perceived by their students as individuals who truly care.

Several promising strategies for emphasizing diversity have been identified:

- Form culturally diverse cohorts so that student teachers have the opportunity to learn from one another;
- Assure the recruitment of students into the field of education who possess a willingness to teach children who are different from themselves;

- Identify mentors and cooperating teachers who model sensitive, receptive approaches to culturally diverse students;
- Provide and utilize curricular approaches that capitalize on children's diversity; incorporate these approaches as a learning resource for the entire classroom or school community.
- Provide student teachers with the skills and confidence to teach all children.

Poverty

The schools, the educators, and the colleges of education who train the educators cannot ignore their responsibility toward children living in circumstances of disabling difficulty. Teachers and those who train teachers must understand the lives of these children, and must possess the skills and sensitivity to work with them.

Each year more of our nation's children live in poverty. The probability that teachers currently being trained will teach poverty-level children also increases each year. It behooves colleges of education to assure that future teachers can tailor philosophies, theories, and programs to their own classrooms. Teachers must be empowered with multiple approaches to meet the multiple needs of students. In his recent article in the Phi Delta Kappan, Duffy argues for the need for "inspired" teachers who do not limit themselves to one prescribed philosophy or theory, but who can apply many approaches and can choose appropriate instructional methodologies to meet individual children's needs and specific situations.

(February 1992)

Learning needs cannot be separated from the social context in which they live. Gardner, in The unschooled mind. How children think and how schools should teach (1991), provides an extensive discussion regarding the tendency of human beings to cling tenaciously to their sense of how the world works. Education is the only realistic opportunity to provide children of poverty with the means to improve their existence and develop into productive, self-sufficient citizens.

Kennedy, in developing an agenda for research on teacher learning (1991), found that the research on student teachers' knowledge and beliefs indicates that they have little awareness of people different from themselves, and that they tend to view subjects as fixed sets of rules or procedures with few connections to themselves or to the world outside the classroom. Further, they hold a limited idea of the teacher role, regard teaching as telling, and view learning as absorbing and reciting back what the teacher has told.

Limited understanding, which constitutes a serious handicap for teachers, is not self-correcting. In reality, limited understanding may lead to illusions that directly affect the ways teachers plan and teach. Ringstaff, reporting at the annual meeting of the American Educational Research Association in April, 1990, presented evidence that personally held illusions can be not only powerful and enduring, but can serve to limit a teacher's motivation for inquiry, experimentation, and future learning. Some of the illusions which Ringstaff found in a study of teachers who were asked to teach a subject for which they were unprepared, were:

- "I know this stuff - it's simple."
- "I know what these kids need."
- "Everyone teaches (this subject) the same way."
- "What was easy for me will be easy for my kids."
- "Anyone can teach if they know enough about the subject."

It is easy to see that these pre-conceived and limiting assumptions are of concern to educators as a whole, but such assumptions can be especially damaging when teaching special needs children such as those who come from poverty environments and other situations which are not reflective of the teacher's own experience.

Global Competition

A recent issue of the Phi Delta Kappan was devoted to the topic of education around the world, and included a guest editorial entitled, "A World at Risk." It is commonly accepted by professional educators as well as society in general that public education in America has been slipping a bit in recent years, in comparison with its world-wide neighbors. Recent (February 6, 1992) headlines in the Albuquerque Journal proclaimed, "Study Finds Most U.S. Students Lag in Math, Science." It is not unusual to open any business journal or major newspaper and find similar articles and headlines, proclaiming that American education is less than it should be. A recent Request for Proposal was issued from the National Center

for Educational Statistics, seeking to find researchers willing to examine other countries' economic and educational systems for the purpose of providing a "level playing field" comparison.

According to the January, 1992, Phi Delta Kappan, there is much to be learned through the sharing of research and practical experience among the world's educators. It is noted, however, that the United States is not the only "nation at risk," and that many other nations are concerned about their educational systems. "The roots of the world's educational problems are amazingly similar, despite the diverse histories, cultures, and social forces that have shaped the various nations," states Jerry Kopp, past president of Phi Delta Kappa and director of PDK's Project EPIC (Educators Promoting International Cooperation). He goes on to say that, "The reasons these problems have surfaced today are quite different and have led to some very different attempts at resolution."

America depends on its public educational system, and the colleges of education which prepare teachers for that educational system, to provide the thinking and high-achieving citizenry on which it relies. In a recent article by Michael Kirst and Diane Ravitch, *The Case for Renewal in Education Research*, the case is made for examining age-old conceptions about learning, how to deliver education, and how to structure our schools. In his preface to the article, Arthur E. Wise discusses a new report developed by the National Academy of Education, an honorary society of 75 distinguished researchers and education leaders. The report is quoted as taking a strong stand that education policy and practice must be guided by

a new quality and quantity of research, and that current efforts to implement broad-based school reforms will fail without adequate research to guide the direction of change. It would seem reasonable to expect that the leadership for such research, appropriate to today's educational needs, should emanate from our colleges of education.

Successful and Effective Educational Strategies

The "practical" application of professional preparation must equip educators to carry out a wide variety of tasks and responsibilities. As in the past, teachers of the 1990's must teach skills and subject matter, but they will be increasingly required to instill in students a "desire for life-long learning" due to the relentless information explosion in many content areas. No longer can teachers rely upon student achievement tests to reflect student knowledge, but must creatively apply any number of alternative or "authentic" measures in their assessment. Educational objectives are more numerous and more complex than those of the past; selecting instructional materials to match objectives has become a specialized skill. The management of student behavior and involvement of parents requires masterful levels of knowledge of human nature, communication, and tact.

Educators who depend upon schools of education for training include not only teachers but also counselors, principals, coordinators of special programs, and a host of specialist-type positions. These professionals will be required to be multi-faceted, multi-trained, and multi-

skilled in their ability to work with parents, community members, business leaders, school faculty members, human services workers, and, in many cases, state or federal educational program monitoring agents. Some will need to possess extensive knowledge in developing and implementing budgets, legal considerations, evaluation of teachers and other educational staff, curriculum development, student and staff mental and physical health concerns, and wide varieties of special programs to meet special identified needs.

How will colleges of education step up to these needs? How will professional schools of education attempt to maintain "cutting edge" approaches as society continues to place more and more demands on its professional educators? The special challenge in meeting these needs will include a combination of skills, techniques, new technologies, current knowledge regarding teaching and learning, continuing awareness of research and its appropriate applications, and a wholehearted willingness to participate in ongoing critical, reflective inquiry.

Technology

The new technology of computers and peripheral devices such as printers and scanners, supporting software and databases, and linking networks, have opened vast new opportunities to the entire field of education. Computers linked to video through videodisc and image-editing devices expand these opportunities beyond what most non-computer literate citizens

can imagine. However, while the new technologies open new vistas in their multiple capabilities as learning tools, integrated learning systems, and providing motivation through simulations and games, technology cannot substitute for a well-prepared and effective teacher.

Teachers of the 1990's must be computer literate. They must be able to use technical knowledge appropriately and flexibly, to serve their own professional needs as well as for use in the classroom. In fact, according to a recent report of the Holmes Group, there is a strong case that use of the new technologies in K-12 education is so important that all future educators must have the opportunity to learn about and to learn with these new tools.

Collins, writing about the role of computer technology in restructuring schools (Phi Delta Kappan, 73 [1], 1991), found a number of major shifts in emphasis as a result of implementation of technology into instruction. Collins found, for example, that:

- The social structure became more cooperative and less competitive
- Small group instruction became more frequently utilized than whole-class instruction
- Teachers were able to attend to the less able students more than when utilizing earlier standard teaching methodologies
- Coaching and facilitation was utilized more frequently, with less frequent use of lecture and recitation techniques
- Students were highly engaged in learning activities
- Teachers utilized individualized materials to meet specific student's individual needs, rather than assigning the same material to the entire class
- Verbal thinking was integrated with visual thinking

- Assessment was based on progress, effort, and products rather than test performance alone

Recent research reflects that, when computers have been integrated into classrooms, teachers have experienced extensive change in their beliefs and practices. These changes are evidenced through many of the shifts listed above; in addition, teachers report presenting more complex material to their students, becoming more of a facilitator and coach in the learning process, and becoming more open to allowing small group and independent work by students.

However, when computers are placed in school or classroom situations where they are not fully integrated by trained teachers, they tend to be more limited in their utilization. In these cases, according to Becker's presentation at the 1989 American Educational Research Association annual meeting, elementary schools are more likely to utilize computers for drill in basic skills, and secondary schools for teaching programming and computer literacy.

The Holmes Group has expressed the hope that forward-thinking member colleges of education will foresee and resist the trend toward conservative computer applications and instead pioneer exemplary programs committed to improved practice. This approach will require not a "one or two courses in computer applications" plan, but a consistent, over-time involvement of preservice teachers and other educators in the College of Education.

Prospective educators must be given the time and opportunity to develop personal comfort in the practical use of technology, and to learn applications of standard tools such as word

processing, databases, and graphics. In addition, all educators should be conversant with computer applications to subject areas, where instructors can model teaching with technology.

Ideally, the teaching of tomorrow's teachers should model the technique and the application. A plan which has the greatest opportunity for success will take place in the classroom learning environment. Therefore, for optimum integration of technology into public education, the teaching of technology to teachers should go beyond the University classroom into children's active learning environments.

THE COLLEGE OF EDUCATION TODAY

Students

In Fall, 1991 the College of Education accepted 638 undergraduates and 1218 graduate students into programs. The table below shows the percent of degrees awarded by the COE over the past four years.

Table 4: Percent of Degrees Awarded by the College of Education by Ethnicity

Degree Ethnicity	87-88	88-89	89-90	90-91
BACHELORS				
Black	1%	2%	2%	2%
Hispanic	21	27	24	24
Native Am.	6	4	5	6
Other	72	67	69	68
MASTERS				
Black	1	1	1	2
Hispanic	25	20	18	24
Native Am.	4	5	5	6
Asian	1	4	5	3
Other	69	70	71	65
DOCTORAL				
Black	2	2	2	9
Hispanic	17	8	22	28
Native Am.	6	2	0	0
Asian	0	5	7	2
Other	75	83	69	61

Clearly, the highest percentage of degrees has been earned by students in the "Other" category which includes Anglo and all groups not otherwise identified. During 1990-91, 243 Bachelors, 342 Masters, and 57 Doctorates were awarded, with 81% going to females and 19% to males. Although the ratios above do not comprise the entire enrollment of the College, they fairly characterize students in the College being about three quarters female and slightly more than two-thirds Anglo.

Age

The face of UNM students seems to be aging according to Betty Karp in her article "About Time for a Face Lift" in the February issue of the UNM Mirage. Non-traditional students were defined roughly as those who are 25 or older. The article further asserts that the needs for non-traditional students are as diverse as their lives, creating a challenge for appropriate response from the university. In examining enrollment data for the COE in Fall, 1991, 42.4% of the students were 25 or younger and 57.6% were 26 and older. Planning for the non-traditional student is an issue which should be considered by the COE.

Plans after Completion: Undergraduates

On the Undergraduate Survey for this study, students were asked to predict anticipated completion dates for their current program of study. Because 90% of the respondents indicated the purpose of their studies in the COE is for either the completion of requirements for a professional license or for the completion of requirements for both the Bachelor's degree and a professional license, it can logically be concluded that dates of completion will largely predict entry into the New Mexico educational arena.

Considerable numbers of undergraduate students indicated plans to seek a position in education in the local area, with 47% of the total respondents choosing this selection. An additional 15% plan to teach in New Mexico, but outside Albuquerque. Twelve percent plan to work in education outside the state, and an additional 12% expect to continue with their studies. A total of 14% indicated they would seek work outside the field of education, not to seek employment, or some other personal plan.

An analysis of subpopulations of students who anticipate completion of studies at specific times reflects that from 40% to 55% of specific cohorts, by semester, anticipate teaching in Albuquerque. An additional 7% to 21% expect to teach outside Albuquerque, but in New Mexico. When these data are reviewed in conjunction with figures on ethnic distribution, it is apparent that considerable need will exist to increase the numbers of educators graduating, and especially those who represent minority ethnic groups, to meet the growing need for local

and state educators. To the degree that the University of New Mexico's College of Education is unable to meet this need, local and state schools will be required to recruit graduates of other universities.

Plans after Completion: Graduate Students

Survey results for graduate students' future plans following completion of their COE studies were similar to those of undergraduates. Forty-four percent (44%) indicated plans to work in education in Albuquerque, 16% to work in education outside Albuquerque but in New Mexico, and 18% intend to seek employment in education outside the state. Because many graduate students are completing advanced work, it was not surprising that only 5% plan to pursue additional university study rather than work full time.

Alumni

Of the 1329 alumni responding, 57% currently work in Albuquerque; an additional 23% work outside Albuquerque but in New Mexico. Twenty percent of those responding work outside the state.

A considerable majority of alumni respondents are currently employed in public education institutions, constituting 64% of the total. From 6% to 8% are working in each of four other

categories of employment: private educational institutions, corporate or business institutions, social service or governmental agencies, or are self-employed.

These figures confirm that expectations on the part of both graduate and undergraduate students are realistic, and lead to the logical conclusion that half or more of graduating students in the next few years will seek employment in the Albuquerque area, primarily in public education. This information raises additional questions for consideration by the COE, such as:

- Should the UNM COE plan to serve primarily the Albuquerque area in the future, or does need for COE training extend to the total state?
- Are there opportunities for providing services to the total state, such as establishing student teaching or internships in other areas, which should be pursued?
- How does the UNM COE data compare to that of other New Mexico colleges and universities? Does it appear that, in general, colleges of education in New Mexico are serving primarily their local areas?

Funding

Funding for the College as well as the University is generated by a formula, based on parameters devised at the state level in the early 1970's, estimating cost and workload. The establishment of the formula coincides with the time period during which COE enrollments

were at an all time high. Since the formula has not been changed to date, ratios establish very high student credit hour (SCH) quotas for the COE faculty.

Two major components, one Instruction and the other General, generate funding for different specific purposes that when added together represent the total which comes into the UNM budget. The model which generates funds coming to the university, however, is not the basis for allocations. A matrix of factors including two internal university taxes and a rolling average of the last three years' student credit hour (SCH) production is used by the University to determine each year's allocation. One of the internal taxes is based on overall productivity. For this tax, the more productive the college or the more cost effective the college's programs, the greater the tax. Both internal taxes are used to support other colleges in the University.

Applying variables from the matrix briefly described above resulted in a 1990-91 allocation for use by the COE of about 78% of what the College actually generated for the total UNM budget according to the state formula. Thus, various workload measures are critical to the formula and are also used as productivity indicators.

The chart on page 47 compares the total University and the COE on five workload measures from Fall, 1986 through Spring, 1991. The five measures are

- **Sections per FTE** - the average number of course meetings per week taught by Full Time Equivalent faculty members

- **FTE Contact Hours** - an index of the average time spent in formal instruction, ignoring preparation and evaluation time
- **Students per FTE** - an index of the average number of students an instructor must potentially evaluate and advise
- **SCH/FTE** - student credit hours divided by full time equivalent instructors references the performance of instructors relative to the current funding formula productivity ratio quota value
- **UNM-9 per FTE** - the result of a synthetic index relative to instructional workload

A review of the five workload measures summarized on the next page shows that, in general, the COE is more productive than the University as a whole. Data for this chart and all others for the College and its departments were prepared by the UNM Policy and Planning Department.

WORKLOAD MEASURES

SEMESTER		SECTIONS PER FTE	FTE CONTACT HRS	STUDENTS PER FTE	SCH/FTE	NM-9 PER FT
FALL 1986	UNM	4.30	14.10	94.50	238.60	13.00
	COE	5.90	20.70	86.70	191.60	18.40
SP 1987	UNM	4.30	13.60	90.10	229.70	12.70
	COE	6.00	20.10	87.10	190.40	18.20
FALL 1987	UNM	4.80	13.40	93.10	239.90	14.80
	COE	6.50	19.00	85.90	198.90	20.10
SP 1988	UNM	5.00	13.80	91.40	232.40	15.20
	COE	7.30	21.10	91.00	203.80	22.00
FALL 1988	UNM	5.00	13.20	91.70	235.50	14.10
	COE	6.60	23.10	86.50	196.70	22.20
SP 1989	UNM	5.20	14.60	95.60	244.60	15.40
	COE	7.70	23.80	102.60	223.70	23.00
FALL 1989	UNM	5.10	14.70	93.50	257.10	15.60
	COE	6.50	23.50	74.80	208.40	23.30
SP 1990	UNM	5.20	14.70	97.50	252.10	15.60
	COE	7.70	24.30	107.00	252.00	23.80
FALL 1990	UNM	5.10	15.00	100.90	264.90	15.70
	COE	7.00	24.10	99.10	235.10	23.20
SP 1991	UNM	5.40	15.10	93.20	251.10	16.20
	COE	7.80	24.60	96.50	253.90	24.90

The chart on page 50 depicts data for the University of New Mexico for academic years 86-87 through 90-91 as well as the percent change comparing 86-87 to 90-91 for the various factors listed. The factors include the following:

- **SCH Total** - the total student credit hours for the academic year
- **FTE Total** - the average full time equivalent faculty members per semester including those not on tenure track
- **FTE Faculty** - the average number of full time equivalent faculty members per semester
- **Faculty Headcount** - the number of faculty hired for the academic year
- **Sections per FTE** - discussed prior to previous chart
- **Contact per FTE** - discussed prior to previous chart
- **Students per FTE** - discussed prior to previous chart
- **SCH per FTE** - discussed prior to previous chart
- **LD SCH per FTE** - lower division course student credit hours per full time equivalent instructor; the expected productivity ratio for COE per academic year is 700 or 350 per semester (semester average is shown)
- **UD SCH per FTE** - upper division course student credit hours per full time equivalent instructor; the expected productivity ratio for COE per academic year is 600 or 300 per semester (semester average is shown)
- **GD SCH per FTE** - graduate division course student credit hours per full time equivalent instructor; the expected productivity ratio for COE per academic year is 300 or 150 per semester (semester average is shown)
- **UNM-9 per FTE** - discussed prior to previous chart

Charts on the following two pages show data for UNM and the College of Education to facilitate comparison. To better understand the productivity ratios related to lower division, upper division, and graduate division the following example is provided. If a faculty member

taught only upper division courses, they would be expected to generate 300 credit hours per semester. Assuming that the courses taught are all worth three credits, then $300/3 = 100$ students, or about 33 students per course per semester. Therefore, the quota is 33 - 34 students for each upper division course taught. Using the same approach, faculty teaching graduate courses are expected to teach about 17 students per graduate course.

It should be noted that the graduate productivity ratio for COE is 300. When compared to the ratios for faculty in Agriculture (150), Biology (150), Engineering (150), Fine Arts (150), Languages (150), Health Sciences (150), Math (150), and Physical Sciences (150), the ratio of 300 means that COE faculty are expected to be twice as productive as their counterparts in the other areas mentioned.

The bar graph at the bottom of the College of Education chart shows the difference in student credit hour production; black bars denote weighted student credit hours and white bars unweighted student credit hours.

UNM

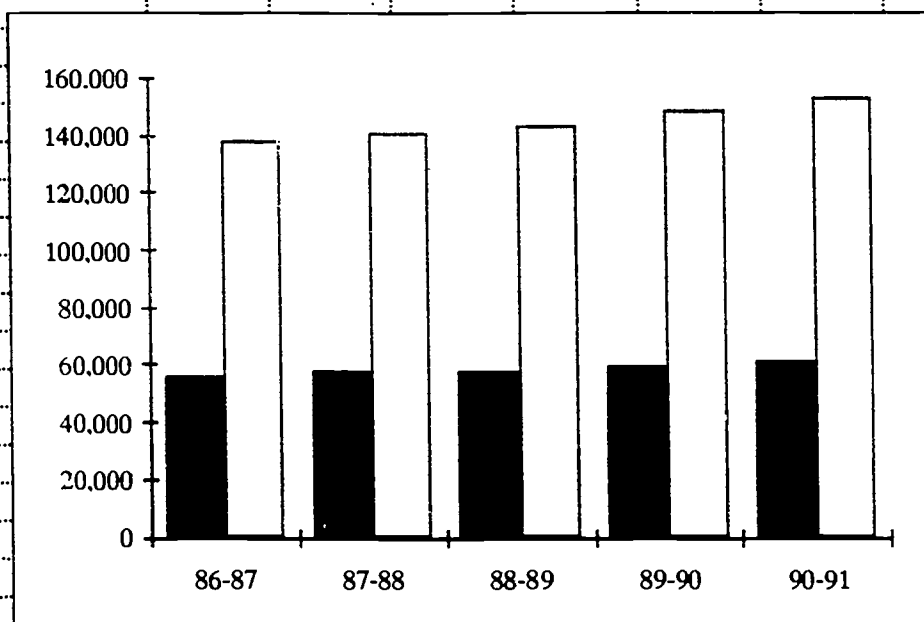
	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	494,005	486,834	488,458	497,780	517,230	4.70%
FTE TOTAL*	933.10	886.50	893.80	849.60	833.15	-10.71%
FTE FACULTY*	662.10	623.60	625.90	701.30	627.45	-5.23%
FACULTY HEADCT	803.00	769.50	769.00	799.00	766.50	-4.55%
SECTIONS PER FTE*	4.30	4.20	5.20	5.15	5.25	22.09%
CONTACT PER FTE*	13.85	13.35	14.60	14.70	15.05	8.66%
STUDENTS PER FTE	92.30	54.75	95.60	95.50	97.05	5.15%
SCH PER FTE*	234.15	236.15	244.50	254.60	258.00	10.19%
LD SCH PER FTE*	365.00	390.60	392.30	473.90	467.90	28.19%
UD SCH PER FTE*	186.85	199.75	219.80	226.35	231.40	23.84%
GD SCH PER FTE*	102.85	102.25	111.20	112.50	111.05	7.97%
UNM9 PER FTE	12.85	12.15	15.4	13.05	15.95	24.12%

COLLEGE OF EDUCATION

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	55,748	57,742	57,782	59,580	61,143	9.68%
SCH/W TOTAL	138,240	140,681	143,366	148,447	152,633	10.41%
FTE TOTAL*	120.95	128.65	125.10	119.15	120.25	-0.58%
FTE FACULTY*	88.10	93.40	89.80	92.35	89.30	1.36%
FACULTY HEADCT	117.00	118.00	113.00	114.00	115.00	-1.71%
SECTIONS PER FTE*	5.95	6.90	7.15	7.10	7.40	24.37%
CONTACT PER FTE*	20.40	20.05	23.45	23.90	24.35	19.36%
STUDENTS PER FTE	86.90	88.45	94.55	90.90	97.80	12.54%
SCH PER FTE*	191.00	201.35	210.20	230.20	244.50	28.01%
LD SCH PER FTE*	214.60	315.45	322.00	401.60	440.25	105.15%
UD SCH PER FTE*	198.10	227.10	229.20	270.55	301.85	52.37%
GD SCH PER FTE*	141.60	133.85	147.80	151.70	151.15	6.74%
UNM9 PER FTE*	18.30	21.05	22.60	23.55	24.05	31.42%

* = AVE PER SEMESTER

STUDENT CREDIT HOUR PRODUCTION



The chart on the following page presents student credit hour data normalized by the application of a weighting factor or Weighted Student Credit Hours for the departments in the College. Again, data are given for 86-87 through 90-91 with a percent of change comparing the earliest to the latest year. Further, the percentage of the weighted student credit hours as a fraction of the total for the College is shown for the earliest and latest academic years.

Departments are Art Education; Curriculum and Instruction in Multicultural Teacher Education; Counseling and Family Studies; Educational Administration; Educational Foundations; Health Promotion, Physical Education, and Leisure Programs; Special Education; and Training and Learning Technologies.

A chart specific to each of the departments cited above is presented on pages 54 to 61. The factors depicted have already been discussed in relation to earlier charts. It should be noted that lower division, upper division, and graduate division productivity quotas for Art Education are based on the Fine Arts formula rather than the formula applied to the other departments in the College. Art Education ratios per academic year are as follows: lower division = 400; upper division = 400; and graduate division = 150.

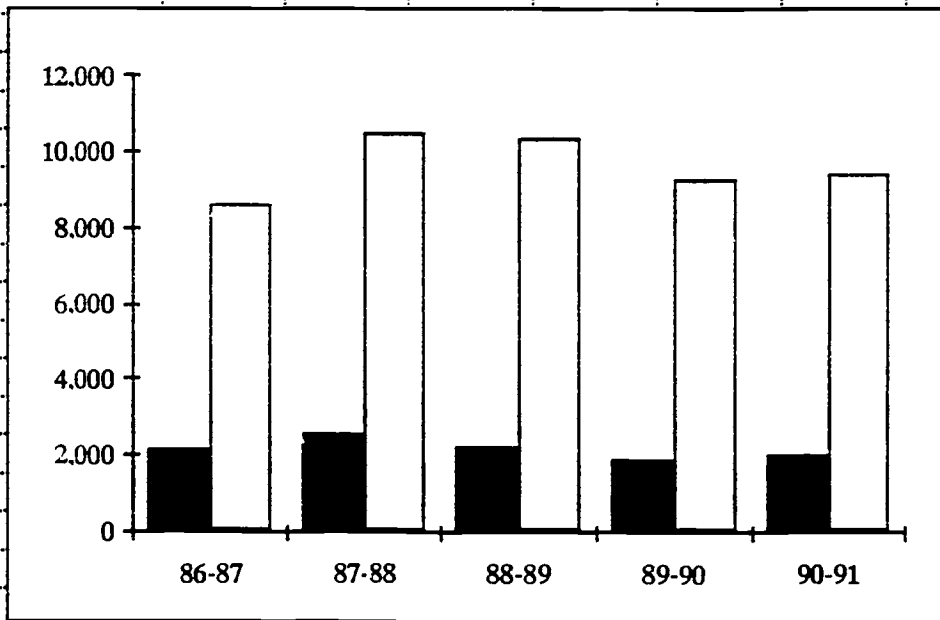
WEIGHTED SCH PRODUCTION

DEPT	86-87	87-88	88-89	89-90	90-91	CHANG	% OF COE 90-91	% OF COE 86-87	GAIN/ LOSS
ART ED	8,607	10,490	10,360	9,281	9,403	9.25%	6.16%	6.23%	-0.066%
C/FS	16,293	14,151	16,089	15,747	17,748	8.94%	11.63%	11.79%	-0.158%
CIMTE	25,995	29,002	27,381	28,711	29,712	14.30%	19.47%	18.80%	0.662%
ED AD	8,533	8,921	11,436	12,312	11,622	36.21%	7.61%	6.17%	1.442%
ED FDNS	16,223	15,051	15,133	17,460	15,778	-2.74%	10.34%	11.74%	-1.398%
HPPELP	38,971	39,748	38,407	39,927	41,778	7.20%	27.37%	28.19%	-0.819%
SPEC ED	18,971	18,016	19,112	18,652	18,928	-0.23%	12.40%	13.72%	-1.323%
TLT	4,388	4,881	5,013	6,357	7,664	74.64%	5.02%	3.17%	1.847%
COE	138,240	140,681	143,366	148,447	152,633	10.41%			

ART EDUCATION

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH	2.115	2.531	2.211	1.901	1.970	-6.86%
SCH/W	8.607	10.490	10.360	9.281	9.403	9.25%
FTE TOTAL*	6.25	5.75	5.90	4.85	4.80	-23.20%
FTE FACULTY*	4.40	4.40	4.90	3.90	4.40	0.00%
FACULTY HEADCT	5.00	5.00	6.00	6.00	5.00	0.00%
SECTIONS PER FTE*	6.20	8.50	7.40	8.80	9.15	47.58%
CONTACT PER FTE*	20.55	23.30	19.60	24.35	28.45	38.44%
STUDENTS PER FTE	49.15	64.80	53.30	75.20	81.15	65.11%
SCH PER FTE*	148.40	191.70	167.15	221.00	243.55	64.12%
LD SCH PER FTE*	201.00	216.80	123.35	128.75	183.20	-8.86%
UD SCH PER FTE*	133.15	227.70	236.30	231.60	274.80	106.38%
GD SCH PER FTE*	146.65	161.40	153.30	224.80	220.65	50.46%
UNM9 PER FTE*	19.90	24.75	21.15	26.00	27.55	38.44%
ENROLLMENT*	341	407	352	341	329	-3.52%
* = AVE PER SEMESTER						

STUDENT CREDIT HOUR PRODUCTION

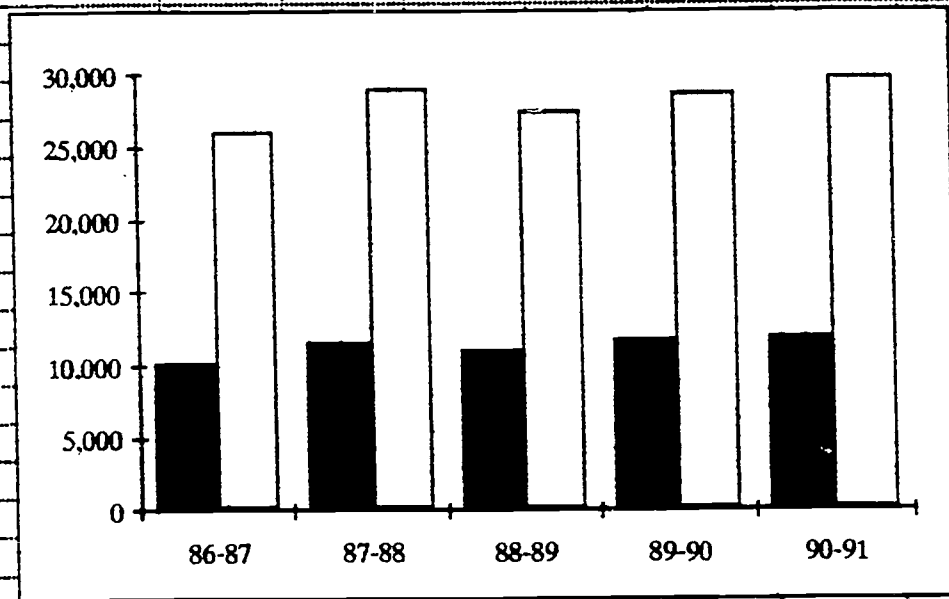


CURRICULUM AND INSTRUCTION

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	10,107	11,600	11,110	11,725	11,987	18.60%
SCH/W TOTAL	25,995	29,002	27,381	28,711	29,712	14.30%
FTE TOTAL*	20.10	24.45	22.20	25.05	21.40	6.47%
FTE FACULTY*	17.40	20.05	18.75	22.15	17.75	2.01%
FACULTY HEADCT	21.00	23.00	22.00	25.00	25.00	19.05%
SECTIONS PER FTE*	6.00	6.10	6.55	6.30	6.80	13.33%
CONTACT PER FTE*	33.20	29.90	43.45	37.00	42.45	27.86%
STUDENTS PER FTE*	69.25	67.70	72.45	75.70	81.90	18.27%
SCH PER FTE*	236.60	240.15	251.35	276.15	336.30	42.14%
LD SCH PER FTE*	444.65	375.10	387.60	433.95	528.10	18.77%
UD SCH PER FTE*	260.80	289.80	302.95	335.00	421.55	61.64%
GD SCH PER FTE*	192.60	162.10	170.60	155.65	146.75	-23.81%
UNM9 PER FTE*	30.30	29.05	37.25	33.15	37.85	24.92%
ENROLLMENT*	1426	1662	1601	1673	1718	20.44%

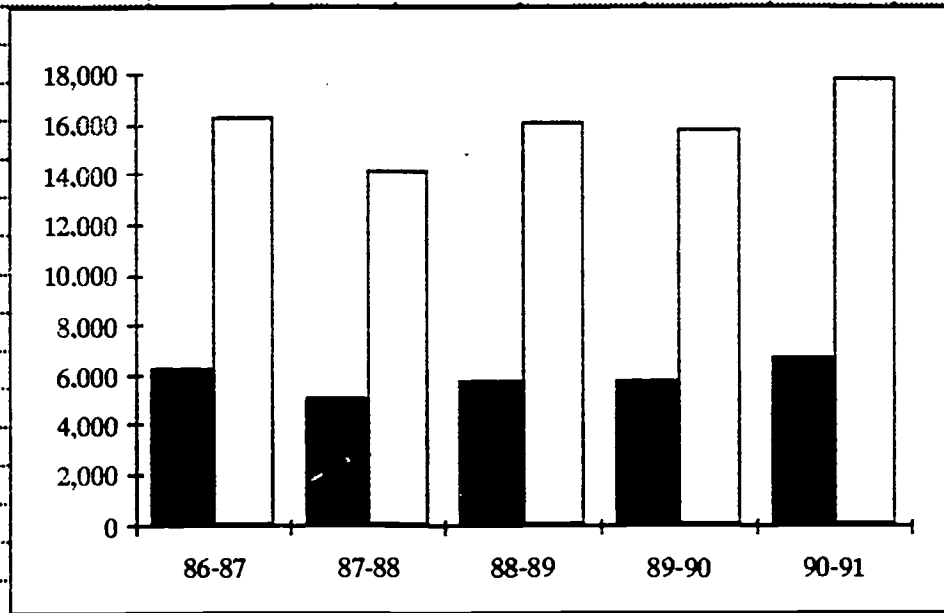
*= AVE PER SEMESTER

STUDENT CREDIT HOUR PRODUCTION



COUNSELING AND FAMILY STUDIES

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	6.274	5.037	5.760	5.810	6.646	5.93%
SCH/W TOTAL	16.293	14.151	16.089	15.747	17.837	9.48%
FTE TOTAL*	12.40	13.95	13.95	15.10	14.10	13.71%
FTE FACULTY*	11.35	13.80	11.55	13.60	12.30	8.37%
FACULTY HEADCT	17.00	13.00	15.00	16.00	16.00	-5.88%
SECTIONS PER FTE*	4.90	5.28	5.75	5.20	5.20	6.12%
CONTACT PER FTE*	13.80	15.18	15.05	15.30	14.70	6.52%
STUDENTS PER FTE*	72.50	55.08	61.90	73.40	81.55	12.48%
SCH PER FTE*	182.48	156.20	212.65	207.40	240.85	31.99%
LD SCH PER FTE*	332.35	417.00	771.25	343.40	560.25	68.57%
UD SCH PER FTE*	177.95	152.70	224.00	254.30	359.80	102.19%
GD SCH PER FTE*	113.05	114.90	148.40	152.85	142.45	26.01%
UNM9 PER FTE*	14.05	16.68	17.20	15.90	16.75	19.22%
ENROLLMENT*	532	417	477	487	556	4.51%
* = AVE PER SEMESTER						
STUDENT CREDIT HOUR PRODUCTION						

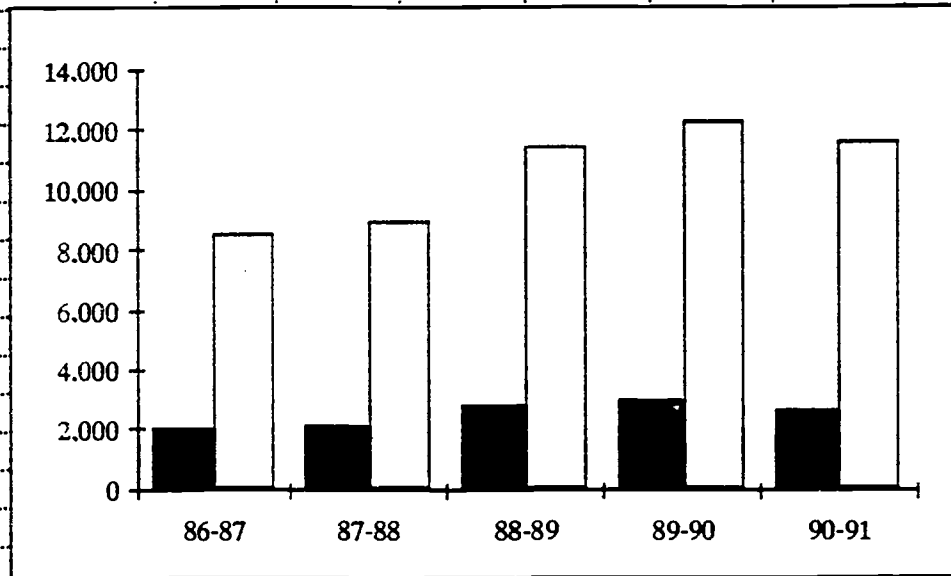


EDUCATIONAL ADMINISTRATION

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	2,066	2,160	2,769	2,981	2,628	27.20%
SCH/W TOTAL	8,533	8,921	11,436	12,312	11,622	36.20%
FTE TOTAL*	7.30	6.80	8.00	8.15	7.90	8.22%
FTE FACULTY*	5.20	5.40	6.30	6.45	5.60	7.69%
FACULTY HEADCT	8.00	10.00	10.00	10.00	10.00	25.00%
SECTIONS PER FTE*	3.00	5.45	4.55	4.65	5.25	75.00%
CONTACT PER FTE*	8.05	11.60	12.45	10.85	9.80	21.74%
STUDENTS PER FTE	41.70	47.40	50.40	49.90	57.60	38.13%
SCH PER FTE*	119.50	148.95	166.80	156.40	173.70	45.36%
LD SCH PER FTE*						
UD SCH PER FTE*						
GD SCH PER FTE*	119.50	148.95	166.80	156.40	173.70	45.36%
UNM9 PER FTE*	9.05	17.50	15.55	14.40	16.00	76.80%
ENROLLMENT*	321	344	444	473	449	39.88%

* = AVE PER SEMESTER

STUDENT CREDIT HOUR PRODUCTION

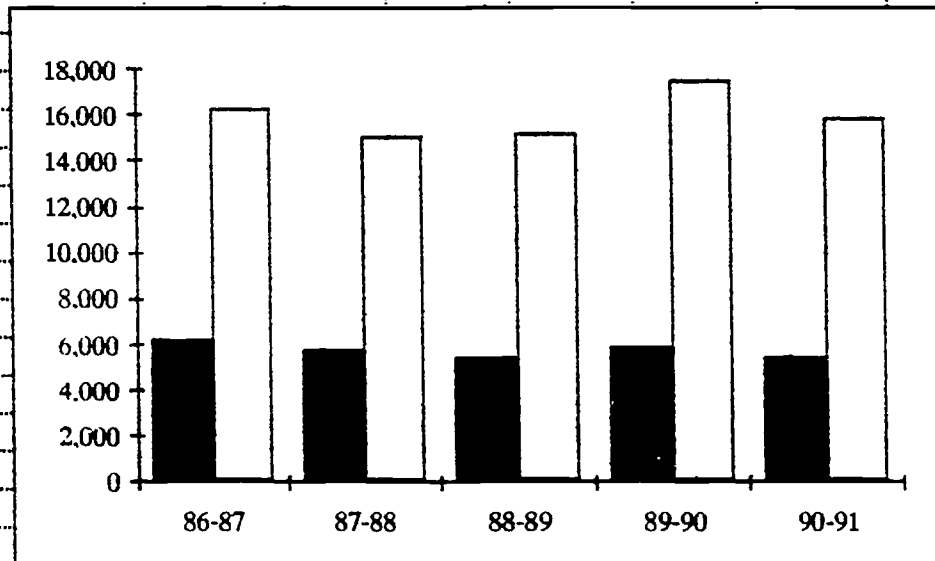


EDUCATIONAL FOUNDATIONS

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	6,157	5,740	5,399	5,898	5,427	-11.86%
SCH/W TOTAL	16,223	15,051	15,133	17,460	15,778	-2.74%
FTE TOTAL*	13.60	13.20	12.80	11.80	12.45	-8.46%
FTE FACULTY*	10.20	10.30	10.60	9.90	10.05	-1.47%
FACULTY HEADCT	15.00	14.00	13.00	12.00	12.00	-20.00%
SECTIONS PER FTE*	5.10	5.75	6.40	6.80	6.00	17.65%
CONTACT PER FTE*	12.60	10.10	13.10	21.70	19.45	54.37%
STUDENTS PER FTE	73.85	71.10	63.50	68.75	64.10	-13.20%
SCH PER FTE*	210.05	205.25	186.20	220.65	176.10	-16.16%
LD SCH PER FTE*	327.05	355.10	154.65	210.88	319.98	-2.16%
UD SCH PER FTE*	250.65	287.60	307.55	422.65	407.15	62.44%
GD SCH PER FTE*	146.55	136.30	139.75	125.00	145.65	-0.61%
UNM9 PER FTE*	15.80	17.05	18.90	23.50	22.50	42.41%
ENROLLMENT*	1056	954	878	959	848	-19.70%

* = AVE PER SEMESTER

STUDENT CREDIT HOUR PRODUCTION

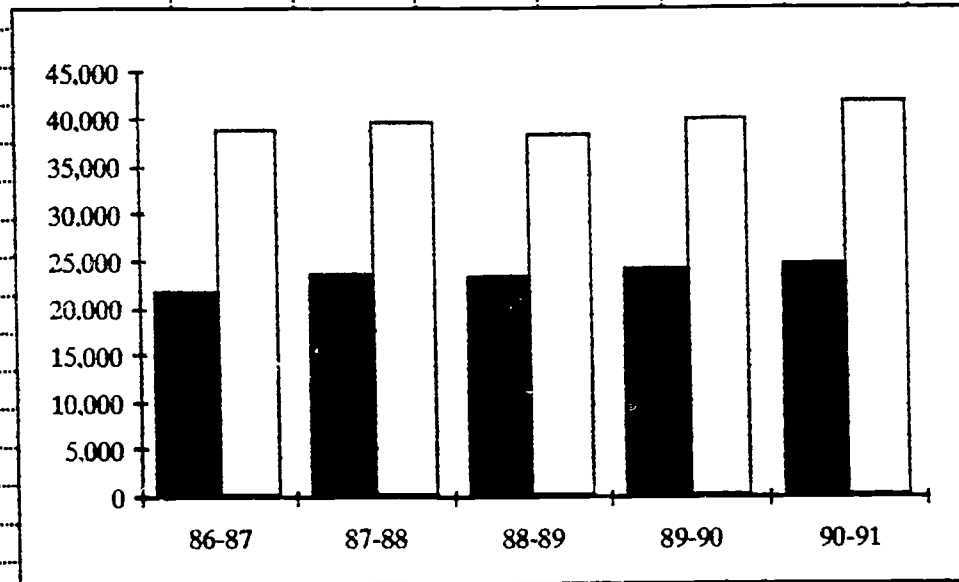


HPPELP

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	21,755	23,671	23,455	24,117	24,624	13.19%
SCH/W TOTAL	38,971	39,748	38,407	39,927	41,778	7.20%
FTE TOTAL*	38.35	41.65	41.00	33.70	38.65	0.78%
FTE FACULTY*	20.80	21.40	20.65	18.60	20.85	0.24%
FACULTY HEADCT	25.00	25.00	25.00	21.00	25.00	0.00%
SECTIONS PER FTE*	7.65	8.55	9.05	9.15	9.40	22.88%
CONTACT PER FTE*	22.80	21.60	23.55	23.45	24.00	5.26%
STUDENTS PER FTE*	144.95	148.40	160.25	145.20	155.25	7.11%
SCH PER FTE*	224.15	238.35	244.95	245.70	268.05	19.59%
LD SCH PER FTE*	271.30	316.40	332.90	388.95	380.60	40.29%
UD SCH PER FTE*	183.90	206.15	187.80	217.25	216.75	17.86%
GD SCH PER FTE*	105.45	100.90	102.60	105.15	129.35	22.66%
UNM9 PER FTE*	18.00	20.60	21.45	23.00	22.80	26.67%
ENROLLMENT*	2454	2523	2369	2422	2531	3.16%
BIP COURSES*	4728	4753	5114	5277	5287	

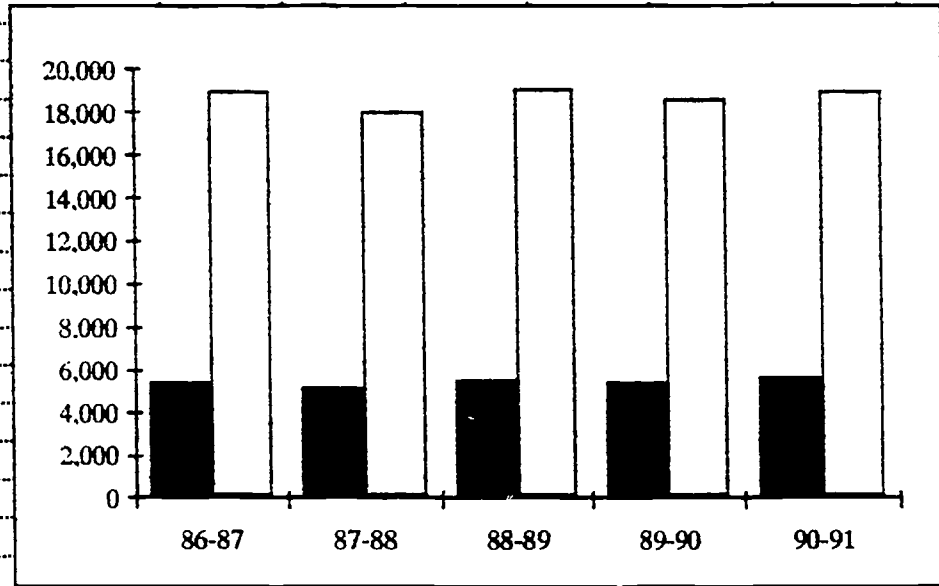
* = AVE PER SEMESTER

STUDENT CREDIT HOUR PRODUCTION



SPECIAL EDUCATION

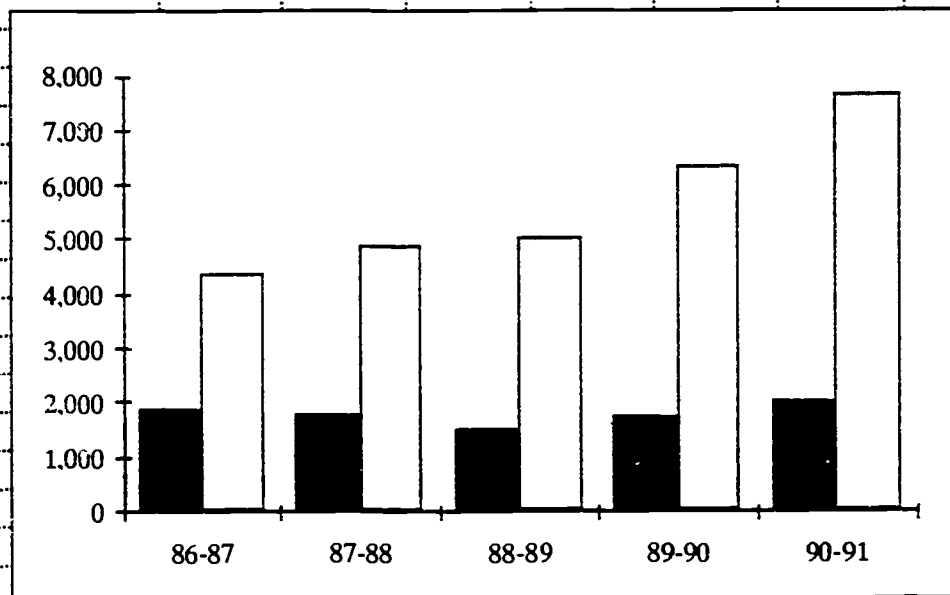
	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	5,333	5,117	5,478	5,419	5,652	5.98%
SCH/W TOTAL	18,971	18,016	19,112	18,652	18,928	-0.23%
FTE TOTAL*	13.30	14.85	14.50	13.05	13.25	-0.38%
FTE FACULTY*	10.65	11.45	11.40	10.35	11.35	6.57%
FACULTY HEADCT	13.00	14.00	15.00	14.00	15.00	15.38%
SECTIONS PER FTE*	4.70	6.50	6.10	7.40	6.90	46.81%
CONTACT PER FTE*	11.00	14.70	16.85	21.50	20.80	89.09%
STUDENTS PER FTE	57.45	55.30	60.25	66.30	65.30	13.66%
SCH PER FTE*	149.85	153.50	161.55	187.35	182.95	22.09%
LD SCH PER FTE*	162.65	221.45	175.75	220.70	250.50	54.01%
UD SCH PER FTE*	163.05	200.25	135.80	217.20	224.75	37.84%
GD SCH PER FTE*	147.65	141.15	163.50	178.40	170.65	15.58%
UNM9 PER FTE*	12.50	18.25	17.35	22.45	21.70	73.60%
ENROLLMENT	952	917	983	937	999	4.99%
* = AVE PER SEMESTER						
STUDENT CREDIT HOUR PRODUCTION						



TRAINING AND LEARNING TECHNOLOGIES

	86-87	87-88	88-89	89-90	90-91	CHANGE
SCH TOTAL	1.860	1.784	1.495	1.729	2.018	8.49%
SCH/W TOTAL	4.388	4.881	5.013	6.357	7.664	74.66%
FTE TOTAL*	9.60	7.95	6.80	7.50	7.80	-18.75%
FTE FACULTY*	8.40	6.80	6.45	7.10	6.90	-17.86%
FACULTY HEADCT	11.00	9.00	8.00	8.00	8.00	-27.27%
SECTIONS PER FTE*	5.05	5.95	6.80	5.75	6.25	23.76%
CONTACT PER FTE*	16.60	14.40	17.90	15.20	18.00	8.43%
STUDENTS PER FTE	41.50	38.90	38.50	38.75	48.40	16.63%
SCH PER FTE*	91.40	98.15	115.90	121.65	115.50	26.37%
LD SCH PER FTE*	119.30	66.90				
UD SCH PER FTE*	85.65	94.50	93.10	86.30	82.75	-3.39%
GD SCH PER FTE*	90.80	105.00	132.00	142.05	133.85	47.41%
UNM9 PER FTE*	17.20	20.05	20.45	18.80	19.10	11.35%
ENROLLMENT	191	189	231	277	296	55.12%
* = AVE PER SEMESTER						

STUDENT CREDIT HOUR PRODUCTION



Current Skills Based on COE Preparation

While indices related to costs and workload provide important information to consider, these measures fail to describe effectiveness from the human perspective such as what skills were actually learned in the COE experience. On the surveys developed for this study, undergraduates, graduate students, and alumni were given the opportunity to review their current professional skills in a number of areas, and to rate each of them as a result of their COE preparation. Areas examined included:

1. Ability to deliver multiple modes of instruction
2. Applications of instructional and computer technology
3. Conflict resolution
4. Understanding and being able to apply learning theory
5. Understanding diversity
6. Understanding human development and performance
7. Understanding real, daily practical problems and issues in the respondent's chosen field
8. *Ability to teach problem solving and critical thinking skills
9. *Management skills
10. **Ability to use professional networks
11. **Leadership skills
12. **Paper presentations at professional conferences
13. **Participation in scholarly debate

14. **Publication of scholarly work
15. **Ability to write grant proposals

Due to different skills required by levels, not all skills were identical across all three populations of respondents. Items 1-8, above, were asked of undergraduates, graduate students, and alumni. Items 8 and 9, indicated with an "**", were asked of undergraduates only. Items 10-15, marked with a "**", were asked of graduate students and alumni.

Undergraduates

In reviewing the first seven items, and comparing responses of the three independent groups, it was noted that undergraduates' responses fell heavily into the "good" category on most items, with smaller percentages indicating that their skills, as a result of their preparation from the College of Education, are "excellent." Item #5, Understanding Diversity, was the one exception to this pattern, with 31% of the undergraduate students choosing the "excellent" response. The other items received varying levels of high-positive response, with from 8% to 25% choosing "excellent." Lowest positive responses were observed in the skills of application of computer technology and conflict resolution. The two areas asked of undergraduate students only, Items 8 and 9 above, which dealt with management skills and the ability to teach problem solving and critical thinking skills, also received lower positive responses, with 11% and 10% of respondents choosing "excellent" to these two items, respectively.

Graduate Students

Larger numbers of graduate students responded enthusiastically to their self-identified skills levels on Items 1-7, above, with from 12% to 35% choosing the "excellent" choice of responses. The lowest positive response of graduate students on these items was in the area of application of instructional and computer technology; the highest positive response was in the category of "understanding diversity."

Alumni

Alumni provided a wide range of responses to these items, with the strongest positive responses observed in Item 1, "Ability to deliver multiple modes of instruction," and Item 5, "Understanding Diversity." The lowest positive response to the seven common items was in regard to the application of instructional and computer technology.

On those items specific to graduate students and alumni only, it was noted that both groups reflected strongest responses in the "good" category, with weaker positive response in the "excellent" choices. The strongest positive responses were observed in self-assessment of leadership skills; lowest positive responses were found regarding writing grant proposals, publication of scholarly works and paper presentations at professional conferences. These figures were consistent in both graduate students and alumni respondents.

WHAT EXTERNAL CONSTITUENCIES HAVE TO SAY

Business, community, and education leaders from across New Mexico participated in six focus groups to explore the thinking of those constituents who are affected directly or indirectly by the College of Education. Since the purpose of this study was to establish the viewpoints of the clients of the College as input to planning, a future orientation was established as the tone of the focus group sessions. Four questions or scenarios were posed to stimulate discussion. Ideas developed by all groups have been synthesized to examine trends.

Central Focus for a College of Education

The first scenario posed below was designed to elicit thoughts on what the purpose of a totally new college dealing with a multiplicity of issues related to education should be.

Imagine that the College of Education as you know it at UNM does not exist and you are providing input that will be used to form a totally new college. What should be its central focus?

Many of these thoughts on central focus were reiterated across groups as follows:

- Develop highly capable graduates who will be the best human resources (teachers, administrators, counselors) for all endeavors related to the field of education. Modeling and mentoring are key strategies to be incorporated.
- Create an interdisciplinary, integrated program focused on the learner emphasizing problem solving; communication skills; group dynamics; balance between theory, application, and research; the teacher as facilitator of learning; classroom management; stages of human development; balance between the issues of content and process.
- Take the leadership role in educational matters for the state and model best practice in realigning to meet established needs. The "College of Learning" was suggested as a new name.
- Become a respected voice for education so that all consumers of education including parents, business and community leaders, and legislators understand and respect the education enterprise.
- Become the focal point for incorporating all human services, establishing the synergistic conditions for successful learning and living.
- Attract top students by having high standards.
- Model an appreciation of diversity in faculty hiring and student recruitment.

In order to accomplish the goals described above, several strategies were discussed including:

- Create collaborative forums of all relevant stakeholders with an interest in education. This collaboration should include public schools, parents, business and community leaders, and students. The purpose of these forums would be to promote an ongoing dialogue regarding what should be included in the curriculum, what's important to learn and to teach, what performance standards should be established and what performance measures should be incorporated to assure accountability.

- Outstanding practicing public school educators outside the university should be invited to teach COE courses or team teach with faculty. Faculty should be expected to be in public school classrooms on a regular basis to develop an understanding of the current classroom circumstances, to conduct research, to provide support, and to offer service. All of these should be valued in equal importance with securing grants and publishing.
- Introduce COE students to public school classrooms on entering the college with continued opportunity to assist in the classroom long before student teaching.
- Model building relationships with parents and the community so that students understand and can utilize this important resource. To be successful educators graduates must understand and participate in the political, social, and cultural contexts of education.

Themes which permeated the discussion were

- Identify clients
- Collaborate with clients to determine current and future needs
- Eliminate barriers to ongoing communication with clients
- Through collaboration recognize the expertise, contributions, and unity among educators at all levels (elementary, secondary, and higher education) to solve problems and create integrated solutions jointly. The groups pointed out that when an attitude exists that most knowledge about any topic should come only from the university level, progress toward the most comprehensive solutions is blocked.

Personal and Professional Characteristics of Educators

Since a college of education deals extensively in preparation, the second question was devised to supply information about what clients think educators will need in the next few years. The

use of the term "educators" intentionally opened consideration to those preparing for any role in education.

What are the most important personal and professional characteristics educators will need to meet the challenges of education between now and the year 2000?

Many expressed difficulty in distinguishing between personal and professional characteristics since both dimensions will be integrated in the competent educator. Generally, the groups felt that the personal characteristics probably should provide guidance for the type of person who will be admitted to the COE, and the professional characteristics may be shaped by the education and experiences gained as a result of the COE program. The following summarizes characteristics in no particular order.

Personal Characteristics

- Literate
- Intelligent, curious
- Accountable
- Flexible
- Non-Judgmental
- Value cultural diversity
- Healthy, energetic, enthusiastic
- Patient
- Caring and nurturing
- Positive
- Good listener
- Good sense of humor
- Integrity, honest
- Emotionally stable
- Linguistically adept
- Organized

- Drug-free
- Risk taker
- Creative, imaginative
- Resourceful
- Independent, assertive
- Excellent interpersonal and communication skills
- High tolerance for ambiguity
- Compassionate, empathetic
- High self-esteem

Professional Characteristics

- Have the conviction that all children can learn and contribute regardless of physical, mental, or emotional impairment
- Have high positive regard for others and see all people as contributors
- Be technologically literate
- Be a competent lifelong learner and expect to continuously update skills and information related to the field
- Be able to cooperate and solve problems collaboratively; understand and participate in shared decision making
- Be able to lead, manage, or monitor, as appropriate
- Have a global understanding of the interrelatedness of society, culture, politics, economy, and education in a rapidly changing world
- Be a facilitator of interconnected, holistic learning rather than one who imparts knowledge
- Understand, conduct, and apply research
- Understand the role of parents and the public in education; invite participation of those now considered outsiders

Concepts Related to Vision

The third scenario focused on the fundamentals for developing a vision for the college. The conversation generated a set of beliefs which might serve as the basis for development of a vision statement, some concepts which could be incorporated, and the assertion that to obtain the requisite ownership required to implement a vision statement the faculty must participate in its development. An important caution was that there should be no expectation that everyone should agree to the vision statement prior to its implementation.

Imagine that the College of Education is developing a vision statement which all faculty will support and which will serve as a framework for producing the kinds of graduates who will be excellent educators for the New Mexico of the future. Our task is to create a list of concepts which should be included in the vision statement. What concepts should we include?

Beliefs

- All children can learn and have the right to be assisted to identify strengths and achieve full potential
- The learner should be recognized as a participant in many other vital relationships as the family, neighborhood, city, state, and country with responsibilities to all these relationships
- Learning must be made relevant and takes place everywhere, not just the classroom
- Education is everybody's business
- Social and cultural diversity are valued; differences are respected
- Learning is continuous, lifelong, and the power needed for personal achievement
- Knowledge is interrelated

- The focus is children

Concepts

- Those developing the vision statement must have the courage to create a blueprint designed to create behavioral results exemplified in graduates, not simply a process to hold coalitions together. A focus on quality must be emphasized with guarantees of what graduates will be able to do.
- The cycle of understanding theory, conducting research, translating findings into practical application, evaluating and improving practice, then refining theory should be taught and reinforced by frequent field experience.
- All necessary resources to education should be coordinated through collaboration.
- The current and future needs of students compared to the needs of society should be a litmus test for what should be included in the curriculum.
- Commit to taking a leadership position in advancing the profession by recognizing quality as measured against established, well-known standards.
- Become a Center for Excellence, enabling the organization to connect all relevant resources of the college and throughout the university for the most meaningful preparation and ongoing renewal of educators.

Restructuring

The final scenario sought perspectives and ideas about restructuring.

Restructuring is a current buzzword in educational circles and on the public's education agenda.

- (a) **What relevance, if any, does restructuring have for the College of Education?**

- (b) **If your task were to restructure the College of Education to meet future educational needs in New Mexico over the next few years, what would be your top three priorities?**

Discussion about part (a) revealed that focus group participants clearly felt restructuring was relevant and in order for the college. The following comments represent the collective thinking:

- The COE, not politicians, should be leading the movement for continual change.
- Restructuring means the difference between success and failure; without it any institution will die in a competitive, rapidly changing environment. Competitors will take on this role if COE doesn't.
- A continual change process with identified benchmarks to measure progress over time is necessary to assure relevance. Colleges of education are typically out of touch with what the true context and needs of education are. Established needs, defined through partnerships with public schools and the community, must be the clarifying force of the change process.
- This is not an activity that happens at one point in time and is then considered finished. It is open-ended and involves a continual exchange of reality-based ideas about best practice. All else should be eliminated.

Priorities

1. Establishment of needs and targets by

- outreach to and collaboration with all relevant clients to assess needs.
- determining what the deliverables will be in human terms and devising appropriate strategies to measure progress.
- becoming proactive.
- testing for congruency against a clear vision for the future.

2. Redefine the organization to

- end isolation and eliminate departmental barriers; create an ongoing interchange and interdependence to maximize opportunity and eliminate duplication.
- teach university courses on public school campuses so that students and faculty cannot miss the current environment and challenges of education.
- encourage retirement or replacement of faculty who are unwilling to change.
- become client centered; few businesses can survive by turning away clients because of unknown standards.
- pose broad questions answered by integrated solutions.
- develop equal partnerships with public schools.
- encourage K-12 educators teaching university classes; university faculty teaching and working in public schools.

3. Create a new agenda for action which values

- a research agenda aligned with the purposes of the college.
- teaching as much as grantsmanship.
- dissemination of research and evaluation to practitioners and the public to establish what works in education.
- jointly conceived and managed demonstration projects.
- risk taking, not rut-hugging.
- social and cultural diversity.
- teaching what's needed today such as collaboration, cooperation, school-based decision making, school-based budgeting, Re:Learning, modeling and mentoring, working with parents and community, family dynamics, and use of technology.
- seeking grants that support the vision of the college.
- active cultivation of community support.
- the public school teacher as researcher with faculty support and collaboration.

What New Mexico Educators Have to Say

In order to solicit a broad-based appraisal regarding current New Mexico educational leaders' perceptions of future needs in education, a survey was designed specifically for this purpose and distributed to several major educational groups. Surveys were distributed as indicated in Chapter One. Of those responding, 63% were male and 37% female. Ages of respondents

varied widely, with from 1% to 27% in the discrete five-year age categories provided. Fifty percent of these educational leaders were between the ages of 41-50; an additional 29% were over the age of 50, and 20% were under age 40.

Over two-thirds (68%) of the respondents were Anglo; 27% were Hispanic; and 3% were Native American. They represented all parts of the state in fairly even numbers, as shown on the following chart:

New Mexico Educators' Survey
Current Location of Respondents

Albuquerque	14%
Northwest New Mexico	24%
Northeast New Mexico	19%
Southwest New Mexico	18%
Southeast New Mexico	25%

Over half (51%) of those responding are currently working as school principals. Twenty eight percent (28%) are local Board of Education members; 12% are district superintendents; seven, or 2%, are State Board of Education members; and 7% are members of the State Department of Education professional staff.

Given the composition of the survey recipients, it was interesting to note that almost half (48%) indicated they have had no previous or current direct relationship with the College of Education. Twenty-eight percent (28%) have earned a degree from COE; twenty-three percent (23%) have taken courses at COE, but did not receive a degree.

Of those who have taken courses or received one or more degrees from COE, the date of their last work varied considerably. Almost one-third attended prior to 1975; another one-third indicated they have been enrolled in the COE since 1987. The remaining one-third were fairly evenly distributed among the years from 1975-1986.

National Goals

Respondents were asked to comment regarding their knowledge of the National Goals for Education, which have been endorsed by the governors of all 50 states as well as the President of the United States. Over half (53%) indicated they are very familiar with these national educational goals, and could discuss the focus of each. An additional 44% have heard of the goals, but do not have extensive knowledge of them. Four percent (4%) do not know about the national educational goals.

A significant majority (87%) of New Mexico's educational leaders, as reflected in survey respondents, feel the COE should use the National Goals as an element in setting direction. Only 8% feel the National Goals should be emphasized as an integral component. Four

percent (4%) expressed their opinion that the National Goals should be ignored in setting new directions for the COE.

Research Considerations

New Mexico educators assigned a "moderate to high" priority regarding the importance of conducting research and the establishment of a research agenda in the COE. Many of the respondents indicated they were aware that research was conducted in the College of Education, but have not seen a completed study. Over one-third (35%) indicated they have been unaware that research is conducted by the COE.

New Mexico educators were asked to respond to the following item regarding the importance of research in the future mission of the College of Education:

Conducting research to improve educational practice is a major goal for many colleges of education. In the future for the COE, the establishment of a research agenda for the improvement of educational practice should (1) become a top priority. (2) be a priority of moderate importance. (3) have a minor role in the mission of the COE. (4) not be emphasized in the mission of the COE.

Almost half the respondents to this item, 48%, chose response (2), indicating that research should be given moderate importance in COE's future. An additional 40% chose the response indicating "top priority," and 10% indicated that research should be given a minor role. Two percent (2%) believed that research should not be emphasized in COE's mission.

Remembering that 47% of the respondents from this group of leaders in New Mexico's schools have not attended the College of Education at UNM, it was interesting to note that only 17% of the total respondents have seen and used research from COE. As mentioned above, 35% were unaware that the COE conducts research, and the larger majority of respondents, 48%, indicated that they have known that research was being conducted, but not seen a completed study.

Preparation of Educators

In evaluating the preparation of COE graduates for work in education, 14% of the district superintendents, school principals, State Department of Education professional employees, and state and local Board of Education members found their colleagues in education to be "well prepared." Forty-seven percent (47%) believe COE graduates in education to be "adequately prepared," and 9% find them "poorly prepared." Almost one-third (30%) expressed that they felt unable to respond knowledgeably to this item.

Strategies and Trends

Strategies

Survey respondents were given a list of ten identified educational strategies, and asked to rate each of the following in terms of its application in meeting the educational needs of the state. The ten strategies are listed below in the order of importance assigned them by educational

leaders responding to the survey, with the first item reflecting the strongest positive response and the tenth item receiving the least positive response:

1. Scheduling to meet the needs of working adults
2. More courses offered at branch campuses
3. More COE faculty participation on school sites
4. Inservice Training
5. Professional development certification
6. A statewide computer network
7. Regional conferences
8. Interactive video classes for secondary students
9. Interactive video classes for adults
10. More collaborative research projects

Trends

New Mexico educators were also asked to review current trends in education, and indicate their opinion of whether or not each could improve education provided by the COE. The following list provides a general overview of respondents' opinions regarding the degree of contribution of each. Each of the top two ranked items, assigned a rank of "1," received the strongest positive response from 78% of those responding.

1. Instruction on site-based decision making
1. Instruction on site-based management

3. Experienced educators, conscious of membership in a profession, help to teach and induct new members
4. Instruction on Re:Learning
5. Fifth year programs that provide more school experience prior to licensure
6. Create an open system so that programs may be developed by taking courses out of multiple departments; blur the lines between the departments in COE
7. Work in cohort groups

Chapter Six

STRENGTHS, NEEDS AND PRIORITIES

Admissions

The admissions process was judged "clear and easy" by approximately half the graduate students and alumni, with 49% to 54% of respondents indicating this choice for admission to the College of Education, the individual departments, and the graduate school. However, undergraduates perceived the admissions process to be more difficult, with only 24% indicating that admission was "clear and easy," and with 53% choosing either "not clear" or "very difficult."

From 23% (undergraduates) to 31% (graduate students and alumni) indicated that admissions required assistance, and that needed assistance was available. From 3% (graduate students) to 14% (undergraduates) found the admissions process to be "very difficult."

Content analysis reflected that admissions was a source of considerable difficulty to many students, and one of the major suggestions for improvement. In open-ended responses, students recalled the admissions process as being unnecessarily cumbersome, complicated, and impersonal.

Academic Advisement

Undergraduates who are currently enrolled in the College of Education also found academic advisement to be less than desired. When asked to rate the availability and helpfulness of academic advisement, almost 2/5 (38.9%) of the undergraduates indicated "available and helpful." However, another 1/4 found the advisement to be available but not helpful, and 29% indicated such assistance was difficult to arrange. Four percent (4%) indicated that academic advisement was inaccessible, and 3% did not seek this advisement opportunity.

Graduate students and alumni found academic advisement to be more available and more helpful than did the undergraduates, with 59% and 66% choosing "available and helpful" as their response, respectively. An additional 36% (alumni) and 30% (graduate students) found academic advisement to be available but not helpful, difficult to arrange, or inaccessible. Almost 5% of each of these two populations did not seek academic advisement.

However, content analysis of open-ended responses selected academic advisement as an overriding concern of undergraduates, graduates, and alumni. When asked what should be changed about the College of Education, the area of academic advisement was mentioned more than any other individual concern. Additionally, respondents expressed very strong feelings regarding advisement, reporting that poor advisement was responsible for a delay in graduation, taking unnecessary and unwanted courses, and causing undue difficulties in their

program of study. Many respondents observed the need for general training of all academic advisors, and frequent updating of faculty regarding licensure and other requirements.

Licensure Advisement

Because licensure in education is of concern to many students in the College of Education, advisement specific to licensure issues was measured as a separate issue. Although a considerable number of students did not seek advisement regarding licensure (13% of undergraduates, 53% of graduates, and 28% of alumni), of those who did seek this information, less than half found the advisement to be available and helpful.

Here again, the undergraduates expressed the highest level of dissatisfaction, with 71% of respondents who had sought advisement regarding licensure finding it to be available but not helpful, difficult to arrange, or inaccessible. The remaining 29% indicated licensure advisement was both available and helpful.

Graduate students and alumni responded more positively regarding this issue, with 54% (graduates) and 53% (alumni) of those respondents who sought licensure advice indicating they found it to be available and helpful.

Open-ended responses received from undergraduates, graduate students, and alumni reflected an overall assumption that COE advisors did not or would not possess current information regarding licensure. It was noted that frequent changes in state requirements were not shared in a systematic way with advisors, and that incorrect advice and direction often resulted.

Course Availability and Quality

Availability

Over half the survey respondents in all three categories indicated that courses they wanted to take were almost always available, and offered at times that matched their schedule.

However, considerable difficulty was expressed by undergraduate students, who indicated that they frequently encounter situations where courses are closed (24%) or not offered at times that match their schedules (13%). Graduate students also expressed concern in this regard, with a combined total of 34% in these two categories. Alumni responses were lower in this regard, with only 4% having experienced frequently closed classes, and 7% finding that needed courses were not offered at times to match their schedules.

The importance of course availability was mentioned frequently in open-ended responses received from undergraduates, graduate students, and alumni, especially in regard to non-traditional students. Many respondents expressed appreciation for the availability of late afternoon, evening, and weekend course offerings, and encouraged the COE to continue to consider the needs of the non-traditional students, who comprise over half the current

graduate student population. One-fifth (20.2%) of the 493 graduate students responding to the survey indicated they are working full-time and attempting to juggle large increments of studies. An additional 34% are working full-time and carrying a somewhat smaller courseload. Forty-four percent (44%) are at least forty years of age. Content analysis of open-ended responses reflected that a considerable number are professionals in education who are returning for advanced degrees, or graduate students who are making a career change from another field into education.

Quality

Undergraduate students were asked to reflect on the content and personal benefit of courses taken in the College of Education as well as outside the COE. Graduate students and alumni were asked questions regarding content and personal/professional benefit of College of Education courses only.

Outside COE (Undergraduates): When reflecting on coursework taken as the essential knowledge base for professional preparation, but taken outside the College of Education, responses were mixed. Twenty-eight percent (28%) of the undergraduates responding indicated that courses had provided insights into the teaching and learning process as well as content background. However, 45% responded that course content was needed but did not provide insights into the teaching and learning process. Ten percent (10%) indicated that courses taken had offered insights into the teaching and learning process but did not provide sufficient content; 9% found courses outside the COE mediocre in both teaching and content;

and 9% found coursework insufficient regarding the knowledge base for their professional program.

COE courses (undergraduates, graduate students, and alumni): Over 80% of survey respondents noted that College of Education courses taken were either about what they had expected or, more positively, expanded their vision and provided essential preparation for their chosen profession. Undergraduate students were especially positive in their response to this item, with 45% of the total respondents indicating that COE courses had expanded their vision and provided essential preparation. An additional 36% of the undergraduates found that their COE coursework contributed about what they had expected.

In regards to the challenging nature of courses and COE experiences, responses were somewhat less positive. Most respondents indicated that courses and experiences were "adequate," with a considerable number (from 8% to 20%) choosing "lacking in rigor." Graduate students and alumni, when given the opportunity for a second response to this item, echoed these concerns.

Open-ended responses from undergraduates, graduate students, and alumni indicated that, all things considered, courses were "adequate." Most comments regarding general course quality could best be interpreted as "acceptable, but of limited challenge." Criticism was especially strong regarding course content which was based on obsolete concepts and what respondents did not consider "cutting edge" knowledge regarding current educational methodology.

Faculty

From 20% to 27% found College of Education faculty members to be "excellent professional role models," with the higher percentage reflected by current graduate students. Even larger numbers, representing from 42% to 46% of the three categories of respondents (undergraduates, graduate students, and alumni) found faculty to be knowledgeable and using flexible instructional approaches. From 16% to 22% indicated that faculty were "adequate."

While some variation in response was seen among populations, positive regard for faculty was consistent across categories of respondents. Fewer than 16% of respondents in any category found faculty to be possess insufficient knowledge, experience, and background or give insufficient attention to instructional approaches.

Open-ended responses could only be interpreted as "mixed." While considerable numbers of undergraduates, graduate students, and alumni commented on some of the outstanding faculty members, they frequently included such words as "some" or "a few." More frequently, comments were received regarding the need for COE faculty members to extend themselves into the public education community, and experience the current situation regarding education in the "real world." One of the most frequent comments, second only to the concern for improved advisement, was in regard to COE faculty who are not aware of current trends in education. Suggestions for improvement included exchange programs with practicing educators, and requiring that COE faculty spend time teaching in a K-12 classroom.

Graduate Study

Graduate students and alumni who had completed graduate coursework in the College of Education were queried regarding their experiences with graduate work. Recognizing that graduate study should provide in-depth, specialty study as well as support breadth, respondents were asked how well their program of studies, including courses, field experiences, and mentorships, met this dual objective in their chosen specialty.

Twenty percent (20%) of the current graduate students and 14% of the alumni who pursued graduate work indicated that the accomplishment of the dual objective of both depth and breadth was "excellent," and that they are able to address issues "from both theoretical and practical stances." An additional 25% (graduate students) and 24% (alumni) answered "very well" to this item, and 35% of both groups found this accomplishment to be "adequate." A fourth choice, "Some, but you had to struggle," was chosen by 18% of the graduate students and 22% of the alumni. Five percent or fewer indicated that the dual objective was not accomplished at all.

Comments received in open-ended responses were positive with two notable exceptions: the degree to which graduate work reflected reality in the field, and the overall "average" or "mediocre" quality of the program. Many respondents expressed dismay at beginning their first job assignment following graduation, only to find very little similarity between what they had learned in their university program and what actually existed in practice. Numerous

comments were received from respondents about the need to maintain currency regarding practice, and the need to include more practical applications and less theory in the overall COE program.

Research and Inquiry

Both graduate students and alumni were asked specific questions regarding their ability to understand, conduct, and participate in sharing research and scholarly inquiry, recognizing that such ability is an integral and vital part of graduate education. In this regard, questions were posed regarding:

- A. opportunities to participate in research investigation prior to thesis or dissertation,
- B. the quality of Inquiry Skills courses,
- C. opportunities to come to an understanding of the nature of research and its purpose in educational fields,
- D. opportunities to relate theory to practice,
- E. ability of the thesis or dissertation chair to provide research guidance opportunities that demanded knowledge of research methodology,
- F. opportunities in educational settings which remanded framing challenging issues with researchable questions, and
- G. opportunities to present a scholarly paper at a professional meeting or to autnor a scholarly paper.

Respondents were asked to rate each of the items, A to G, when applicable, as to its worth in preparing them to participate in research and scholarly inquiry. Response choices ranged from "excellent" to "poor," and included "Didn't have an opportunity," and "not applicable."

Graduate students: research & inquiry: Graduate students assigned the highest rating to Item D, above, "opportunities to relate theory to practice," with 24% assigning a value of "excellent," and an additional 32% a value of "good" to its worth in professional preparation. A strong positive response was also observed from graduate students on item C, with a combined total of "excellent" and "good" choices of 55%.

The lowest positive response from graduate students was to Item E, the ability of the thesis or dissertation chair or provide research guidance, with 13.1% choosing "excellent," and an additional 17.7% choosing "good" in response to this query.

Alumni: research & inquiry: Alumni respondents echoed graduate students' observations on many choices. In general, the most positive responses from alumni were observed from items D, with 55% choosing "excellent" or "good," and C, with 47% indicating these combined choices.

In general, open-ended responses received from undergraduates, graduate students, and alumni reinforced students' need for research experiences. Many respondents delineated requests for specific types of research, including more classroom-based opportunities,

increased attention to qualitative methodologies, and additional opportunities to work with COE faculty in collaborative research endeavors.

Numerous comments were received regarding the need for course offerings in grantsmanship, fund-seeking, and proposal writing. These comments were especially prevalent from professional educators working in the field, who have noted that these skills would fill a very important need in their attempts to secure financial support for special or innovative educational programs.

Priorities

Undergraduates, graduate students, alumni, and New Mexico educators were asked to review a list of items and rank order them in terms of need for funding.

Recognizing that resources are always limited, please put the following items in priority order to show how you think the College should allocate its funds.

Choices included in two or more of the four lists included the following:

- A greater variety of course offerings
- A more ethnically/culturally diverse faculty
- Better facilities for students and faculty

- Hiring better qualified full time faculty
- More and/or better equipment
- More laboratory opportunities for students
- Smaller classes (fewer students in each class)
- Supervision and support of practicum and intern experiences
- More research opportunities

Respondents from all groups were clear in their selections, and remarkably consistent in their top priorities. From the above list, undergraduates, graduate students, and alumni identified the same top three items, and in the same order, as priorities 1, 2, and 3. Interestingly, New Mexico Educators also chose identical items as priorities 1, 2, and 3. These highest-ranked items for funding were:

Priority 1: Hiring better qualified full time faculty

Priority 2: Supervision and support of practicum and intern experiences

Priority 3: A greater variety of course offerings

It should be noted that the content analysis further amplified what respondents were thinking in relation to priority 3, above. Many respondents expressed concern regarding a high degree of redundancy and repetitiveness in current course offerings. Many suggested that the curriculum be reconsidered, with relevant skills being collapsed into fewer but more appropriate courses reflecting current educational needs.

Priorities 4 through 9 differed somewhat according to respondent subgroup. The following chart reflects each group's choices for medium and lower priority item rankings:

Rankings 4 - 9	N.M. Educ.	Undergrad.	Grad. Stu.	Alumni
More ethnically/culturally diverse faculty	6	8	8	9
Better facilities for students and faculty	9	5	5	8
More and/or better equipment	7	7	7	7
More laboratory opportunities for students	4	6	6	4
Smaller classes (fewer students in each class)	5	4	4	5
More research opportunities (alumni and NM Educators)	8	NA	NA	6

In addition to indicating where funds should be allocated, as shown above, undergraduates, graduate students, and alumni were asked to assign priorities to identified items in terms of their immediate significance for the College of Education. The survey question was stated as follows:

Given that there are many issues and opportunities for the College of Education, please put the following items in priority order of significance for the College to address at this time.

All groups were in agreement regarding top priority items, but differed among rankings of those in the middle and low priorities.

Highest Priority Items

When given the opportunity to rank, the three groups expressed highest priority assignments to:

- Relevance, rigor, and quality of course work*
- Opportunities for hands-on, clinical or laboratory settings*
- Improvements in the admissions and advisement processes*
- Research internships and mentoring (graduate students and alumni only; not asked of undergraduates)*

Middle Priority Items

Mid-range rankings were assigned by all groups to the following list of items:

- *Change in the College's programs to better meet the needs of its clientele/educational reform issues*
- *Parity with other academic programs at UNM/Recognized excellence among the academic programs at UNM*
- *Educational technology*

Lowest Priority Items

Only one item was ranked consistently low by all three groups:

- *How college programs apply to societal issues such as parenting and substance abuse*

Mixed Responses

On two items, rankings were mixed:

-A post-baccalaureate teacher licensure program (5th year) was ranked 3rd by undergraduate students, 8th by graduate students, and 10th by alumni.

-Diversity and multicultural education was ranked 5th by undergraduate students, 6th by graduate students, and 9th by alumni.

In an attempt to solicit additional input regarding the graduate school of the College of Education, graduate students were asked to identify areas of concern specific to students pursuing advanced work. These questions were not posed to undergraduate students or alumni; however, select items were addressed on the survey of New Mexico Educators and in the focus groups. These responses are discussed elsewhere in this report.

The following list is presented in the order of importance assigned by respondent graduate students:

<u>Priority</u>	<u>Item</u>
1st	Funding support of graduate study through more/better graduate and teaching assistantships
2nd	Development of more integrated and focused programs to better meet the needs of students and education in the state
3rd	Better planned mentoring experiences leading to comprehensive examinations and/or planning and implementing these, and dissertation studies
4th	More/better attention to advisement from admissions through completion of a program

- 5th Interactions with other disciplines of inquiry across the university
- 6th Better/more participation of faculty in professional field settings off campus
- 7th More attention to planning ongoing experiences for professionals in educational settings
- 8th Internships in leadership and policy making agencies such as the State Department of Education and the LESC (Legislative Education Study Committee)
- 9th Opportunities to participate with faculty in professional organizations and conferences
- 10th Opportunities to participate in colloquia presented by scholars and/or professionals in educational fields

OBSERVATIONS

Throughout this report several themes persist and have been reinforced by various constituents. The following is a list of observations which emerged as a result of this investigation.

- Participant groups expect high future demand for educational technology and special education in New Mexico.
- Both admissions and advisement procedures should be reviewed to insure that all students receive accurate and appropriate information.
- While some indications show that diversity is being acknowledged, increased emphasis should be placed on recruiting and retaining greater numbers of minority faculty and students.
- Retraining and upgrading of educator's skills will be increasingly important. As the age of the modal teacher increases, and as more educators take breaks from their jobs, retraining will become a more critical need.
- Since non-traditional preparation programs are attracting more prospective teachers, attention should be given to increasing flexibility and reducing barriers.
- National trends support the need for instruction in innovative approaches such as site-based management and decision making, Re:Learning, alternative assessment, cooperative and collaborative learning, teacher empowerment and responsible participation, and other methodologies.
- Current faculty must model facilitation of problem solving and learning, rather than imparting knowledge in specific content areas.
- Recognizing and incorporating current innovative trends in education as well as the realities of the public school environment will assure continuing viability for the College.

- Educators should be trained to meet the needs of all students. Blending strengths of all departments will create optimal conditions for this comprehensive training to occur.
- Findings of this study indicate a need for COE services throughout the state. Exploring creative approaches to outreach may yield opportunities for expanding the delivery of services including field experiences and student teaching.
- Creation of interdisciplinary, integrated programs which focuses on the learner emphasizing problem solving; communication skills; group dynamics; balance between theory, application, and research; the teacher as facilitator of learning; classroom management; stages of human development; and balance between the issues of content and process will assure a comprehensive, relevant curriculum.
- An ongoing collaborative dialogue should include all relevant stakeholders with an interest in education.
- Modeling best practices in meeting established educational needs will assure a leadership role for the COE.
- Utilizing public school teachers in COE faculty positions and utilizing COE faculty in public schools assures awareness of current educational needs and jointly developed solutions.
- Introduce COE students to public school classrooms on entering the College, with continued opportunity to assist in the classroom long before student teaching.
- Model building relationships with parents and the community so that students understand and can utilize this important resource.
- The craft of quality teaching should be valued in equal importance with securing grants and publishing.
- Prevalent attitudes that knowledge comes only from the university level blocks progress toward comprehensive, collaborative solutions regarding problems facing education.
- The cycle of understanding theory, conducting research, translating findings into practical application, evaluating and improving practice, then refining theory should be taught and reinforced by frequent field experience.

- Restructuring is not change just for the sake of change. It means the difference between success and failure; without it any institution will die in a competitive, rapidly changing environment. Competitors will take on this role if COE doesn't.
- A continual change process with identified benchmarks to measure progress over time is necessary to assure relevance.
- Many respondents believe that the National Goals for Education should serve as an element in setting direction for the COE.
- Most New Mexico educators felt that relevant research and dissemination is a moderate to high priority. Over one third of the respondents were not aware that the COE conducts research.
- The highest priority for immediate attention was assigned to the "relevance, rigor, and quality of course work."

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