CCHE Agenda

January 10, 2003
Boettcher Auditorium
Colorado History Museum, Denver, CO
8:00 a.m.

I. Approval of Minutes

II. Reports

A. Chair's Report – Lamm
B. Commissioners' Reports
C. Advisory Committee Reports
D. Public Comment

III. Consent Items

A. New Degree Proposals
   (1) Proposal: Bachelor of Arts in Criminal Justice at University of Northern Colorado - Kuepper
   (2) Proposal: Doctor of Audiology at the University of Northern Colorado - Kuepper
B. Statewide Transfer Policy – Evans
C. Proposed Student Appeals Policy – Samson
D. Policy Revision: Approval Policy for Site-Based Out-of-State and Out-of-Country Degree Programs - Breckel

IV. Action Items

A. Budget Adjustment Decision FY 2002-2003 - Burnett (30 minutes) [HANDOUT]

V. Items for Discussion and Possible Action

A. State Guaranteed General Education Courses - Connor (45 minutes)
B. 2003 Report on Newly Approved Degree Programs - Samson (15 minutes)
C. 2003 Annual Report on Discontinuance of Academic Degrees with Low Program Demand – Samson (10 minutes)

VI. Written Reports for Possible Discussion

A. Quality Indicator System Report for FY 2001-02- Kieft
B. First-Year Teacher Education Survey - Samson
C. Concept Papers
   (1) Ph.D. in Nursing Education at the University of Northern Colorado - Kuepper
   (2) Master of Arts/Master of Fine Arts in Arts and Media at the University of Colorado at Denver - Kuepper
   (3) Master of Science in Nursing at the University of Southern Colorado - Kuepper
D. Degree Program Name Changes – Evans
E. FTE - Service Area Exemptions - Samson
F. Report on Out-of-State Instruction - Breckel
G. Distance Education Enrollments at Colorado Public Institutions of Higher Education Fiscal Years 1997 – 2001 - Richardson/Hum

TOPIC: CHAIR'S REPORT

PREPARED BY: PEGGY LAMM

This item will be a regular monthly discussion of items which the Chair feels will be of interest to the Commission.

TOPIC: COMMISSIONERS' REPORTS

PREPARED BY: COMMISSIONERS

This item provides an opportunity for Commissioners to report on their activities of the past month.

TOPIC: ADVISORY COMMITTEE REPORTS

PREPARED BY: ADVISORY COMMITTEE MEMBERS

This item provides an opportunity for Commission Advisory Committee members to report on items of interest to the Commission.

TOPIC: PUBLIC COMMENT

PREPARED BY: TIM FOSTER

This item provides an opportunity for public comment on any item unrelated to the meeting agenda. A sign-up sheet is provided on the day of the meeting for all persons wishing to address the Commission on issues not on the agenda. Speakers are called in the order in which they sign up. Each participant begins by stating his/her name, address and organization. Participants are asked to keep their comments brief and not repeat what others have said.

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TOPIC: **PROPOSAL: BACHELOR OF ARTS IN CRIMINAL JUSTICE AT THE UNIVERSITY OF NORTHERN COLORADO**

PREPARED BY: **WILLIAM G. KUEPPER**

I. SUMMARY

The University of Northern Colorado has submitted a proposal for a Bachelor of Arts (B.A.) degree in Criminal Justice. The program is designed to "provide students with a quality liberal arts education that incorporates the skills and knowledge specifically linked to pursuing a career in various aspects of Criminal Justice." Currently, UNC offers a Criminal Justice emphasis within its Sociology major. The proposed degree program requires 40 credits in the major and an 18 credit minor, and projects that 40 students will graduate per year when the program is fully implemented.

The proposal currently points to the substantial shortage of people qualified to work in the criminal justice system. It estimates that Colorado will need over 40 percent more law enforcement and 50 percent more correctional officers by the year 2008.

Several factors support approval of the proposed undergraduate degree program in Criminal Justice:

1. Market demand in Colorado for program graduates;
2. Appropriate curriculum to provide necessary knowledge and skills;
3. Resources committed to make this a quality program and revenues sufficient to cover the expenses associated with implementing this degree.

Commission staff recommends the approval of the proposal from the University of Northern Colorado for a Bachelor of Arts degree in Criminal Justice.

II. BACKGROUND

For the past twenty years, the University of Northern Colorado has offered a Criminal Justice emphasis within its Sociology major. The emphasis is a popular one. Over half of the institution's 577 majors in Sociology during the years 1994-1999 chose Criminal Justice as their field of emphasis. This level of student interest, the increasing specialization of the field of Criminal Justice, and Colorado's need for its graduates led to UNC's decision to develop the new major.

The program is designed to "provide students with a quality liberal arts education that incorporates the skills and knowledge specifically linked to pursuing a career in various aspects of Criminal Justice." The proposal notes that criminal justice systems in the United States " have come to embrace the need for a well-educated workforce, particularly in the front-line area of law enforcement and the back-end area of corrections."

The proposal points out the critical need of suitably trained personnel for work in corrections and other law enforcement professions. Employment opportunities in those fields are projected to grow at a much higher rate than the general expansion of the workforce.

While the proposed Criminal Justice program is designed to enroll students who come to UNC as freshmen, it will also serve community college graduates in Criminal Justice who wish to continue their education toward a baccalaureate degree in that field. In addition, through the use of distance learning, the program will be able to reach professionals in criminal justice who wish to complete a baccalaureate degree but cannot participate in the program on the UNC campus.

The Criminal Justice major will require 40 credits. Twenty-two of these credits will be in the core that consists of eight courses, all of which are required. Nine required credit hours are "content electives" all of which are taken in one of three areas (law enforcement, correctional services, or justice administration). Nine are in skills electives, e.g., computers, oral communication. In addition, Criminal Justice majors must complete a minor of 18 credits.

Basic Program Design for a Bachelor of Arts in *Criminal Justice* (40 hour major)

I. General Education Requirements (6 hours)
Category 2 - Students will take STAT 150: Introduction to Statistical Analysis
Category 5f - Students will take CRJ 110: Introduction to Criminal Justice (formerly SOC 141)

II. Criminal Justice Core (22 hours)

CRJ 220	Policing Systems (3 hrs)
CRJ 230	Judicial Process (cover both adult & juvenile) (3 hrs)
SOC 346	Criminology (3 hrs)
SOC 347	Sociology of Corrections (3 hrs)
CRJ 370	Professionalism and Ethics (3 hrs)
CRJ 380	Justice Research and Statistics (3 hrs)
CRJ 390	The Criminal Justice Profession (1 hr)
CRJ 410	Comparative Justice Systems (3 hrs)

III. Content Electives (9 hours linked to appropriate courses for **one area** below – at least 6 hours at 300 or 400 level)
Law Enforcement
In consultation with their advisor, students will choose at least 9 credit hours from

courses appropriate for persons interested in law enforcement. Such courses are plentiful in many disciplines and could include courses from African Studies, Anthropology, Community Health, Geography, Hispanic Studies, Multicultural Studies, Philosophy, Psychology, and Sociology.

Correctional Services

In consultation with their advisor, students will choose at least 9 credit hours from courses appropriate for persons interested in correctional services. Such courses are plentiful in many disciplines and could include courses from African Studies, Anthropology, Community Health, Geography, Hispanic Studies, Human Rehabilitation Services Multicultural Studies, Philosophy, Psychology, and Sociology.

Justice Administration

In consultation with their advisor, students will choose at least 9 credit hours from courses appropriate for persons interested in justice administration. Such courses are plentiful in many disciplines and could include courses from Accounting, Management, Philosophy, Political Science, and Sociology.

IV. Skills Electives (9 hours chosen from any below --- at least 6 hours at 300 or 400 level)

Computers (Information Systems)

In consultation with their advisor, students may choose courses that develop or expand computer skills. Such courses could include ones from Business Administration, Computing, Educational Technology, and Sociology.

Critical Thinking

In consultation with their advisor, students may choose courses that develop or expand critical thinking skills. Such courses could include ones from Philosophy and Speech Communication.

Oral Communication

In consultation with their advisor, students may choose courses that develop or expand oral communication skills. Such courses could include ones from Speech Communication.

Research

In consultation with their advisor, students may choose courses that develop or expand research skills. Such courses could include ones from Geography, Interdisciplinary Studies, Psychology, Sociology, and Statistics.

Written Communication

In consultation with their advisor, students may choose courses that develop or expand written communication skills. Such courses could include ones from English.

IN ADDITION to the requirements for the major, Criminal Justice major students **must complete a minor** (17 hour minimum) in a field of their choice. No more than six credit hours of courses in any one prefix may be counted for both the major and minor.

Enrollment projections reflect the substantial popularity of the existing criminal justice track in Sociology. (See Attachment A) Sixty students (new freshmen, internal and external transfers) are expected to enroll for the program's first year. By full implementation, as noted above, 240 students are projected to be enrolled, generating 224 FTE. Of these, 24 will come from out of state. At full implementation, the program is expected to produce 40 graduates per year. Implementing the program in Criminal Justice will have the biggest impact on the Sociology program. Course enrollments are not expected to be greatly effected but the number of majors in Sociology will be reduced by half. Sociology will remain large, however, with an estimated 200 majors after the implementation of the new program.

III. STAFF ANALYSIS

The Commission had the concept paper on its agenda at its February 2002 meeting. At that time, it raised five issues to be addressed in the full proposal. Commission staff believe that each has been adequately addressed.

1. The proposal points out the advantages of the new degree over the existing track in Sociology, noting that Sociology is more oriented toward criminology rather than criminal justice. The latter focuses on the agencies and procedures operating in society to achieve civil order.
2. The role of the minor is explained as providing additional skills in the job market.
3. New courses are identified. Also identified is the source of the teaching faculty in the program (from the criminal justice emphasis in sociology).
4. The loss of Sociology majors is discussed, as are course offerings, which might see enrollment increases with the introduction of the new degree program.
5. The proposal provides examples of the use of technology in Criminal Justice classrooms. In addition, it points out that students will be expected to be familiar with the use of the Internet for research. Student responsibility for learning will be emphasized in such diverse ways as classroom presentations and debates, use of online course supplements, and internships.

Enrollment projections have been appropriately documented and the numbers appear to be achievable. The projections count on a very substantial interest in the program, an expectation which commission staff feels is justified.

The table of program expenditures and revenues likewise has been appropriately developed and include the faculty costs of offering all courses required to implement the program. The expenditures, however, do not appear to include any cost of program implementation. This

suggests that the development of the five new courses required in the program will be done without compensation. This may be the case, but if faculty are compensated either through overload payments or releases from teaching, this should be factored into the program budget.

Commission staff has a concern over the very substantial advising load that the faculty in the program will carry if enrollments approach those projected. While the proposal notes that the tenured faculty in the program already carry heavy advising responsibilities, it is important that the junior faculty member(s) in the program not be overburdened. As the institution looks at program capacity, advising workload of faculty should be taken into consideration.

No additional classroom or office space is requested for the new program (see Attachment B). The table of projected revenues and expenditures is included as Attachment C and indicates that the degree program will generate sufficient revenue to offer the degree without necessitating an institutional reallocation of funds. Additional faculty resources needed to implement the program are described as "minimal". Five new courses will be developed. The remainder of the courses required in the program are already offered at the university

In sum, Commission staff sees the creation of a degree program in Criminal Justice as a logical and timely outgrowth of UNC's longstanding commitment to Criminal Justice, and believes that the program will be a popular and useful addition to the university's academic program array.

IV. STAFF RECOMMENDATION

That the Commission approve the request from the University of Northern Colorado for a Bachelor of Arts degree program in Criminal Justice.

Attachment A

ENROLLMENT PROJECTION ASSUMPTIONS AND RATIONALE

During fall semester 2001 over 200 students were enrolled at UNC pursuing the Sociology: Criminal Justice emphasis and the interest in the program is expected to increase if it becomes a separate degree program. A degree in criminal justice is often the chosen major for students interested in many occupations related to law enforcement and corrections. During the first year, we estimate that 60 students will declare a major in criminal justice, 20 new freshmen, 20 external transfer students and 20 currently enrolled freshmen and/or sophomores. With increased marketing and awareness of a major in criminal justice, we estimate that at full implementation that approximately 80 students will enter UNC each year, 40 new freshmen and 40 transfers, with the intent of majoring in criminal justice.

The enrollment estimates, shown in Table 1 (p. 29), are based on a gradual increase in freshmen and transfer students entering UNC who declare a major in criminal justice. The estimate begins with 20 new freshmen, 20 external transfers and 20 internal transfers in year one, increases to 25 new freshmen, 25 external transfers and 10 internal transfers in year two, 30 new freshmen and 30 external transfers in year three, 35 new freshmen and 35 external transfers in year four, and 40 new freshmen and 40 external transfers in year five. UNC had 212 students enrolled during Spring semester 2002 with a declared major in Sociology: Criminal Justice, but since most of these students are juniors and seniors UNC expects only 20 of the current freshmen and/or sophomores to change their major to the new BA in Criminal Justice during the first year, and only 10 additional students during the second year. Although the current Sociology: Criminal Justice emphasis requires some of the same courses as the proposed degree program, most of the current students are too far into their current program to make a change of major likely.

The resident/non-resident proportions used in the enrollment projections for students enrolled as criminal justice majors is similar to the proportions of currently enrolled Sociology: Criminal Justice majors at UNC. The projections are that 90% of the students will be Colorado residents, and 10% will be non-resident students. Almost all non-resident undergraduate students at UNC enroll for at least 15 credit hours per semester, but resident students, on average, complete only 14 credit hours per semester. The full-time equivalency estimates are based on these student enrollment patterns, and result in the resident FTE being slightly lower than number of resident students enrolled in the program each year. The criminal justice curriculum, and the four-year graduation plan, are designed for students to complete 30 credit hours per year, but because of the size of the program and the variety of electives possible within the program, students who enroll for fewer than 30 credit hours should not find it difficult to register for needed courses.

The retention of the students in the criminal justice program is based on the retention for students at UNC. For entering freshmen at UNC, 69% return for a second year, 55% of the original cohort return for a third year, 52 % return for a fourth year. The retention rate for external transfers is typically 80%. The retention rates for students who have declared a major is slightly higher, but the lower retention rates have been used in estimating enrollment in the criminal justice program.

At UNC, approximately 25% of the original cohort graduate after 4 years and another 20% graduate after completing the fifth year, and these rates have been used to estimate the number of entering freshmen that will graduate with a major in criminal justice. The graduation rates for transfer students who enter UNC varies based on the number of hours they transfer to UNC. It is expected that initially, both internal and external transfer students entering the criminal justice program will be sophomores, and the graduation rates for these students will be approximately 25% after the third year and 20% after the fourth year. No graduates are projected before the third year; however, the entire curriculum will be available during year two, and it is possible that some current Sociology: Criminal Justice students or some transfer students could complete the program during the second year.

ENROLLMENT PROJECTIONS

DEFINITIONS:

Academic year is the period beginning July 1 and concluding June 30.

Headcount projections represent an unduplicated count of those students officially admitted to the program and enrolled at the institution during the academic year.

FTE is defined as the full-time equivalent number of those students majoring in the program, regardless of the classes enrolled, during the academic year.

Program graduate is defined as a student who finishes all academic program requirements and graduates with a formal award within a particular academic year.

SPECIAL NOTES:

To calculate the annual headcount enrollment, add new enrollees to the previous year headcount and subtract the number who graduated in the preceding year. Adjust by the anticipated attrition rate.

To calculate FTE, multiply the number of students times the projected number of credit hours students will be typically enrolled in per year and divide by 30.

The data in each column is the annual **unduplicated** number of declared program majors. Since this table documents program demand, course enrollments are not relevant and shall not be included in the headcount or FTE data.

		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Full Implementation
1-a	In-state Headcount	54	84	130	154	182	216
1-b	Out-of-State Headcount	6	12	14	21	23	24
2	Program Headcount	60	96	144	175	205	240
3-a	In-state FTE	50	78	120	142	167	200
3-b	Out-of-state FTE	6	12	14	21	23	24
4	Program FTE	56	90	134	163	190	224
5	Program Graduates	0	0	12	20	30	40

Attach a brief description explaining the specific source data for projecting the program headcount (e.g., actual enrollment in a similar program at a comparable college).

Attachment B

PHYSICAL CAPACITY ESTIMATES

Physical Capacity Estimates – BA in Criminal Justice at UNC

There are no additional physical space needs or costs related to fully implementing the BA in Criminal Justice at UNC.

Attachment C

PROJECTED EXPENSE AND REVENUE ESTIMATES

Projected Expenses:

The projected expenses related to the BA in Criminal Justice program at UNC, Table 3 (p. 35), do not include any expenses related to the University's general education program (40 credit hours), or the student's general university electives (22 credit hours). The expenses reflect only those costs directly related to the delivery of the courses required as part of the major, 22 credit hours in Criminal Justice, 18 credit hours in required content and skill electives, and 18 credit hours in a required minor. Thus the expenses shown are for less than one-half, 58 credit hours, of the total 120 credit hours required to complete the BA in Criminal Justice at UNC.

During year one, entering freshmen will be enrolled primarily in general education courses, and will enroll in only one course required for the program. Transfer students entering the program as sophomores during the first year will enroll in 19 required credit hours (10 credit hours in Criminal Justice and/or Sociology, 6 credit hours of content or skill electives, and 3 credit hours in their minor), and transfer students entering the program as juniors will enroll in 6 credit hours in required Criminal Justice and /or Sociology courses, 6 credit hours of required content/skill electives, and 9 credit hours in their minor. The number of students enrolled as juniors during the first year is likely to be relatively small, 8 to 12, and thus only one section of the required courses will be scheduled. However, because most of the courses required for freshmen and sophomores are new courses, it is likely that the transfer students will need to enroll in these new courses during the first year, and thus most of these courses will need more than one section even during the first year. The total number of credit hours to be delivered by the criminal justice faculty majors during the first year is estimated to be 36, with another 27 credit hours of required electives or minor courses delivered by other departments.

Because the projected enrollment includes a large number of transfer students, both internal and external, the entire curriculum for the criminal justice major must be scheduled during year two. The number of students enrolled as juniors will increase and thus the required courses will need to be offered each semester. The number of students enrolled as seniors is not likely to be large but the required senior level Criminal Justice course (3 credit hours) will need to be offered at least during spring semester. The total number of credit hours to be delivered by the criminal justice faculty during the second year is estimated to be 45, with another 36 credit hours of required electives or minor courses delivered by other departments

By year three, the number of students enrolled as criminal justice majors will have increased sufficiently that each required lower division courses delivered by the criminal justice faculty will need to be offered each semester, and the upper division course will also need to be offered each semester. The total number of credit hours to be delivered by the criminal justice faculty majors during the third year is estimated to be 54, with another 45 credit hours of required electives or minor courses delivered by other departments.

During year four, the number of students enrolled as criminal justice majors will continue to grow with more than half of the students enrolling in upper division courses. The number of sections of required courses will increase slightly, with the criminal justice faculty teaching 57 credit hours and other departments teaching another 54 credit hours of required electives and minor courses.

By year five the number of credit hours taught by the criminal justice faculty has increased to 66, and the required elective credit hours and minor courses taught by other departments remaining at 54 credit hours. This number of courses offered during year five is very close to the total number needed when the program reaches full enrollment.

The faculty costs were estimated based on the required courses in Criminal Justice and/or Sociology (22 credit hours), and the required skill and content electives (18 credit hours), taught by other departments. The faculty cost for the required course taught by criminal justice faculty was estimated based on the 2002/03 salary and benefits for the current criminal justice faculty members, adjusted based on an estimated instructional assignment in the program for each year. For the first year, it was estimated that each faculty member would be assigned half-time to the criminal justice program, and that by year five all faculty would be assigned full-time to the program. The faculty FTE assigned to the program, and costs associated with the faculty, would gradually increase as the credit hours taught by the criminal justice faculty increases. The average faculty cost for the credit hours taught by other departments was estimated at $2,000 per credit hour, and is based on the average salary and fringe benefits for assistant professors and lecturers in the College of Arts and Sciences.

The projected expenses for program administration are based the expectation that a separate Criminal Justice department will be created with four faculty and a .50 FTE support staff position. The department chair costs are based on a reducing a full-time faculty member's instructional assignment by six credit hours per year (.333 FTE reassignment) each year. The cost of the .50 FTE Administrative Assistant position is based on the costs for a similar position in other departments at UNC. The other operating expenses were estimated based on the current allocation for departments of a similar size in the College of Arts and Sciences. Full program administration costs begin in year one because the department will need to be in full operation during the first year.

Projected Revenue:

The revenue projections for the BA in Criminal Justice at UNC are based on the enrollment projections shown in Table 1 (p. 29). The General Fund: State Support estimate is the number of resident student FTE multiplied by $4,931, the FY 2002/03 funding rate for UNC. UNC charges students' full tuition for enrollment of 9 credit hours or more and the tuition revenue shown in Table 3 (p. 35) is based on the resident FTE and non-resident FTE each year multiplied by the appropriate academic tuition rate ($2,290 for resident students, $10,584 for non-residents, and $3,435 for non-residents participating in WUE). The BA in Criminal Justice program does not anticipate any cash revenue or additional funds from other sources.

PROJECTED EXPENSE AND REVENUE ESTIMATES

		ESTIMATED AMOUNT in DOLLARS				
		Year 1	Year 2	Year 3	Year 4	Year 5
Operating Expenses:						
1	Faculty	$162,500	$202,500	$249,000	$272,000	$298,000
2	Financial Aid specific to					
3	Instructional Materials					
4	Program Administration	$47,000	$47,000	$47,000	$47,000	$47,000
5	Rent/Lease					
6	Other Operating Costs	$9,000	$9,000	$9,000	$9,000	$9,000
7	Total Operating Expenses:	$218,500	$258,500	$305,000	$328,000	$354,000
Program Start-Up Expenses:						
8	Capital Construction					
9	Equipment Acquisitions					
10	Library Acquisitions					
11	Total Program Start-Up Exp.	0	0	0	0	0
TOTAL PROGRAM EXPENSES		$218,500	$258,500	$305,000	$328,000	$354,000
Enrollment Revenue:						
12	General Fund: State Support	$249,050	$384,618	$591,720	$700,202	$823,477
13	Cash Revenue: Tuition	$156,602	$262,734	$372,933	$475,954	$547,223
14	Cash Revenue: Fees					
Other Revenue:						
15	Federal Grants					
16	Corporate Grants/Donations					
17	Other fund sources *					
18	Institutional Reallocation **					
TOTAL PROGRAM REVENUE		$405,652	$647,352	$964,653	$1,176,156	$1,370,700

*If revenues are projected in this line, please attach an explanation of the specific source of the funds.
**Attach an explanation of the amounts reported in line 18 that identifies the specific departments whose budgets will be decreased due to the reallocation and the impact the dollars will have on these departments or programs.

TOPIC: PROPOSAL: DOCTOR OF AUDIOLOGY AT THE UNIVERSITY OF NORTHERN COLORADO

PREPARED BY: WILLIAM G. KUEPPER

I. SUMMARY

The Board of Trustees for the University of Northern Colorado has submitted a proposal for a Doctor of Audiology (Au.D.) degree. The degree is designed to graduate professionals who will have advanced clinical skills in audiology as well as teaching and supervisory skills, the doctorate will replace the current master's degree program as the entry level degree. The program will emphasize preparing students for careers in K-12 schools or as higher education faculty.

The proposed degree requires 129 credit hours, 55 of which are clinical. It is designed to be completed in four years. During the final nine months of the program, the student will be in a full-time clinical residency program.

No institution in Colorado has a program leading to an Au.D. degree, although UC-Boulder offers a clinical track in its Ph.D. program in Speech, Language and Hearing Sciences. However, it is noted that UCB's program has graduated few students in the past five years.

Several reasons support the approval of the proposed degree:

1. The emphasis in the proposed program on preparing clinical and educational audiologists is consistent with UNC's role and mission at the graduate level.

2. The accreditation society has adopted substantial changes for preparing an audiologist. With those changes, the Au.D. is the preferred degree. For students matriculating after January 1, 2007, the doctorate will be required to apply for certification in Colorado since Colorado registration regulations in this field are linked to graduation from an accredited program.

3. UNC graduates 21 students from its Communication Disorders: Audiology degree each year who are eligible for K-12 licensure as Audiologists. At the master's level, the average number of graduates is nine. Over the past five years, the graduates of the program have achieved a 100 percent employment record.

4. The program is well designed, addressing the increasing body of knowledge in the field. The external reviewer praises its strong clinical preparation.

5. The institution has provided assurances that it is ready to commit the resources necessary to implement and sustain a quality program.

Commission staff recommend approval of UNC's proposed Doctor of Audiology degree.

II. BACKGROUND

In the mid-90s, UNC prepared proposals for a Doctor of Audiology degree. The move to a doctorate as the entry level degree in audiology was being discussed widely at that time but consensus had not been reached in the profession on the change, nor had any timetable been established for its implementation. When the earlier proposals from UNC reached the Commission, important issues were the appropriateness of, and need for, a doctorate as the entry-level degree and the fate of the master's degree in audiology offered at UNC if a doctorate were approved. Because those issues had not been satisfactorily resolved, UNC withdrew the proposals.

The concept paper for the new proposal was on the Commission agenda at its meeting of June 6, 2002. The Commission raised several matters to be addressed in the full proposal. These have been specifically addressed in the proposal. The proposal was submitted to an external reviewer, Professor Barry Freeman, Chair of the Audiology Department, Nova Southeastern University. His report is appended as Attachment A, and the university's response is Attachment B. The UNC Board of Trustees approved the proposal on December 13, 2002 (Attachment F).

Projections through 2006 suggest that employment in audiology will grow nationally at a rate exceeding that for the average of all occupations. It has been estimated that one out of ten Americans suffer from hearing loss. The majority of those with hearing loss will be referred to an audiologist. Many states, including Colorado, now mandate newborn hearing screening, which will result in early identification and diagnosis of hearing disorders. Growth in school-age populations, and growth in the elderly population will also increase the need for audiologists.

In addition, the Front Range is described in the proposal as a region "known world-wide as a center for specialized otolaryngology and audiology services, including cochlear implants and diagnosis and treatment of balance disorders and sensorineural hearing loss.

The proposed Au.D. will build on the strong audiology program that was initiated in 1971. The program has built a strong reputation both regionally and nationally. The primary goal of the UNC Au.D. program is to offer a post-baccalaureate Au.D. degree that "both meets national accreditation standards and is unique in its preparation of professionals who have advanced clinical skills as well as teaching and supervisory skills." Specific goals of the

Au.D. programs, according to the proposal, are to recruit, educate, and graduate professionals who will:

- Develop the knowledge and skills needed to apply state-of-the-art audiologic instrumentation, assessment procedures, and intervention strategies.
- Be uniquely trained for employment in early childhood and K-12 educational settings.
- Have the interpersonal skills necessary to communicate effectively with patients, family members, educational and medical professionals, and other professional entities representing diverse sociocultural backgrounds.
- Have the written and oral communication skills necessary to be effective leaders in the profession and the community.
- Provide leadership and model "best practice" in the audiology profession.
- Use evidence-based approaches to clinical problem solving.
- Be effective in an interdisciplinary team environment.
- Be knowledgeable and critical consumers of research with the ability to apply research to clinical practice and to conduct clinical research.
- Be knowledgeable in the legal, ethical, and business aspects of audiology practice and health care administration.
- Develop the teaching skills needed to provide college-level instruction in clinical and/or educational audiology.

Admission to the Au.D. program will require an undergraduate “background” in Communication Disorders or Audiology. Others may apply but, if accepted, may need to take up to one additional year of “leveling” coursework by way of preparation for the degree program.

The degree requires the completion of 129 credits and is designed to be completed in three years and nine months. Of the required credits, 55 are earned in clinical courses. The curriculum is based on recommendations of the American Speech-Language-Hearing Association and the American Academy of Audioloy. The requirements reflect the scope of practice for audiologists as defined by these two organizations.

Au.D. Course Requirements

Didactic Courses	
CMDS 555 Neuroanatomy and Neurophysiology	3
CMDS 570 Rehabilitative Audiology	3
CMDS 571 Speech and Hearing Science	3
CMDS 571L Hearing Science Laboratory	1
CMDS 572 Noise	2
(name change to Industrial Audiology)	
CMDS 573 Auditory Physiology and Pathology	3
CMDS 582 Pediatric/Educational Audiology	3
(name change to Educational Audiology)	
CMDS 671 Psychoacoustics	2
CMDS 675 Differential Diagnosis of Auditory Problems	3
CMDS 677 Medical Aspects of Audiology	3
CMDS 678 Hearing Aids and Uses of Amplification	3
CMDS 685 Advanced Differential Diagnosis	4
CMDS 688 Hearing Aids II	3
CMDS 698 Cochlear Implants	3
CMDS 771 Speech Perception & Adv. Psychoacoustics	3
CMDS 774 Professional Issues in Audiology	3
CMDS 775 Advanced Electrodiagnosis	3
CMDS 782 Pediatric Audiology	3
NURS 612 Advanced Pharmacology	4
Research	
CMDS 515 Foundations of Research and Writing	1
CMDS 615 Research in CMDS	3
CMDS 715 Applied Research in Audiology	4
HRS 610 or SRM 600 or equivalent statistics course	3
Presentation of Research Project	
Teaching	
CMDS 720 Supervised Teaching	**2**
(repeatable to 6 credits)	
Clinical Courses	
CMDS 574/580/594 Practicum and Advanced Topics	12
CMDS 592/673/692 Internships in Audiology	16
CMDS 792 Clinical Residency in Audiology	27
Elective Courses	6
TOTAL CREDITS FOR AU.D	**129**

(Note: A more comprehensive description of requirements and course of study is appended as Attachment C)

While the program is designed primarily for students with a bachelor's degree and no clinical experience, it will also accommodate practicing professionals who already hold a master's

degree. Students who hold the master's degree will complete a modified curriculum individually designed after an evaluation of knowledge work and work experience.

III. STAFF ANALYSIS

In analyzing the concept paper and the program proposal, Commission staff considered UNC's role and mission, duplication, program need and demand, and quality issues such as accreditation, curriculum and resources. In addition, staff reviewed the history of UNC's development of the Au.D. proposal.

Role and Mission and Program Duplication

The Au.D. is consistent with UNC's role and mission, particularly the clinical and education emphases of the proposed degree program. The university offers several graduate programs emphasizing the training of practitioners and clinicians, e.g., Educational Psychology, Human Rehabilitation.

The only other graduate program in audiology is the Ph.D. at UC-Boulder. Although UCB program has a clinical track, its primary focus is on preparing researchers and thus differs significantly from the proposed Au.D.

Program Need and Demand

The two certifying bodies in Audiology -- the American Board of Audiology (ABA) and the American Speech-Language-Hearing Association (ASHA) -- confirm that anyone seeking clinical certification after December 31, 2011 (matriculating after 2007) will be required to have a doctorate in audiology. While certification is technically a voluntary action, Colorado requires certification by ASHA to be a registered audiologist in this state. (In Colorado, registration is tantamount to licensure.)

The ASHA also serves as the accrediting body for programs in audiology. Its staff has informed Commission staff that it is assuming that, after 2011, programs will need to offer a doctorate in audiology or Ph.D. to retain accreditation. Since the Au.D. is the clinical doctorate, that degree will be the degree of choice.

Enrollment projections provided in the proposal (Attachment D) are derived from enrollments in the existing master's degree program. Twelve students (ten in-state and two out-of-state) will be admitted for the first and each subsequent year. It is projected that this rate of admission, and an expected high retention, will result in an enrollment of forty-four at full implementation, and produce twelve graduates per year which is consistent with the current graduation numbers of UNC's master's degree in this field.

The number of in-state students entering without clinical experience will be limited to ten per year. This limit is dictated primarily by the number of available externship and clinical residency sites in Colorado.

Program Quality and Resources

In determining potential quality of the proposed program. The capacity of the institution to offer the new degree, and the cost-effectiveness of the program, Commission staff rely substantially on governing board involvement. The governing board is required to consider these matters as it reviews the program proposal and provide assurances to the Commission that it has done so.

The external reviewer raised several questions about curriculum, which have been, or will be, adequately addressed by the institution. These are primarily related to topics that the program has embedded in several of its courses and thus will be covered in that way. In a conversation with Commission staff, the external reviewer indicated that this approach was an appropriate response to his concerns.

The curriculum is built upon UNC's considerable experience in audiology and is responsive to the new requirements agreed upon by the certifying and accrediting bodies. Because the development of Au.D. is still in its early years, some modifications of the requirements may occur as programs evolve. The external reviewer believes that the proposed UNC curriculum for its Au.D. reflects current thinking in the field.

While the requirements include research coursework and preparation of a research paper, the research component is distinctly less than that found in a Ph.D. program. In the UNC proposal, the emphasis on clinical work, and the preparation for teaching are seen as program strengths by the external reviewer. He cautions against overemphasizing the research element of the degree, for example, the requirement of producing a "publishable paper," at the expense of the other components.

A second issue raised by the Commission concerned the future of UNC's master's degree in audiology. The university has clarified its plans regarding that degree. Nationally, there will be a transition period from 2007 to 2012 during which a master's degree can still lead to certification. However, during that transition period, the master's programs will need to meet a new set of requirements in curriculum and learning outcomes, many of which are similar to the requirements of the doctorate. UNC has decided to forego the transition period with an augmented master's degree and move directly to the Au.D. From the university's perspective, the need for the master's degree will no longer exist, so it plans to phase out the master's degree as soon as the Au.D. is implemented.

Faculty needed for the didactic portion of the program will be drawn from those already teaching in the master's program. It is projected that no new faculty will be needed until the

third and fourth year of the program when an additional FTE is hired. The external reviewer expressed concern over the workload of the faculty given the complexity of the program.

The proposal includes a detailed description of space to be utilized in the Au.D. All the needed space is presently available, and the institution has provided assurances that no additional space will be needed to fully implement the program.

The table of projected expense and revenue estimates (Attachment E) indicates that revenues derived from tuition and fees, plus revenues from the UNC Speech-Language Pathology Clinic, are more than sufficient to support the proposed program. In addition, the dean of the college has committed funds for the additional position to be added in year three. It would appear that projected revenues would be sufficient to support an extra faculty position if it would become necessary to hire one.

In sum, Commission staff believe that the proposed degree (1) is supported by bona fide need in Colorado, (2) has a curriculum that defines the special character of the program, one that would enhance its statutory role and mission and meets impending accreditation requirements in audiology, and (3) has the resources necessary to develop and sustain a program of high quality.

State Policy Issues

The Audiology Doctorate is the first in a line of proposed degree programs that are being upgraded from the master's to the doctorate level driven primarily due to external pressure from accrediting societies. At the national level only 10 programs are recognized as first-professional level, including Doctor of Medicine, Doctor of Dentistry, Audiology Doctorate, Pharmacy Doctorate, Juris Doctor, and Doctor of Veterinary Medicine. Colorado's recent experiences with the upgrade to Pharm.D. and the Doctorate in Nursing demonstrate that changes to the doctorate level require significant resources. The policy decision to make this transition should be based on state need and not external pressure.

While UNC plans to phase out the master's degree based on fiscal considerations, that closure does raise a state policy issue. Will the elimination of the master's degree and the move to the doctorate as the entry-level degree in audiology significantly raise the cost of providing health care services? Will the graduate health profession programs consume a disproportionate amount of funding in the future when the Commission's overarching goal is to expand access at the undergraduate level?

Does the Commission wish to consider recommending a modification in the Colorado's requirements for registering as an audiologist? Should the statutory requirements, which now include the requirement for a person to be certified by ASHA, be amended so as to specifically permit master's prepared students, who meet the 2007 standards of the certifying bodies, to continue to be registered in the state?

Would there continue to be a market for master's trained audiologists after UNC begins producing students with the doctorate? And, if so, should UNC be asked to continue awarding the master's degree in audiology after it initiates the Au.D. degree program?

IV. STAFF RECOMMENDATION

That the Commission approve the request of the Board of Trustees for the University of Northern Colorado for a Doctor of Audiology (Au.D.) degree.

Attachment A

External Review
DOCTOR OF AUDIOLOGY (Au.D) DEGREE
UNIVERSITYOF NORTHERN COLORADO
Dr. Barry Freeman
Chair, Audiology Department
Nova Southeastern University

I. Assess the quality of the proposed program.

A. If the proposed program is in a well-defined traditional field of study, does the curriculum provide generally accepted content in the field? Alternatively, if the proposed program is in a new or less traditional field of study, does the proposal demonstrate that the curriculum represents the cutting edge in the field? Is this field of study sufficiently defined to warrant the awarding of a degree?

General Comments:

Audiology education is undergoing a transformation from a master's level entry-level degree to a doctoral entry profession with the Doctor of Audiology (Au.D) degree as the preferred designator. This reviewer compliments UNC for taking the initiative to develop a curriculum and program that will permit graduates to meet the didactic, clinical, and professional requirements to become successful practitioners.

The challenge faced by all programs developing curriculum for an Au.D program is that only models exist. At the time this proposal was developed there were only a handful of universities offering the Au.D degree and they have graduated very few students. In addition, no national standards have been developed to assist universities in the development of their curriculum. However, the proposal does address the skills validation studies, practice-specific literature, and related information that led to changes in the profession that assure that the level of preparation and requirements for practice are consistent with the scope of practice of the profession.

Curriculum:

The proposed curriculum will have 74 course hours and 55 clinical credit hours. According to the mission and goals statements, "students will have the opportunity to focus on educational audiology" as well as be prepared to meet the "critical need for doctoral-level clinical audiologists in university training programs." The goal of the program will be to "offer a …degree that both meets national accreditation standards and is unique in its preparation of professional who have advanced clinical skills as well as teaching and supervisory skills." The curriculum was reviewed with these goals in mind.

The national accreditation standards for audiology doctoral level programs are currently being developed. It would appear that the UNC proposed curriculum would meet most of the proposed accreditation standards. Only recently (November 2002), were standards released by the ASHA for certification requirements in 2007. A review of the proposed requirements suggests that UNC may need to make changes in their proposed curriculum.

A. The scope of practice and the ASHA 2007 certification standard outcomes for audiologists includes diagnosis, management, and treatment of patients with hearing and balance disorders. A review of the didactic courses in the UNC curriculum does not include vestibular assessment or treatment. The foundation, management and treatment courses appear to focus on auditory rather than auditory and vestibular disorders (CMDS 573 Auditory Physiology and Pathology; CMDS 675 Differential Diagnosis of Auditory Problems; CMDS 685 Advanced Differential Diagnosis of Auditory Problems). It is suggested that courses and/or content be revised to include vestibular assessment, management, and treatment.
B. A goal of the UNC program is the preparation of graduates to be employed in the public schools as educational audiologists. The reviewer commends the faculty on its approach to provide a broad-based curriculum that will prepare graduates to practice in diverse clinical settings.
C. The reviewer recommends that students be required to take courses in both Genetics and Pharmacology. The proposed curriculum lists these as elective courses (NURS 612 Advanced Pharmacology appears to be an option in the curriculum). The advent of genetic research and pharmacologic management in our society and the potential impact on the treatment and management of adults and children with hearing and balance disorders make the study of both genetics and pharmacology invaluable to current and future audiologists.
D. Another goal of the program is "advanced supervisory skills." There are no specific courses listed in the curriculum on supervision. The reviewer notes CMDS 720 is "Supervised Teaching" but it does not appear to be a specific course in the supervision of personnel or students. A supervision course would make an excellent addition to the curriculum and meet the program goals.
E. Strong anecdotal evidence suggests that a high percentage of Doctors of Audiology will enter independent professional practice and/or become managers of clinical facilities. In addition, the ASHA 2007 certification standard outcomes include knowledge of "Health care systems" and related topics. Also, a stated goals of the UNC program is to "be knowledgeable in the legal, ethical, and business aspects of audiology practice and health care administration." The reviewer recommends the inclusion of a course on Business/Practice Management at least as an elective.
F. The ASHA 2007 certification standards require students to complete "the aggregate total of clinical experiences equal to 52 work weeks…defined as a minimum of 35 hours per week in direct patient contact…" This totals to a minimum of 1820 hours of clinical experiences for the duration of the program. The UNC program "will result in the accumulation of approximately 1500 clinical clock hours." The reviewer notes that UNC will have to increase the experiences of students to meet the certification standards. A recommendation would be to follow the suggestions proposed in the article in Appendix M on the Audiology

Matching Program. This program recommends a fourth year experience of 10-12 months that would fulfill the recommendations of the certification standards for UNC students.

G. The reviewer agrees with the program that there is a need for audiologists to teach at universities. The requirement for all AuD students "to teach a college-level course under supervision of the faculty" appears unique when compared to existing AuD programs. This will require the three full-time AuD doctoral faculty to supervise these ten students and, also, to have ten courses per year at the undergraduate level for these students to teach. Since audiology is now being viewed as a First Professional Degree profession that does not have an undergraduate major, it will mean that UNC audiology students will be teaching courses outside of their area of specialization. The reviewer recognizes that some might view audiology and speech-language pathology or Communication Science Disorders as a single discipline. However, these are two very distinct professions. The audiology program should be prepared to defend the rationale for having Doctor of Audiology students teaching courses outside of their professional expertise and specific area of training.

H. The Capstone Research Project is among the more controversial requirements for Doctor of Audiology programs. The UNC description notes that the Capstone Project is "not as extensive as a doctoral dissertation [and] it must be original work that makes a contribution to the field." The completed project will be presented to faculty which must judge it to be "of publishable quality" to be accepted for the degree requirement. It is unclear if, as a condition of graduation, students will be required to submit the project for publication or presentation. The reviewer questions if the three full-time audiology faculty will be able to manage ten Capstone Projects annually. Actually, since the project is spread out in the CMDS 715 sequence, it is probable that these three faculty will be managing as many as 20-30 projects, depending on the completion rate of the projects. At other AuD programs with a Capstone requirement, adjunct faculty often are hired to manage the projects. This should be acknowledged in the budget. Also, if the program elects to use faculty from the CSD department, they should assure the students that these faculty have adequate expertise in audiology to properly direct this audiology clinical project.

I. UNC proposes to enroll "a small percentage of applicants…who have already earned a master's degree in audiology…to complete the requirements for the AuD in less than two years." The reviewer agrees that the UNC program would be attractive to current practitioners with a master's degree. The proposal did not offer much detail on how this program would be offered. Prior to enrolling these students, UNC should address program specifics to include:
    a. What will be the specific degree requirements for post-master's students?
    b. What courses will these students be required to take and will the curriculum be lock-step or will a different plan of study be developed for each student?
    c. Will these students be required to teach an undergraduate course and complete a capstone project?
    d. Will courses be offered at a time of day convenient to current practitioners who are employed?
    e. Will there be clinical requirements for completion of the degree?

B. Assess how the methods of delivering instruction support and enhance program quality. Program instruction appears to follow traditional approaches for didactic and clinical instruction. It appears to meet the needs for a quality program.

I. Assess the capacity of the institution to offer the proposed program

A. Number of faculty. There are three full-time faculty for the audiology program to teach a 129 credit hour program, supervise the teaching of ten undergraduate courses per year, place and manage ten students in fourth year clinical externships, and direct at least 10-20 capstone research projects annually. The reviewer understands that faculty from outside audiology (i.e., speech-language pathology and nursing) may teach some foundation courses (e.g., Neuroanatomy, Foundations of Research, Speech and Hearing Science, Pharmacology), but the primary responsibility will fall to these three faculty and adjuncts. The reviewer believes that if this program is going to maintain its high quality and be responsive to student needs, several additional full-time faculty will need to be added. The current faculty may have been sufficient to manage a two-year master's degree program with twenty total students. However, the current faculty appears inadequate to meet the academic and clinical needs of a doctoral program.

B. Other resources. From the description, it appears that the university and program have the resources necessary to meet the needs for a quality program.

C. The budget projections as presented appear adequate to support the program. However, the reviewer has several questions about costs that do not appear to be included in the budget (the reviewer recognizes that universities have different budgeting systems and that these questions may not reflect the UNC budget process).

ii. Are there allocated costs that must be paid to the university?
iii. Does the faculty expense line or other lines include costs for faculty from outside audiology (e.g., speech-language or nursing) to teach audiology students or does the revenue line reflect tuition dollars that may go to other departments for audiology student registration?
iv. Do faculty expenses or other operating costs include items such as travel, professional development, student recruiting, brochures, insurance?
v. Will overloads need to be paid to current audiology faculty or adjuncts to teach all academic courses and requirements?
vi. New and/or expanded courses are being added to the curriculum. Have costs been allocated to support the development or expansion of these courses?

For an accurate assessment of the financial aspects of this program, the budget should reflect the actual revenue and expenses of the Audiology Department.

II. **Level of interest and demand by students for a degree in this field.** The proposal discusses the "…large pool of students who have a foundation in science…" Yet, the

admission requirements "assume an undergraduate background in Communication Disorders." The reviewer agrees that there is a large pool of science majors and encourages UNC to recruit these students to the audiology program. The audiology profession is in need of students with more math and science and an interest in entering an independent health care profession. The reliance on undergraduate CSD majors may pose a risk in attracting qualified students to the AuD program. According to ASHA, the number of CSD majors has declined more than 52% in the past two years and the trend does not appear to be changing. Audiology programs have traditionally been able to attract approximately 2.5% of these majors to apply for an audiology degree. Currently, the undergraduate CSD pool is less than 16,000 students nationally and, yet, the 2.5% audiology application pool has remained constant. The UNC program should actively recruit from outside undergraduate CSD programs and their budget should be modified to reflect this marketing activity.

III. **Assess the demand and need for graduates in this field.** The audiology profession is transitioning to the doctoral entry at a time when world-wide demographics suggest an increasing demand for hearing health care services. According to the 2000, and again in 2002, **Jobs Almanac** and US Department of Labor, Audiology is rated in the top 15% of the most desirable professions of this decade, ahead of most other health care professions. The proposal adequately and accurately addressed the need for both practitioners and university faculty for at least the next decade.

IV. **Comment on the potential economic impact that could be expected to result from the establishment of this program in Colorado.** Currently, only one western university (Utah State University) offers the Doctor of Audiology degree program. UNC should attract applicants from within Colorado as well as areas outside the state.

V. Additional Reviewer Comments.

A. Comparison of AuD to PhD. The proposal provided an excellent overview of the difference between these two degrees. As stated, "the Au.D. program emphasizes clinical training…" It is important for the UNC program not to lose this focus. The inclusion of a publishable research project and the teaching requirement for all students are admirable but can they be met without sacrificing the primary goal of training clinical practitioners? The Doctor of Audiology degree is a first professional degree designed for clinical practitioners. The reviewer questions whether this program needs the capstone project as presented in the proposal. UNC is encouraged to investigate the curriculum requirements, especially as they relate to research and teaching, of other professional degree programs in Colorado (e.g., optometry, medicine, pharmacy).

B. The reviewer suggests that UNC address the needs of their fourth year students in more detail. The Audiology Matching Program has not been finalized and universities may need to find clinical sites, place students, and assure that the students are receiving proper training during their fourth year. Even if the matching program succeeds, some students may request a

placement outside of the match and will require the assistance of faculty in finding a placement. Also, UNC will need to decide on the number of site visits and who will make these visits to students during their fourth year. These expenses for travel and time do not appear to be reflected in the proposed budget.

Attachment B

Response to External Review of Doctor of Audiology (Au.D.) Degree
University of Northern Colorado

Curriculum

The proposed Au.D. program was designed to fully meet the accreditation standards proposed by both the American Speech-Language-Hearing Association and the American Academy of Audiology. Appendix C of the proposal lists performance standards of both bodies and identifies in which courses the standards are intended to be met.

A. Vestibular assessment, management, and treatment are thoroughly covered in portions of three courses in the program: CMDS 677, CMDS 685, and CMDS 775. In addition, vestibular anatomy and physiology is covered in CMDS 573. Although the course titles do not reflect it, each of these courses addresses vestibular as well as audiologic testing, treatment, and management. The course syllabi are attached illustrating inclusion of the appropriate content. Although many programs offer a single course on vestibular testing, we have chosen to spread it throughout the program so that students have a chance to digest the information over several semesters.

C. The reviewer suggests that pharmacology and genetics be required. NURS 612 *is* a required course in the program (see page 13 of the text) and the genetics content is again included in three courses in the program, all of which are required: CMDS 582, CMDS 677, and CMDS 782 (see course syllabi, Appendix F).

D. The reviewer suggests that supervision be included in the curriculum. Again, it is embedded in one of the required courses, CMDS 720 (see course syllabus, Appendix F). It is the intention of the department that CMDS 720, Supervised Teaching, include not only classroom and online teaching but also clinical teaching (called supervision in the field). We fully agree with the reviewer that supervision is an important aspect of learning to teach. The syllabus for CMDS 720 should be modified to reflect this emphasis.

E. The reviewer suggests adding a course on Business/Practice Management. Again, material addressing this topic is spread throughout the program and may specifically be found in CMDS 688 and CMDS 774 (see course syllabi, Appendix F). In addition, students are required to take 6 credits of elective courses and may include additional business coursework as electives.

F. The reviewer suggests that the equivalent of 52 weeks, 35 hours per week of direct patient contact be required. In fact, the UNC program exceeds this requirement. In addition to the fourth year experience, students are required to complete 16 weeks of CMDS 592/692, Internships in Audiology (see p. 14) and 12 credits of on-campus practicum spread over the first 2 ½ years of the program.

This totals over 2000 hours of patient contact throughout the program. The "1500 hours" mentioned in the document referred to the fourth year alone.

G. The reviewer is concerned that Au.D. students will be teaching outside their areas of expertise and that they will be teaching 10 full courses each year. The Supervised Teaching course (CMDS 720) does not require that a full course be taught by each student. To the contrary, each student is required to teach 5 class sessions, some of which may include clinical teaching (supervision). The course is designed to familiarize students with various teaching methods and philosophies and give them some teaching experience but students will not be solely responsible for entire courses. Ten students teaching five one-hour class sessions adds up to 50 hours or slightly more than one 3-credit course.

H. The reviewer questions the resources in the department for managing the Capstone Research Project required of each student. Because the projects are part of a series of courses (CMDS 515, CMDS 615, CMDS 715) to be taught by both audiology and speech-language pathology faculty, the projects will be developed and implemented with students working together in small seminar-type settings. One or two faculty members per semester will be assigned to a seminar and students will work through research design, data collection, and analysis as a group. We anticipate that students will develop an idea with several spin-off aspects to be explored. The purpose of the seminars is to expose students to clinical research on a smaller scale than that required of Ph.D. candidates. We believe that students earning a doctoral-level degree, albeit a clinical degree, should have some familiarity with research methods.

I. We anticipate that students admitted to the program who already hold master's degrees will be full-time on-campus students. There are other programs available in distance format for working professionals seeking to upgrade to the Au.D. We do not anticipate a large number of these students but wish to offer the opportunity to a few such students. Because these students will enter the program with a good deal of clinical experience, they will enroll primarily in the more advanced didactic courses, will complete the capstone project, and will do some supervised teaching. Two additional students each year will not be a significant draw on faculty time but will add FTE to didactic courses. Each student's previous education and clinical experience will be evaluated on a case-by-case basis to determine the specific requirements for the Au.D. degree. We anticipate that these students will have completed a master's degree at an accredited university and will need the courses in years two and three of the program. They will likely not be required to complete year four because they will enter the program with the requisite 1800+ clinical hours.

Resources

A. Number of faculty

The curriculum is laid out so that current faculty (with anew faculty member beginning spring 2003) will be able to meet the needs of the program. Some courses will be offered during alternate years so that both first- and second-year students or second- and third-year students will enroll. Students will be off-campus for part of the third year and all of the fourth year. As mentioned previously, the capstone project as organized as group seminars requiring only one or two faculty (some of which may be speech-language pathology faculty with expertise in aural rehabilitation, speech perception,

and neurophysiology) to participate each semester. The burden on the UNC Audiology Clinic will be unchanged because the master's degree program currently requires first- and second-year students to complete 1 to 2 credits of clinical practicum each semester. This number will remain unchanged because third- and fourth-year students will be off-campus at clinical internship sites and clinical residency sites.

C. Budget
ii. No, there are no costs that must be paid to the university.
III. The faculty expense line is for audiology faculty only and tuition revenue reflects enrollment in CMDS courses only.
iv. Yes, the operating costs and expenses include all expenses allocated to the audiology portion of the Department of Communication Disorders.
v. No overloads will be needed for faculty. The budget includes 3 to 6 credits per semester for adjunct faculty teaching.
vi. Yes, costs have been included for development and expansion of courses.

The Communication Disorders department includes both audiology and speech-language pathology. The budget allocations for the Au.D. program reflect the audiology portion only.

II. The reviewer suggests enhancement of recruitment activities to target students outside Communication Disorders programs. This is an excellent suggestion and one about which we have brainstormed recently.

Additional comments
A. See "Curriculum" section above.
B. This is a valid observation. UNC currently has a wide network of placement sites for student internships and we anticipate that many of those sites will welcome UNC students for the clinical residency as well. In addition, the distance-delivered master's degree program in speech-language pathology has developed a viable method for monitoring off-campus placement of students and meeting site visit requirements. We plan to implement many of the methods already in place for that program and may need to allocate additional funds. This need will be more than offset within the university by the tuition for 27 credit hours of clinical residency per student.

Attachment C

PROGRAM REQUIREMENTS

Length of Study/Degree Requirements

Anticipated time to completion is 3 years, 9 months for students who matriculate from the bachelor's degree.

Years 1 and 2: **The curriculum will include course work in basic sciences, clinical audiology, audiologic rehabilitation, pediatric and educational audiology, hearing disorders, amplification, psychoacoustics, speech perception, industrial audiology, and applied research. Clinical experiences will be provided in the UNC Audiology and Speech-Language Pathology Clinic, regional school districts, and at practicum sites affiliated with UNC.**

Year 3: **Students will complete course work in pharmacology, electrodiagnosis, cochlear implants, applied research, and advanced topics in audiology. Students will also be required to teach a college-level course under supervision of the faculty and will complete off-campus internships in medical settings and educational (K-12) settings. A capstone research project will be completed.**

Year 4*:** The last 9 months to one year will be spent in full-time clinical residency. This residency experience was formerly called the Clinical Fellowship Year (CFY) and students formerly completed the residency ***after graduating with the master's degree. Inclusion of the residency in the Au.D. program ensures that students receive high-quality, supervised, hands-on experience ***before*** entering the work force. Students may opt to complete the residency requirement in 3 semesters of 9 credits each or in two semesters totaling 27 credits.

Degree requirements total 129 credit hours including 74 credits of academic course work, 12 credits of on-campus clinical practicum, 16 credits of off-campus internship experiences, and 27 credits for a 9-month clinical externship/residency.

Supervised clinical practica will be provided at both on- and off-campus sites, and students will complete a minimum of 1500 hours of supervised clinical practicum experience and clinical residency.

The Department of Communication Disorders already has in place many successful mechanisms for ensuring that graduate students receive high-quality one-on-one supervision in clinical practicum experiences and off-campus externships. In order to successfully bridge the gap between on-campus clinical practica, off-campus clinical practica and residency sites, we plan to implement collaborative efforts with full-time faculty and affiliate faculty in the following ways:

- University supervisors will make periodic visits or phone calls to off-site supervisors during practicum and residency experiences
- An on-line supervision course will be offered to off-site supervisors (this course is already developed for the Speech-Language Pathology program)
- Off-site supervisors will teach a course or guest lecture at the university
- Off-site supervisors will serve on a program advisory board
- Off-site supervisors will be involved in curriculum development
- Off-site supervisors will be hired part-time to supervise in the on-campus clinic
- Off-site supervisors will participate in a mentoring program for students
- Advanced methods courses will be team-taught by off-site supervisors and on-campus faculty

Plan of Study

Scope of practice for audiologists has been defined by the American Speech-Language-Hearing Association and the American Academy of Audiology (see Appendix B and Appendix C). Recommendations from these organizations for training and knowledge base of audiologists form the basis for the Au.D. curriculum.

Didactic Courses

CMDS 555 Neuroanatomy and Neurophysiology of Communication	3
CMDS 570 Rehabilitative Audiology	3
CMDS 571 Speech and Hearing Science	3
CMDS 571L Hearing Science Laboratory	1
CMDS 572 Noise *(name change to Industrial Audiology)*	2
CMDS 573 Auditory Physiology and Pathology	3
CMDS 582 Pediatric/Educational Audiology *(name change to Educational Audiology)*	3
CMDS 671 Psychoacoustics	2
CMDS 675 Differential Diagnosis of Auditory Problems	3
CMDS 677 Medical Aspects of Audiology	3
CMDS 678 Hearing Aids and Uses of Amplification	3
CMDS 685 Advanced Differential Diagnosis of Auditory Problems	4
CMDS 688 Hearing Aids II	3
CMDS 698 Cochlear Implants	3
CMDS 771 Speech Perception & Advanced Psychoacoustics	3
CMDS 774 Professional Issues in Audiology	3
CMDS 775 Advanced Electrodiagnosis	3
CMDS 782 Pediatric Audiology	3
NURS 612 Advanced Pharmacology	4
55 credits	

Research

CMDS 515 Foundations of Research and Writing	1
CMDS 615 Research in Communication Sciences and Disorders	3
CMDS 715 Applied Research in Audiology	4
HRS 610 or SRM 600 or equivalent statistics course	3
	11 credits

Teaching

CMDS 720 Supervised Teaching in Communication Disorders *(repeatable to 6 credits)*	**2** credits

Clinical Courses

CMDS 574/580/594 Practicum and Advanced Topics in Audiology	12
CMDS 592/673/692 Internships in Audiology	16
CMDS 792 Clinical Residency in Audiology	27
	55 credits

Elective Courses

Students will choose at least **6 credits** from the following or other courses approved by the program. Electives will be chosen so that students may focus on specialized career needs. For example, some students may elect to become proficient in American Sign Language; others who desire more of a medical emphasis may elect to take additional courses in genetics and pharmacology.

Examples of Elective Graduate-level Courses

Workshops (CMDS 508, CMDS 513)
American Sign Language I, II, and III
Sign Language in Educational Settings
Educational Leadership
Counseling Methods
Genetics
Epidemiology
Informatics
Biostatistics
Neuropsychology
Pharmacology
Community Health
Public Health Administration
Leadership Development

TOTAL CREDITS 129

Attachment D

ENROLLMENT PROJECTIONS

Enrollment projections are derived from the current master's degree program in audiology. Data were obtained from the UNC Office of Institutional Research and Planning.

The current master's degree program enrolls approximately 10 students each year with very little attrition (1 student has not completed the program in the past 5 years). Applicants for the program total 30 to 40 each year. We anticipate that 75% of students will be in-state.

The number of students with baccalaureate degrees enrolled in the program shall be capped at 10. Because of the large clinical training component of the program, it is not feasible to expect to place more than 10 students per year in externship sites and clinical residency sites especially if most students elect to stay in Colorado. In addition, each student must complete a capstone research project requiring a great deal of individual attention from faculty.

The program is designed primarily for students who have already earned a bachelor's degree and have no clinical experience. We anticipate, however, that for some time after the program's inception, a small percentage of the applicants will include individuals who have already earned a master's degree in audiology and who may have already had several years of clinical experience before beginning work on the Au.D. Academic and clinical backgrounds will be evaluated for each of these students on a case-by-case basis and a program of study will be designed for each student that reflects past experience and outlines specific courses and practicum assignments to meet the requirements of the Au.D. These students should be able to complete the requirements for the Au.D. in less than two years. Because the Au.D. will be the entry-level degree for clinical certification after 2011, we anticipate that the number of applicants fitting into this category will decrease over time.

Data in the enrollment table reflect a cap of 10 students per year enrolling with a baccalaureate degree, and 2 students per year enrolling with a master's degree. Students will take approximately 12 credits during Fall and Spring semesters and approximately 9 credits during summer semesters. Data are based on an attrition rate of 0 and an in-state rate of 80%. The in-state rate of 80% was calculated from data supplied by the UNC Office of Institutional Research and Planning. The in-state rate for the last two years and the current year ranges from 77% to 81%.

ENROLLMENT PROJECTIONS

Name of Program: Doctor of Audiology (Au.D.)
Name of Institution: University of Northern Colorado

DEFINITIONS:

Academic year is the period beginning July 1 and concluding June 30.

Headcount projections represent an unduplicated count of those students officially admitted to the program and enrolled at the institution during the academic year.

FTE is defined as the full-time equivalent number of those students majoring in the program, regardless of the classes enrolled, during the academic year.

Program graduate is defined as a student who finishes all academic program requirements and graduates with a formal award within a particular academic year.

		Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Full Implementation
1-a	In-state Headcount	10	19	27	35	35	35
1-b	Out-of-State Headcount	2	5	7	9	9	9
2	Program Headcount	12	24	34	44	44	44
3-a	In-state FTE	11	21	30	38	38	38
3-b	Out-of-state FTE	2	5	8	10	10	10
4	Program FTE	13	26	38	48	48	48
5	Program Graduates	0	2	2	12	12	12

Attach a brief description explaining the specific source data for projecting the program headcount (e.g., actual enrollment in a similar program at a comparable college).

Attachment E

EXPENSES AND REVENUE

Expenses and revenue were calculated based on the existing master's degree program. The existing program enrolls approximately 10 students per year and the proposed program will cap the number of students at 10. Approximately 30% of the courses in the Au.D. program are new courses. With careful scheduling of courses over the four-year program and the ability to combine groups of students (i.e., 1st- and 2nd-year students may take a course at the same time), the number of faculty and affiliate/adjunct faculty should remain relatively constant for the two programs and the student/faculty ratio should not change significantly for didactic course work. There will be an increase, however, in clinical teaching needs and oversight of research by faculty members. For this reason, it is anticipated that a new faculty line will be needed. This line will come from reallocation of resources within the College of Health and Human Sciences.

PROJECTED EXPENSE AND REVENUE ESTIMATES

PURPOSE: This table documents what the program will cost and how the institution plans to cover the costs.
All cost and revenue projections should be in constant dollars (do not include an inflation factor).

		ESTIMATED AMOUNT in DOLLARS				
		YEAR 1	Year 2	Year 3	Year 4	Year 5
Operating Expenses:						
1	Faculty	188,000	188,000	238,500	238,500	238,500
2	Financial Aid specific to	18,000	20,000	20,000	20,000	20,000
3	Instructional Materials	6,400	6,400	6,400	6,400	6,400
4	Program Administration	96,200	96,200	96,200	96,200	96,200
5	Rent/Lease	0	0	0	0	0
6	Other Operating Costs	16,000	16,000	16,000	16,000	16,000
7	Total Operating Expenses	319,600	326,600	377,100	377,100	377,100
Program Start-Up Expenses						
8	Capital Construction					
9	Equipment Acquisitions	14,000	0	0	0	0
10	Library Acquisitions					
11	Total Program Start Up Exp	14,000	0	0	0	0
TOTAL PROGRAM EXPENSES		333,600	326,600	377,100	377,100	377,100
Enrollment Revenue						
12	General Fund: State Support	63,877	127,753	186,716	235,852	235,852
13	Cash Revenue: Tuition	46,398	100,726	142,036	194,056	194,056
14	Cash Revenue: Fees	374	747	1,059	1,370	1,370
Other Revenue						
15	Federal Grants	70,000	70,000	70,000	70,000	70,000
16	Corporate Grants/Donations	10,000	10,000	10,000	10,000	10,000
17	Other fund sources *	224,000	224,000	224,000	224,000	224,000
18	Institutional Reallocation **	0	0	50,500	50,500	50,500
TOTAL PROGRAM REVENUE		414,649	533,226	684,311	785,778	785,778

TOPIC: **STATEWIDE TRANSFER POLICY**

PREPARED BY: **JOANN EVANS**

I. SUMMARY

This revised Statewide Transfer Policy for Commission review (Attachment A) was developed in collaboration with the higher education community. In 2001, the General Assembly passed legislation that required the Commission update its transfer policies and higher education institutions align their transfer practices with state policy. Since the legislation is premised on a Student Bill of Rights, the primary driver for revised transfer policy revisions is student recommendations.

The problems with the current policy include:

- Lacks a guarantee that transferred credits apply to graduation credits.
- Complicated for students to interpret or use since each transfer agreement is program and institution-specific.
- Labor intensive for institutions to maintain.
- The student appeal process is not well-publicized and consequently does not serve the purpose it is designed to achieve.

The major highlights of the revised Statewide Transfer Policy include:

- Multiple transfer options designed for students.
- Acceptance of 60 credit hours of the A.A. and A.S. degrees toward graduation credits in all liberal arts and science degree programs.
- Universal transfer of state guaranteed general education courses to general education requirements at all Colorado public colleges and universities.
- Statewide agreements in professional programs, e.g., Business, Engineering.
- Modification of lengthy transfer guide format to simpler format that can be web-enabled.
- Better information systems for students.

Staff recommend that the Commission approve the proposed Statewide Transfer Policy.

II. BACKGROUND

College students who seek to transfer from one Colorado public higher education institution to another need to know which course credits will transfer and which institutions will accept their coursework. The answers lie in statewide transfer and articulation policies.

The current statewide transfer policy was developed in 1985 with the latest revision in September 1993. In the late 1980s all Colorado public higher education institutions negotiated transfer agreements between two-year and four-year institutions and four-year to four-year institutions. The agreements delineated the courses that are accepted by the four-year receiving institution. While the current transfer policy has provided guidelines to higher education institutions in the matter of transfer of student credit, there continues to be anecdotal examples of students losing credits when transferring from one Colorado public higher education institution to another institution.

The current Statewide Transfer Policy was based on the following principles:

1. Colleges and universities in Colorado will work together to ensure that a student with a declared educational objective may complete a degree program in the shortest possible time, whether the student remains enrolled at one institution or transfers to another. (access)
2. To safeguard the rigor necessary for a quality educational experience, the articulation process must assure that the curricula of academic programs retain their academic integrity. (quality)
3. The involvement of faculty in the development of transfer agreements and the transfer process is essential. (responsibility/accountability)
4. Transfer students have a right to clear and updated advising and planning information to make the appropriate choice of courses and plans of actions. (efficiency)
5. A transfer student has the right to a fair and timely evaluation of credits and an opportunity to challenge the decision for reasonable cause. (equity)

Colorado public higher education institutions are bound by Colorado statute to accept transfer credits provided the credits meet certain conditions. Colorado statute [C.R.S. 23-1-108(7)] pertains to transfer agreements between two-year and four-year institutions and among four-year institutions and guarantees that all acceptable coursework be transferred from one Colorado public college to another.

During the 2001 legislative session, the Colorado General Assembly adopted legislation (CRS 23-1-108.5 and CRS 23-1-125) which mandated that the Commission adopt a course identification system that will ensure that the quality and requirements of general education courses at all Colorado public higher education institutions are comparable and transferable statewide.

Student Input

Early in the process of revising the transfer policy interviews were conducted with students to get their perspective on the transfer of credits. The target population was defined as students currently enrolled in a Colorado public higher education institution and preferably transfer students. Students from the community colleges as well as four-year institutions

participated in the survey. The results of the random sampling survey clearly showed that the ability to transfer credits from one institution to another is extremely important to students.

It also revealed that ninety percent of those surveyed were unaware of a student appeal process. The major conclusion of the survey is that students reported that advising is one of the most important aspects for successful transfer of credit.

Statistics collected by the Education Commission of the States (ECS) have shown that over half of the students participating in postsecondary education in the United States are enrolled in a community college. Successful transfer from a community college to a four-year institution is often the only opportunity many of these individuals have to achieve a bachelor's degree, particularly in the case of low-income students. Therefore, good transfer policies are essential to benefit student success.

Higher Education Community Input

CCHE staff worked closely with representatives of the higher education governing boards in developing the revised policy. The draft policy went through several iterations to assure clarity, while at the same time, simplifying the policy to make it student-friendly. Institutional transfer coordinators also had an opportunity to provide input on the policy to assure that it is implementable. Their suggestions have been incorporated into the proposed policy.

Issues

The proposed revision of the statewide transfer policy is designed to address several transfer issues.

- Guarantee that transfer credits apply to graduation

  Course credits are currently being transferred at all of Colorado's public higher education institutions; however, there are cases where some transfer credit does not count toward meeting graduation requirements. Under the revised policy, courses that hold the designation of state guarantee general education courses will be guaranteed to satisfy general education requirements at all Colorado public higher education institutions and will count toward graduation for an associate of arts or a bachelor's degree. It should be noted that institutions may require additional general education requirements beyond the statewide guaranteed 35 credit hours.

  Although general education is the key component of the revised transfer policy, the specific courses that make up the statewide guaranteed general education curriculum are still in the approval process. The state guaranteed general education designation will be discussed in greater detail at the January Commission meeting.

- The current transfer policy is complicated

  The current statewide transfer policy is lengthy, complicated, and viewed as bureaucratic. As legislative mandates have been added to the original policy, it has become more complicated.

- Labor intensive for institutions

  Since 1988 Colorado has had transfer agreements that ensure a student who completes an A.A. or A.S. degree with a C or better in all courses may transfer the courses taken at a Colorado public community college or four-year institution to another Colorado public higher education institution. There are individual transfer agreements for every approved degree program at every institution. Maintaining transfer agreements is labor intensive for institutions.

- The student appeal process is not well-publicized or utilized

  There is anecdotal information that students are losing credit when transferring from a two-year to a four-year institution. Those students who do file an appeal find it cumbersome and a very lengthy process.

  Some students report that they contacted ten or more individuals to get a response. The student bill of rights legislation (CRS 23-1-125) assures that students can, not only transfer credits, but also rely on a mechanism to appeal decisions should the student feel that reasonable doubt exists. The Commission has the delegated authority to resolve transfer disputes.

III. STAFF ANALYSIS

The revised statewide transfer policy is designed to bring the policy into compliance with the student bill of rights statute (CRS 23-1.125) to provide clear and concise information about the transfer of credits from one Colorado public higher education institution to another. The proposed policy revision also addresses statute CRS 23-1-108.5 regarding general education course numbering system.

Multiple ways to transfer without credit loss

Students transfer for different reasons and at different points in their college career. Students may begin their college degree at a community college because the tuition is lower or the classes are smaller or it is more convenient even though they plan to earn a four-year degree. Some students have specific degree plans, e.g., Communication degree, and some are undecided. The revised transfer policy has different options to serve students regardless if they have selected their major. The revised policy reduces the probability of losing credits during the transfer process. These options have been simplified based on student input.

1. The broadest and simplest transfer process is the Associate of Arts (A.A.) /Associate of Science (A.S.) agreement. In 1989 Colorado governing boards signed agreements to honor the full transfer of the associate degrees – 60 hours guaranteed to transfer to four-year degrees in arts and science degrees. This mechanism works well for the community college students who are undecided about their major. Under this agreement, 35 credits apply to lower division general education graduation credits and the remaining 25 credits apply to free electives. The bottom line is that students who complete an associate degree (A.A./A.S.) are guaranteed that 60 credits will apply to graduation credits.

2. Community college students frequently transfer after completing their general education requirements rather than the full associate degree. Under the current policy, lower division general education requirements at a four-year college are considered completed if a student successfully completes all general education requirements at a community college. If the full transfer core is not completed, general education courses are evaluated individually using course equivalency tables.

   The revised transfer policy guarantees that individual general education courses will be guaranteed to apply to general education graduation requirements in addition to the full general education core. The bottom line is that students who complete state guaranteed general education courses are guaranteed that they will apply to general education graduation requirements whether it is one course or eleven (35 credits). Effective for students who enter in the fall 2003 semester, Colorado public four-year higher education institutions will honor the transfer of an Associate of Arts (A.A.) degree and the Associate of Science (A.S.) degree earned at a Colorado community college. A student who earns an A.A. or A.S. degree at a Colorado public community college, including completing the state guaranteed general education courses with a grade of C or better in all courses, will transfer with junior standing into any arts and science degree program offered by a Colorado public four-year college.

   Any course that has the designation of state guarantee general education is guaranteed to transfer to any Colorado public higher education institution and count as meeting a general education requirement and toward graduation at the receiving institution.

3. A significant number of community college students are interested in transferring into a professional undergraduate degree. The curriculum in professional degrees is often prescribed by accrediting associations or employer specifications. Statewide transfer agreements serve these prospective transfer students. The major advantage of a statewide agreement over transfer guides is that a student can transfer to any four-year institution under a statewide agreement. There are currently two statewide articulation agreements among all Colorado community colleges and four-year public institutions offering particular degree programs --- Business and Nursing. A statewide Engineering agreement and a statewide Teacher Education agreement are in development. Collectively, these four degrees serve 60 percent of the community college transfer students. The bottom line is that 60 credits will apply to graduation credits under Statewide Agreements.

4. Transfer guides are institution-specific and program-specific. Colorado has negotiated transfer agreements for all undergraduate degree programs. Approximately 415 individual transfer guides exist. Students who follow a transfer guide can select courses that will apply to their selected major without risk of credit loss. This option works extremely well for students who know exactly which degree program and which college they plan to attend, e.g., a CCD student who plans to attend UCD in Communication. From a student perspective, the sheer number of transfer guides makes it difficult to find the essential information. The revised transfer guide format (Attachment B) replaces the former transfer guide format. The revised form is short and contains the course information.

Improved visibility of transfer information

Even with these available options, transfer problems may still occur. If students do not contact an advisor, they are often unaware that transfer guides or transfer agreements exist.

The revised Statewide Transfer Policy specifies that it is an institutional responsibility to reach out to students to inform them about these options. The community colleges plan to initiate an active campaign to inform students about transfer guarantees with flyers that students distribute to their fellow students. Governing boards have had a preliminary discussion about an inter-institutional referral system, matching prospective transfer students with advisors at their intended transfer college. The policy shifts the focus from the student coming to the information to information coming to the student.

The statewide transfer policy specifies four ways to enhance the student advising process:

1. The transfer process should be clear to a student. It should be so simple that a student could reference any of the materials available and have a reasonable idea of what will transfer and what will not.
2. Train faculty on the state guaranteed general education policy and the revised transfer policy.

3. Elaborate in printed and on-line catalogues and student information packets the options available for the transfer of credit.
4. Provide information to students about the process.

The process for resolving transfer problems may also become more visible to students with student representatives on the Student Appeals Board. Agenda Item V-B explains the student appeal process in more detail.

IV. STAFF RECOMMENDATION

That the Commission approve the proposed Statewide Transfer Policy.

Appendix A

STATUTORY AUTHORITY

CRS 23-1-108.5. (1) The General Assembly hereby finds that, for many students the ability to transfer among all state-supported institutions of higher education is critical to their success in achieving a degree. The General Assembly further finds that it is necessary for the state to have sound transfer policies that provide the broadest and simplest mechanisms feasible, while protecting the academic quality of the institutions of higher education and their undergraduate degree programs. The General Assembly finds, therefore, that it is in the best interests of the state for the commission to oversee the adoption of the statewide articulation matrix system of course numbering for general education courses that includes all state-supported institutions of higher education and that will ensure that the quality of and requirements that pertain to general education courses are comparable and transferable statewide.

CRS 23-1-125. Commission directive – student bill of rights – degree requirements – implementation of core courses – on-line catalogue- competency test. (1) Student bill of rights. The General Assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:

(a) Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;

(b) A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;

(c) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;

(d) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;

(e) Students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education.

SECTION I

PART L STATEWIDE TRANSFER POLICY

1.00 Introduction

The Statewide Transfer Policy pertains to the transfer of course credits from one Colorado public higher education institution to another as well as intra-institutional transfer. The policy applies to all Colorado public higher education undergraduate programs, focusing on student movement from two-year to four-year institutions, four-year to four-year institutions, four-year to two-year institutions, or within four-year institutions.

This policy does not address transfer issues where the state has limited legal authority: the transfer of credits from private, non-accredited, or out-of-state institutions, or the awarding of credit for non-credit bearing courses. However, this does not prohibit the acceptance of transfer credit from those institutions; it only identifies where acceptance of transfer credit is non-negotiable**.**

The policy is divided into the following sections:

2.00 Statutory Authority

The transfer policy is based on statutory authority of Colorado Revised Statute 23-1-108 (7) (a), C.R.S. 23-1-108.5, and C.R.S. 23-1-125.

3.00 Policy Goals

The policy goal is to ensure access to undergraduate degree programs, and facilitate completion of degree requirements, including:

3.01 The General Assembly implemented the Student Bill of Rights (C.R.S. 23-1-125) to assure that students enrolled in public institutions of higher education have the following rights:

(a) A quality general education experience that develops competencies in reading, writing, mathematics, technology and critical thinking through an integrated arts and science experience.
(b) Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;
(c) A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
(d) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
(e) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
(f) Students, upon successful completion of core general education courses should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
(g) Students have a right to know if courses from one or more public higher education institutions satisfy the students' graduation requirements;
(h) A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

4.00 Roles and Responsibilities

4.01 Commission

The role of the Colorado Commission on Higher Education is to facilitate a simple statewide transfer process, including:

4.01.01 Ensuring that state-supported two-year and four-year institutions provide native and transfer students equitable treatment in assisting them to meet their educational goals.
4.01.02 Establishing, in consultation with the governing boards, a statewide transfer policy to assure that students can transfer qualified college-level courses between and among institutions.
4.01.03 Designating the approved list of state guaranteed general education courses.
4.01.04 Resolving student appeals regarding state guaranteed transfer courses or referring cases to the governing board for action.
4.01.05 Resolving inter-institutional impasses or problems pertaining to transfer negotiations.

4.02 Governing Boards

The governing board shall ensure that its institution complys with statewide policies and statutory requirements that pertain to transfer, including admission, degree approval, and student appeals.

4.03 Institutions

The institution's role is to administer an efficient and orderly transfer process. The responsibilities are effective when this policy is adopted unless specified otherwise, including:

4.03.01 Publishing the Student Bill of Rights in course catalogs, web sites, and advising centers as listed in this policy.

4.03.02 Honoring the transferability of state guaranteed general education course credits (Fall 2003).

4.03.03 Aligning existing transfer agreements for all approved baccalaureate degree programs with current statute and policy by June 30, 2003.

4.03.04 Publishing in printed and electronic form the general education courses that are designated as the state guaranteed general education course designation (Spring 2003).

4.03.05 Evaluating student transcripts within 30 days of receiving a complete set of transcripts. It is recommended that this happen within two weeks whenever possible.

4.03.06 Developing effective transfer advising systems, including training faculty and student advisors.

4.03.07 Establishing an aggressive student advising process to provide freshman students with planning information and transfer students with appeals information.

4.03.08 Developing advising partnerships among all four-year and two-year public institutions to jointly advise students.

4.03.09 Developing guaranteed two-year and four-year graduation agreements.

4.03.10 Implementing an appeal process that addresses student transfer appeals within 30 days of the date the student files an appeal.

4.04 Students

Students are responsible to act in their best academic interests and seek the information necessary for making informed choices, including:

4.04.01 Selecting courses from the state guaranteed general education list of courses if planning to transfer.

4.04.02 Contacting an advisor to understand the terms and benefits of the transfer agreements.

4.04.03 Filing an appeal in a timely manner to resolve transfer problems.

4.04.04 Understanding the limits in applying general education transfer credits within general education categories.

4.05 GE-25 Council

The General Education Council (GE 25 Council) is responsible for recommending the criteria and framework for "statewide guaranteed general education courses," identifying general education assessments, and communicating the state criteria to the members' respective institutions.

5.00 Transfer Options

5.01 Transfer of Associate of Arts and Associate of Science Degrees

Colorado public four-year higher education institutions will honor the transfer of an Associate of Arts (A.A.) degree and the Associate of Science (A.S.) degree earned at a Colorado public institution that offer A.A. or A.S. degrees. A student who earns an A.A. or A.S. degree at a Colorado public college, including completing the state guaranteed general education courses with a grade of C or better in all courses will transfer with junior standing into any arts and science degree program offered by a Colorado public four-year college. The credits earned in the associate degree program will apply at minimum to 35 credit hours of lower division general education and 25 credit hours of additional graduation credits. Since 1988 Colorado has had an operating two-plus-two transfer agreement that ensures a student who completes an A.A. or A.S. degree with a grade of "C" or better in all courses, will have junior standing at the receiving institution i.e., transfer 60 credit hours. Because all liberal arts and sciences degrees are designed to be completed in 120 credit hours, a transfer student can complete a four-year degree in the same time as a native student, 120 hours. The receiving institution will evaluate credit for prior learning, Advanced Placement, and correspondence courses following its standard policy.

5.02 Transfer of General Education

Colorado's state guaranteed general education courses are designed to allow students to begin their general education courses at one Colorado public higher education institution and later transfer to another without loss of general education credits. That is, the state guaranteed general education may be applied to the general education graduation requirement or the graduation requirements of the declared major, whichever is in the student's best interest. Effective fall 2003, Colorado policy ensures that students who successfully complete a state guaranteed general education course will receive transfer credits applied to graduation requirements in all majors at all public institutions unless a specific statewide articulation agreement exists.

The state's guaranteed general education curriculum is organized into five categories: communication, mathematics, fine arts and humanities, social and behavioral sciences, and physical and life sciences**.** To complete the Colorado state guaranteed general education core, students are required to take 11 courses or 35 to 37 semester credit hours and earn a C grade or better in each course. The guarantee is limited to the number of semester credit hours in each general education category**.**

Sem. Cr. Hr.	General Education Categories
6	**Communication:** 1 Intro. Writing course (3 semester credits) **Communication:** 1 Intermediate Composition (3 semester credits)
3-5	**Mathematics:** 1 course (3 to 5 semester credits)
9	**Arts** and **Humanities:** Fine Arts and Expression Humanities Ways of Thinking Select 3 courses from different categories
9	**Social and Behavioral Sciences** Select 1 History course Select 2 courses from 2 different disciplines
8	**Physical** and **Life Sciences:** Select 2 laboratory courses

All state guaranteed general education courses in communication, mathematics, arts and humanities, social and behavior science, and physical and life science shall be identified by a state-assigned common number.

When evaluating a transfer student's transcript, each Colorado public higher education institution will apply state guaranteed general education credits to its general education graduation requirements. Institutions may require additional general education graduation requirements beyond the 35 semester credit hours of state guaranteed general education credits. If an institution requires less than 35 general education credits, the institution will accept in transfer the full 35 credits and apply these credits toward a student's graduation requirements.

5.03 Statewide Articulation Agreements

An Articulation Agreement is a statewide agreement among all Colorado community colleges and all four-year public institutions offering a particular degree program. It is most commonly used for undergraduate professional programs that have specific course requirements established by accrediting or external licensure boards[1.]

1 Currently Colorado has several approved statewide articulation agreements --Business, Nursing, Engineering, and Teacher Education.

5.04 Transfer Guides

Each institution is responsible for implementing a Transfer Guide for each CCHE-approved baccalaureate degree program unless a statewide articulation agreement is in place. The Transfer Guide shall be designed so that a student can complete a baccalaureate program in no more than 120 credit hours unless there are additional graduation requirements recognized by the Commission. The transfer guide defines the 25 credit hours required beyond the state guaranteed general education credits and may include required courses in the major or prerequisite courses for admission into the degree program. The transfer guides are to be on file with CCHE.

6.00 General Education Procedures and Processes

Institutions may nominate a course that is an institutionally approved general education course for consideration as a state guaranteed general education course. To nominate a course, the institution must submit a signed nomination form and supporting material.

CCHE will consider nominations each fall. Using a faculty review process, working committees will evaluate nominated courses against the adopted statewide content and competency criteria. CCHE will forward the recommended courses to the Commission for action.

CCHE will assign a common number to approved state guaranteed general education courses. Institutions will list the state guaranteed course number in all printed catalog materials, including on-line catalogs.

Courses that receive the state guarantee continue to carry that designation unless the institution chooses to withdraw the course from general education, the course is not offered within a two-year period, or evaluations indicate that a course is not meeting the state criteria.

7.00 Articulation Agreement Procedure

To develop an articulation agreement, CCHE or a sponsoring governing board will convene a committee that includes representatives from each public institution offering the degree program for purposes of negotiating the terms of the articulation agreement including course equivalencies. Each academic vice-president will sign the agreement, and publish the approved agreement so that students, faculty, and academic advisors are fully informed of the terms of the agreement. The articulation agreement format is included as Appendix B.

Transfer appeals filed by students transferring in these fields of study will be decided by the terms and conditions specified in the Statewide Articulation Agreements. Individual transfer guides in these fields of study will not supplant the existing statewide agreements.

8.00 Transfer Guides Procedures

Transfer guides are institutional-specific agreements which contain information about graduation requirements for a particular CCHE-approved degree program, including course equivalency and program admission requirements and prerequisites. Once negotiated, an institution or governing board transmits the guide to CCHE and publishes the approved agreement so that students, faculty and academic advisors are fully informed of the terms of the agreement.

Transfer appeals filed by students transferring in these fields of study will be decided by terms and conditions specified in the Transfer Agreement.

GLOSSARY Definition of Terms

Articulation Agreements: Articulation agreements apply to specific degree programs as unilateral agreements that specify the common terms, conditions and expectations for students transferring into the degree program. When these courses and/or degree programs are completed successfully at the sending institution, they will, for admitted students, be accepted in transfer and apply to graduation requirements for a specified degree program at all receiving institutions.

GE 25 Council: A council of 25 educational leaders representing each higher education governing board, including presidents, academic vice-presidents, faculty, and students.

General Education: General Education requirements represent an institutional statement about the general body of knowledge and skills that the recipient of any undergraduate degree conferred by an institution should possess.

Institution: A Colorado public higher education institution.

Institutional Dispute: A disagreement between institutions regarding an interpretation of the Statewide Transfer Policy or a disagreement regarding compliance with the procedures and guidelines of this policy, including failure to reach agreement on a Transfer Agreement.

Inter-Institutional Transfer: A student who transfers credit from one Colorado public higher education institution to another Colorado public higher education institution.

Intra-Institutional Transfer: A change of major. A student changes his/her stated major or degree objectives at the institution where the student is currently enrolled.

Native Student: A student who begins and completes an undergraduate degree program at a single institution.

State Guaranteed General Education Course: Courses that the Commission has approved as meeting the state criteria, including satisfying the content criteria in communication, mathematics, social science, arts and humanities or natural and physical science and competency criteria in communication, reading, mathematics, technology, and critical thinking.

Student Transfer Appeal: A student's claim that a principle defined in the statewide transfer policy or a section of an institutional transfer agreement or articulation agreement has been violated. The Commission serves as the final court of appeal and all its decisions are binding.

Successful Completion: Successful completion means that the student passed all 35 state guaranteed general education credit hours with the requisite grade of "C" or better.

Transfer Guide: The written agreement reached between two or more specific institutions for a specific degree program about course equivalency, and program admission criteria.

Transfer Plan: A transfer plan is the specific plan developed by an advisor for a student with a specific transfer objective (e.g., Transfer into a Computer Science degree program at a specific institution.). An advisor at the sending or receiving institution may develop the plan based on an existing transfer agreement and may not include exemptions to a published transfer agreement.

Transfer Student: A transfer student is a student who begins a degree program at one institution and transfers to another institution.

Transcript Evaluation: The process by which an institution evaluates credits attempted and earned at a different institution, applies accepted credits to graduation requirements, and informs a transfer student of what degree and course requirements remain to be fulfilled.

Attachment B

TRANSFER GUIDE
Name of Program
Four-Year Institution
and
Colorado Community Colleges

Section I: Degree/Program Requirements

A. Institutional graduation requirements for this degree program.

The graduation requirements for a transfer student pursuing [Name of degree program] will be no different than the graduation requirements for a native student, including the minimum number of semester hours required for graduation requirements. Specifically, the student must complete 120 credits, successfully complete [30] credits in the major, earned a [2.0] gpa, [complete an internship, etc.].

B. Required courses in Major, including pre-requisites and required supporting courses.

Name of Program/Major				
	Course Number	**Course Name**	**CC Course Number**	**CC Course Name**
Prerequisites				
Supporting Courses				

Section II: Transfer of Credit

A. Grade Eligibility.

1. Only academic courses with a letter grade of "C" or better will be accepted for transfer; courses with grades of "F", "D", "IP", "I", "S", "U", "AU" and "Z" are not transferable. If a course is taken pass/fail or satisfactory/unsatisfactory, the grade must be "C" or better to be satisfactory or pass.

2. Treatment of advanced placement, CLEP and national standardized test scores, other non-traditional methods of awarding credit.
3. The four-year college or university will accept all approved credits earned within [ten years] of transfer. Courses earned more than ten years earlier may be evaluated on an individual basis.

Transfer Guides need to specify any exclusions for non-traditional course credit.

Section III: Appeals Process

A. Institutional Appeal Process

Students who follow this agreement shall have the right to appeal a transfer decision that appears to be inconsistent with the terms and courses listed in this agreement. Appeals pertaining to this transfer guide should be filed with the [Name of Person who handles transfer appeals at institution]. A student may file an appeal that pertains to state guaranteed general education courses directly to CCHE.

B. State Appeal

If an institution does not respond[1] to a filed appeal within 30 days, the student may file an appeal with the Commission. If the evidence supports that the institution failed to respond within this time frame, then the appeal is ruled in favor of the student. The Commission's Board of Appeals will hear the complaint and render a recommendation. The decision of the Commission is binding.

This agreement is effective at the date of signature. The institutions further agree to complete the full 60 credit hour agreement by June 30, 2003 (i.e., 30 credits or the sophomore year). The statewide transfer agreement remains in force until such time as the community college system or a four-year college mutually agrees to reconsider the terms of this agreement.

_____ _____

Academic Vice President

_____ _____

President Date Dr. Joe May, CC President

[1] Respond to an appeal includes but is not limited to a meeting or hearing within the 30-day period, a request for additional information from the student, a written response to the appeal with an explanation for the decision, or a referral to a higher authority.

TOPIC: PROPOSED STUDENT APPEALS POLICY

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

This agenda item presents a proposed new policy outlining how the Commission will ensure that student issues are heard and resolved – Student Appeal Policy (Attachment A). The proposed policy has been developed in collaboration with the chief academic officers of the governing boards. In 2001, the General Assembly passed legislation that outlined a Student Bill of Rights. From student interviews, it became apparent that the current student appeals process was too limited, too long, and not well-publicized. In contrast, the legislation pertaining to transfer mandates a transfer system "with the broadest and simplest mechanisms feasible, while protecting the academic quality of the institutions of higher education and their undergraduate degree programs."

To make the policy more visible, the student appeals policy was separated from the Statewide Transfer Policy. The major highlights of the proposed Student Appeals Policy include:

- Simplified appeal process that requires an institution to hear an issue within 30 days.
- Identified issues where the institution has the primary responsibility to hear a student appeal in a timely manner (e.g., tuition classification, financial aid).
- Expedited appeals process for state guaranteed general education courses (5 days).
- Creation of a state appeals board to hear cases that are guaranteed under the statute or state policy, with student representation on the appeals board.

Staff recommend that the Commission approve the proposed Student Appeals Policy.

II. BACKGROUND

The current statewide transfer policy developed in 1985 specified procedures and guidelines for student appeals. It was limited to transfer appeals. The full appeals process occurred over a four month – one semester period. It involved filing an appeal with the transfer coordinator, a second appeal with the academic vice-president, a third appeal with the governing board and the final appeal with the Commission (Attachment B).

Few students filed a Commission level appeal during the past years. From data collected during a two-year period, the majority of student transfer concerns were indeed resolved at the institutional level. However, some students have been discouraged and filed an appeal through the consumer advocate office – some legitimate concerns and some not. Some

students used the consumer advocate line to protect their confidentiality. Most frequently, complaints surfaced through legislator's offices.

Perhaps the highest barrier to early resolution of student complaints is lack of information regarding appeals processes. Interviews conducted in 2002 to get the student perspective indicated that 90 percent of prospective transfer students surveyed were unaware that an appeal process exists. Few were aware of ombudsmen on the campus.

III. STAFF ANALYSIS

This policy applies to students currently enrolled at a public institution of higher education. It mandates that each institution define and implement appeals processes to hear student appeals in a fair and expeditious manner. It identifies student issues that are statutorily institutional decisions and those that may be referred to the state appeal board. If an institution fails to respond within 30 days or its response appears inconsistent with existing state or institutional policy, the student can appeal to the Commission. If the student's issue concerns "state guaranteed" general education, the student can bypass all appeals processes and follow the expedited appeals process.

The full appeals process will be effective immediately. The expedited appeals process is effective fall 2003.

In keeping with the spirit of the legislation, the policy is simple (3 pages) and broad (extends beyond transfer). This policy has been sent to the governing boards to circulate for review and comments. No concerns were expressed regarding the intent or details of the Student Appeals Policy. The Colorado Student Association and selected student focus groups also reviewed the student appeals policies. Their suggestions have been incorporated into a Frequently Asked Question paper (Attachment C).

IV. STAFF ANALYSIS

That the Commission approve the proposed Student Appeals Policy.

Appendix A

STATUTORY AUTHORITY

CRS 23-1-108.5. (1) The General Assembly further finds that it is necessary for the state to have sound transfer policies that provide the broadest and simplest mechanisms feasible, while protecting the academic quality of the institutions of higher education and their undergraduate degree programs.

CRS 23-1-125. Commission directive – student bill of rights – degree requirements – implementation of core courses – on-line catalogue- competency test. (1) Student bill of rights. The General Assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:

(a) Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;
(b) A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
(c) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
(d) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
(e) Students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education.

Attachment A

SECTION I

PART T STUDENT APPEALS POLICY

1.00 Introduction

This policy applies to students currently enrolled at a public institution of higher education. It mandates that each institution define and implement appeals processes to hear student appeals in a fair and expeditious manner. It identifies student issues that are statutorily institutional decisions and those that may be referred to the state appeal board. The full appeals process is effective immediately. The expedited appeals process is effective fall 2003.

2.00 Statutory Authority

Several sections in statute outline the Commission's responsibility to ensure that the public higher education system is designed to function for students' benefit. Its responsibilities range from ensuring the design of degree programs to permit graduation within a reasonable time [23-1-108 (13)], intra-institutional and inter-institutional transfer [23-5-122] to the Student Bill of Rights [23-1-135]. The Commission is directed to develop the broadest and simplest mechanisms possible to ensure student rights.

3.00 Goals and Definitions

The policy goals of CCHE's Student Appeal Policy include:

3.01 To uphold the Students' Bill of Rights and other statutory goals for the public higher education system as they pertain to students.
3.02 To ensure that student issues are resolved in a timely and reasonable manner.
3.03 To inform students of the appropriate way to solve non-academic problems.

4.00 Role, Responsibilities, and Limitations Pertaining to Student Appeals

4.01 Role of the Commission

- To arbitrate unresolved student appeals that involve academic issues related to state policy.
- To facilitate resolution of other academic issues.

- To modify state policies or request institutions to modify policies to prevent persistent student problems from recurring.
- To publicize its appeal process and promote the publication of all appeal processes.
- To appoint members to the Student Appeals Board.

4.02 Role of Governing Board

- To ensure that its institutions comply with state policy regarding appeals, including the intent for students to have a timely and fair hearing.

4.03 Role of Institution

- To hear student appeals in a timely and unbiased manner. In some instances, an institution is the sole determinate of a student issue, including but not limited to:

  a) Tuition Classification. The institution shall establish an appeals process and timelines to hear cases in which a student disputes tuition classification. The decision of the institution appeal board is binding.
  b) Graduate issues related to admission, thesis defense and comprehensive exams.
  c) Admission decisions.
  d) Issues related to student government and student organizations.
  e) Financial Aid.
  f) Grading.
  g) Non-academic issues.

- At minimum, the institution shall publish its appeal procedures and the Student Bill of Rights in the college catalog and on the college web site.
- Institutions shall notify CCHE of its appeal procedures and identify the primary contact person for its various appeals processes.

4.04 Role of CCHE's Appeal Board.

The Commission delegates its authority to hear student appeals to an appeal board. The appeal board will include 5 members – 3 student representatives and 2 at-large members. Each appointment will be a two-year term. The appeal board will convene as needed during the academic year to resolve cases.

5:00 Commission Appeal Process and Procedures

A student may appeal to the Commission by submitting a written request (letter or e-mail) describing the issue and the steps the student has taken to resolve the issue. Eligible appeals (e.g., transfer, inter-institutional agreements) will follow the full appeal process. Appeals that involve state guaranteed transfer courses will be handled through an expedited process.

Appeals that involve issues that are reserved for the institution will be referred to the appropriate authority.

5.01 Full appeal process.

CCHE will assist the student by identifying the institutional staff person or department that is in the best position to resolve the issue directly.

If an institution does not act on an appeal within thirty days of the date that the appeal is received or if the outcome appears inconsistent with state policy, a student may formally request a hearing by CCHE's Appeal Board.

For issues that are within CCHE's authority, CCHE will convene the board. It will request the involved institution to provide a 1-2 page rationale for its actions. The board will review the submitted material within two weeks and meet to hear the student's appeal. The board will recommend appropriate action. To implement the decision in a timely manner, the decision of the board will be communicated to both the student and the institution. Such decisions are binding and not subject to further appeal. CCHE staff will respond to all other issues by letter.

5.02 Expedited Appeal Process.

An enrolled student who receives a transcript evaluation that does not award general education transfer credit for a "state guaranteed" general education course may appeal directly to the Commission. The disputed credit must be earned in a course in which the student received a C or better grade. The student must have enrolled in the course during the 2002-03 academic year or later. The Commission staff will resolve such cases within five business days.

Attachment B

Excerpt from Current Statewide Transfer Policy (to be replaced by new process)

7.03.01 Institutional Transfer Appeal Process

Each institution shall establish a single institutional transfer appeals process that includes at minimum:

1. An opportunity to appeal the initial transcript evaluation.

   a. The student may appeal:

      (1) a decision regarding the transferability of a specific course(s);
      (2) a decision regarding the placement of a specific course(s); or
      (3) the institution's failure to provide a transcript evaluation within the designated thirty (30) calendar day period.

   The appeal must be submitted in writing to the office responsible for transfer evaluations. The decisions regarding course transferability and/or placement made in the initial transcript evaluation will be binding if the student fails to file a written letter of appeal within fifteen (15) calendar days.

   b. The appropriate review panel, department, or committee will hear the appeal as determined by the institutional transfer appeals process.

   c. The appropriate department or committee designated to handle the first level appeals will have thirty (30) calendar days to review the student's appeal and inform the student in writing of the department's decision on the appeal, including the rationale for that decision. In addition, the student shall be informed in writing about the process for appealing the appeal decision should the student feel that reasonable doubt exists.

   d. If the department fails to inform the student of the available appeal options, the departmental decision shall be null and void. The student's request prevails and cannot be overturned by any institutional administrator or committee.

2. An opportunity to appeal the first appeal decision.

   a. The student may appeal the first appeal decision by writing the Academic Vice-President of the institution. The appeal must be filed within fifteen (15) calendar days of the postmark date of the letter notifying the student

of the departmental decision. If the student fails to file an appeal within this time period, the original decision shall be binding.

b. The institution must hear and reach a decision on the appeal within (15) calendar days after the appeal is filed.

c. The student will be notified in writing by the institution of its decision regarding the transfer appeal and the rationale for the decision. In addition, the institution shall inform the student that the student may appeal the decision by writing the governing board.

3. An opportunity to appeal the institutional appeal decision.

a. The student may appeal the institutional decision by writing the Academic Vice-President of the governing board. The appeal must be filed within five (5) calendar days of the postmark date of the letter notifying the student of the institutional decision. If the student fails to file an appeal within this time period, the institutional decision shall be binding.

b. The governing board staff shall review and reach a decision on the appeal within five (5) calendar days after the appeal is filed.

c. The student will be notified in writing by the governing board of its decision regarding the transfer appeal and the rationale for the decision. In addition, the institution shall inform the student that the student may appeal the decision by writing the Colorado Commission on Higher Education. The appeal must be filed within five (5) calendar days of the postmark date of letter notifying the student of the governing board's decision.

4. Institutional catalogs will include a description of the student appeal process as defined in the Statewide Transfer Policy and the institutional procedures for appealing a transfer decision.

7.03.02 Commission Procedures for Resolution of Student Transfer Disputes

The appeals process is to be initiated by the student after all remedies have been exhausted without resolution of the issue at the institutional level.

1. An appeal is initiated by the student who informs the Commission in writing of the situation and the reason for the appeal.
2. The Executive Director of CCHE will immediately notify the chief executive officer of the institution of the appeal and invite the institution to submit

documentation for the decision being appealed by the student. Documentation will be submitted within fifteen (15) calendar days of notification by the Commission.

3. The TAC chair will schedule the appeal to be heard at the next Transfer Advisory Council or convene a special meeting if the appeal cannot be heard within thirty (30) calendar days. Both the student and the institution will be notified of the TAC's meeting time and location. The student and/or the institution may be asked to make an oral presentation to the council. The resolution of a dispute will be completed within thirty (30) calendar days from the time an appeal is made to the Commission. In no case, will the appeal process extend beyond 120 days from the day the student was notified of the transcript evaluation unless it benefits the student.

4. Should an appeal be filed involving a campus or governing board represented on the Transfer Advisory Council, the TAC member will not be able to participate in hearing this appeal, nor may the member be present during the discussion. Transfer disputes will be heard by only those members who are not directly affiliated with the institution or governing board involved.

5. The council's consideration of the appeal will include, but is not limited to, the institution's compliance with the Statewide Transfer Policy, the governing board policy statement, the institutional Articulation/Transfer Agreements, the transfer appeals process, and the student's compliance with the institutional Articulation/Transfer Agreements. In the absence of a written Articulation/Transfer Agreement for the program in question, the Transfer Advisory Council will conduct a transcript evaluation and determine the transferability of individual courses.

6. The chair will inform the Executive Director of the Transfer Advisory Council's recommendation.

7. The Executive Director will inform the chief executive officer, the chief academic officer, and the student of the final determination and advise the chief executive officer to implement the recommendation within five (5) calendar days.

8. The institution's chief academic officer will inform the TAC chair within ten (10) calendar days of the action taken in regard to the final determination.

9. The TAC's recommendation and the action taken by the institution will be reported to the Colorado Commission on Higher Education as an information agenda item.

Attachment C

Frequently Asked and Seldom Answered Questions About Colorado's Student Appeal Process

Where do I go if I have a problem?

Students have several options to resolve academic problems; some are quicker than others. The first contact should follow the institution's student appeals process; the second person to contact is the institution's Academic Vice President. The Commission hears appeals if these processes break down. It is the last resort.

Each institution is required to have appeal processes to handle student problems. The appeal process provides an opportunity to have a person or committee objectively look at your specific situation to see if there is a way to resolve it or a mistake has been made (For example, a request for a second transcript evaluation). The most common student appeals pertain to general education courses, transfer, tuition classification, financial aid, faculty problems, or grades.

Colorado guarantees that certain general education courses are universally transferable to general education graduation requirements. A common general education course number identifies these courses. If a student enrolls in a state guaranteed course beginning fall 2003 and has trouble transferring this course, contact CCHE by phone or e-mail. CCHE will resolve this problem within five days.

Since 1988, Colorado has had transfer guides that provide information on what courses will transfer into approved four-year degree programs. A student must successfully complete the class (grade of C or better). This guarantee does not include correspondence or credit evaluated by an external organization (e.g., CLEP courses, portfolios). Students may appeal a transfer decision by contacting the Admission Director or the Transfer Coordinator at their institution.

A designated person at each institution handles decisions and questions pertaining to tuition classification. The state statute or federal law specifies this authority and the Commission cannot overrule, but each institution has an appeal process to have a second review. Tuition classification is one of the few exceptions that cannot be appealed. However, the Commission can explain a particular decision or why the institution is limited in its decision.

Each institution is required to have a financial aid appeals process. You will receive information with your financial aid package. An institution publishes information about the financial aid appeals process in student handbooks and the Financial Aid Office.

In general, the institution handles all faculty-related and grading issues. Resolving a personality conflict with a faculty member can often be handled discretely by contacting the Dean or the Vice President of Academic Affairs. These individuals want your college experience to be positive without unnecessary hurdles. The dean or vice president is in the best position to assist you in transferring to another class if the situation warrants such action.

If a student does not get a response to a written appeal in 30 days or feels that an institution did not follow its policies and procedures, you can appeal to the Commission to hear your case.

Matters of a criminal nature are best directed to local law enforcement (police, sheriff, etc.), campus police, or the local district attorney. If uncertain how to handle this matter, contact your Student Service Vice President. Counselors will be able to assist you.

If a student disagrees with current institutional policies, the best approach is to get involved with student government. The Student Government Association has a legislative agenda to improve higher education for students and frequently testifies on behalf of all students regarding institutional policies.

What types of complaints can I appeal to the Commission?

The Commission hears appeals that pertain to "state guaranteed general education" course transferability, violation of the Student Bill of Rights, and non-compliance with Commission policies (e.g., Transfer, Student Fees). The Commission will also hear appeals that suggest a public higher education institution:

- May lack appropriate policies or procedures required by the Commission's policies.
- Did not follow an institution's established policies or procedures.
- Did not respond to a student's written appeal within 30 days.

The Commission's appeal process is not designed to resolve disputes between an individual and an institution that involve grades, billing, terms of employment or that involve athletic eligibility. These issues are outside the Commission's area of authority. The Commission may be able to facilitate a meeting or identify the correct contact person.

How do I file an appeal with the Commission?

Students interested in filing an appeal should submit a signed letter requesting Commission assistance. Remember to include a mailing address and phone number so that we can contact you. Under the Privacy Act, we can only discuss a case with the student.

- Write a brief narrative of the facts of the complaint. In most cases, such a narrative need be no longer than one page.

- Indicate the date you filed an appeal following the institution's appeal process, with whom, and the type of response received.

- Attach documentation to support your narrative wherever possible. Helpful documentation might include relevant portions of the college catalog, letters exchanged between you and the institution, signed graduation agreements, transcript evaluations, etc.

- Mail the letter and its attachments to the Colorado Commission on Higher Education, 1380 Lawrence Street, Suite 1200, Denver, CO 80204, Attention: Sharon Samson. Do not copy the Commissioners. They will receive materials under the general letter as appropriate.

Can I simply send the Commission a copy of an appeal I sent to the institution?

You may include the letter as documentation, but the Commission will take no action unless the appeals request is addressed to it.

When copied on a letter sent to an institution, CCHE staff assume that it is for information purposes only. Because institutional decisions are best resolved within the institution's own internal appeal processes that have the ability to mediate or order an individual remedy, we do not wish to get in the middle. It may complicate or lengthen the institutional process. We want the simplest and shortest appeal route in all cases.

Can I send an appeal to the Commission through e-mail or via the telephone?

Many student problems can be resolved informally, especially connecting the student with the appropriate campus contact person. The Commission will respond to e-mail and telephone inquiries. In some cases, CCHE staff will advise you to file an appeal.

The Commission will not process any appeal requests until it is received in writing but an e-mail letter will suffice.

How soon may I expect the Commission's response to my complaint?

The Commission staff will indicate whether your appeal is one that the Commission can consider by sending you a letter within five days of receiving your complaint. Appeals pertaining to state guaranteed general education courses will be handled within five business days.

If the Commission agrees to process my complaint, what happens next?

If the appeal is one that the Commission has authority to hear, the appeal will be forwarded to the CCHE's Appeal Board. The Appeal Board meets the third Friday of October, November, March and April. Due to finals, the board does not meet in December and May. Since it is preferable that the student and the institution resolve the matter, the appeals process allows 30 days in the beginning of each semester for this to occur. For example, if a student files an appeal with an institution in fall semester, the earliest the appeal can be forwarded to the Commission is late September. The Appeal Board would review the case in October.

Once the Commission has received your appeal, it will forward your appeal along with a letter from Commission staff to the chief executive officer seeking a response to the issue identified. The Commission may ask for additional information from you.

Once the Appeals Board has met, the Commission will write to you again to indicate its disposition of your appeal. In most cases, the institution is likely to have been able to provide the Commission with adequate assurances that it has appropriate policies in place and has conducted decision-making in accordance with those policies OR that it has recognized a problem and initiated corrective action. In rare cases, where the issues are exceptionally serious and far-reaching, the Commission may schedule an on-site evaluation visit to consider the issues further.

If I am worried about revealing my identity, can I file my appeal anonymously?

Anonymous complaints are difficult for the Commission to process even when they appear to raise relevant issues. The Commission has no way to ask for additional information or verify the facts. The Commission does protect student names when referring a case to an Appeal Board. Only the Commission staff and the college president has access to the student's name.

Individuals may request that the Commission keep their identity confidential to the extent possible and include the reasons for the request. In rare cases, the Commission may be able to summarize the information raised by the complainant when discussing a case with the college president.

What is the Student Bill of Rights?

23-1-125. Commission directive - student bill of rights

THE GENERAL ASSEMBLY HEREBY FINDS THAT STUDENTS ENROLLED IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION SHALL HAVE THE FOLLOWING RIGHTS:

(a) STUDENTS SHOULD BE ABLE TO COMPLETE THEIR ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE DEGREE PROGRAMS IN NO MORE THAN SIXTY CREDIT HOURS OR THEIR BACCALAUREATE PROGRAMS IN NO MORE THAN ONE HUNDRED TWENTY CREDIT HOURS UNLESS THERE ARE ADDITIONAL DEGREE REQUIREMENTS RECOGNIZED BY THE COMMISSION;

(b) A STUDENT CAN SIGN A TWO-YEAR OR FOUR-YEAR GRADUATION AGREEMENT THAT FORMALIZES A PLAN FOR THAT STUDENT TO OBTAIN A DEGREE IN TWO OR FOUR YEARS, UNLESS THERE ARE ADDITIONAL DEGREE REQUIREMENTS RECOGNIZED BY THE COMMISSION;

(c) STUDENTS HAVE A RIGHT TO CLEAR AND CONCISE INFORMATION CONCERNING WHICH COURSES MUST BE COMPLETED SUCCESSFULLY TO COMPLETE THEIR DEGREES;

(d) STUDENTS HAVE A RIGHT TO KNOW WHICH COURSES ARE TRANSFERABLE AMONG THE STATE PUBLIC TWO-YEAR AND FOUR-YEAR INSTITUTIONS OF HIGHER EDUCATION;

(e) STUDENTS, UPON COMPLETION OF CORE GENERAL EDUCATION COURSES, REGARDLESS OF THE DELIVERY METHOD, SHOULD HAVE THOSE COURSES SATISFY THE CORE COURSE REQUIREMENTS OF ALL COLORADO PUBLIC INSTITUTIONS OF HIGHER EDUCATION;

(f) STUDENTS HAVE A RIGHT TO KNOW IF COURSES FROM ONE OR MORE PUBLIC HIGHER EDUCATION INSTITUTIONS SATISFY THE STUDENTS' DEGREE REQUIREMENTS;

(g) A STUDENT'S CREDIT FOR THE COMPLETION OF THE CORE REQUIREMENTS AND CORE COURSES SHALL NOT EXPIRE FOR TEN YEARS FROM THE DATE OF INITIAL ENROLLMENT AND SHALL BE TRANSFERRABLE.

TOPIC: **POLICY REVISION: APPROVAL POLICY FOR SITE-BASED OUT-OF-STATE AND OUT-OF-COUNTRY DEGREE PROGRAMS**

PREPARED BY: **ANDREW BRECKEL III**

I. SUMMARY

The purpose of this policy is to insure that institutions sponsoring *site-based* out-of-state degree programs, certificates or degree programs are in compliance with statutory requirements (C.R.S. 23-5-116). It applies only to those degree programs that are physically offered outside the state of Colorado. The current policy was approved on January 9, 2001. The proposed revisions are designed to insure that there is an annual review and reauthorization of all approved out-of-state and out-of-country programs (Attachment A and Attachment B). In summary, the revised policy requires the completion of an annual report and request for reauthorization that includes:

- a description of any changes in the program as approved or reauthorized by the commission,
- a description of any actions taken by the governing board related to the approved or reauthorized program,
- a confirmation of the current administration, evaluation and oversight of the program,
- a statement of the cost to students, and
- a financial statement identifying actual expenses and revenues by source.

II. BACKGROUND

Currently, Section IV Part E, **Approval Policy For Site-Based Out-of-State and Out-of-Country Degree Programs** provides criteria and requirements necessary for an institution to submit a proposal for the delivery of a *site-based* out-of-state or out-of-country degree program. The current policy does not require an annual review or reauthorization of the program once it has been approved. To insure that multi-year programs continue to be in compliance with statute and that the commission is kept informed about any changes in the content, organization and financial status of an approved program an annual report and reauthorization process is necessary. This requirement is consistent with similar requirements for other programs administered by the Commission such as Off-Campus State-Funded Programs and the Rural Education Access Program.

III. STAFF ANALYSIS

The delivery of a certificate program, degree program or a degree completion program is a significant activity on a college campus under the best of circumstances. Typically, the

delivery of a program off the main campus involves additional challenges. Such challenges have caused accrediting associations, such as the North Central Association, not to extent automatically accreditation to programs delivered off of a campus or to an off-campus site. An institution must be able to demonstrate its capacity to sustain an off-campus degree program and to support quality comparable to the same program being delivered on. In Colorado the concern for high intrinsic value, sustainability and quality runs so deep that this issue is addressed in The Degree Authorization Act (Title 23, Article 2, Section 101 ET SEQ., C.R.S.) That act requires all accredited out-of-state institutions, public or private, that wish to offer degree programs in Colorado to have site visit within one year of operating in the state. Institutions must also inform the Commission on an annual basis of any changes in the operation of their programs.

The expectation of similar reporting rigor for Colorado's public institutions that deliver degree programs outside Colorado and the United States is a reasonable request that supports the Commission's and institutional responsibility under 23-5-116, C.R.S. 1973, amended in 1983. Policy requiring an annual report and reauthorization is, for example, a provision of the Commission policies related to Off-Campus State-Funded programs. Annual reports, which include program and financial detail, are submitted on September 1 of each year, and a formal request for reauthorization of continuing programs is due on June 1 of each year.

It is the intent of the revised policy to provide Colorado public institutions with a set of procedures and format for an annual report and reauthorization request that parallels the required content for the original proposal. The annual report and reauthorization request will be due on May 1 so that there is sufficient time to review the program prior to the beginning of the following fiscal year. The institution's governing board, prior to submission to the commission, must discuss its level of support of out-of-state programs and approve reports. If the actual expenses and revenues change between May 1 and June 30, the institution must submit a revised actual expense and revenue report on September 1.

IV. STAFF RECOMMENDATION

That the Commission approve the proposed Revised Approval Policy for Site-Based Out-of-State and Out-of-Country Degree Programs.

Appendix A

STATUTORY AUTHORITY

Governing boards-authority to provide out-of-state courses. (1) The governing board of any state institution of higher education may offer postsecondary courses at locations outside of the state of Colorado for credit applicable toward a degree program. Each governing board shall promulgate policies and procedures concerning the administration of such courses. (C.R.S. 23-5-116)

Section IV

PART E APPROVAL POLICY FOR SITE-BASED OUT-OF-STATE AND OUT-OF-COUNTRY DEGREE PROGRAMS

1.00 Introduction

This policy applies to all degree programs, certificates and degree completion programs offered out-of-state and out-of country by a Colorado state-supported institution of higher education. (Approval for a single course offered out-of-state or out-of-country will continue to be reviewed for approval by applying the Policies and Procedures outlined in Appendix K of Section IV of the compilation of CCHE Policies.) Instruction delivered out-of-state or out-of-country is authorized in Colorado statute but subject to different review procedures. Degree programs offered out-of-state or out-of-country are limited to those degree programs that the Commission has approved and the institution has authority to offer. The curriculum and academic requirements shall be the same as those of the program when offered on the institution's campus. Such instruction will be part of the Extended Studies Program. Programs approved under this policy will be reviewed on an annual basis and must be reauthorized for the following academic year.

2.00 Statutory Authority

The Colorado Commission on Higher Education has broad statutory responsibility to ensure the quality of education offered by a state-supported institution and protect the students enrolled in these courses and programs. The statute C.R.S. 23-5-116, amended 1983, reads:

> State institutions of higher education may offer instruction, for credit or non-credit, outside of Colorado. Each governing board shall have policies and procedures in place concerning the approval and administration of such courses. Governing boards are required by the statute to notify the Commission of their policies and procedures and to provide an annual report of programs sponsored by the institutions under their control. The statutes prohibit the use of state General Fund monies for out-of-state instruction.

3.00 Goals and Criteria

3.01 Policy Goals

To ensure that institutions sponsoring out-of-state degree programs guarantee the quality of these programs, the safety of students enrolled in the programs, and the ability to graduate students in the programs offered without the use of state general fund monies.

To insure the safety of students enrolled in out-of-state and out-of-country programs, institutions should exercise precautions that are commensurate with the normal health and safety practices carried out on the home campus and that are appropriate for the off-campus location where the program is being conducted. For out-of-country programs, US State Department travel advisories should be reviewed and considered in the institutional decision to offer the program.

3.02 Limitations and Exclusions

State funds shall not be used directly or indirectly for instruction or administration of classes or degree programs delivered out-of-state or out-of-country. Course instruction shall be part of the Extended Studies Program and administered by the institution's designated Extended Studies office and in compliance with the policies and procedures of the Extended Studies Program.

The following types of instruction are excluded from the approval procedures pertaining to out-of-state and out-of-country programs. They are, however, subject to the same quality standards of out of state and out-of-country courses and programs:

- Out-of-state class excursions (field trips) that are scheduled as a part of regular classes, including those that are state-funded courses or cash-funded courses.
- Correspondence courses and instruction delivered via television, videotape, or other mass media.
- Institution-sponsored study-abroad courses that are administered on-campus and offered primarily for the benefit of regularly enrolled degree-seeking students. In contrast, study–abroad courses advertised to the general public that enroll only a small proportion of persons who are regular, degree-seeking students shall be offered, cash-funded, through the Extended Studies Program.
- Internships, cooperative education experiences arranged for sites outside of Colorado that are offered to regularly-enrolled, degree-seeking students.

4.00 Process and Procedures

Institutions planning to offer a complete degree program, certificate and or degree completion program out-of-state, beyond the seven states contiguous to Colorado, or out of the United States, shall submit information in the format outlined in **Technical Appendix A**. The proposal for delivery of a complete degree program, certificate and or a degree completion program shall be submitted through the institution's governing board and shall have the approval of the governing board. The proposal will be reviewed by CCHE staff, and if it meets statutory and CCHE criteria it will be recommended to the CCHE Executive Director for approval. At a minimum, the requesting institution must clearly state the benefit of the out-of-state program to the institution, its students and the State of Colorado. No action will be taken by the institution until all issues and concerns raised by the staff have been resolved by the governing board. All site-based programs will be reviewed on an annual and must be

reauthorized prior to the beginning of the following academic year. Institutions will complete **Technical Appendix A-1** and submit it to the Commission by May 1.

A COPY OF THE DEGREE PROGRAM DESCRIPTION FROM THE INSTITUTION'S CATALOG SHOULD BE APPENDED.

A. <u>Criteria and Procedures for the Review of Proposals for the Delivery of Degree Programs Out-of-State or Out-of-Country</u>

Degree programs proposed for delivery out-of-state or out-of-country shall be reviewed by the CCHE staff to determine whether the proposed program meets quality criteria for off-campus programs, the program is approved for offering by the sponsoring institution, quality control methods are incorporated into administrative plans, and whether the program's curriculum and academic standards are the same as those for the program when it is delivered on-campus. State general fund monies may not be used to support costs of delivery of out-of-state instruction, including institutional indirect costs.

The Commission must receive proposals at least three (3) months in advance of the program's proposed start-up date.

Attachment B

TECHNICAL APPENDIX A-1

ANNUAL REPORT AND REAUTHORIZATION OF SITE-BASED OUT-OF-STATE AND OUT-OF-COUNTRY DEGREE PROGRAMS Due May 1

I. Approved Program

A. Describe any changes in the content of the program as originally presented and approved.

B. Has the sponsoring institution's governing board taken an action related to the approved program since its approval by the Commission? Identify those actions.

II. Where and how the Program is being delivered

A. Where is the program being delivered? Identify the country, city, and specific facility in which the program is to be delivered. Does this represent any change from the original approved proposal?

B. Is the program being delivered in cooperation with any other institution, foreign or domestic, and if so, identify that institution? Identify and describe any contract agreements, academic or financial with the cooperating entity.

C. What method(s) are being used to deliver the instruction? If telecommunications technology is being used, identify the technology and indicate where programming will originate and where it will be received.

D. Describe the continuing steps taken by the institution and governing board to ensure the physical safety of students enrolled in the program.

III. Program Administration, Evaluation and Oversight

A. Describe the structure that the institution is using for administration and oversight of the program. List the name and affiliation of the on-site administrator and provide the names and titles of the central institutional administrators who have responsibility for oversight of the on-site administration, faculty, and program content and quality.

B. Identify all individuals who taught in the program during the past year by name, title, institution or organization in which regularly employed.

C. Provide the most recent annual evaluation of the quality of the teaching, supporting materials, equipment (e.g., library, computer, laboratory, or other types of resources that are needed to deliver the program successfully), the physical facilities in which instruction was delivered, the quality of student life, and the effectiveness of the on-site administrator(s).

IV. Program Description

A. Provide a profile of the students who were accepted and enrolled in the program.

B. Describe the program requirements (such as total hours, credit hour distribution, etc.) and list titles of courses that were offered in the program. Describe any variations in the program from the program offered on-campus or as originally approved for out-of-state and out-of-country delivery.

V. Costs to Students

Identify the costs to individual students for:

Tuition (per semester credit hour) $_____

Program Fees (identify) $_____

Room and Board $_____

Other $_____

VI. Actual Expenses And Revenues

Use the attached "Actual Expense and Revenue" format.

Note: This report is due on May 1 so that there is sufficient time to review the program prior to the beginning of the following fiscal year. If the actual expenses and revenues change between May 1 and June 30, the end of the fiscal year, the institution must submit a ***Revised*** Actual Expense and Revenue Report.

VII. Enrollment

How many students were originally admitted to the program? How many students enrolled in the program? How many students have been retained in the program?

ACTUAL EXPENSE AND REVENUE REPORT

OPERATING EXPENSES	**Fiscal Year ____**
Faculty	
Financial Aid Specific to the Program	
Instructional Materials	
Program Administration	
Auditing, Quality Control Costs	
Rent/Lease	
Indirect Costs	
Other Operating Expenses	
Total Operating Expenses	
PROGRAM START-UP EXPENSES	**Fiscal Year ____**
Capital Construction	
Equipment Acquisitions	
Library Acquisitions	
Total Program Start-Up Expenses	
Total Program Start-Up Expenses	
ENROLLMENT REVENUE	**Fiscal Year ____**
General Fund: State Support*	-0-
Cash Revenue: Tuition	
Cash Revenue: Fees	
OTHER REVENUE	
Federal Grants	
Corporate Grants/Donations	
Other Fund Sources**	
Institutional Reallocation**	
TOTAL PROGRAM REVENUE	

* State General Fund monies may not be used to support out-of-state instruction.
** State funds may not be reallocated.

TOPIC: **STATE GUARANTEED GENERAL EDUCATION COURSES**

PREPARED BY: **JETT CONNER**

I. SUMMARY

In compliance with state statute, this agenda item presents recommendations regarding the adoption of specific courses for the State Guaranteed General Education designation (Attachment A). This designation means that the course is universally transferable to general education at all Colorado public institutions and all undergraduate degree programs.

CCHE convened the GE-25 Council in July 2001 to define guidelines for a core framework. The GE-25 Council represents a broad cross-section of higher education, including the governing boards and individual institutions, college presidents, and academic vice-presidents, and faculty and student representatives. Under the leadership of the Council, Colorado designed a robust process for ensuring the quality of general education and the transferability of those courses that meet the state criteria, including:

- Definition of general education
- Rationale
- Criteria for content
- Criteria for competencies
- Review process to evaluate if the courses nominated meet the criteria
- Formal approval

Robert Shoenberg, Senior Policy Fellow of American Association of Colleges and Universities, stated that Colorado and Missouri have taken the optimum approach to identifying general education courses with all six elements explicitly in the state's general education policies and practices.

At its May, 2002 meeting, the Commission approved the state goals, definitions and content criteria recommended by the GE-25 Council for state guaranteed general education courses in Arts and Humanities, Communication, Mathematics, Natural and Physical Sciences and Social Sciences (Attachment B) and the corresponding competency criteria recommended by the GE-25 Council in Critical Thinking, Mathematics, Reading, Technology and Written Communication (Attachment C). Following that action, CCHE invited all public higher education institutions in Colorado to nominate general education courses that met the adopted criteria for consideration as a state guaranteed course. After a blind review process (i.e., all institutional identification material was deleted from the nomination materials) involving representatives from each institution in each content and competency area, 287 courses are recommended for state guaranteed general education designation. Each approved course will be assigned a state

course matrix number to communicate in the simplest and most consistent way the transfer guarantee that is associated with the state guaranteed designation.

The staff recommends that the Commission approve the listed courses attached to this proposal for the state guaranteed general education designation.

II. BACKGROUND

The General Assembly directed the Commission to outline a plan to implement a core course concept, defining the general education course competency guidelines for all public institutions of higher education, and ensuring the most effective way to achieve the transferability of general education course credits among public institutions in Colorado.

2001 General Education Legislative Mandates

The background section summarizes the mandates of HB 01-1263 and HB 01-1298. The bill numbers are referenced in ().

Commission shall:

- Adopt policies and practices as may be necessary for the implementation of general education and common course numbering (1298)
- Convene a council (1298); council goes into sunset review in 2011
- Establish a standard of 120-hour baccalaureate degree (1263)
- Adopt policies to ensure transferability of courses (1263)
- Develop a plan to implement a core course concept that includes general education course guidelines for all public institutions (1263)
- Submit to Education Committees and JBC progress reports before March 31, 2002 (1298)
- Design and implement a database to provisions of 1298
- Solicit grants and private donations to implement the course-numbering project and invest in a fund at the state treasury. All state funds shall remain in the fund and shall not revert (1298)

Governing boards shall

- Modify their existing transfer policies as necessary (1298)

Institutions shall:

- Conform their own general education core course requirements to the Commission's guidelines (1263)
- Identify the specific courses that meet the general education core course guidelines (1263)
- Review courses that correspond to Colorado's common course number system (1298)
- Publish and update a list of general education courses that correspond to the state's common course number system by fall 2003 (1298)
- Submit general education courses, including course descriptions, for review and approval by the Commission on or before March 1, 2003 (1298)

Students will:

- Receive credit for core courses they test out of free of tuition (1263)

CCHE convened the GE-25 Council in July 2001 to define guidelines for the core framework. The GE-25 Council represents a broad cross-section of higher education, including the governing boards and individual institutions, college presidents, and academic vice-presidents, faculty and student representatives.

CCHE, in collaboration with the Western Interstate Commission on Higher Education (WICHE), received a small grant from the Ford Foundation to advance the general education initiative. Faculty working committees were established to develop the criteria for qualifying general education courses as state guaranteed transfer courses.

III. STAFF ANALYSIS

The Commission adopted the framework developed by the GE-25 Council. The framework was derived from a set of general education goals that connote what a quality "general" education experience means in Colorado. The framework specified 35 credit hours of general education courses that were distributed among five content categories. Students may transfer one or more courses, up to 35 credit hours, taken from the list of approved state guaranteed general education courses, beginning fall semester, 2003.

See the table on the following page.

Sem. Cr. Hr.	General Education Categories
6	**Communication:** 1 Intro. Writing course (3 semester credits) **Communication:** 1 Intermediate Composition (3 semester credits)
3-5	**Mathematics:** 1 course (3 to 5 semester credits)
9	**Arts** and **Humanities:** Fine Arts and Expression Humanities Ways of Thinking
9	**Social and Behavioral Sciences** Select 1 History course Select 2 courses from 2 different disciplines
8	**Physical** and **Life Sciences:** Select 2 laboratory courses

Process Overview

During the summer and fall of 2002, institutions nominated courses to be considered for the state guaranteed transfer list. Nomination materials included a Nomination Form, signed by the vice president at the institution, and three or more course syllabi that were representative of the course as taught in the classroom. Faculty delegates in working committees in each of the five Content areas (Arts and Humanities, Communication, Mathematics, Physical and Natural Sciences and Social Sciences) reviewed and recommended courses to be included for state guaranteed general education transfer designation. Faculty subcommittees of four delegates each (two from community colleges, one from a four-year college and one from a university) were utilized in each working committee to review course nomination materials. A vote of three faculty members was required to recommend a course. The committee chair of each Content Committee reviewed the recommendation and concurred or listed conditions based on reviewer concerns. Nominated courses were (1) recommended, (2) not recommended, or (3) recommended provisionally, pending additional documentation supplied to the CCHE by nominating institutions. The course review process was "blind;" that is, college identifiers were removed from course nomination materials to foster an impartial review of course nominations. Priority for course reviews went to those lower division courses of comparable content that was commonly nominated (e.g., College Composition). Nominations were pre-screened to ensure that the course was listed as a general education course at the nominating institution, the nomination materials were complete, and that the course did not require a hidden prerequisite.

An informal review of Colorado's emerging statewide general education transfer policy and process by a nationally recognized expert, Dr. Robert Shoenberg of the Association of American Colleges and Universities, was conducted this fall while the course reviews were still in process. Dr. Shoenberg met with the Academic Council of the CCHE to share his impressions of our efforts and praised Colorado for advancing further than other states nationally in establishing a purposeful and well-constructed transfer system for general education courses. He noted that Missouri and Colorado are leading the way on this critical initiative.

Summary of recommendations for state guaranteed general education courses

The GE-25 Council defined the purpose of Colorado's general education framework:

> "General education seeks to benefit students by encouraging them to acquire the intellectual tools, knowledge and creative capabilities necessary to be able to study the world as it is, as it has been understood, and as it might become. General education prepares students for fulfilled lives as educated persons and effective contributors to a democratic society. To develop a breadth of knowledge, general education courses acquaint students with the methods of inquiry of the various academic disciplines and different ways these disciplines view the world. Effective general education helps students act ethically and responsively, develops habits of critical thinking and action, intellectual sophistication, and an orientation to learning and investigation that will become life long.
>
> Among key competencies general education seeks to develop are those in reading, written communication, mathematics, critical thinking, and technology. General education gives students the opportunity to apply these skills across diverse disciplines, including communication, mathematics, humanities, natural sciences, and social sciences."

Table 1 compares the old general education paradigm to Colorado's general education framework with the rationale linking the old and the new.

Table 1: Comparison of Colorado's General Education framework and model

Old general education paradigm...	*Rationale...*	*State Guaranteed General Education model..*
sees the curriculum predominantly as a conveyor of well-established knowledge	in recognition of the world's complexity	**D**efines general education as an informed probing of ideas and values and the ability to communicate ideas (Communication)
emphasizes study in a discipline	in recognition of the need to understand real world problems	**P**romotes connections within and across disciplines
Stresses recall of knowledge	given the need for civic engagement in major policy decisions	**REINFORCES AND DEVELOPS CRITIC**al thinking skills in all general education courses
promotes objective analysis	in recognition of the need to shape the rapid pace of change	**D**evelops creativity (Arts and Humanities)
studies Western cultures, perspectives, and issues	to respond to the modern world, and global interdependence	**REQUIRES A HISTORY COURSE AND TWO OTHER SOCIAL SCIENCE COURSES THAT FOCUS ON WORLDWIDE PROBLEMS**, human behavior patterns, and global issues(Behavioral and Social Sciences)
emphasizes science survey courses	in recognition of the explosion of available information	**E**mphasizes where to find needed information, how to evaluate its accuracy, and what students can do with their knowledge (Science)
values learning for learning's sake	to acknowledge the new role of higher education in U.S. society	**I**ncorporates competencies in reading, writing, technology, and mathematics (Competency-based)

Adoption of the attached list of courses will launch Colorado's state guaranteed general education transfer program. Nomination and review of additional courses for consideration of statewide general education transfer will continue on an annual basis. See Summary table that follows.

General Education Course Transfer Summary Table

REVISED		Recommended
Communication		
	College Composition - Intro	12
	College Composition - Intermediate	7
Mathematics		
	College Math	17
	Calculus	11
	Statistics	6
Art & Humanities		
	Art	10
	Literature	26
	Music	9
	Philosophy	15
	Theatre	8
Social & Behavioral Sciences		
	Anthropology	15
	Economics	2
	Geography	7
	Political Science	7
	Psychology	5
	Sociology	3
	US History	12
	World History	18
Physical & Natural Sciences		
	Astronomy	6
	Biology	16
	Chemistry	13
	Geology	8
	Physics	16
TOTAL		**249**

GE-25 Decisions and Outlook

The role of the GE-25 Council is to anticipate transfer problems that students may encounter and collectively find ways to resolve these problems. At its meeting in November, the GE-25 Council postponed including foreign languages among courses to be reviewed this year, pending further discussion. Foreign language is not required by most institutions as a general education requirement but sometimes is an admission requirement. It also discussed Speech competency and

its place in the framework, noting that Speech as a course is not part of the council's purview.

All recommended courses are instructor-based courses, taught either in a classroom format, or electronically online or interactive TV. The recommendations do not extend to student-paced course sections.

There is a restriction in the Natural and Physical Sciences to limit approved courses to those with "hands on" laboratories. The course recommendations in Natural and Physical Sciences are limited to those course sections with required laboratories and do not extend to course sections offered electronically with no "hands on" laboratory experiences.

In spring 2003, the GE-25 Council will consider proposals to implement a statewide assessment of selected general education courses as a means of assuring that comparable course requirements and outcomes will continue to be addressed.

IV. STAFF RECOMMENDATION

That the Commission approve the fully recommended courses for "state guaranteed general education" designation. Courses with provisional recommendations and pending additional information will be reviewed in 2003.

Appendix A

STATUTORY AUTHORITY

23-1-125. Commission directive - student bill of rights - degree requirements - implementation of core courses - on-line catalogue - competency test. (1) **Student bill of rights.** The general assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:

(c) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;

(d) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;

(e) Students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;

(f) Students have a right to know if courses from one or more public higher education institutions satisfy the students' degree requirements;

(g) A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

(3) **Core courses.** The commission, in consultation with each Colorado public institution of higher education, is directed to outline a plan to implement a core course concept, which defines the general education course guidelines for all public institutions of higher education. The core of courses shall be **designed to ensure that students demonstrate competency in reading, critical thinking, written communication, mathematics, and technology.** The core of courses shall consist of at least thirty credit hours, but shall not exceed forty credit hours. Individual institutions of higher education shall conform their own core course requirements with the guidelines developed by the commission and shall identify the specific courses that meet the general education course guidelines. If a statewide matrix of core courses is adopted by the commission, the courses identified by the individual institutions as meeting the general education course guidelines shall be included in the matrix. The commission shall adopt such policies to ensure that institutions develop the most effective way to implement the transferability of core course credits.

(b) The council shall recommend to the commission a statewide articulation matrix system of common course numbering to which the general education courses for each higher education institution may be mapped.

(c) (I) On or before October 1, 2002, the council shall recommend to the commission a list of general education courses to be included in the course numbering system. In identifying said general education courses, the council shall review the course descriptions, and may request summaries of course syllabi for review, focusing first on lower division general education courses. The commission shall review the council's recommendations and adopt a statewide articulation matrix system of common course numbering for general education courses, including criteria for such courses, on or before January 1, 2003.

(II) The council shall annually review the list of general education courses and the course numbering system, including the criteria, adopted by the commission and recommend such changes as may be necessary to maintain the accuracy and integrity of the course numbering system. The council's annual review shall include consideration of the course descriptions, and the council may request summaries of course syllabi for further review.

--REVISED AND APPROVED AS REVISED BY COMMISSION 1/7/03--

Attachment A
REVISED

ARTS AND HUMANITIES

COURSE NOMINATION	CCHE PROPOSAL
ASC Art 103 Art Appreciation	Recommend
ASC Spt 180 Intro to Theatre	Recommend
CCCS Art 111 Art History I	Recommend
CCCS Art 112 Art History II	Recommend
CCCS Mus 120 Music Appreciation	Recommend
CCCS Mus 121 Intro to Music History I	Recommend
CCCS Mus 122 Intro to Music History II	Recommend
CCCS Lit 115 Intro to Literature I	Recommend
CCCS Lit 201 Masterpieces of Literature I	Recommend
CCCS Lit 202 Masterpieces of Literature II	Recommend
CCCS Phi 111 Intro to Philosophy	Recommend
CCCS Phi 112 Ethics	Recommend
CCCS The 105 Intro to Theatre Arts	Recommend
CCCS The 211 Development of Theatre I	Recommend
CCCS The 212 Development of Theatre II	Recommend
CSU Arcc 100 Intro to the Visual Arts	Recommend
CSU Ecc 140 Study of Literature	Recommend
CSU Ecc 270 Intro to American Literature	Recommend

COURSE NOMINATION	CCHE PROPOSAL
CSU Lbcc 170 World Literatures to 1500	Recommend
CSU Ecc 238 Twentieth-Century Lit	Recommend
CSU Lbcc 171 World Literatures-Modern period	Recommend
CSU Ecc 245 World Drama	Recommend
CSU Plcc 100 Appreciation of Philosophy	Recommend
CSU Plcc 110 Logic & Critical Thinking	Recommend
CSU Plcc 170 World Philosophies	Recommend
FLC Art 162R Art in the Humanities	Recommend
FLC Mu 101R The Musical Experience	Recommend
FLC Eng 240R Survey of American Literature	Recommend
FLC Phil 141S Intro to Philosophy	Recommend
FLC Thea 101R Intro to Theatre	Recommend
MESA Arte 115 Art appreciation	Recommend
MESA Thea 145 Intro to Dramatic Lit	Recommend
MESA Engl 261 Survey of American Lit I	Recommend
MESA Engl 262 Survey of American Lit II	Recommend
MESA Engl 131 Western World Lit I	Recommend
MESA Engl 254 Survey of English Lit I	Recommend
MESA Phil 110 Intro to Philosophy	Recommend
MSCD Mus 1000 Intro to Music	Recommend
UCB Thtr 1009 Intro to Theatre	Recommend

COURSE NOMINATION	CCHE PROPOSAL
UCCS Engl 150 Intro to Literature	Recommend
UCCS Engl 260 Literature, the Global Experience	Recommend
UCCS Engl 261 Literature, Global Perspective II	Recommend
UCCS Phil 112 Critical Thinking	Recommend
UCD Phil 2441 Logic and Language	Recommend
UCD Pmus 1001 Music Appreciation	Recommend
UCD Engl 2600 Great Works British/Am Lit	Recommend
UCD Phil 1012 Intro to Philosophy	Recommend
UCD Phil 1020 Intro to Ethics	Recommend
UCD Thea 1001 Intro to Theatre	Recommend
UNC Engl 131 Intro to Literature	Recommend
UNC Engl 262 Masterpieces of World Lit	Recommend
UNC Engl 211 Survey of American Lit	Recommend
UNC Engl 213 Survey of British Lit I	Recommend
UNC Engl 214 Survey of British Lit II	Recommend
UNC Phil 110 Figures in Western Philosophy	Recommend
USC Art 211 History of Art I	Recommend
USC Art 212 History of Art II	Recommend
USC Art 100 Visual Dynamics	Recommend
USC Mus 118 Music Appreciation	Recommend
USC Eng 221 Masterpieces of Lit I	Recommend

COURSE NOMINATION	CCHE PROPOSAL
USC Eng 222 Masterpieces of Lit II	Recommend
USC Phil 201 Classics in Ethics	Recommend
USC Phil 204 Critical Thinking	Recommend
WSC Art 105 Intro to Art	Recommend
WSC Mus 100 Fundamentals of Music	Recommend
WSC Mus 140 Intro to Music	Recommend
WSC Eng 255 Ancient World Literature	Recommend

COMMUNICATION

COURSE NOMINATION	CCHE PROPOSAL
ASC Eng 101 Communication Arts I	Recommend
ASC Eng 102 Communication Arts II	Recommend
CCCS Eng 121 English Composition I	Recommend
CCCS Eng 122 English Composition II	Recommend
CSU Cocc 150 College Composition	Recommend
FLC Comp 250 Academic Inquiry and Writing	Recommend
FLC Comp 126 Writing in College (intensive)	Recommend
MSCD Eng 1010 Freshman Composition: Essay	Recommend
MSCD Eng 1020 Freshman Composition: Researc	Recommend
UCB Wrtg 1150 First-Year Writing & Rhetoric	Recommend
UCCS Engl 131 Rhetoric and Writing I	Recommend
UCCS Engl 141 Composition II	Recommend
UCD Engl 1020 Core Composition I	Recommend
UCD Engl 2030 Core Composition II	Recommend
UNC Engl 122 College Composition	Recommend
UNC Engl 123 College Research Paper	Recommend
USC Eng 101 Composition I	Recommend
WSC Eng 102 Academic Writing	Recommend

MATHEMATICS

COURSE NOMINATION	CCHE PROPOSAL
ASC Math 106 College Algebra	Recommend
ASC Math 104 Finite Mathematics	Recommend
ASC Math 120 Calculus I	Recommend
CCCS Mat 121 College Algebra	Recommend
CCCS Mat 150 Mathematics for Liberal Arts	Recommend
CCCS Mat 125 Survey of Calculus	Recommend
CCCS Mat 201 Calculus I	Recommend
CCCS Mat 202 Calculus II	Recommend
CCCS Mat 135 Intro to Statistics	Recommend
CSM Macs 111 Calculus for Scientists & Engin I	Recommend
CSM Macs 112 Calculus for Scientists & Engin II	Recommend
CSM Macs 213 Calculus for Scientists & Engi III	Recommend
CSU Mcc 155 Calculus for Biol Scientists I	Recommend
CSU Mcc 160 Calculus for Physical Scient. I	Recommend
CSU Stcc 301 Intro to Statistical Methods	Recommend
FLC Math 110Q College Algebra	Recommend
FLC Math 121Q Pre-calculus	Recommend
FLC Math 201Q Elementary statistics	Recommend
MESA Math 113 College Algebra	Recommend
MESA Math 110 College Mathematics	Recommend

MESA Math 119 Pre-calculus	Recommend
MSCD Mth 1110 College Algebra	Recommend
MSCD Mth 1310 Finite Mathematics	Recommend
MSCD Mth 1210 Intro to Statistics	Recommend
UCB Math 1012 Quantitative Reasoning & Skills	Recommend
UCB Math 1150 Pre-calculus	Recommend
UCB Math 1300 Analytic Geometry & Calculus I	Recommend
UCCS Math 105 Elementary Funct. of Calculus	Recommend
UNC Math 181 Fundamentals of Math I	Recommend
UNC Math 182 Fundamentals of Math II	Recommend
USC Math 121 College Algebra	Recommend
USC Math 124 Pre-calculus	Recommend
USC Math 156 Intro to Statistics	Recommend
WSC Math 140 Algebraic Functions	Recommend
WSC Math 213 Probability and Statistics	Recommend
WSC Math 131 Math for Managt. and Soc. Sci.	Recommend

PHYSICAL AND NATURAL SCIENCES

COURSE NOMINATION	CCHE PROPOSAL
ASC Biol 203 General Biology	Recommend
ASC Chem 101 Intro to Chemistry	Recommend
ASC Phys 230 General Physics	Recommend
ASC Phys 221 College Physics	Recommend
CCCS Bio 111 General College Biology I	Recommend
CCCS Bio 112 General College Biology II	Recommend
CCCS Che 101 Introduction to Chemistry I	Recommend
CCCS Che 102 Introduction to Chemistry II	Recommend
CCCS Che 111 General College Chemistry I	Recommend
CCCS Che 112 General College Chemistry II	Recommend
CCCS Gey 111 Physical Geology	Recommend
CCCS Gey 121 Historical Geology	Recommend
CCCS Ast 101 Astronomy I	Recommend
CCCS Ast 102 Astronomy II	Recommend
CCCS Phy 111 Physics: Algebra based I	Recommend
CCCS Phy 112 Physics: Algebra based II	Recommend
CCCS Phy 211 Physics: Calculus based I	Recommend
CCCS Phy 212 Physics: Calculus based II	Recommend
CSM Chgn 100 Chemistry I	Recommend
CSM Phgn 100 Physics I	Recommend

COURSE NOMINATION	CCHE PROPOSAL
CSU CCC 111 General Chemistry I	Recommend
CSU Phcc 121 General Physics I	Recommend
FLC Bio 110Tx Modern Biological Issues	Recommend
FLC Geog 107Nx Earth System Science	Recommend
FLC Phsc 206Tx Intro to Astronomy	Recommend
FLC Phsc 106Tx The physical sciences	Recommend
MESA Biol 101 Gen Human Biology	Recommend
MESA Biol 105 Attributes of Live Systems	Recommend
MESA Chem 131 Gen Chemistry I	Recommend
MESA Chem 132 Gen Chemistry II	Recommend
MESA Chem 121 Principles of Chemistry	Recommend
MESA Geol 111 Principles of Physical Geology	Recommend
MESA Geol 112 Principles of Historical Geology	Recommend
MESA Phys 111 General Physics I	Recommend
MESA Phys 112 General Physics II	Recommend
MESA Phys 131 Fundamental Mechanics	Recommend
MSCD Bio 1080 General Intro of Biology	Recommend
UCB Epob 1210 General Biology I	Recommend
UCB Epob 1220 General Biology II	Recommend
UCB Chem 1111 General Chemistry I	Recommend

COURSE NOMINATION	CCHE PROPOSAL
UCCS Biol 100 Biology in the Modern World	Recommend
UCCS Pes 105 General Astronomy I	Recommend
UCCS Pes 106 General Astronomy II	Recommend
UCD Biol 1550 Basic Biology I	Recommend
UCD Biol 1560 Basic Biology II	Recommend
UNC Geol 100 General Geology	Recommend
UNC Ast 100 General Astronomy	Recommend
USC Biol 100 Principles of Biology	Recommend
USC Chem 111 Principles of Chemistry I	Recommend
USC Chem 121 General Chemistry I	Recommend
USC Geol 101 Earth Science	Recommend
USC Phys 140 Light, Energy and Atom	Recommend
USC Phys 221 General Physics I	Recommend
USC Phys 201 Principles of Physics I	Recommend
USC Biol 121 Environmental Conservation	Recommend
WSC Biol 150 Biological Principles	Recommend
WSC Geol 101 Physical Geology	Recommend
WSC Biol 130 Environmental Biology	Recommend

SOCIAL AND BEHAVIORAL SCIENCES

COURSE NOMINATION	CCHE PROPOSAL
ASC Hgp 110 Development of Civilization I	Recommend
ASC Hgp 111 Development of Civilization II	Recommend
ASC Psyc 101 Introduction to Psychology	Recommend
ASC Soc 201 The Sociological Imagination	Recommend
CCCS Ant 101 Cultural Anthropology	Recommend
CCCS Ant 111 Physical Anthropology	Recommend
CCCS Geo 105 World Geography	Recommend
CCCS His 101 History of Western Civ I	Recommend
CCCS His 102 History of Western Civ II	Recommend
CCCS His 201 U.S. History I	Recommend
CCCS His 202 U.S. History II	Recommend
CCCS Pos 105 Introduction to Political Science	Recommend
CCCS Psy 102 General Psychology II	Recommend
CSU Apcc 100 Intro to Cultural Anthropology	Recommend
CSU Apcc 200 Cultures and the Global System	Recommend
FLC Ant 151R Intro to Anthropology	Recommend
FLC Geog 271R World Regional Geography	Recommend
FLC Hist 160 Survey of Western Civ I	Recommend
FLC Hist 281R Survey of U.S. History 1877-presnt	Recommend

COURSE NOMINATION	CCHE PROPOSAL
FLC Ps 101S Intro to Political Science	Recommend
MESA Anth 222 World Prehistory	Recommend
MESA Hist 101 Western Civ I	Recommend
MESA Hist 102 Western Civ II	Recommend
MESA Hist 132 U.S. History II	Recommend
MSCD Ant 1310 Intro to Cultural Anthropology	Recommend
MSCD His 1010 Western Civ to 1715	Recommend
MSCD His 1020 Western Civ since 1715	Recommend
MSCD His 1210 American History to 1865	Recommend
MSCD His 1220 American History since 1865	Recommend
MSCD Psy 1001 Introductory Psychology	Recommend
MSCD Soc 1010 Intro to Sociology	Recommend
UCB Hist 1015 History of the U.S. since 1865	Recommend
UCB Psci 1101 American Political System	Recommend
UCCS Anth 103 Intro to Cultural Anthropology	Recommend
UCCS Anth 104 Intro to Cultural Anthropology	Recommend
UCD Anth 2102 Culture and the Human Expernc	Recommend
UCD Geog 1102 World Regional Geography	Recommend
UCD Hist 1381 Paths to the Present I	Recommend
UCD Hist 1382 Paths to the Present II	Recommend
UNC Ant 100 Intro to Anthropology	Recommend

COURSE NOMINATION	CCHE PROPOSAL
UNC Ant 110 Intro to Cultural Anthropology	Recommend
UNC Ant 120 World Archaeology	Recommend
UNC Econ 105 Intro to Econ: Micro	Recommend
UNC Geog 100 World Geography	Recommend
UNC Geog 110 Geography of the U.S./Canada	Recommend
UNC Hist 120 Western Civ I	Recommend
UNC Hist 121 Western Civ II	Recommend
UNC Hist 101 U.S. History since 1877	Recommend
UNC Psci 105 Fundamentals of Politics	Recommend
UNC Psci 100 U.S. National Government	Recommend
UNC Psy 120 Principles of Psychology	Recommend
UNC Psy 100 Principles of Sociology	Recommend
USC Anth 100 Cultural Anthropology	Recommend
USC Hist 201 U.S. History I	Recommend
USC Hist 202 U.S. History II	Recommend
USC Hist 101 Hist of World Civ to 1100	Recommend
USC Hist 102 Hist of World Civ fm 1100 to 1800	Recommend
USC Hist 103 Hist of World Civ since 1800	Recommend
USC Soc 101 Intro to Sociology	Recommend
WSC Anth 107 Intro to General Anthropology	Recommend
WSC Econ 201 Macroeconomics	Recommend

COURSE NOMINATION	CCHE PROPOSAL
WSC Geog 101 World Regional Geography	Recommend
WSC Geog 250 Geography of North America	Recommend
WSC Hist 126 American History to 1865	Recommend
WSC Hist 127 American History since 1865	Recommend
WSC Hist 101 World History to 1615	Recommend
WSC Hist 102 World History since 1615	Recommend
WSC Pols 117 Intro to Political Ideas	Recommend
WSC Pols 180 American Federal Government	Recommend
WSC Psy 151 General Psychology	Recommend

Attachment B

CONTENT: COMMUNICATION
General Education
"Guaranteed Transfer" Course Criteria

State-level Goal

The general education requirement in communication is designed to help students:

- To develop the ability to use the English language effectively.
- To read and listen critically.
- To write with thoughtfulness, clarity, coherence, and persuasiveness.

Criteria for Designating a Communications Course as State Guaranteed

The content of a "state guaranteed" communication course shall be designed to:

1. Develop rhetorical knowledge, including:
   a) Focus on a purpose.
   b) Use voice, tone, format and structure appropriately.
   c) Write and read texts written in several genres and for multiple discourse communities.
2. Experience in writing processes:
   a) Use multiple drafts.
   b) Develop strategies for generating, revising, editing, and proofreading.
   c) Learn to critique own and other's work.
   d) Use a variety of technologies (writing and research tools).
3. Develop mastery of writing conventions:
   a) Select appropriate format for different writing tasks.
   b) Apply genre conventions ranging from structure and paragraphing to tone and mechanics.
   c) Use specialized vocabulary, format and documentation appropriately.
   d) Control features such as syntax, grammar, punctuation, and spelling.
4. Demonstrate student's comprehension of content knowledge through effective communication strategies, including:
   a) Ability to compose messages for specific purposes (e.g., expository, persuasive, technical, etc.).
   b) Ability to communicate to a variety of audiences.
   c) Ability to adapt content and style to respond to the needs of different audiences and different rhetorical situations.

AND

5. Competency in critical thinking.
6. Competency in written communication (must meet all competency criteria).
7. Competency in reading communication.

Maximum number of credits in communications courses that will be guaranteed to transfer 6 credit hours in writing courses.

Disciplines Included:

Writing or English writing courses.

Attachment B

CONTENT AREA: ARTS & HUMANITIES
General Education
"Guaranteed Transfer" Course Criteria

State-level Goal

Collectively, the general education requirement in art and humanities is designed to help students:

- recognize the different ways in which humans have perceived their world.
- deepen their understanding of how social, cultural, linguistic, religious, philosophical, and historical circumstances shape the human environment.
- enhance their appreciation of the creative world.
- explore fundamental questions of value, meaning, and modes of expression and creativity.
- investigate the cultural character and literatures of the human experience.
- learn to approach problems with greater awareness of their moral dimensions and ethical consequences**.**

Criteria for Designating a Humanities Course as State Guaranteed

The content of a "state guaranteed" humanities course shall be designed to provide students experiences either to:

1. Respond analytically and critically to cultural artifacts, including literature, music, and works of art by:

    a. Describing the basic elements and their effects on meaning in a work of art.
    b. Relating the effects of geography, economics, politics, religion, philosophy and science on the values of a culture and the stylistic features of its arts.
    c. Determining how a work reflects or rejects the major values or concerns of a historical era or culture.
    d. Interpreting themes or major concepts.

OR

2. Compare and contrast attitudes and values of specific eras (e.g., past to the present), or cultures (e.g., non-Western to Western culture).

OR

3. Understand ways of thinking, including logic and ethics, or obtain a broad understanding of the different questions dealt with by leading philosophers and their positions on those questions.

AND

4. Competency in critical thinking.
5. Competency in written communication.
6. Develop competency in reading or technology.

Maximum number of Arts & Humanities course credits that will be guaranteed to transfer 6 credit hours, addressing different content criteria.

Suggested Disciplines Include:

Humanities; Foreign Languages; Literature; Philosophy; Cultural and Area Studies; or non-studio Theatre, Art and Music classes.

Attachment B

CONTENT: MATHEMATICS
General Education
"Guaranteed Transfer" Course Criteria

State-level Goal:

Collectively, the general education requirement in mathematics is designed to help students:

- develop understanding of fundamental mathematical concepts and their applications.develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning.

Criteria for Designating a Mathematics Course as State Guaranteed

1. The content of a "state guaranteed" mathematics course shall be designed to provide students experience to know how to:

   a) Select data relevant to for solving a problem.
   b) Interpret and draw inferences from mathematical models such as formulas, graphs, and tables.
   c) Represent mathematical information symbolically, visually, numerically, and verbally.
   d) Use several methods, such as algebraic, geometric, and statistical reasoning, to solve problems.
   e) Estimate and verify answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results.
   f) Demonstrate an ability to generalize from specific patterns of events and phenomena to more abstract principles, and to proceed from abstract principles to specific applications.
   g) Recognize that mathematical and statistical methods have limitations.

AND

2. Competency in Mathematics.

3. Competency in Critical Thinking.

Maximum number of credits in mathematics that will be guaranteed to transfer 1 course, ranging from 3-5 credits. Test is that the course must meet all the stated criteria.

Disciplines Include:

Mathematics.

Examples of Prototypical Mathematics General Education Courses:

College Algebra; Mathematics for Elementary Educators; Mathematics for Secondary Educators; Calculus I, II or III; Liberal Arts Mathematics; Finite Mathematics/Business Mathematics/Financial Mathematics; Survey of Calculus; Trigonometry/Pre-Calculus; Statistics (with an introduction to Probability); any course that has one of these courses as a pre-requisite would also meet these criteria.

Attachment B

CONTENT: NATURAL/PHYSICAL SCIENCES
General Education
"Guaranteed Transfer" Course Criteria

State-level Goal

Collectively, the general education requirement in natural and physical sciences is designed to help students master scientific knowledge at a level that facilitates communication in an increasingly technological society, including:

- to instill a clear understanding of the basic scientific viewpoint
- to enable students to learn and use the scientific method
- to evaluate the impacts of science and technology on society
- to increase the level of science literacy

Criteria for Designating a Science Course as State Guaranteed

1. The content of a "state guaranteed" science course shall be designed to develop students':

    a) foundational knowledge in specific field(s) of science.
    b) understanding of and ability to use the scientific method.
    c) recognition that science as a process involves the interplay of observation, experimentation and theory.
    d) use of quantitative approaches to study natural phenomena.
    e) ability to identify and highlight interconnections between specific course being taught and larger areas of scientific endeavor.
    f) ability to distinguish among scientific, nonscientific, and pseudoscientific presentations, arguments and conclusions.

2. The required laboratory component of a science course will:

    a) develop concepts of accuracy, precision, and the role of repeatability in acquisition of scientific knowledge.
    b) be predominately hands-on and inquiry-based with demonstration components playing a secondary role.
    c) emphasize a student's formulation and testing of hypotheses with scientific rigor.
    d) stress student generation and analysis of actual data, the use of abstract reasoning to interpret these data, and communication of the results of experimentation.
    e) develop modern laboratory skills.
    f) emphasize procedures for laboratory safety.

AND

3. Competency in mathematics.

4. Competency in critical thinking.

Maximum number of science credits that are guaranteed to transfer - Two lab-based courses (8 credits).

Suggested Disciplines Include:

Astronomy, Biology, Chemistry, Environmental Science, Geology, Physics.

Attachment B

CONTENT: SOCIAL SCIENCES
General Education
"Guaranteed Transfer" Course Criteria

State-level Goal

Collectively, the general education requirements in social sciences are designed to help students acquire a broad foundation in social science knowledge and ability to apply this understanding to contemporary problems and issues. Specifically the social science requirement helps students:

- Gain insight into the methods of social sciences,
- Understand historical and social frameworks,
- Understand how individuals relate to the social world, past and present.

Criteria for Designating a Social Science Course as State Guaranteed

The content of a "state guaranteed" social science course shall be designed to:

1. Provide content knowledge in one of the following areas:

   a) Historical, cultural, or social frameworks that explore and compare achievements, issues, and characteristics of the world and its different cultures.

   OR

   b) United States historical framework exploring important aspects of American culture, society, politics, economics or its position in the world.

   OR

   c) Understanding of contemporary economic or political systems.

   OR

   d) Understanding how geography creates a sense of identity, shapes a culture, and influences the economics of a region.

   OR

   e) Knowledge of human behavior, including learning, cognition, and human development.

2. Ability to use the social sciences to analyze and interpret issues.

3. Understand diverse perspectives and groups.

AND

4. Competency in Critical Thinking.

5. Competency in Written Communication or Technology.

Maximum number of credits in social sciences that will be guaranteed to transfer 9 credits, one History course plus 2 courses addressing a different knowledge area

criterion (1 b –e).

Suggested Disciplines Include:

Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology.

Attachment C

COMPETENCY: CRITICAL THINKING
General Education

Guiding Principle

The goal of instruction in "critical thinking" is to help students become capable of critical and open-minded questioning and reasoning. An understanding of argument is central to critical thinking.

Definition: Critical Thinking Competency

Ability to examine issues and ideas and to identify good and bad reasoning in a variety of fields with differing assumptions, contents and methods.

Criteria

1. Information Acquisition
   - Identify questions, problems, and arguments.
   - Differentiate questions, problems, and arguments.

2. Application
   - Evaluate the appropriateness of various methods of reasoning and verification.
   - State position or hypothesis, give reasons to support it and state its limitations.

3. Analysis
   - Identify stated and unstated assumptions.
   - Assess stated and unstated assumptions.
   - Critically compare different points of view.

4. Synthesis
   - Formulate questions and problems.
   - Construct and develop cogent arguments.
   - Articulate reasoned judgments.

5. Communication
   - Discuss alternative points of view.
   - Defend or criticize a point of view in view of available evidence.

6. Evaluation
   - Evaluate the quality of evidence and reasoning.
   - Draw an appropriate conclusion.

Attachment C

COMPETENCY: MATHEMATICS
General Education

(Defines criteria for mathematics competency across the curriculum. See mathematics content for course-specific criteria.)

Definition

Ability to use mathematical tools and strategies to investigate and solve real problems.

Criteria

1. Information Acquisition
   - Select data that are relevant to solving a problem.

2. Application
   - Use several methods, such as algebraic, geometric and statistical reasoning to solve problems.

3. Analysis
   - Interpret and draw inferences from mathematical models such as formulas, graphs, and tables.

4. Synthesis
   - Generalize from specific patterns and phenomena to more abstract principles and to proceed from abstract principles to specific applications.

5. Communication
   - Represent mathematical information symbolically, graphically, numerically and verbally

6. Evaluation
   - Estimate and verify answers to mathematical problems to determine reasonableness, compare alternatives, and select optimal results.
   - Recognize that mathematical and statistical methods have limitations.

Attachment C

COMPETENCY: READING
Criteria apply to all general education courses that develop reading competency
(not course specific)

Guiding Principle

The ability to read critically is developed as students process visual information and apply the information to real problems across the curriculum.

Definition

The ability to read critically and thoughtfully.

Criteria

1. Information Acquisition
   - Recognize the different purposes and types of writing (e.g., descriptive, persuasive, narrative, imaginative, technical).

2. Application
   - Read newspapers and journals to track current events and issues.
   - Extract main points from texts and presentations.
   - Research topics using the web and other technologies.
   - Demonstrate comprehension of material by applying it to a written report, oral presentation, or group discussion.

3. Analysis
   - Summarize or interpret an author's point of view in written or oral format.

4. Synthesis
   - Interpret material by connecting own experiences to what is read in written or oral format.

5. Communication
   - Use logic, reasoning, content analysis, and interpretative skills when reading printed or published materials.
   - Convey the essence of read material to others by paraphrasing or citing in written or oral format.

6. Evaluation
   - Select texts that are credible and appropriate sources for written or oral case building.
   - Identify common fallacies (e.g., fact, logic, and relationships) in presentations and written texts.

- Compare the value or relevance of information obtained from different sources.

Attachment C

COMPETENCY: TECHNOLOGY
General Education

Guiding Principle

The integration of appropriate technology competencies and skills support the mastery of content of general education. The use of technology should never suppress content or diminish the rigor of general education courses.

Definition of Technology Competency

Ability to select and apply contemporary forms of technology to solve problems or compile information

Criteria

1. Information Acquisition
   - Conceptually understand available networking tools (e.g. web search engines, web sites), select, discriminate and evaluate sources for credibility and appropriateness.

2. Application
   - Achieve a familiarity with contemporary technology that allows a student to identify which technologies are useful and/or appropriate.

3. Analysis
   - Use appropriate technology to analyze information or data as required in a field of study.

4. Synthesis
   - Integrate information or data from a variety of sources to form a position or present a point of view.

5. Communication
   - Use current technology as a venue for information sharing (e.g. post a web page).

6. Evaluation
   - Determine which technologies apply to the task, understand the limitations of those technologies and know how to combine technologies effectively.

Attachment C

COMPETENCY: WRITTEN COMMUNICATION
Criteria apply to all general education courses that develop written competency
(not course specific)

Guiding Principle

Learning to write is a complex process that takes place over time with continued practice and informed guidance. While qualified writing professionals help students learn writing skills and knowledge of writing conventions, written communication competency is developed as students apply this knowledge across the curriculum. The statements below describe the level of competency in expository writing that students develop and refine in the general education curriculum.

Definition

The ability to write clearly and concisely.

Criteria

1. Information Acquisition
   - Find, select, and synthesize information from appropriate primary and secondary sources.

2. Application
   - Apply knowledge of syntax, grammar, punctuation and spelling in writing assignments.
   - Use appropriate vocabulary, formats, and documentation for different writing tasks.

3. Analysis
   - Critique own and others' work.

4. Synthesis
   - Integrate own ideas with those of others.

5. Communication
   - Convey a primary theme or message in a written text.
   - Use a variety of research tools, including current technological resources.

6. Evaluation
   - Clarify ideas and improve the quality of a written paper by using feedback.

See Communication Content Criteria for course-specific criteria.

TOPIC: **2003 REPORT ON NEWLY APPROVED DEGREE PROGRAMS**

PREPARED BY: **SHARON M. SAMSON**

I. SUMMARY

The Commission's Master Plan states that its goal is a market responsive higher education system. Responsiveness includes adapting the degree program mix by identifying unmet need and closing degree programs that no longer are in high demand. The two activities complement each other in the fact that they allow governing boards and institutions to redirect resources to new programs. Excluding vocational certificates and two-year degree programs, the Commission approved 15 degree programs in 2002. A total of 33 new baccalaureate and graduate degree programs were approved in the last five years with 50 percent of the new program activity at the University of Colorado.

The Annual Report on Newly Approved Degree Programs monitors the implementation of the new academic programs. It compares the projected enrollment and graduation numbers originally provided by the proposing institution with the actual enrollment and graduation data of the degree program. If a degree program meets its projections during its first five years, its approval status moves from provisional to full approval. The *2003 Report* provides information on all academic degree programs that the Commission has approved within the last five years or that are still operating with provisional status. Enrollment and graduation data are available for those programs that were implemented prior to or during FY 2001-02 – 33 degree programs.

In contrast, the annual Report on Low Demand Programs includes only four-year degree programs that have full program approval. The Commission delegates the authority to the governing boards for monitoring and taking action on degree programs that have been operating five years or more. Reviewing newly approved degree programs until they are fully implemented is part of the Commission's statutory approval responsibility.

In the *2003 Report*, the staff analysis specifically examines the performance of seven programs (Attachment A) that were implemented in 1996-97, including:

- University of Colorado at Boulder – East Asian Language M.A.
- University of Colorado at Boulder – Kinesiology Ph.D.
- University of Colorado at Colorado Springs – Computer Science Ph.D.
- University of Colorado at Colorado Springs – Electrical Engineering Ph.D.
- University of Colorado at Denver – Design & Planning Ph.D.
- University of Colorado at Health Sciences Center – Clinical Science Ph.D.
- Western State College – Art B.F.A.

And a program that was continuing from the 2002 review:

- Cell and Molecular Biology (M.S.) – Colorado State University

Staff recommends that the Commission grant full approval status to East Asian Language M.A. (UCB), Kinesiology Ph.D. (UCB), Electrical Engineering Ph.D. (UCCS), Design & Planning Ph.D. (UCD), Art B.F.A. (WSC).

If the Commission adopts the recommendation, the degree programs will no longer be included in the annual Report on Newly Approved Degree Programs. The governing board will assume primary responsibility for monitoring the performance and viability of these degree programs.

II. BACKGROUND

State law requires the Colorado Commission on Higher Education to approve proposals for new academic degree programs before they are established. In accordance with CCHE policy, the proposing institution provides five-year enrollment and completion projections. The Commission relies on these projections as an reliable assessment of program demand. As part of its degree approval responsibilities, the Commission monitors the enrollment and graduation performance of recently approved programs. In consultation with the Academic Council, CCHE has revised the provisions of the *Policy and Procedures for the Approval of New Academic Programs in State-Supported Institutions of Higher Education in Colorado* as well as the *Review Policy and Procedures for Newly Approved Academic Degree Programs.* As revised, each policy strengthens the role of governing boards and requires them to assume greater responsibility for program review decisions.

The Commission provisionally approves degree programs subject to their demonstrated ability to meet projections. As part of the approval process, it informs the governing board that the Commission will monitor the program's implementation each year and publish the data. The degree program data are available for the degree programs that were implemented prior to, or during, AY 2001-02.

III. STAFF ANALYSIS

Currently 33 degree programs are in the post-approval review phase, including seven implemented in 1996-97, eight in 1997-98, two in 1998-99, nine in 1999-00, 15 in 2000-01, and 15 in 2001-02 (Attachment A). At the time of the degree approval, the governing board provided enrollment and graduation projections to justify that significant need exists in Colorado for the state to support the proposed degree. There is one exception in the approval history – UCCS did not provide projections when it requested approval for the Electrical Engineering Ph.D. degree program.

The Commission approved seven new academic degree programs that admitted the first cohort of students in 1997-98 and therefore, have been operating for five years. According to CCHE policy, these degree programs are subject to Commission review in January 2003.

University of Colorado at Boulder – East Asian Language M.A.

The East Asian Language M.A. degree at the University of Colorado at Boulder has achieved its enrollment and graduation projections. An analysis of the enrollment patterns indicates that the program will sustain its current graduation numbers.

Staff recommend granting this degree program full approval.

University of Colorado at Boulder – Kinesiology Ph.D.

The Kinesiology Ph.D. degree at the University of Colorado at Boulder has achieved its enrollment projections with approximately 21 students enrolled in the last three years. It has graduated 10 students in the same period with new students entering the program at the same rate that students graduate.

Staff recommend granting this degree program full approval.

University of Colorado at Colorado Springs – Computer Science Ph.D.

The Computer Science Ph.D. degree at the University of Colorado at Colorado Springs has not achieved its enrollment nor graduation projections. It has graduated one student in the past three years. More problematic is that the enrollment data for the past two years does not show new students entering the program. The average credit load of enrolled students is seven credits per year. All but two students have accumulated less than 1/3 of credits required for graduation. The two students are approximately halfway complete with the course requirements based on the accumulated credit hours reported.

Staff do not recommend granting this degree program full approval.

University of Colorado at Colorado Springs – Electrical Engineering Ph.D.

The Electrical Engineering Ph.D. degree at the University of Colorado at Colorado Springs has a sustained record of enrollment or graduation projections. The numbers meet CCHE benchmarks for doctoral degree programs.

Staff recommend granting this degree program full approval.

University of Colorado at Denver – Design & Planning Ph.D.

The Design and Planning Ph.D. degree at the University of Colorado at Denver has achieved its enrollment projections with approximately 28 students enrolled annually in the last three years. While graduation numbers lag graduation projections, UCD conferred two doctoral degrees in 2002 and two additional degrees this past week in 2003. The data indicate that another three students will graduate in the spring.

Staff recommend granting this degree program full approval.

University of Colorado at Health Sciences Center – Clinical Science Ph.D.

The Clinical Science Ph.D. degree at the University of Colorado Health Sciences Center has achieved its enrollment projections but only graduated one student to date. The graduation numbers would trigger a low demand review. The program design merges both the clinical training for medical faculty with the medical degree training. It may not be realistic to project on a five-year horizon for this degree. Students on average enroll in nine credits per year in the Clinical Science program with approximately six students accumulating sufficient credits to graduate this year. It is not possible to determine if the students met the other requirements for medical training and research.

Staff request that UCHSC provide additional data to CCHE staff to further investigate this issue.

Western State College – Art B.F.A.

The Art B.F.A. degree at Western State College has a robust enrollment of 52 students with a high graduation rate. The 20 graduates per year meet the state benchmark for a baccalaureate degree program.

Staff recommend granting this degree program full approval.

Cell and Molecular Biology (M.S.) at Colorado State University

In 2002, the Commission reviewed Colorado State University's M.S. degree in Cell and Molecular Biology. While it had steady enrollment, however, the graduation numbers continue to be below the state benchmarks for the masters' degree program. Possibly students pursuing this field of study are heavily research oriented and interested in a doctoral track only. Staff has asked CSU to explain the program performance and what it proposes to do.

Code	Deg	Program Name	98	99	00	01	02
26.0402	M.S.	Cell & Molecular Biology	4	2	1	1	2

Staff do not recommend granting this degree program full approval.

Summary

The governing boards will receive a letter from the Commission indicating the status of its institution's degree programs at the conclusion of the five-year implementation period. The letters will also identify degree programs that are in the second, third, and fourth year of implementation which are performing below the original projections. The letter will remind the governing board that the data are what the institution has reported to CCHE and verified as accurate and complete.

In keeping with CCHE's protocol, the Commission formally notifies the governing boards through the agenda item of those degree programs approaching the five-year review point. The Commission expects governing boards to take appropriate action, if necessary, before the Commission 2004 Review of Newly Approval Degree Program. The following eight programs will be in the final year of the follow-up next year:

- Environmental Engineering B.S. – Colorado State University
- Environmental Engineering B.S. – Univ. of Colorado at Boulder
- Women Studies B.A. – Univ. of Colorado at Boulder
- Mechanical Engineering B.S. – Univ. of Colorado at Colorado Springs
- Mechanical Engineering M.S. – Univ. of Colorado at Colorado Springs
- Communication B.A. – Univ. of Colorado at Denver
- Psychology B.S. – Univ. of Colorado at Denver
- Theatre B.A. – Univ. of Colorado at Denver

Governing boards are encouraged to examine the performance of these degree programs.

- No concerns with the baccalaureate degree program performance; all are meeting projections.
- The enrollment in the M.S. in Mechanical Engineering is increasing but below projections at this time.
- The graduation numbers do not meet projections.

Although the Women's Studies B.A. at UCB has strong enrollment patterns, American Studies -- the original degree program of which Women's Studies was an emphasis area -- is experiencing declining enrollment. UCB may wish to consider whether to merge the two degree programs to continue offering the full curriculum. The Commission also has questions about the Cognitive Science degree. No students appear to have enrolled in this degree. Since approval was as a stand-alone Ph.D., the absence of enrollment is curious.

IV. STAFF RECOMMENDATION

That the Commission approve full degree approval for the following degree programs:

- **University of Colorado at Boulder – East Asian Language M.A.**
- **University of Colorado at Boulder – Kinesiology Ph.D.**
- **University of Colorado at Colorado Springs – Electrical Engineering Ph.D.**
- **University of Colorado at Denver – Design & Planning Ph.D.**
- **Western State College – Art B.F.A.**

Appendix A

STATUTORY AUTHORITY

23-1-107. Duties and powers of the commission with respect to program approval, review, reduction, and discontinuance. (1) The commission shall review and approve, consistent with the institutional role and mission and the statewide expectations and goals, the proposal for any new program before its establishment in any institution.

23-1-108 (8). The Commission shall prescribe uniform academic reporting policies and procedures to which the governing boards shall adhere.

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
ASC	Interdisciplinary Studies	Projected Enrollment					289	297	306	317	327	
	24.0101	Actual Enrollment					108					
	B.A.	Projected Grads					0	51	52	54	56	
	Approved: 2001	Actual Grads					51					
CSM	Engineering & Technology Mgr	Projected Enrollment					20	27	34	42	50	
	14.3001	Actual Enrollment										
	M.S.	Projected Grads					19	26	32	40	47	
	Approved: Jan 2001	Actual Grads					0					
CSU	Environmental Engineering	Projected Enrollment		25	35	45	55	70				
	14.1401	Actual Enrollment		12	28	34	47					
	B.S.	Projected Grads		5	7	9	11	14				
	Approved: 1998	Actual Grads		0	2	3	8					
CSU	Electrical Engineering	Projected Enrollment			5	12	24	31	34			
	14.1001 02	Actual Enrollment			19	13	0					
	M.E.E.	Projected Grads			0	0	5	7	12			
	Approved: Jan 1999	Actual Grads			0	4	5					
CSU	Master of Engineering	Projected Enrollment					5	7	11	14	15	
	14.0101	Actual Enrollment					0					
	M.E.	Projected Grads					0	0	8	12	14	
	Approved: Jan 2001	Actual Grads					1					
CSU	Computer Engineering	Projected Enrollment					133	113	158	184	202	
	14.0901	Actual Enrollment					11					
	B.S.	Projected Grads					22	27	32	37	40	
	Approved: July 2001	Actual Grads					0					
FLC	Interdisciplinary Studies	Projected Enrollment					30	31	32	33	34	
	24.0101	Actual Enrollment					56					
	B.A.	Projected Grads					28	29	30	31	32	
	Approved: June 2001	Actual Grads					4					
MESA	Environmental Science and Te	Projected Enrollment				40	52	72	95	119		
	03.0102	Actual Enrollment				11	61					
	B.S.	Projected Grads				8	5	5	8	11		
	Approved: Nov., 1996	Actual Grades				0	6					

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
MESA	Computer Information Systems	Projected Enrollment					56	60	62	65	69	
	52.1201	Actual Enrollment					17					
	B.A.	Projected Grads					20	22	24	26	28	
	Approved: June 2001	Actual Grads					12					
UCB	Astronomy	Projected Enrollment				15	39	50	50	60		
	40.0201	Actual Enrollment				34	67					
	B.A.	Projected Grads				0	0	10	10	12		
	Approved: June 2000	Actual Grads				0	4					
UCB	East Asian Language	Projected Enrollment	7	15	18	22	22					
	and Literature	Actual Enrollment	25	26	32	31	31					
	16.0399	Projected Grads	0	0	2	3	5					
	M.A.	Actual Grads	4	9	6	10	9					
	Approved: June 1997											
UCB	**Environmental Engineering**	Projected Enrollment		31	42	50	54	54				
	14.1401	Actual Enrollment		8	33	36	47					
	B.A.	Projected Grads		5	8	10	14	14				
	Approved: July 1998	Actual Grads		0	2	1	0					
UCB	**Environmental Studies**	Projected Enrollment					5	10	11	12	13	15
	03.0102	Actual Enrollment					0					
	M.S.	Projected Grads					4	4	4	5		
	Approved:	Actual Grads					0					
UCB	Kinesiology	Projected Enrollment	3	6	9	12	15					
	31.0505	Actual Enrollment	8	16	20	21	23					
	Ph.D.	Projected Grads	0	0	0	2	4					
	Approved: Feb 1997	Actual Grads	0	3	0	9	1					
UCB	Women's Studies	Projected Enrollment		60	60	60	60	60				
	05.0207	Actual Enrollment		39	33	44	46					
	B.A.	Projected Grads		0	8	15	18	19				
	Approved: 1998	Actual Grads		19	19	20	15					
UCB	Cognitive Science	Projected Enrollment			4	7	10	12	14			
	42.0301	Actual Enrollment			0	0	0					

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
	Ph.D	Projected Grads			1	1	2	2	4			
	Approved: Jan. 1999	Actual Grads			0	2	2					

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
UCCS	Computer Engineering	Projected Enrollment				27	33	44	55	61		
	14.0901	Actual Enrollment				1						
	B.S.	Projected Grads				0	0	3	6	10		
	Approved: Sept.1999	Actual Grads				0	5					
UCCS	Computer Science	Projected Enrollment	10	20	26	34	35					
	11.0101	Actual Enrollment	0	11	9	9	14					
	Ph.D.	Projected Grads	0	0	2	3	4					
	Approved: 1997	Actual Grads	2	0	1	0	0					
UCCS	Electrical Engineering	Projected Enrollment										
	14.1001	Actual Enrollment	31	26	27	26	22					
	Ph.D	Projected Grads										
	Approved: 1997	Actual Grads	3	2	4	3	2					
UCCS	Mechanical Engineering	Projected Enrollment		36	68	108	120	125				
	14.1901	Actual Enrollment		22	60	82	109					
	B.S.	Projected Grads		0	0	5	10	18				
	Approved: 1997	Actual Grads		0	0	3	9					

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
UCCS	Mechanical Engineering	Projected Enrollment		10	17	27	30	32				
	14.1901	Actual Enrollment		3	9	16	24					
	M.S.	Projected Grads		0	0	2	4	7				
	Approved: 1998	Actual Grads		0	0	1	1					
UCD	Communication	Projected Enrollment		186	186	186	186	186				
	09.0101	Actual Enrollment		294	313	340	387					
	B.A.	Projected Grads		54	54	54	54	54				
	Approved: Nov.1998	Actual Grads		64	62	69	81					
UCD	Design and Planning	Projected Enrollment	5	13	17	21	25					
	04.0401	Actual Enrollment	5	14	25	28	30					
	Ph.D.	Projected Grads	0	0	0	3	3					
	Approved: June 1997	Actual Grads	0	0	0	0	2					
UCD	Psychology	Projected Enrollment		30	45	53	57	59				
	42.1101	Actual Enrollment		0	0	69	81					
	B.S.	Projected Grads		5	7	8	9	9				
	Approved: Mar.1998	Actual Grads		11	11	16	13					
UCD	School Psychology	Projected Enrollment			10	25	30	30	30			
	42.1701	Actual Enrollment			46	76	65					
	Ed.S	Projected Grads			0	10	15	15	15			
	Approved: Feb.1999	Actual Grads			0	26	16					
UCD	Theatre	Projected Enrollment		39	39	40	40	40				
	50.0501	Actual Enrollment		50	57	66	72					
	B.A.	Projected Grads		12	12	12	12	12				
	Approved: Nov.1998	Actual Grads		3	3	4	14					
UCHSC	**Clinical Science**	Projected Enrollment	3	7	11	16	19					
	51.1401	Actual Enrollment	2	1	2	14	18					
	Ph.D.	Projected Grads	0	0	0	2	3					
	Approved: April 1997	Actual Grads	0	0	0	1	0					

2002 DEGREE PROGRAM APPROVAL REPORT

NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
UNC	Allied Health	Projected Enrollment					46	54	54			
	51.0701	Actual Enrollment					7					
	B.A.S.	Projected Grads					16	24	24			
	Approved: 2001	Actual Grads					0					
UNC	Resource Development	Projected Enrollment					46	54	54			
	44.0000	Actual Enrollment					10					
	B.A.T.	Projected Grads					16	24	24			
	Approved: July 2001	Actual Grads					0					
USC	Liberal Studies	Projected Enrollment					192	204	218			
	24.0101	Actual Enrollment					186					
	B.S.	Projected Grads					51	55	60			
	Approved: July 2001	Actual Grads					2					
WSC	Art	Projected Enrollment	90	97	104	110	112					
	50.0702	Actual Enrollment	7	19	34	50	52					
	B.F.A.	Projected Grads	15	23	26	25	25					
	Approved: 1996	Actual Grads	3	8	11	15	20					
WSC	Environmental Studies	Projected Enrollment				25	39	54	63	65		
	03.0104	Actual Enrollment				38	0					
	B.A.	Projected Grads				0	2	3	10	12		
	Approved: June 2000	Actual Grads				0	4					
WSC	Interdisciplinary Studies	Projected Enrollment					36	67	90	103	110	
	24.0101	Actual Enrollment					38					
	B.A.	Projected Grads					0	0	2	4	9	
	Approved: Nov. 2000	Actual Grads					0					
WSC	Computer Information Science	Projected Enrollment					28	52	65	78	78	
	52.1201	Actual Enrollment					0					
	B.A.	Projectd Grads					0	3	5	9	11	
	Approved: July 2001	Actual Grads					0					

DEGREE PROGRAM APPROVAL REPORT
NEWLY APPROVED DEGREE PROGRAMS 1996-2001

INST	PROGRAM	ACTIVITIY STATUS	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY 2002
CSU	**Cell & Molecular Biology**	Projected Enrollment		2	4	7	7	7	
	26.0402	Actual Enrollment		6	10	8	10	10	
	M.S.	Projected Grads		0	0	1	1	1	
		Actual Grads			4	2	1	1	

DEGREE PROGRAM APPROVAL REPORT
NEWLY APPROVED DEGREE PROGRAMS 1996-2001

	INST	PROGRAM	ACTIVITIY STATUS	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
Full Approval 1/11/2002	**CSU**	Cell & Molecular Biology	Projected Enrollment		0	2	5	10	15
		26.0402	Actual Enrollment		6	7	11	12	
		Ph.D.	Projected Grads		0	0	0	0	2
			Actual Grads			0	0	1	1
Full Approval 1/11/2002	**FLC**	Theatre Arts	Projected Enrollment		8	15	22	27	30
		50.0501	Actual Enrollment		11	24	47	39	31
		B.A.	Projected Grads		0	0	2	4	7
			Actual Grads		3	5	3	0	5
Full Approval 1/11/2002	**UCD**	M.E. Engineering	Projected Enrollment		15	30	45	55	60
		14.0101	Actual Enrollment		13	8	10	9	
			Projected Grads		0	6	10	15	15
			Actual Grads		3	6	9	8	8
Full Approval 2001	**UCD**	PH.D. Health and Behavioral Sciences	Projected Enrollment	8	17	25	34	37	37
			Actual Enrollment	13	17	24	30	37	
		30.9999	Projected Grads	0	0	0	5	8	8
			Actual Grads	0	0	0	3	2	4
Full Approval 2001	**UCD**	M.S. International Business	Projected Enrollment	82	83	85	87	88	
		52.1101	Actual Enrollment	37	56	60	57	63	
			Projected Grads	0	0	5	10	20	
			Actual Grads	1	3	11	8	14	

DEGREE PROGRAM APPROVAL REPORT

NEW ACADEMIC DEGREES APPROVED in 2000 and 2001

			Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	
INST	**PROGRAM**	**ACTIVITIY STATUS**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**Yr. Approved**

TOPIC: **2003 ANNUAL REPORT ON DISCONTINUANCE OF ACADEMIC DEGREES WITH LOW PROGRAM DEMAND**

PREPARED BY: **SHARON M. SAMSON**

I. SUMMARY

This agenda item presents the data on low-demand degree programs, i.e., those that failed to meet the minimum graduation benchmarks as defined in policy (Attachment A). The low-demand review does not include degree programs that the Commission has approved in the last five years. These are reviewed separately under the Newly Approved Review Policy since they have provisional standing until demonstrating bona fide demand. Refer to agenda Item V, C for data analysis of newly approved degree programs.

CCHE Low Demand Policy delegates to the governing board action with in three years for any degree program whose graduates are below the CCHE benchmarks:

- Undergraduate degree programs that fail to graduate at least 10 students in the current year or a total of 20 students in the past three years. Each institution may exempt up to five undergraduate degree programs that are central to the institution's role and mission (Attachment B).
- Masters' degree programs that fail to graduate at least three students in the current year or a total of five in the past three years.
- Doctoral programs that fail to graduate at least one student in the current year or a total of three in the past three years.

The Low Demand Policy process follows a three-year schedule:

- In the first year the governing boards review the data, determine potential causes and strategies - the intervention year.
- In year two, the institution implements the strategies – the implementation year.
- In year three, either the institution meets the benchmark or the governing board closes the degree program – the results year.

In 2003, the low demand review identified 14 additional degree programs that were operating below the benchmarks (Attachment A). The review provides governing boards with the opportunity to resolve data reporting problems for these degree programs. The governing boards need to intervene appropriately and take final action on the low demand programs prior to April 2005. In 2002, 17 programs were identified as low demand. In 2001, three degree programs were identified as low demand and one under a two-year extension.
The number of degree programs triggering the low demand review suggests that the Commission may wish to discuss related policy issues, including does CCHE current degree

approval policies promote or prevent over-specialization and duplication of degree programs?

The staff recommends that the Commission remand 19 degree programs to the respective governing boards to review and take action prior to April 2005.

II. BACKGROUND

In accordance with the General Assembly's HB 85-1187 directives, CCHE is charged with ensuring access to public education and guarding against unnecessary duplication. It accomplishes this responsibility through its degree approval process and the annual discontinuance review. Under CCHE's Discontinuance Policy, adopted in 1996, baccalaureate degree programs that do not graduate 10 students in the current year, masters' degree programs that graduate less than three each year and doctoral degree programs that do not graduate at least one student each year are subject to discontinuance. The policy does allow for a minimal number of exemptions for undergraduate degree programs.

At the April 2000 meeting the Commission modified the language defining exemptions. The current policy language pertaining to qualified exemptions reads "that a degree program must graduate at least three graduates in the past three years to qualify as an exemption." Formerly, the institution needed to graduate at least one student per year to exercise exemption privileges for a particular degree. Several institutions who testified in support of this change believed it allows the governing boards additional latitude when selecting which degree programs will be exempt. The Commission adopted this policy revision unanimously in April 2000. UNC and METRO both used the new language to exempt a degree program in May.

At the August 2000 Commission meeting, the Commission approved several additional revisions to the *Policy and Procedures for the Discontinuance of Academic Degrees with Low Program Demand*. The discontinuance action in April was the first time in 11 years that CCHE policy required explicit governing board action. The revisions responded to the governing boards' call for clarity and specificity on certain policy points that become apparent when the boards attempted to implement the Discontinuance Policy. In summary, the revised policy (1) strengthens the role of the governing board in assuming the primary responsibility for discontinuing programs; (2) clarifies the explicit criteria for exempting low demand degree programs (i.e., central to role and mission and student access), (3) sets the exemption limit at five, but states the Commission's preference regarding a maximum of three exemptions for large institutions, (4) defines the appeals process to limit appeals to short-term extensions for programs in which the governing board is actively involved and intervention is occurring, and (5) affirms that the Commission retains the ultimate responsibility if a governing board chooses not to make the final exemption selection.

III. ANALYSIS

Attachment A provides the recent enrollment and graduation numbers for degree programs that are operating below CCHE benchmarks, excluding those exempted by governing board action. Eighteen additional degree programs have been identified as low demand this year. Staff recommends that the Commission remands the listed degree programs to the respective governing boards to review and take action prior to April 2005.

Analysis of Low Demand by Institution:

- ASC exercised four exemptions in 2000. It closed its Physics degree after experimenting with a coordinated relationship with WSC. ASC has redesigned the Mathematics curriculum of the masters' degree program.
- CSM has eight graduate degree programs operating below the benchmark. Colorado School of Mines is exempt for the Low Demand Policy under the CSM 2001 Performance Contract.
- CSU exercised four exemptions in 2000. It successfully merged several agriculture degree programs. However Botany (BS) is operating below its benchmark.
- FLC exercised four exemptions. No other degrees are operating below the benchmarks.
- MESA has exercised no exemptions. No other degrees are operating below the benchmarks.
- METRO exempted four undergraduate degree programs. It merged its Spanish degree program with the Modern Languages degree program and Music Performance with the Music degree program. Meteorology is operating below the benchmark.
- UCB exercised five undergraduate exemptions. The Communications MA has met the graduate degree program benchmark in 2002. Three undergraduate programs, one master's, and two doctoral programs are operating below the benchmark. One of the undergraduate degree programs – American Studies historically had robust graduation numbers but when it split into two degree programs – Women Studies and American Studies – in 1998, the enrollment and number of graduates in American Studies sharply declined.
- UCCS exempted one undergraduate program in Physics, consolidated Applied Mathematics and Mathematics into a single undergraduate degree program and resolved a data reporting problem in Allied Health. UCCS has reported graduation data in American Studies - a graduate program that the governing board chose not to implement, reallocating its funds to support another degree program. The Ph.D. in Computer Science is analyzed in Agenda Item V, C.
- UCD closed two degree programs and exempted Physics. No other degrees are operating below the benchmarks.
- UNC exercised four exemptions. One additional undergraduate program –

Gerontology - is operating below the benchmark.

- USC exercised two exemptions and closed one low performing degree program -- Recreation. The Electronic Engineering Technology and Foreign Languages programs triggered a review in 2001 and continue to operate below the benchmark. Governing board action is required by April 2003. USC's Speech Communication degree program is operating below the benchmark.
- WSC exercised three exemptions with the exempted Spanish degree exceeding the benchmark. Chemistry graduated three students in 2002.

Exemptions are reserved for undergraduate degree programs that are central to an institution's role and mission. An institution is limited to five exemptions. Once exempt, the governing board need take no further action unless it wishes to replace a currently exempt degree program with another. The enrollment in these degree programs is often very cyclic so an exempt degree program may meet the benchmark in a particular year but retain its exempt status to protect it from future fluctuations. Other than closing degree programs, the governing boards did not notify CCHE of any changes to exemption lists. Furthermore, large institutions agreed to move three or less exemptions. While all governing boards were moving in this direction in 2002, the number of programs identified in 2003 Low Demand Report seems to reverse this trend.

The Commission approves graduate degree programs based on strong market demand and academic recognition in a field or discipline. Consequently, low demand graduate degree programs are not eligible for exemptions. Instead most governing boards have merged low demand graduate programs, -- interpreting the graduation data as changing market patterns, possible over-specialization, or a combination of both factors. The number of graduate programs identified as low demand has increased this year; the number of graduate low demand programs identified in 2001, 2002, and 2003 are 1, 2 and 8 respectively.

Two-Year Extensions

The Regents of the University of Colorado filed an appeal for a two-year extension for UCB Communication (M.A.) in 2000. The Regents requested the extension because it believed that three students would graduate in 2000. It contended that it would be possible to determine if sufficient interest exists to justify continuing the degree program at the end of the extension. It did not graduate the 3 students necessary to meet the benchmark in 2001. In January 2001, UCB requested a second extension for two additional years, explaining that its intervention strategy needed this extension for full implementation. The UCB's masters' degree in Communication graduated three students in 2002, and a total of six students in the past three years, meeting the benchmark.

UCB	**1998**	**1999**	**2000**	**2001**	**2002**
Communications, MA	0	1	1	2	3

Policy Issues

In the broad context of access, the Commission assumes that some degree proposals may be designed to expand access, but low number of graduates may indicate that bona fide need is unjustified. This issue is particularly relevant in times of budgetary rescissions when institutions need to make hard choices. For example, some governing boards have announced the recent closure of degree programs during the budget reduction strategies, affirming that program closure is a cost-effective way to stretch limited resources. The number of graduate degree programs triggering the low demand review raises a question regarding CCHE's current degree approval policy: Does the Degree Approval Policy promote or protect against over-specialization and duplication of degree programs? Do the two policies – Degree Approval and Low Demand Policy – position the State to a reactive or proactive role?

The other policy issue is more pragmatic. Governing boards have taken responsibility to close degree programs during their review processes. However, reported program closures to the Commission that occur in April each year may have stalled at the operational level. In several instances, institutions continue to report student enrollment and graduate students under the "old" degree programs, raising the question if the degrees are closed in practice as well as on paper. Are there consequences if a governing board officially closes a degree program and continues to operate the program? Program mergers are effective immediately while students enrolled in "discontinued" degree programs have no more than four years to graduate under the statute.

IV. STAFF RECOMMENDATION

The following staff recommendation is presented as a matter of public notice.

That the respective governing boards need to take action on the following low-demand degree programs by April of the designated year:

2003	**UCB**	**Communication (M.A.)**	**Met benchmark**
	UCCS	**Allied Health (B.S.)**	**Met benchmark**
	USC	**Foreign Language**	**Below**
2004	**ASC**	**Geology**	
		Mathematics	
	CSU	**Botany (BS)**	
	FLC	**Music (BA)**	
		Theatre (BA)	
	METRO	**Music/Music Performance (BA/BFA)**	

	UCB	**Distributed Studies (BA)**
		Comparative Literature (MA)
	UNC	**Physics (BA)**
	USC	**Mathematics (BS)**
		Electronics Engineering Tech (BS)
	WSC	**Chemistry (BS)**
		Physics (BS)[1]
2005	**CSU**	**Agricultural Economics (B.S.)**
		Music (B.M.)
		Physics (B.S.)
		Rangeland Ecology (B.S.)
		Rangeland Ecosystem Science (Ph.D)
	METRO	**Meteorology (B.S.)**
	UCB	**American Studies (B.A.)**
		Comparative Literature (M.A.)
		Chemical Physics (Ph.D)
		Speech, Language, & Hearing Sciences (Ph.D)
	UCCS	**American Studies (M.A.)**
	UNC	**Gerontology (B.A.)**
	USC	**Music (B.A.)**
		Speech Communication (B.A./B.S.)

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-1-107 (2) reads:

a) The commission shall establish, after consultation with the governing boards of institutions, policies and criteria for the discontinuance of academic or vocational programs. The commission shall direct the respective governing boards of institutions, including the board of regents of the university of Colorado, to discontinue an academic or vocational degree program area, as program area is defined in commission policies.

b) The governing board of a state-supported institution of higher education directed to discontinue an academic or vocational degree program area pursuant to this subsection (2) shall have not more than four years to discontinue graduate and baccalaureate programs and not more than two years to discontinue associate programs following the commission's directive to phase out said program area.

c) If the commission directs the governing board of an institution to discontinue an academic or vocational degree program area, and the governing board refuses to do so, the commission may require such governing board to remit to the general fund any moneys appropriated for such program area.

3) Each governing board of the state-supported institutions of higher education shall submit to the commission a plan describing the procedures and schedule for periodic program reviews and evaluation of each academic program at each institution consistent with the role and mission of each institution. The information to be provided to the commission shall include, but shall not be limited to, the procedures for using internal and external evaluators, the sequence of such reviews, and the anticipated use of the evaluations.

4) Prior to the discontinuance of a program, the governing boards of state institutions of higher education are directed, subject to commission approval, to develop appropriate early retirement, professional retraining, and other programs to assist faculty members who may be displaced as a result of discontinued programs.

5) The commission shall assure that each institution has an orderly process for the phase-out of the programs.

Degrees and Certificates Awarded by Level and CIP Code

Inst	Level	CIP		Degree Level	Program Name	Degrees/Certificates Awarded in 1997-98	1998-99	1999-2000	2000-01	2001-02	STATUS	Action By
ASC												
		27.0101		B.A./B.S.	Mathematics	9	3	9	2	2		2004
		50.0901		B.A.	Music	6	4	2	7	7	E	
		16.0905		B.A.	Spanish	1	5	0	2	3	E	
		50.0501		B.A.	Speech - Theatre	3	1	3	5	3	E	
CSM												
		14.1501		M.S.	Geological Engineering	0	0	0	0	1	*	2004
		14.1601		M.S.	Geophysical Engineering	0	0	0	0	2	*	2005
		14.1601	02	M.S.	Geophysical Engineering	0	1	2	0	0	*	2005
		40.0501		M.S.	Chemistry	0	2	0	1	0	*	2004
		40.0801		M.S.	Physics	2	3	0	0	1	*	2004
		14.1501		Ph.D.	Geological Engineering	0	1	0	0	0	*	2005
		14.1601		Ph.D.	Geophysical Engineering	0	0	0	0	0	*	2004
		27.0101		Ph.D.	Mathematics & Computer Science	2	3	0	1	0	*	2005
CSU												
		01.0103		B.S.	Agricultural Economics	6	3	6	0	4		2005

	02.0101		B.S.	Bio-Agricultural Science	1	7	3	6	4	E	
	26.0301		B.S.	Botany	6	11	3	4	6		2004
	14.1301		B.S.	Engineering Science	4	5	4	7	3	E	
	16.0101		B.A.	Foreign Languages & Culture	0	0	0	0	3		**2005**
	50.0901		B.M.	Music	5	16	4	9	5		2005
	40.0801		B.S.	Physics	5	12	7	5	7		2005
	02.0409	02	B.S.	Rangeland Ecology	9	11	5	3	8		2005
	02.0409		Ph.D.	Rangeland Ecosystem Science	5	6	1	1	0		2005

FLC											
	45.0601		B.A.	Economics	3	1	1	3	5	E	
	38.0101		B.A.	Philosophy	2	4	5	5	4	E	
	40.0801		B.S.	Physics	1	2	4	1	2	E	
	50.0501		B.A.	Theatre	5	3	0	5	2	E	
METRO											
	05.0201		B.A.	African American Studies	1	0	1	2	1	E	
	40.0401		B.S.	Meteorology	7	10	6	4	7		2005
	40.0801		B.A./B.S.	Physics	4	1	2	3	3	E	
	15.1102		B.S.	Surveying & Mapping	1	2	3	2	5	E	
UCB											
	05.0102		B.A.	American Studies	20	12	7	1	7		2005
	05.0103		B.A.	Asian Studies	6	6	7	6	4	E	2005
	30.9999	02	B.A.	Distributed Studies	4	2	1	1	1		2003
	16.0902		B.A.	Italian	2	6	5	7	4	E	
	23.0301		M.A.	Comparative Literature	6	1	1	1	1		2005
	40.0506		Ph.D.	Chemical Physics	2	3	2	0	0		2005
	51.0201		Ph.D.	Speech, Language, & Hearing Sciences	1	0	1	1	0		2005
UCCS											
	27.0301		B.S.	Applied Mathematics	5	5	8	0	0	M	
	40.0801		B.S.	Physics	3	6	4	5	5	E	
	05.0102		M.A.	American Studies	4	0	1	0	2	D	
	11.0101		Ph.D.	Computer Science	2	0	1	0	0		2003
UCD	40.0601		B.S.	Geology	9	6	4	8	3	D	

	16.0501	B.A.	German	1	4	1	5	4	D	
	40.0801	B.S.	Physics	2	2	6	5	2	E	
UNC										
	5.0201	B.A.	Africana Studies	3	0	2	2	1	E	
	5.0203	B.A.	Mexican American Studies	5	7	5	3	1	E	
	19.0705	B.S.	Gerontology	11	13	6	3	7	E	2005

USC										
	15.0303	B.S.E.E.T.	Electronics Engineering echnology	7	6	6	6	5		2004
	16.0101	B.A.	Foreign Languages	6	6	6	4	2		2003
	50.0901	B.A.	Music	5	10	9	7	3		2005
	40.0801	B.S.	Physics	2	1	2	3	0	E	
	23.1001	B.A./B.S.	Speech Communication	21	11	10	6	0		2005
WSC										
	40.0501	B.S.	Chemistry	1	0	4	3	3		2004
	27.0101	B.S.	Mathematics	4	7	9	4	2	E	
	50.0901	B.A.	Music	0	3	7	4	1	E	
	40.0801	B.S.	Physics	3	2	2	1	1	E	

STATUS KEY

D	Discon	Discontinue
E		Exempt
M		Merged
U		Unapprove

Table 2: List of Degree Programs Exempted by Governing Board
(The exempted degree programs listed in bold meet the benchmark in 2003).

		2000	2001	2002
ASC	**Chemistry (BA/BS)**	**7**	**5**	**9**
	Music (BA)	3	7	7
	Spanish (BA)	0	2	3
	Speech-Theatre (BA)	3	5	3
CSM	Geological Engineering (PE)	2	2	2
	Geophysical Engineering (PE)	**7**	**13**	**17**
CSU	Bio-Agricultural Science (BS)	3	6	4
	Bio-resource/Agricultural Engineering (BS)	**13**	**6**	**11**
	Consumer & Family Studies (BS)	**9**	**3**	**10**
	Engineering Science (BS)	4	7	3
FLC	Economics (BA)	1	3	5
	Philosophy (BA)	5	5	4
	Physics (BA)	4	1	2
	Southwest Studies (BA)	**10**	**3**	**12**
METRO	African American Studies (BA)	1	2	1
	Chicano Studies (BA)	**7**	**5**	**12**
	Physics (BA/BS)	2	3	3
	Surveying and Mapping (BS)	3	2	5
UCB	Asian Studies (BA)	7	6	4
	Italian (BA)	5	7	4
UCCS	Physics (BS)	4	5	5
	Spanish (BA)	**8**	**5**	**8**
UCD	Physics (BS)	6	5	2
UNC	Africana Studies (BA)	2	2	1
	Mexican American Studies (BA)	5	3	1
USC	**Business Economics (BS/BA)**	**1**	**1**	**15**
	History (BA)	**8**	**15**	**18**
	Physics (BS)	1	3	0
WSC	**Economics (BA)**	**7**	**16**	**6**
	Mathematics (BA)	9	4	2
	Music (BA)	7	4	1
	Spanish (BA)	**13**	**11**	**9**

TOPIC: **QUALITY INDICATOR SYSTEM REPORT FOR FY 2001-02**

PREPARED BY: **RAY KIEFT**

I. SUMMARY

The results from the annual administration of the Quality Indicator System (QIS) is required by statute (CRS 23-13-105 (5) (a)) to be reported to the Governor, Joint Budget Committee, Senate and House Education Committees, and the governing boards. The results of the FY 2001-02 administration of QIS are included in the attached report (Attachment A).

The governing boards, in turn, are required by statute (CRS 23-13-105 (6)) to respond to the QIS Report. In their responses, the governing boards are asked to provide a description of strategies and/or programs they intend to undertake to address any areas of substandard or declining performance as indicated by QIS.

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-13-105 (5) (a) On or before December 1, 1998 and on or before December 1 of each year thereafter, the commission shall provide to the persons specified in section 23-1-105(3.7) (a), to the education committees of the house of representatives and the senate, and to each governing board a report of the data collected through the quality indicator system indicating the overall performance of the statewide system of higher education and each governing board's and institution's performance in achieving the statewide expectations and goals.

C.R.S. 23-13-105 (5)(b) It is the general assembly's intent that the governing boards and the institutions shall respond appropriately to the information provided in the quality indicator report and take such corrective actions as may be necessary to improve the quality of education provided by each institution.

C.R.S. 23-13-105 (6) On or before January 30, 1999, and on or before January 30 of each year thereafter, the commission and the governing boards shall report to the education committees of the house of representatives and the senate and to the joint budget committee on the information received from the quality indicator system and the actions being taken or planned by the governing boards in response to the information.

QUALITY INDICATOR SYSTEM REPORT

December 2002

Introduction

This Quality Indicator System (QIS) report is the fourth since the inauguration of QIS in 1997. During 1997, the Colorado Commission on Higher Education (CCHE), in collaboration with the governing boards of the state-supported institutions of higher education, implemented HB96-1219 which the General Assembly had passed during the 1996-97 legislative session. Outlining the General Assembly's initial expectations for a quality indicator system for Colorado's state-supported higher education system, HB96-1219 was refined during the 1999 legislative session through the enactment of SB99-229 which identified state goals and institutional actions as part of a revised QIS.

The specific quality indicators involved in QIS are similar to those used in the variety of quality indicator systems found in other states: graduation rates, freshmen retention and persistence rates, passing scores or rates on tests and licensure examinations, undergraduate class size, faculty teaching workload rates, and institutional support/administrative expenditures. The indicators utilized in Colorado's QIS are also used in the CCHE's performance funding system. (Readers interested in CCHE's performance funding system can find a report detailing the performance funding system on the CCHE's web site).

This report includes a description of the nine indicators used in QIS, the institutional data for each, as well as the benchmarks for measuring institutional performance, where applicable.

Background

Colorado is one of nearly forty states that has implemented some type of a performance measurement system for their state-supported institutions of higher education. While many states rely on a greater number of indicators than Colorado (e.g., Missouri – 24, Wisconsin - 21, Kentucky – 16, Virginia – 14, Washington – 13), Colorado's QIS keeps the overall number of indicators to ten or fewer (with subcomponents).

Along with the indicators common to other states, Colorado's QIS has unique aspects which result from specifics contained in SB99-229. First and foremost, Colorado's QIS focuses solely on undergraduate education. Graduate level education and research are not specifically contained in SB99-229 and thus, neither is included explicitly in Colorado's QIS. The exclusion of these two vital aspects of Colorado's higher education enterprise should not be construed as a devaluing of either, as both are recognized by the state and CCHE as important.

To the extent possible, the performance of each Colorado state-supported institution, as measured by QIS, is compared to an individual benchmark for each indicator (or subcomponent). The benchmarks are based on the performance levels of institutions from across the country representing a national comparison group for the individual Colorado institution (i.e., institutions from across the country with similar roles and missions, enrollment size, program array and complexity, etc.). To ensure that each Colorado institution has a relevant comparison group for an indicator, the comparison groups may differ from indicator to indicator. In some cases, however, the comparison group is limited by the availability of national databases and/or reliable data from similar institutions. In such cases, recent performance of the institution itself serves as the benchmark, with the expectation that improvement will occur.

Purposes of QIS

Purpose 1: Encouraging Continuous Improvement by Institutions in Achieving High Levels of Performance

In the decade of the 1990s, higher education conscientiously addressed the public expectation for an effective framework to ensure quality and accountability. Colorado's heightened attention to quality and accountability occurred in 1996 with the passage of HB96-1219, known as the Higher Education Quality Assurance Act. This legislation outlined the General Assembly's expectations and goals for higher education. It also urged higher education to "…concentrate on improving both the quality and cost-effectiveness of higher education in the state." (CRS 23-13-102) The QIS reflects this statutory purpose by encouraging state-supported institutions of higher education to strive for continuous improvement in achieving high levels of performance. This purpose is reinforced by the Commission's Performance Funding System which recognized annual improvement in performance as measured by several performance measures, (Interested readers can obtain information about the Commission's Performance Funding System by referring to the Commission's website).

Purpose 2: Measuring Institutional Performance and Accountability

Since 1985, Colorado's state-supported institutions of higher education have been involved in accountability reporting vis-à-vis several laws (HB85-11-87, HB91-1002, SB93-136, HB94-1110, andHB96-1219). The Higher Education Quality Assurance Act (HB96-1219) was refined in 1999 with the passage of SB99-229. Through this refinement, the General Assembly mandated the establishment of "…a quality indicator system to measure the overall performance of the statewide system of higher education and each governing board's and each institution's performance in achieving the statewide expectations and goals…" (CRS 23-13-105) In establishing the statewide expectations and goals, the General Assembly further expressed its expectation that "…each institution…shall work toward achieving a high quality, efficient, and expeditious undergraduate education…" (CRS 23-13-104(a)) The QIS serves as an accountability reporting process as related to these statewide expectations and goals.

Purpose 3: Determining Funding Recommendations and the Funding Distribution for the Higher Education System

The incorporation of QIS in the Commission's funding recommendation and distribution formula for the higher education system is specified in statute: "The commission shall make annual system-wide funding recommendations…in making its recommendations, the commission shall consider each governing board's and each institution's level of achievement of the statewide expectations and goals…as measured by data collected through the quality indicator system…" (CRS 23-1-105(2)) and "The commission shall establish…the distribution formula of general fund appropriations…to each governing board under the following principles…To reflect the governing board's and the institution's level of achievement of the statewide expectations and goals…as measured by data from the quality indicator system…" (CRS 23-1-105(3)(d))

Purpose 4: Build Public Support for Increased Funding for Higher Education

A recent survey of Colorado residents identified higher education as having a high level of respect with the institutions of higher education viewed as providing quality educational experiences. However, this high level of regard has not translated into a level of financial support for higher education as measured by higher education's share of the state budget. For several years, higher education staked its financial future on a growing enrollment and inflation as the primary means for keeping education's percent of the state budget on pace with the rest of state government. Unfortunately, enrollment growth often fell short of expectations. Consequently, higher education lost ground in funding support.

A strategy of building public support for increased funding for higher education is embodied in the utilization of data from QIS in the performance funding system and the College Guide. Clear, concise reporting of aspects of higher education that matter intuitively to the public – graduation rates,

achievement levels of recent graduates, freshmen retention and persistence rates, class size, overhead costs – the willingness to set high performance expectations and standards (benchmarks), and the openness to compare the performance of Colorado's institutions with the performance of like institutions across the country, these all provide a foundation which can be used to request increased financial support for higher education.

Balance and Limitations Inherent in Any Quality Indicator System

Each state-supported institution of higher education in Colorado has a particular role and mission. Each has an admission selectivity level assigned to it by statute. Each has its own particular set of academic and student support programs and services. Each has relationships with its local community, region, and the state. Some have national and international relationships. Traditions have shaped each institution. Taken as a whole, each institution has aspects that cannot be adequately taken into account or measured by any system, no matter how sophisticated that system may be when, by design, the system incorporates some amount of uniformity and commonality among the institutions. This is a limitation of any quality indicator or performance measurement system that seeks to include all institutions in some common format and approach. Whatever the quality indicator or performance measurement system employed, it must recognize this limitation and strive to balance the diversity of institutions and their respective differences with the commonality and uniformity inherent in the quality indicator or performance measurement system.

On the other hand, all state-supported institutions should be able to demonstrate good educational and administrative practices in offering their programs, allocating their resources, and being accountable to their students, taxpayers, and the public. As state-supported institutions of higher education that benefit from public funds, state-supported institutions have a special obligation to be accountable to the citizens of the state. This balance must also be achieved by a quality indicator or performance measurement system. It is believed that the quality indicator system reflected in this report strikes this balance by honoring the diversity of Colorado's state-supported institutions of higher education while promoting continuous improvement in their operations through accountability.

Actions Taken or Planned by the Governing Boards and Institutions

This report presents quality indicators, institutional data, and applicable benchmarks without incorporating an evaluative component or outlining new initiatives, remediation, or further inquiry that the data might suggest. HB96-1219 provides such opportunities through a follow-up report due during January, 2003 that takes that next step. The January report will describe the responsive actions taken or planned by the governing boards and institutions.

QUALITY INDICATORS FOR 2002-03

Indicator 1A: Baccalaureate Graduation Rates (four-year institutions)

For baccalaureate degree-granting institutions, graduation rates are the single most common indicator used by quality indicator and performance measurement systems across the many states that use some form of a quality indicator or performance measurement system. Its inclusion is reflected in the fact that graduation rates are reported nationally by educational organizations, publications (e.g., *US News and World Report*), and other states.

Colorado's QIS mirrors the nation's and other states' utilization of a similar indicator. Four-five, and six year graduation rates are calculated for each baccalaureate degree-granting institution based on the nationally accepted definition of a first-time, entering, full-time, degree-seeking student. Students meeting these criteria and beginning at a specified time constitute an entering cohort upon which the measurement is based. A graduation rate for students completing at their original institution is calculated along with a graduation rate from any four-year institution in Colorado's state-supported system of higher education. For the latter measure, students transferring to private institutions in Colorado and to

institutions outside Colorado are not counted. Since some institutions have more of a transfer role than others, the graduation rate from any four-year institution in Colorado's state-supported system of higher education is meant to recognize this important component of an institutions' role and mission.

Benchmark ranges for the indicator measuring graduation rates from the original institution are based on a national comparison group of similar institutions, with a predicted rate calculated based on the cohort's average test scores and percentage of undergraduates that are enrolled part-time. The benchmark midpoint equals 102% of the predicted rate. The benchmark range is the midpoint plus or minus two percentage points. The benchmark for the indicator measuring graduation rates from any four-year institution in Colorado's state-supported higher education system is based on each institution's recent performance, with the emphasis on improvement from the past year's performance level.

Indicator 1B: Three-Year Graduation Rates (two-year institutions)

This indicator is the equivalent indicator for two-year institutions as indicator 1A is for four-year institutions. This indicator measures the three-year graduation rate for first-time, full-time, certificate or associate degree-seeking freshmen who entered a two-year institution in summer or fall 1998 and either graduated from the original institution or another two-year institution in Colorado's state-supported institution of higher education within three years after entry. Individual institution benchmark values are based on recent performance with the expectation for improvement from the past year's performance level.

Indicators 2A and 2B: Freshmen Retention and Persistence Rates

These indicators mirror similar indicators used by other states which measure the percentage of first-time, full-time, certificate or degree-seeking freshmen entering in summer or fall 2000 who either completed a program by August 2001, were enrolled in the fall 2001 term at the same institution, or transferred to another Colorado state-supported institution of higher education and enrolled at that institution in the fall 2001 term. Benchmarks for the four-year institutions are based on national comparison groups, with a predicted rate calculated based on the cohort's average test scores and percentage of undergraduates that are enrolled part-time. The benchmark midpoint equals 102% of the predicted rate. The benchmark range is the midpoint plus or minus two percentage points. A second benchmark reflects recent performance of the institution with an expectation for improvement from the past year's level of performance. Benchmarks for the two-year institutions are based on recent performance with an expectation for improvement from the past year's level of performance.

Indicators 3A and 3B: Support and Success of Minority Students

These two indicators take the six-year graduation (from four-year institutions), three-year graduation (from two-year institutions), freshmen retention, and freshmen persistence rate indicators and measure them for first-time, full-time, certificate and degree-seeking freshmen minority students. Benchmarks are calculated as above.

Factors to Keep in Mind When Interpreting Graduation, Retention, and Persistence Rates

Following nationally-recognized definitions, the entering cohorts tracked in the QIS graduation, retention, and persistence rate indicators (indicators 1A, 1B, 2A, 2B, 3A, 3B) are limited to first-time, degree-seeking freshmen who entered the institution in the summer or fall and were enrolled full-time in their first fall term. All other undergraduate students new to the institution are excluded from the entering cohorts (e.g., freshmen enrolled part-time their first term, all non-degree students, and all transfer students).

For some institutions, a large percentage of their new undergraduates may be non-degree seeking students, transfers, or part-time. This translates into a small cohort for QIS purposes. Once the entry cohort is formed, no students are added, and students are removed only for death, military service, or missionary service. Finally, one also should be mindful that, while a student may have enrolled full-time

in his or her first term of attendance, the student may register on either a full-or part-time basis in subsequent terms but continue to be included in the QIS calculation.

Indicator 4A: Achievement Scores on Licensure, Professional, Graduate School Admission, and Other Examinations taken by Baccalaureate Graduates (four-year institutions)

How well institutions have prepared their students is captured, in part, by how well graduating students perform on various comprehensive examinations, tests, and discipline or professional-specific licensure or certification examinations. This indicator is included in most quality indicator or performance measurement systems of other states. Benchmarks are national or statewide passing rates and scores. Passing rates and scores are reported only for institutions with 20 or more test takers over two years.

Indicator 4B: Career and Technical Graduates Employed or Continuing Their Education (two-year institutions)

A significant aspect of the role and mission of the two-year institutions is the provision of trained and skilled employees for the workforce, especially in technical areas. For some students at two-year institutions, this translates into employment immediately following their graduation. For other students, continued education at another institution is required prior to joining or re-entering the workforce. The benchmark is 90%, thereby taking into account students who may not become employed or continue their education for personal reasons related to family or exceptional circumstances.

Indicator 5: Institutional Support Expenditures

Each institution's operating budget is categorized in accordance with specific reporting requirements associated with the National Association of College and University Business Officers (NACUBO). One category – institutional support expenditures – most closely encompasses those expenditures considered to support the administration of the institution. The amount of institutional support expenditures per FTE student and the percent of the overall Educational and General operating budget represented by institutional support expenditures serve as proxies for the level of expenditures for administration, according to the role and mission, and enrollment size of the institution. Individual institutional benchmarks are based on performance levels of comparison groups.

Factors to Keep in Mind When Interpreting Indicator 5

The expenditure categories used by higher education institutions for the reporting of expenditures allow for differing assignment of functions, depending on the organizational structure of the institution. An expenditure at one institution may be categorized one way, while another institution may assign the expenditure to another category. Both institutions may be correct in their assignment of the expenditure since the particular organizational structure of the institution dictates how the expenditure is categorized. For institutions with numerous delivery sites (e.g., Colorado Mountain College), this indicator should be reviewed in the context associated with administering multiple delivery sites.

Indicator 6: Undergraduate Class Size

The inclusion of undergraduate class size by *US News and World Report* in its annual guide, *America's Best Colleges*, has brought added attention to this indicator which measures the percent of undergraduate class sections having an enrollment less than or greater than certain sizes. For the four-year institutions, the benchmarks are taken from the *US News and World Report's* publication. For the two-year institutions, the benchmarks are based on recent performance with an expectation of improvement from the past year's performance levels.

Indicator 7: Faculty Teaching Workload

The average number of hours per week devoted to organized class meetings by full-time faculty constitutes this indicator. Organized class meetings include lectures and seminars, laboratories, field

instruction, studios, and on-line delivery of courses. The hours per week that are measured do not include class preparation time, grading, student advising, or individualized instruction such as independent study or supervision of dissertations, thesis, internships, cooperative education, and student teaching. National comparative data by type of institution is used for the benchmarks.

Indicators 8 and 9: Indicators Selected by the Institution

No common set of quality indicators captures the diversity and unique aspects of Colorado's twenty-eight state-supported institutions of higher education. In recognition of the diversity of Colorado's system of state-supported institutions of higher education and the individuality of each institution, two institution-specific indicators were identified by each institution which the institution felt best demonstrated its efforts to promote and enhance quality, efficiency or expediency at the undergraduate level. Like the indicators, benchmarks also were chosen by the institution.

QIS Measure 1A: BACCALAUREATE GRADUATION RATES
AFTER FOUR, FIVE, AND SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1995, 1996, and 1997 Cohorts

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Four Yrs After Entry From --			Cumulative % Graduating Five Yrs After Entry From --			Cumulative % Graduating Six Yrs After Entry From --			Benchmark***	
			Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Adams State Coll	1993	352	13.9	1.4	15.3	24.4	4.3	28.7	29.5	6.5	36.1		
	1994	437	17.4	2.3	19.7	27.5	5.9	33.4	30.4	8.7	39.1		
	1995	**449**	**13.4**	**2.0**	**15.4**	**27.4**	**4.2**	**31.6**	**31.6**	**7.6**	**39.2**	32.8 - 36.8	39.9
	1996	**431**	**15.8**	**1.9**	**17.6**	**24.6**	**5.1**	**29.7**	-	-	**-**	27.3 - 31.3	33.0
	1997	**420**	**15.5**	**3.1**	**18.6**	-	-	**-**	-	-	**-**	13.4 - 17.4	17.9
Colo State Univ	1993	2,179	28.1	1.2	29.4	53.8	3.6	57.4	59.8	4.7	64.5		
	1994	2,291	29.1	0.8	29.9	57.0	2.9	59.9	61.9	4.1	66.0		
	1995	**2,568**	**31.4**	**1.1**	**32.5**	**57.4**	**3.4**	**60.8**	**62.4**	**4.3**	**66.7**	58.0 - 62.0	67.3
	1996	**2,723**	**31.2**	**1.3**	**32.5**	**58.9**	**3.7**	**62.7**	-	-	**-**	53.7 - 57.7	62.0
	1997	**2,639**	**32.8**	**1.1**	**33.9**	-	-	**-**	-	-	**-**	29.7 - 33.7	33.1
Univ of Southern Colo (to be CSU-Pueblo)	1993	682	11.4	1.3	12.8	22.9	4.3	27.1	27.0	5.7	32.7		
	1994	640	9.8	0.8	10.6	23.1	4.8	28.0	27.5	6.1	33.6		
	1995	**590**	**11.7**	**0.8**	**12.5**	**22.0**	**5.3**	**27.3**	**26.6**	**8.3**	**34.9**	32.8 - 36.8	34.3
	1996	**575**	**11.8**	**0.7**	**12.5**	**23.5**	**3.7**	**27.1**	-	-	**-**	27.3 - 31.3	28.2
	1997	**584**	**8.4**	**0.2**	**8.6**	-	-	**-**	-	-	**-**	13.4 - 17.4	13.4
Fort Lewis Coll	1993	1,081	8.7	1.2	9.9	23.6	6.9	30.5	28.6	10.4	38.9		
	1994	875	12.3	2.1	14.4	27.5	7.0	34.5	31.1	11.0	42.1		
	1995	**1,012**	**9.5**	**2.2**	**11.7**	**22.9**	**6.7**	**29.6**	**28.1**	**10.5**	**38.5**	32.8 - 36.8	42.9
	1996	**1,131**	**10.8**	**2.0**	**12.8**	**24.6**	**8.8**	**33.3**	-	-	**-**	27.3 - 31.3	32.7
	1997	**1,061**	**9.0**	**1.0**	**10.0**	-	-	**-**	-	-	**-**	13.4 - 17.4	13.4
Mesa State Coll	1993	611	8.0	1.5	9.5	20.0	4.4	24.4	23.2	7.7	30.9		
	1994	662	6.5	1.2	7.7	18.9	5.0	23.9	24.5	7.3	31.7		
	1995	**667**	**9.0**	**2.5**	**11.5**	**20.1**	**7.8**	**27.9**	**27.4**	**11.1**	**38.5**	32.8 - 36.8	32.8
	1996	**630**	**9.7**	**2.2**	**11.9**	**23.8**	**6.2**	**30.0**	-	-	**-**	27.3 - 31.3	28.5
	1997	**706**	**11.0**	**2.1**	**13.2**	-	-	**-**	-	-	**-**	13.4 - 17.4	13.4
Metropolitan State Coll of Denver	1993	1,378	3.1	1.0	4.1	12.2	5.3	17.5	19.8	7.7	27.5		
	1994	1,254	4.3	1.3	5.6	12.8	4.8	17.5	19.1	6.9	26.1		
	1995	**1,239**	**3.9**	**0.9**	**4.8**	**14.9**	**4.4**	**19.4**	**21.5**	**6.6**	**28.1**	22.2 - 26.2	27.3
	1996	**1,324**	**3.9**	**0.8**	**4.7**	**13.7**	**3.4**	**17.1**	-		**-**	17.7 - 21.7	19.8
	1997	**1,478**	**4.7**	**0.9**	**5.6**	-	-	**-**	-	-	**-**	2.1 - 6.1	4.8
Univ of Colo - Boulder	1993	3,434	35.3	1.0	36.3	59.0	2.7	61.7	63.7	4.1	67.8		
	1994	3,591	35.6	0.9	36.5	58.8	2.3	61.0	64.4	3.2	67.6		
	1995	**4,164**	**34.8**	**0.4**	**35.2**	**60.0**	**2.2**	**62.2**	**65.2**	**3.4**	**68.7**	63.8 - 67.8	69.1
	1996	**3,946**	**38.8**	**0.7**	**39.5**	**62.4**	**2.4**	**64.8**	-	-	**-**	59.6 - 63.6	63.4
	1997	**4,259**	**36.5**	**0.7**	**37.2**	-	-	**-**	-	-	**-**	33.7 - 37.7	40.2
Univ of Colo - Colo Springs	1993	308	14.9	1.0	15.9	30.8	8.1	39.0	39.3	11.0	50.3		
	1994	328	12.5	1.5	14.0	28.4	7.9	36.3	34.5	9.5	43.9		
	1995	**373**	**10.7**	**3.5**	**14.2**	**24.9**	**9.9**	**34.9**	**29.0**	**11.3**	**40.2**	40.7 - 44.7	48.0
	1996	**385**	**18.2**	**1.8**	**20.0**	**33.5**	**8.3**	**41.8**	-	-	**-**	37.7 - 41.7	36.3
	1997	**543**	**17.5**	**2.2**	**19.7**	-	-	**-**	-	-	**-**	18.3 - 22.3	20.4
Univ of Colo - Denver	1993	243	15.6	1.6	17.3	29.6	5.3	35.0	37.9	8.6	46.5		
	1994	265	11.7	2.3	14.0	33.2	6.8	40.0	37.4	10.6	47.9		
	1995	**266**	**15.4**	**2.6**	**18.0**	**32.3**	**4.9**	**37.2**	**40.2**	**6.8**	**47.0**	36.4 - 40.4	48.9
	1996	**375**	**14.4**	**2.1**	**16.5**	**34.9**	**6.9**	**41.9**	-	-	**-**	30.7 - 34.7	39.4
	1997	**439**	**14.4**	**2.1**	**16.4**	-	-	**-**	-	-	**-**	12.2 - 16.2	17.6
Univ of Northern Colo	1993	1,704	18.1	1.5	19.5	39.5	5.6	45.1	44.0	7.7	51.7		
	1994	1,609	21.0	1.6	22.6	39.9	5.9	45.8	44.3	9.2	53.4		
	1995	**1,763**	**22.9**	**1.9**	**24.7**	**40.8**	**5.3**	**46.2**	**45.5**	**8.6**	**54.1**	51.1 - 55.1	54.4
	1996	**1,642**	**25.0**	**2.2**	**27.2**	**43.2**	**6.7**	**49.9**	-	-	**-**	43.3 - 47.3	47.1
	1997	**1,908**	**25.7**	**1.0**	**26.7**	-	-	**-**	-	-	**-**	23.9 - 27.9	27.7

(Continued)

QIS Measure 1A: BACCALAUREATE GRADUATION RATES
AFTER FOUR, FIVE, AND SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1995, 1996, and 1997 Cohorts

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Four Yrs After Entry From --			Cumulative % Graduating Five Yrs After Entry From --			Cumulative % Graduating Six Yrs After Entry From --			Benchmark***	
			Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Western State Coll	1993	599	10.9	1.5	12.4	22.9	6.8	29.7	27.4	8.5	35.9		
	1994	608	10.0	0.8	10.9	22.2	5.1	27.3	28.0	8.2	36.2		
	1995	**599**	**10.5**	**1.8**	**12.4**	**23.4**	**8.2**	**31.6**	**27.5**	**10.7**	**38.2**	32.8 - 36.8	36.9
	1996	**632**	**12.0**	**1.7**	**13.8**	**27.1**	**6.0**	**33.1**	-	-	**-**	27.3 - 31.3	32.2
	1997	**562**	**13.7**	**1.8**	**15.5**	-	-	**-**	-	-	**-**	13.4 - 17.4	14.1
Four-Year Inst Total	1993	12,571	20.6	1.2	21.9	39.5	4.5	44.0	44.8	6.4	51.2		
	1994	12,560	22.0	1.2	23.2	41.1	4.2	45.4	46.3	6.2	52.4		
	1995	**13,690**	**22.9**	**1.3**	**24.2**	**42.5**	**4.4**	**46.9**	**47.7**	**6.4**	**54.1**	n/a	n/a
	1996	**13,794**	**24.4**	**1.3**	**25.7**	**43.9**	**4.6**	**48.5**	-	-	**-**	n/a	n/a
	1997	**14,599**	**24.0**	**1.1**	**25.1**	-	-	**-**	-	-	**-**	n/a	n/a

*Base year cohort is 1997 for four-year graduation rate, 1996 for five-year rate, and 1995 for six-year rate; graduate totals based on specified number of academic years plus the following summer.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g\QIS\2002\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

***Benchmark midpoint is 102% of rate predicted for the cohort, given cohort average test scores and percentage of undergraduates enrolled part-time. Benchmark range is midpoint plus/minus two percentage points.

QIS Measure 1B: GRADUATION RATES AFTER THREE YEARS FROM COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1998 Cohort

Institution	Cohort Entering in Fall --	# Students in Entering Cohort**	Cumulative % Graduating With Cert or Assoc Degree Three Years After Entry From --			Benchmark	
			Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Aims Comm Coll	1996	507	20.3	1.0	21.3		
	1997	387	20.9	0.5	21.4		
	1998	**429**	**14.7**	**0.5**	**15.2**	21.3	21.8
Arapahoe Comm Coll	1996	355	24.5	1.1	25.6		
	1997	295	15.3	0.3	15.6		
	1998	**295**	**19.7**	**0.7**	**20.3**	20.3	21.0
Colo Mountain Coll	1996	398	18.6	0.8	19.3		
	1997	458	21.6	1.3	22.9		
	1998	**412**	**19.2**	**0.5**	**19.7**	22.0	23.4
Colo NW Comm Coll	1996	141	24.8	3.5	28.4		
	1997	166	23.5	1.2	24.7		
	1998	**127**	**26.8**	**3.1**	**29.9**	24.6	27.1
Comm Coll of Aurora	1996	231	11.3	0.9	12.1		
	1997	227	5.7	0.9	6.6		
	1998	**235**	**14.5**	**0.9**	**15.3**	8.7	9.5
Comm Coll of Denver	1996	457	19.7	0.4	20.1		
	1997	493	12.6	0.4	13.0		
	1998	**493**	**16.0**	**0.2**	**16.2**	16.5	16.9
Front Range Comm Coll	1996	815	16.3	0.9	17.2		
	1997	947	17.4	0.8	18.3		
	1998	**830**	**17.0**	**0.8**	**17.8**	17.7	18.7
Lamar Comm Coll	1996	154	24.0	0.6	24.7		
	1997	160	30.6	1.9	32.5		
	1998	**158**	**31.6**	**2.5**	**34.2**	31.2	33.2
Morgan Comm Coll	1996	89	41.6	1.1	42.7		
	1997	75	20.0	1.3	21.3		
	1998	**50**	**46.0**	**0.0**	**46.0**	31.4	32.6
Northeastern Junior Coll	1996	475	42.5	1.9	44.4		
	1997	338	39.6	0.6	40.2		
	1998	**320**	**39.4**	**0.9**	**40.3**	41.9	43.1
Otero Junior Coll	1996	212	37.7	2.4	40.1		
	1997	232	33.6	2.6	36.2		
	1998	**180**	**40.6**	**1.7**	**42.2**	36.4	38.9
Pikes Peak Comm Coll	1996	826	13.4	0.4	13.8		
	1997	649	12.5	0.5	12.9		
	1998	**738**	**11.4**	**0.7**	**12.1**	13.2	13.6
Pueblo Comm Coll	1996	263	20.5	0.4	20.9		
	1997	252	13.5	0.4	13.9		
	1998	**301**	**23.3**	**0.3**	**23.6**	17.3	17.7
Red Rocks Comm Coll	1996	427	16.2	1.4	17.6		
	1997	423	16.8	1.4	18.2		
	1998	**425**	**17.4**	**0.7**	**18.1**	17.1	18.6
Trinidad State Jun Coll	1996	326	36.8	0.3	37.1		
	1997	283	35.7	0.7	36.4		
	1998	**236**	**33.1**	**0.8**	**33.9**	37.0	37.5
Two-Year Inst Total	1996	5,676	22.2	1.0	23.1		
	1997	5,385	19.8	0.9	20.7		
	1998	**5,229**	**20.4**	**0.8**	**21.2**	n/a	n/a

**Base year cohort is 1998 for three-year
Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer.
Beginning with QIS 2002, students with registration status=2 were excluded from cohorts.

QIS Measure 2A: RETENTION RATES
ONE YEAR AFTER ENTRY BY
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 2000 Cohort

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Retained One Year After Entry From --			Benchmark***	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Adams State Coll	1998	483	57.6	12.4	70.0		
	1999	416	63.2	10.8	74.0		
	2000	**423**	**58.6**	**11.3**	**70.0**	68.6 - 72.6	75.4
Colo State Univ	1998	3,055	82.5	6.2	88.7		
	1999	3,119	83.1	5.0	88.2		
	2000	**3,261**	**81.9**	**6.5**	**88.4**	80.8 - 84.8	90.2
Univ of Southern Colo (to be CSU-Pueblo)	1998	620	61.0	13.5	74.5		
	1999	611	66.1	12.1	78.2		
	2000	**641**	**64.1**	**12.2**	**76.3**	68.6 - 72.6	79.8
Fort Lewis Coll	1998	970	58.2	12.0	70.2		
	1999	998	55.6	12.5	68.1		
	2000	**983**	**54.7**	**11.3**	**66.0**	68.6 - 72.6	70.5
Mesa State Coll	1998	664	60.2	10.2	70.5		
	1999	626	57.7	13.7	71.4		
	2000	**668**	**60.3**	**8.1**	**68.4**	68.6 - 72.6	72.8
Metropolitan State Coll of Denver	1998	1,382	64.3	9.8	74.1		
	1999	1,440	59.9	8.9	68.8		
	2000	**1,548**	**62.1**	**9.0**	**71.1**	65.3 - 69.3	72.9
Univ of Colo - Boulder	1998	4,270	84.0	4.1	88.1		
	1999	4,552	83.4	4.2	87.6		
	2000	**5,052**	**82.3**	**3.8**	**86.0**	84.5 - 88.5	89.6
Univ of Colo - Colo Spr	1998	666	65.3	12.9	78.2		
	1999	684	63.2	10.7	73.8		
	2000	**743**	**63.7**	**12.5**	**76.2**	75.1 - 79.1	77.5
Univ of Colo - Denver	1998	394	67.5	12.4	79.9		
	1999	478	70.3	10.7	81.0		
	2000	**515**	**68.3**	**9.3**	**77.7**	70.3 - 74.3	82.6
Univ of Northern Colo	1998	2,169	67.8	14.2	82.0		
	1999	2,293	69.9	12.3	82.3		
	2000	**2,115**	**68.9**	**14.1**	**83.0**	77.4 - 81.4	83.9
Western State Coll	1998	591	55.7	11.8	67.5		
	1999	557	58.3	14.4	72.7		
	2000	**500**	**52.8**	**18.6**	**71.4**	68.6 - 72.6	74.2
Four-Year Inst Total	1998	15,264	72.8	8.8	81.6		
	1999	15,774	73.1	8.2	81.3		
	2000	**16,449**	**72.6**	**8.3**	**80.9**	n/a	n/a

*Base year cohort is 2000.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer.
Source: Cohort and benchmark calculation based on SURDS files and institutional data; g\QIS\2002\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls
***Benchmark midpoint is 102% of rate predicted for the cohort, given cohort average test scores and percentage of undergraduates enrolled part-time. Benchmark range is midpoint plus/minus two percentage points.

QIS Measure 2B: RETENTION RATES ONE YEAR AFTER ENTRY BY COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 2000 Cohort

Institution	Base Year** For Cohort Entering In Fall --	Percent Successful One Year After Entry At --			Benchmark	
		Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Aims Comm Coll	1998	43.6	5.6	49.2		
	1999	59.7	6.0	65.7		
	2000	**40.4**	**7.9**	**48.3**	60.9	67.0
Arapahoe Comm Coll	1998	45.8	12.5	58.3		
	1999	54.0	8.8	62.8		
	2000	**48.1**	**12.0**	**60.2**	55.1	64.1
Colo Mountain Coll	1998	42.2	14.3	56.6		
	1999	46.0	9.7	55.6		
	2000	**51.4**	**10.5**	**61.9**	46.9	56.7
Colo NW Comm Coll	1998	46.5	15.0	61.4		
	1999	45.5	10.7	56.3		
	2000	**56.5**	**13.0**	**69.6**	46.9	60.0
Comm Coll of Aurora	1998	46.0	10.2	56.2		
	1999	66.6	5.9	72.5		
	2000	**46.3**	**7.8**	**54.0**	67.9	74.0
Comm Coll of Denver	1998	52.3	9.9	62.3		
	1999	48.6	7.9	56.5		
	2000	**54.1**	**4.4**	**58.5**	51.5	60.6
Front Range Comm Coll	1998	50.7	9.9	60.6		
	1999	47.6	10.3	57.9		
	2000	**52.0**	**9.8**	**61.8**	50.1	60.4
Lamar Comm Coll	1998	54.4	6.3	60.8		
	1999	53.1	7.1	60.2		
	2000	**55.3**	**3.9**	**59.2**	54.8	61.7
Morgan Comm Coll	1998	60.0	8.0	68.0		
	1999	50.7	9.0	59.7		
	2000	**70.7**	**7.3**	**78.0**	56.5	65.1
Northeastern Junior Coll	1998	57.8	6.9	64.7		
	1999	56.0	9.1	65.1		
	2000	**58.0**	**12.9**	**71.0**	58.0	66.4
Otero Junior Coll	1998	61.7	8.9	70.6		
	1999	53.6	8.1	61.6		
	2000	**54.6**	**8.8**	**63.4**	58.8	67.4
Pikes Peak Comm Coll	1998	45.5	4.9	50.4		
	1999	44.7	4.8	49.5		
	2000	**47.7**	**6.4**	**54.1**	46.0	50.9
Pueblo Comm Coll	1998	58.5	4.0	62.5		
	1999	50.6	4.0	54.7		
	2000	**51.3**	**5.3**	**56.6**	55.6	59.8
Red Rocks Comm Coll	1998	48.0	6.1	54.1		
	1999	47.2	9.6	56.8		
	2000	**46.8**	**10.3**	**57.1**	48.6	57.9
Trinidad State Jun Coll	1998	54.7	4.7	59.3		
	1999	53.4	6.4	59.7		
	2000	**45.3**	**4.7**	**50.0**	55.1	60.9
Two-Year Inst Total	1998	49.7	8.2	57.9		
	1999	50.7	7.8	58.6		
	2000	**50.1**	**8.5**	**58.6**	n/a	n/a

**Base year cohort is 2000; graduate
Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer.

QIS Measure 3A: BACCALAUREATE GRADUATION RATES
AFTER SIX YEARS AT
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1995 Minority Cohort

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Cumulative % Graduating Six Yrs After Entry From --			Benchmark***	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Adams State Coll	1993	95	24.2	4.2	28.4		
	1994	129	23.3	7.8	31.0		
	1995	**122**	**32.0**	**4.9**	**36.9**	26.8 - 30.8	31.6
Colo State Univ	1993	340	49.7	4.4	54.1		
	1994	332	50.3	4.2	54.5		
	1995	**345**	**54.5**	**4.1**	**58.6**	55.6 - 59.6	55.6
Univ of Southern Colo (to be CSU-Pueblo)	1993	200	19.0	5.5	24.5		
	1994	203	21.2	3.0	24.1		
	1995	**199**	**17.6**	**7.5**	**25.1**	26.8 - 30.8	26.8
Fort Lewis Coll	1993	189	22.2	4.8	27.0		
	1994	139	24.5	5.8	30.2		
	1995	**195**	**25.6**	**2.6**	**28.2**	26.8 - 30.8	30.8
Mesa State Coll	1993	74	17.6	10.8	28.4		
	1994	78	23.1	5.1	28.2		
	1995	**85**	**25.9**	**9.4**	**35.3**	26.8 - 30.8	28.9
Metropolitan State Coll of Denver	1993	372	15.9	2.7	18.5		
	1994	345	12.8	1.4	14.2		
	1995	**403**	**19.4**	**2.5**	**21.8**	16.9 - 20.9	16.9
Univ of Colo - Boulder	1993	676	49.4	4.7	54.1		
	1994	685	51.4	3.6	55.0		
	1995	**655**	**52.5**	**5.3**	**57.9**	56.7 - 60.7	56.7
Univ of Colo - Colo Spr	1993	41	29.3	4.9	34.1		
	1994	62	32.3	9.7	41.9		
	1995	**75**	**26.7**	**8.0**	**34.7**	35.3 - 39.3	42.7
Univ of Colo - Denver	1993	104	29.8	9.6	39.4		
	1994	121	29.8	5.8	35.5		
	1995	**131**	**42.0**	**4.6**	**46.6**	25.0 - 29.0	38.2
Univ of Northern Colo	1993	303	32.3	4.6	37.0		
	1994	270	39.6	3.0	42.6		
	1995	**297**	**38.7**	**6.4**	**45.1**	45.7 - 49.7	45.7
Western State Coll	1993	58	17.2	10.3	27.6		
	1994	48	31.3	4.2	35.4		
	1995	**60**	**25.0**	**13.3**	**38.3**	26.8 - 30.8	36.1
Four-Year Inst Total	1993	2,452	33.8	4.9	38.7		
	1994	2,412	35.9	3.9	39.8		
	1995	**2,567**	**37.4**	**5.1**	**42.6**	**n/a**	**n/a**

*Base year cohort is 1995 for six-year rate; graduate totals based on specified number of academic years plus the following summer.

**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic/minority category.

Source: Cohort and benchmark calculation based on SURDS files and institutional data; g\QIS\2002\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls

***Benchmark midpoint is 102% of rate predicted for the cohort, given cohort average test scores and percentage of undergraduates enrolled part-time. Benchmark range is midpoint plus/minus two percentage points.

QIS Measure 3B: GRADUATION RATES AFTER THREE YEARS FROM COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 1998 Minority Cohort

Institution	Cohort Entering in Fall --	# Students in Entering Cohort**	Cumulative % Graduating With Cert or Assoc Degree Three Years After Entry From --			Benchmark	
			Orig Inst	Tranf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Aims Comm Coll	1996	160	10.0	0.0	10.0		
	1997	123	10.6	0.0	10.6		
	1998	**173**	**3.5**	**0.6**	**4.0**	10.8	10.8
Arapahoe Comm Coll	1996	61	23.0	0.0	23.0		
	1997	46	2.2	0.0	2.2		
	1998	**42**	**19.0**	**0.0**	**19.0**	12.9	12.9
Colo Mountain Coll	1996	46	30.4	0.0	30.4		
	1997	37	24.3	0.0	24.3		
	1998	**33**	**9.1**	**0.0**	**9.1**	27.9	27.9
Colo NW Comm Coll	1996	25	0.0	16.0	16.0		
	1997	23	21.7	0.0	21.7		
	1998	**13**	**15.4**	**7.7**	**23.1**	22.1	22.1
Comm Coll of Aurora	1996	75	6.7	1.3	8.0		
	1997	85	4.7	1.2	5.9		
	1998	**81**	**14.8**	**0.0**	**14.8**	5.8	6.6
Comm Coll of Denver	1996	243	15.2	0.4	15.6		
	1997	243	9.5	0.0	9.5		
	1998	**280**	**14.3**	**0.4**	**14.6**	12.6	12.6
Front Range Comm Coll	1996	147	17.7	0.7	18.4		
	1997	158	17.1	0.0	17.1		
	1998	**138**	**13.8**	**0.7**	**14.5**	17.4	8.1
Lamar Comm Coll	1996	37	16.2	0.0	16.2		
	1997	47	21.3	0.0	21.3		
	1998	**39**	**30.8**	**0.0**	**30.8**	21.7	21.7
Morgan Comm Coll	1996	15	53.3	0.0	53.3		
	1997	10	30.0	0.0	30.0		
	1998	**11**	**27.3**	**0.0**	**27.3**	42.5	42.5
Northeastern Junior Coll	1996	42	23.8	2.4	26.2		
	1997	41	9.8	2.4	12.2		
	1998	**44**	**13.6**	**0.0**	**13.6**	17.1	19.6
Otero Junior Coll	1996	77	42.9	1.3	44.2		
	1997	79	31.6	1.3	32.9		
	1998	**57**	**43.9**	**0.0**	**43.9**	38.0	39.3
Pikes Peak Comm Coll	1996	228	11.4	0.0	11.4		
	1997	186	5.9	0.0	5.9		
	1998	**207**	**13.0**	**1.0**	**14.0**	8.8	8.8
Pueblo Comm Coll	1996	123	20.3	0.0	20.3		
	1997	118	11.9	0.8	12.7		
	1998	**151**	**28.5**	**0.0**	**28.5**	16.4	16.8
Red Rocks Comm Coll	1996	71	14.1	0.0	14.1		
	1997	72	13.9	0.0	13.9		
	1998	**60**	**13.3**	**1.7**	**15.0**	14.3	14.3
Trinidad State Jun Coll	1996	141	34.0	0.0	34.0		
	1997	162	28.4	0.0	28.4		
	1998	**126**	**30.2**	**0.8**	**31.0**	31.8	31.8
Two-Year Inst Total	1996	1,491	18.6	0.6	19.2		
	1997	1,430	14.3	0.3	14.6		
	1998	**1,455**	**17.3**	**0.5**	**17.9**	n/a	n/a

**Base year cohort is 1997 for three-year graduation rate; graduate totals based on specified Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic minority category.

QIS Measure 3C: RETENTION RATES
ONE YEAR AFTER ENTRY BY
COLORADO PUBLIC FOUR-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 2000 Minority Cohort

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Retained One Year After Entry From --			Benchmark***	
			Orig Inst	Transf Inst	All Inst	Orig Inst	All Inst
Adams State Coll	1998	170	57.6	10.0	67.6		
	1999	111	71.2	7.2	78.4		
	2000	**138**	**58.7**	**5.8**	**64.5**	67.1 - 71.1	80.0
Colo State Univ	1998	389	81.5	5.1	86.6		
	1999	403	80.4	6.5	86.8		
	2000	**459**	**81.3**	**7.4**	**88.7**	77.4 - 81.4	88.5
Univ of Southern Colo (to be CSU-Pueblo)	1998	246	62.2	11.0	73.2		
	1999	216	64.4	12.0	76.4		
	2000	**241**	**66.0**	**9.5**	**75.5**	67.1 - 71.1	77.9
Fort Lewis Coll	1998	202	46.0	5.9	52.0		
	1999	238	51.3	8.0	59.2		
	2000	**244**	**42.6**	**5.3**	**48.0**	67.1 - 71.1	60.4
Mesa State Coll	1998	72	59.7	5.6	65.3		
	1999	85	47.1	15.3	62.4		
	2000	**89**	**64.0**	**6.7**	**70.8**	67.1 - 71.1	65.1
Metropolitan State Coll of Denver	1998	370	67.6	7.0	74.6		
	1999	371	63.6	5.9	69.5		
	2000	**417**	**62.6**	**5.0**	**67.6**	62.3 - 66.3	73.5
Univ of Colo - Boulder	1998	592	81.1	6.3	87.3		
	1999	602	80.2	4.8	85.0		
	2000	**676**	**80.9**	**5.8**	**86.7**	80.6 - 84.6	87.9
Univ of Colo - Colo Spr	1998	125	68.8	15.2	84.0		
	1999	142	65.5	9.2	74.6		
	2000	**137**	**63.5**	**8.8**	**72.3**	72.6 - 76.6	80.1
Univ of Colo - Denver	1998	166	68.7	10.8	79.5		
	1999	197	69.0	6.6	75.6		
	2000	**205**	**75.6**	**7.3**	**82.9**	66.0 - 70.0	79.1
Univ of Northern Colo	1998	337	70.6	9.2	79.8		
	1999	364	67.3	11.3	78.6		
	2000	**297**	**68.0**	**13.1**	**81.1**	75.3 - 79.3	80.8
Western State Coll	1998	41	51.2	22.0	73.2		
	1999	53	60.4	18.9	79.2		
	2000	**29**	**48.3**	**20.7**	**69.0**	67.1 - 71.1	80.8
Four-Year Inst Total	1998	2,710	69.9	8.1	78.0		
	1999	2,782	69.3	7.9	77.2		
	2000	**2,932**	**69.6**	**7.4**	**76.9**	n/a	n/a

*Base year cohort is 2000.
**Cohort based on first-time, full-time, baccalaureate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic/minority category.
Source: Cohort and benchmark calculation based on SURDS files and institutional data; g\QIS\2002\tables\1A_2A_Grads_3A_3C_Ret_4yr.xls
***Benchmark midpoint is 102% of rate predicted for the cohort, given cohort average test scores and percentage of undergraduates enrolled part-time. Benchmark range is midpoint plus/minus two percentage points.

QIS Measure 3D: RETENTION RATES ONE YEAR AFTER ENTRY BY COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS
Fall 2000 Minority Cohort

Institution	Base Year* For Cohort Entering In Fall --	# Students In Entering Cohort**	Percent Successful One Year After Entry By --			Benchmark	
			Orig Inst	Transf Inst	All CO Public Inst	Orig Inst	All CO Public Inst
Aims Comm Coll	1998	173	30.6	2.9	33.5		
	1999	68	51.5	5.9	57.4		
	2000	**149**	**26.2**	**4.7**	**30.9**	52.5	58.5
Arapahoe Comm Coll	1998	42	40.5	9.5	50.0		
	1999	44	54.5	11.4	65.9		
	2000	**30**	**46.7**	**6.7**	**53.3**	55.6	67.2
Colo Mountain Coll	1998	33	42.4	6.1	48.5		
	1999	35	45.7	5.7	51.4		
	2000	**38**	**65.8**	**15.8**	**81.6**	46.6	52.4
Colo NW Comm Coll	1998	13	30.8	15.4	46.2		
	1999	23	43.5	4.3	47.8		
	2000	**22**	**54.5**	**9.1**	**63.6**	44.4	48.8
Comm Coll of Aurora	1998	81	48.1	6.2	54.3		
	1999	112	65.2	3.6	68.8		
	2000	**121**	**40.5**	**10.7**	**51.2**	66.5	70.2
Comm Coll of Denver	1998	280	53.6	8.6	62.1		
	1999	226	51.3	4.0	55.3		
	2000	**219**	**54.3**	**3.7**	**58.0**	53.5	59.9
Front Range Comm Coll	1998	138	41.3	11.6	52.9		
	1999	121	40.5	8.3	48.8		
	2000	**137**	**55.5**	**7.3**	**62.8**	41.7	51.9
Lamar Comm Coll	1998	39	53.8	5.1	59.0		
	1999	31	54.8	3.2	58.1		
	2000	**26**	**42.3**	**11.5**	**53.8**	55.9	59.7
Morgan Comm Coll	1998	11	54.5	0.0	54.5		
	1999	9	33.3	11.1	44.4		
	2000	**7**	**85.7**	**14.3**	**100.0**	44.8	50.4
Northeastern Junior Coll	1998	44	31.8	13.6	45.5		
	1999	40	30.0	15.0	45.0		
	2000	**46**	**39.1**	**17.4**	**56.5**	31.5	46.2
Otero Junior Coll	1998	57	70.2	8.8	78.9		
	1999	84	45.2	9.5	54.8		
	2000	**85**	**54.1**	**7.1**	**61.2**	58.9	68.2
Pikes Peak Comm Coll	1998	207	45.4	2.4	47.8		
	1999	193	43.5	2.6	46.1		
	2000	**179**	**45.3**	**7.3**	**52.5**	45.3	47.9
Pueblo Comm Coll	1998	151	64.2	3.3	67.5		
	1999	145	50.3	6.9	57.2		
	2000	**122**	**54.9**	**6.6**	**61.5**	58.4	63.6
Red Rocks Comm Coll	1998	60	41.7	6.7	48.3		
	1999	60	46.7	6.7	53.3		
	2000	**63**	**52.4**	**6.3**	**58.7**	47.6	54.4
Trinidad State Jun Coll	1998	126	49.2	4.8	54.0		
	1999	106	50.0	5.7	55.7		
	2000	**140**	**43.6**	**4.3**	**47.9**	51.0	56.8
Two-Year Inst Total	1998	1,455	47.6	6.3	53.9		
	1999	1,297	48.7	5.9	54.5		
	2000	**1,384**	**47.5**	**7.0**	**54.5**	**n/a**	**n/a**

**Base year cohort is 2000; graduate totals based on specified number of academic year(s) plus the following summer.
Cohort based on first-time, full-time, certificate and associate degree-seeking students entering in specified fall term or prior summer and reported in an ethnic minority category.

QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1999-2000 and FY 2001-02 (FOUR-YEAR PUBLIC INSTITUTIONS)

	INSTITUTION											
Exam	**ASC**	**CSU**	**USC (to be CSU-P)**	**FLC**	**Mesa**	**Metro**	**UC - B**	**UC - CS**	**UC - D**	**UNC**	**WSC**	**Benchmark**
Graduate Record Examinations												
# Scores (10/98 - 9/99)												
Verbal	11	334	23	22	15	18	229	26	60	75	15	**543,649**
Quantitative	11	334	23	22	15	18	229	26	59	75	15	**543,475**
Analytical	11	334	23	22	15	18	229	26	59	75	15	**542,098**
# Scores (10/99 - 9/00)												
Verbal	1	278	11	5	22	20	167	24	64	70	12	**529,395**
Quantitative	1	278	11	5	22	20	167	24	64	70	12	**529,312**
Analytical	1	277	11	5	22	20	167	24	64	70	12	**528,855**
# Scores (10/00 - 9/01)												
Verbal	1	305	14	10	19	20	180	29	60	62	12	**170,270**
Quantitative	1	305	14	10	19	20	180	29	60	62	12	**170,245**
Analytical	1	304	14	10	19	20	180	29	60	62	12	**170,118**
Mean Scores												
Mean Verbal Score 10/98 - 9/99	*	466	*	*	*	*	492	478	459	427	*	**426 - 526**
Mean Verbal Score 10/99 - 9/00	*	461	*	*	*	*	500	*	450	425	*	**426 - 526**
Mean Verbal Score 10/00 - 9/01	*	471	*	*	*	*	493	457	469	425	*	**429 - 529**
Mean Quant Score 10/98 - 9/99	*	575	*	*	*	*	605	561	557	489	*	**517 - 617**
Mean Quant Score 10/99 - 9/00	*	592	*	*	*	*	620	*	529	513	*	**522 - 622**
Mean Quant Score 10/00 - 9/01	*	596	*	*	*	*	609	529	523	494	*	**529 - 629**
Mean Analytical Score 10/98 - 9/99	*	573	*	*	*	*	603	554	554	540	*	**514 - 614**
Mean Analytical Score 10/99 - 9/00	*	596	*	*	*	*	617	*	560	560	*	**515 - 615**
Mean Analytical Score 10/00 - 9/01	*	603	*	*	*	*	618	564	567	563	*	**521 - 621**

Test cohort = seniors whose GRE test scores were reported to their respective undergraduate institution during October 2000 - September 2001.
Benchmark: +/- 50 points of national mean scores for single year test takers beginning with 2000-01 test-takers. Source: Educational Testing Service
Notes: 1) ETS provides requires a minimum of 25 scores to calculate a mean.
2) Due to some examinees receiving no score, the total number of scores may differ for each measure of the general test.

Uniform Certified Public Accountant Examination												
# Test Takers (5/00 - 11/01)	63	268	11	111	102	241	180	72	173	148	29	**1,626**
# Passing Test Takers (5/00 - 11/01)	13	64	*	18	23	72	54	11	41	34	4	**404**
% Passing Test Takers (5/99 - 11/00)	14.7	22.2	*	20.3	22.8	22.6	26.3	22.6	27.7	18.2	12.5	**22.8**
% Passing Test Takers (5/00 - 11/01)	20.6	23.9	*	16.2	22.5	29.9	30.0	15.3	23.7	23.0	13.8	**24.8**

Test cohort = Beginning with test results for 2000, first-time and reexamination candidates without an advanced degree were reported; testing period from May through November.
*Benchmark: CO Average Pass Rate (5/99 - 11/00); Source: CO Dept of Regulatory Agencies, State Board of Accountancy *= no test-takers reported*

National Council Licensure Examination for Registered Nurses (NCLEX-RN)												
# Test Takers (7/00 - 6/02)	---	---	55	---	31	---	---	164	---	131	---	**1,659**
# Passing Test Takers (7/00 - 6/02)	---	---	48	---	28	---	---	150	---	120	---	**1,438**
% Passing Test Takers (7/99 - 6/01)	---	---	79.5	---	93.9	---	---	91.7	---	86.4	---	**86.1**
% Passing Test Takers (7/00 - 6/02)	---	---	87.3	---	90.3	---	---	91.5	---	91.6	---	**86.7**

Test cohort = first-time registered nurse candidates tested July 2000 - June 2002; UCCS data include Beth-El College of Nursing candidates.
Benchmark: CO Average Pass Rate (7/00 - 6/02); Source: CO Dept of Regulatory Agencies, State Board of Nursing

(Continued)

QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1999-2000 and FY 2001-02 (FOUR-YEAR PUBLIC INSTITUTIONS)

Exam	INSTITUTION											Benchmark
	ASC	CSU	USC (to be CSU-P)	FLC	Mesa	Metro	UC - B	UC - CS	UC - D	UNC	WSC	
Program for Licensing Assessments for Colorado Educators (PLACE)												
Elementary Education												
# Test Takers (10/00 - 5/02)	255	20	180	158	77	266	250	64	---	421	46	**1,737**
# Passing (10/00 - 5/02)	156	16	126	120	67	215	242	58	---	347	40	**1,387**
% Passing (10/99 - 5/01)	63.6	100.0	65.0	90.4	80.2	79.0	96.5	93.1	---	84.3	92.5	**81.7**
% Passing (10/00 - 5/02)	61.2	80.0	70.0	75.9	87.0	80.8	96.8	90.6	---	82.4	87.0	**79.9**
Social Studies												
# Test Takers (10/00 - 5/02)	35	123	42	38	21	62	42	11	---	87	28	**489**
# Passing (10/00 - 5/02)	12	85	19	19	19	32	35	*	---	35	14	**281**
% Passing (10/99 - 5/01)	33.3	67.1	34.5	57.6	93.8	47.8	77.5	*	---	49.4	50.0	**55.6**
% Passing (10/00 - 5/02)	34.3	69.1	45.2	50.0	90.5	51.6	83.3	*	---	40.2	50.0	**57.5**
English												
# Test Takers (10/00 - 5/02)	32	103	48	34	26	41	44	6	---	49	7	**390**
# Passing (10/00 - 5/02)	15	84	18	29	20	30	38	*	---	34	*	**280**
% Passing (10/99 - 5/01)	38.1	81.3	30.2	84.6	62.5	87.0	83.3	*	---	66.0	*	**70.1**
% Passing (10/00 - 5/02)	46.9	81.6	37.5	85.3	76.9	73.2	86.4	*	---	69.4	*	**71.8**
Science												
# Test Takers (10/00 - 5/02)	19	127	18	32	29	12	24	5	---	37	10	**314**
# Passing (10/00 - 5/02)	*	81	*	14	19	*	23	*	---	20	14	**202**
% Passing (10/99 - 5/01)	*	81.5	*	84.6	82.6	*	93.9	*	---	72.5	100.0	**81.2**
% Passing (10/00 - 5/02)	*	63.8	*	43.8	65.5	*	95.8	*	---	54.1	50.0	**64.3**
Physical Education												
# Test Takers (10/00 - 5/02)	52	55	19	14	15	20	1	---	---	77	16	**270**
# Passing (10/00 - 5/02)	25	48	*	*	*	15	*	---	---	27	*	**167**
% Passing (10/99 - 5/01)	53.6	87.2	*	*	*	*	*	---	---	68.8	*	**75.7**
% Passing (10/00 - 5/02)	48.1	87.3	*	*	*	75.0	*	---	---	35.1	*	**62.1**
Mathematics												
# Test Takers (10/00 - 5/02)	5	58	8	15	13	19	8	3	---	45	4	**174**
# Passing (10/00 - 5/02)	*	35	*	*	*	*	*	*	---	38	*	**120**
% Passing (10/99 - 5/01)	*	61.8	*	*	*	*	*	*	---	74.2	*	**68.3**
% Passing (10/00 - 5/02)	*	60.3	*	*	*	*	*	*	---	84.4	*	**69.0**
Art												
# Test Takers (10/00 - 5/02)	10	69	2	16	10	22	1	---	---	18	21	**169**
# Passing (10/00 - 5/02)	*	56	*	*	*	13	*	---	---	*	10	**120**
% Passing (10/99 - 5/01)	*	80.4	*	*	*	66.7	*	---	---	*	52.9	**70.4**
% Passing (10/00 - 5/02)	*	81.2	*	*	*	59.1	*	---	---	*	47.6	**71.0**
Music												
# Test Takers (10/00 - 5/02)	13	28	8	21	5	16	26	---	---	40	4	**161**
# Passing (10/00 - 5/02)	*	22	*	11	*	*	25	---	---	30	*	**115**
% Passing (10/99 - 5/01)	*	75.8	*	57.1	*	*	100.0	---	---	75.0	*	**71.0**
% Passing (10/00 - 5/02)	*	78.6	*	52.4	*	*	96.2	---	---	75.0	*	**71.4**
Early Childhood Education												
# Test Takers (10/00 - 5/02)	9	23	---	21	1	72	---	---	---	1	---	**127**
# Passing (10/00 - 5/02)	*	20	---	17	*	47	---	---	---	*	---	**91**
% Passing (10/99 - 5/01)	*	100.0	---	80.0	*	56.9	---	---	---	*	---	**61.4**
% Passing (10/00 - 5/02)	*	87.0	---	81.0	*	64.8	---	---	---	*	---	**71.7**

(Continued)

QIS Measure 4A: ACHIEVEMENT SCORES ON LICENSURE, PROFESSIONAL, GRADUATE SCHOOL ADMISSION, and OTHER EXAMINATIONS TAKEN BY BACCALAUREATE SENIORS AND GRADUATES DURING FY 1999-2000 and FY 2001-02 (FOUR-YEAR PUBLIC INSTITUTIONS)

	INSTITUTION											
Exam	**ASC**	**CSU**	**USC (to be CSU-P)**	**FLC**	**Mesa**	**Metro**	**UC - B**	**UC - CS**	**UC - D**	**UNC**	**WSC**	**Benchmark**
Program for Licensing Assessments for Colorado Educators (PLACE)--continued												
English as a Second Language												
# Test Takers (10/00 - 5/02)	32	2	---	19	---	---	1	---	---	38	---	**92**
# Passing (10/00 - 5/02)	21	*	---	*	---	---	*	---	---	14	---	**50**
% Passing (10/99 - 5/01)	0.0	*	---	*	---	---	*	---	---	50.0	---	**47.9**
% Passing (10/00 - 5/02)	65.6	*	---	*	---	---	*	---	---	36.8	---	**54.3**
Bilingual Education												
# Test Takers (10/00 - 5/02)	3	1	---	10	---	15	2	---	---	38	---	**69**
# Passing (10/00 - 5/02)	*	*	---	*	---	*	*	---	---	20	---	**44**
% Passing (10/99 - 5/01)	*	*	---	*	---	*	*	---	---	60.0	---	**67.2**
% Passing (10/00 - 5/02)	*	*	---	*	---	*	*	---	---	52.6	---	**63.8**
Business Education												
# Test Takers (10/00 - 5/02)	33	40	---	3	---	1	---	---	---	---	---	**76**
# Passing (10/00 - 5/02)	8	14	---	*	---	*	---	---	---	---	---	**23**
% Passing (10/99 - 5/01)	23.1	41.0	---	*	---	*	---	---	---	---	---	**35.7**
% Passing (10/00 - 5/02)	24.2	35.0	---	*	---	*	---	---	---	---	---	**30.3**
Moderate Needs												
# Test Takers (10/00 - 5/02)	42	0	---	---	---	23	3	8	---	14	16	**106**
# Passing (10/00 - 5/02)	38	0	---	---		20	*	*	---	*	*	**96**
% Passing (10/99 - 5/01)	80.0	0.0	---	---	---	95.7	*	*	---	*	*	**82.7**
% Passing (10/00 - 5/02)	90.5	0.0	---	---	---	87.0	*	*	---	*	*	**90.6**
Spanish												
# Test Takers (10/00 - 5/02)	4	32	9	7	---	9	3	---	---	11	7	**82**
# Passing (10/00 - 5/02)	*	16	*	*	---	*	*	---	---	*	*	**42**
% Passing (10/99 - 5/01)	*	50.0	*	*	---	*	*	---	---	*	*	**50.6**
% Passing (10/00 - 5/02)	*	50.0	*	*	---	*	*	---	---	*	*	**51.2**

Test cohort = first-time candidates tested October 2000 - April 2002. Pass rates are reported only for those content areas having 20 or more test takers over the two-year testing cycle. An asterisk (*) indicates that the institution offers the content area, but fewer than 20 students were tested in that institution's content area over the two-year reporting cycle.

Benchmark: CO Average Pass Rate (10/00 - 5/02). Source: Calculated from institutional reports. Benchmark and institution entries based on test takers and passers in all content areas at all institutions. Content areas not having at least 20 test takers stated wide are not included in table.

QIS Measure 4B: CAREER AND TECHNICAL GRADUATES EMPLOYED OR CONTINUING POST-SECONDARY EDUCATION AT COLORADO PUBLIC TWO-YEAR HIGHER EDUCATION INSTITUTIONS FY 2000 - 2001

Institution	# FY 2000-2001 Certificate and AAS Graduate Respondents	# Employed	# Employed & Continuing Their Education	# Continuing Their Education	Total # Employed or Continuing Their Education	% Employed or Continuing Their Education	Benchmark
Aims Comm Coll	**140**	**64**	**53**	**17**	**134**	**95.7%**	90.0%
Arapahoe Comm Coll	**272**	**170**	**60**	**15**	**245**	**90.1%**	90.0%
Colo Mountain Coll	**150**	**0**	**133**	**0**	**133**	**88.7%**	90.0%
Colo NW Comm Coll	**16**	**14**	**2**	**0**	**16**	**100.0%**	90.0%
Comm Coll of Aurora	**99**	**61**	**28**	**3**	**92**	**92.9%**	90.0%
Comm Coll of Denver	**192**	**123**	**43**	**10**	**176**	**91.7%**	90.0%
Front Range Comm Coll	**549**	**302**	**174**	**34**	**510**	**92.9%**	90.0%
Lamar Comm Coll	**107**	**70**	**30**	**4**	**104**	**97.2%**	90.0%
Morgan Comm Coll	**132**	**117**	**9**	**1**	**127**	**96.2%**	90.0%
Northeastern Junior Coll	**96**	**89**	**1**	**2**	**92**	**95.8%**	90.0%
Otero Junior Coll	**144**	**112**	**23**	**6**	**141**	**97.9%**	90.0%
Pueblo Comm Coll	**373**	**262**	**60**	**13**	**335**	**89.8%**	90.0%
Pikes Peak Comm Coll	**248**	**144**	**60**	**18**	**222**	**89.5%**	90.0%
Red Rocks Comm Coll	**224**	**145**	**56**	**18**	**219**	**97.8%**	90.0%
Trinidad State Junior Coll	**279**	**191**	**43**	**21**	**255**	**91.4%**	90.0%
TOTAL	**3,021**	**1,864**	**775**	**162**	**2,801**	**92.7%**	n/a

Sources: Community Colleges of Colorado System Office (VE 135) and Local District Colleges' files.

QIS Measure 5: INSTITUTIONAL SUPPORT EXPENDITURES
PER FULL-TIME EQUIVALENT STUDENT

Institution	Institutional Support Expenditures (1)	Total Current Fund Expenditures & Transfers (2)	Total Student FTE (3)	Institutional Support Expenditures per Student FTE [= Col 1 / Col 3] (4)	Benchmark -- Comparison Group Avg of Inst Support Expenditures per Student FTE (5)	Inst Support Expenditures as % of Total Current Fund Expend & Transfers [= Col 1 / Col 2] (6)	Benchmark Comparison Group Avg of Inst Support Expenditures as % of Total Current Fund Expend & Transfers (7)
Four-Year Institutions							
Adams State Coll	$2,350,513	$29,029,877	3,948	$595	$1,789 - $1,861	8.10%	12.01% - 12.50%
Colo State Univ	$19,527,217	$505,456,549	22,360	$873	$1,676 - $1,744	3.86%	5.13% - 5.34%
Univ of Southern Colo (to be CSU-P)	$2,842,670	$50,393,159	4,134	$688	$1,162 - $1,209	5.64%	9.50% - 9.88%
Fort Lewis Coll	$4,036,515	$45,535,280	4,024	$1,003	$1,430 - $1,488	8.86%	10.59% - 11.02%
Mesa State Coll	$2,116,213	$40,952,894	4,327	$489	$1,331 - $1,385	5.17%	9.90% - 10.30%
Metropolitan State Coll of Denver	$9,518,839	$113,726,854	12,379	$769	$1,607 - $1,672	8.37%	11.06% - 11.49%
Univ of Colo - Boulder	$25,645,798	$639,080,989	25,060	$1,023	$1,693 - $1,761	4.01%	4.98% - 5.18%
Univ of Colo - Colo Springs	$5,114,495	$58,980,889	4,817	$1,062	$2,092 - $2,177	8.67%	13.31% - 13.85%
Univ of Colo - Denver	$10,535,390	$124,439,160	8,453	$1,246	$1,305 - $1,358	8.47%	8.38% - 8.72%
U of Northern Colo	$6,997,026	$128,896,740	10,884	$643	$1,534 - $1,596	5.43%	8.20% - 8.53%
Western State Coll	$2,581,511	$26,708,336	2,184	$1,182	$1,395 - $1,451	9.67%	9.78% - 10.18%
Two-Year Institutions							
Aims Comm Coll	$3,734,911	$31,970,918	3,711	$1,007	$1,357 - $1,412	11.68%	15.02% - 15.63%
Arapahoe Comm Coll	$3,201,164	$30,735,075	3,652	$877	$1,464 - $1,523	10.42%	15.49% - 16.12%
Colo Mountain Coll	$6,029,957	$37,602,562	3,386	$1,781	$1,724 - $1,794	16.04%	14.01% - 14.58%
Colo NW Comm Coll	$1,620,966	$10,668,862	899	$1,804	$1,413 - $1,470	15.19%	12.60% - 13.11%
Comm Coll of Aurora	$1,467,710	$18,129,463	2,210	$664	$1,209 - $1,258	8.10%	13.33% - 13.87%
Comm Coll of Denver	$3,400,593	$38,064,427	3,340	$1,018	$1,317 - $1,370	8.93%	14.43% - 15.01%
Front Range Comm Coll	$6,313,770	$52,572,752	6,836	$924	$1,308 - $1,361	12.01%	15.76% - 16.40%
Lamar Comm Coll	$932,448	$7,803,682	623	$1,497	$1,960 - $2,039	11.95%	13.87% - 14.43%
Morgan Comm Coll	$1,101,448	$8,344,908	794	$1,387	$1,474 - $1,534	13.20%	12.40% - 12.90%
Northeastern Junior Coll	$1,409,509	$15,630,444	1,884	$748	$1,261 - $1,312	9.02%	13.18% - 13.71%
Otero Junior Coll	$804,181	$14,459,020	929	$866	$1,302 - $1,355	5.56%	11.45% - 11.91%
Pikes Peak Comm Coll	$4,131,061	$41,421,604	5,290	$781	$1,010 - $1,051	9.97%	12.98% - 13.50%
Pueblo Comm Coll	$3,244,799	$28,101,316	2,580	$1,258	$1,336 - $1,390	11.55%	13.69% - 14.24%
Red Rocks Comm Coll	$3,482,189	$27,088,569	3,822	$911	$1,165 - $1,212	12.85%	14.74% - 15.34%
Trinidad State Junior Coll	$1,504,093	$17,387,078	1,228	$1,225	$1,471 - $1,530	8.65%	13.50% - 14.04%

Full-time Equivalent Students are calculated as full-time headcount plus one-third of part-time headcount.
Date Source: NCHEMS NCES Finance Dataset, 1999-2000
Date Source: NCHEMS Enrollment Dataset, Fall 2000

QIS Measure 6: CLASS SIZE COMPARISONS FOR COLORADO PUBLIC FOUR-YEAR INSTITUTIONS
Fall Term 2000

Institution	Total # of Sections	Number of Sections with Student Enrollment of --		Percent of Sections with Student Enrollment of --		Benchmarks**	
		<20	≥50	<20	≥50	<20	≥50
Adams State Coll	435	230	22	52.9%	5.1%	46.3% - 48.2%	3.5% - 3.6%
Colo State Univ	2,413	939	419	38.9%	17.4%	40.3% - 41.9%	12.3% - 12.8%
Univ of Southern Colo (to be CSU-P)	585	242	49	41.4%	8.4%	38.1% - 39.6%	6.5% - 6.9%
Fort Lewis Coll	780	418	34	53.6%	4.4%	50.6% - 52.6%	3.1% - 3.2%
Mesa State Coll	979	471	57	48.1%	5.8%	44.8% - 46.6%	5.1 - 5.2%
Metropolitan State Coll of Denver	2,153	806	94	37.4%	4.4%	44.8% - 46.6%	5.1 - 5.2%
Univ Colo - Boulder	2,807	1,301	401	46.3%	14.3%	40.3% - 41.9%	12.3% - 12.8%
Univ Colo - Colo Spr	801	281	104	35.1%	13.0%	38.1% - 39.6%	6.5% - 6.9%
Univ Colo - Denver	950	385	100	40.5%	10.5%	40.3% - 41.9%	12.3% - 12.8%
Univ of Northern Colo	1,348	393	231	29.2%	17.1%	40.3% - 41.9%	12.3% - 12.8%
Western State Coll	532	215	18	40.4%	3.4%	50.6% - 52.6%	3.1% - 3.2%
Total Public Four-Year Inst	**13,783**	**5,681**	**1,529**	**41.2%**	**11.1%**	**n/a**	**n/a**

Source: Institution reporting in 2000-2001, Common Data Set, Part I-3.
**Benchmarks calculated from national data published by *U.S. News and World Report*, September 2001; institutional peers and benchmarks based on public sector, Carnegie classification, and institutional undergraduate enrollment.

QIS Measure 6: CLASS SIZE COMPARISONS FOR COLORADO PUBLIC TWO-YEAR INSTITUTIONS
Fall Term 2000

Institution	Class Sizes for Fall Term --	Total # of Sections	Number of Sections with Student Enrollment of --		Percent of Sections with Student Enrollment of --		Benchmarks	
			≤15	≥35	≤15	≥35	≤15	≥35
Aims Comm Coll	1998	1,243	939	13	75.5%	1.0%		
	1999	1,282	943	20	73.6%	1.6%		
	2000	**1,243**	**919**	**19**	**73.9%**	**1.5%**	**76.0%**	**1.3%**
Arapahoe Comm Coll	1998	1,019	561	24	55.1%	2.4%		
	1999	1,054	583	25	55.3%	2.4%		
	2000	**1,010**	**554**	**16**	**54.9%**	**1.6%**	**56.4%**	**2.3%**
Comm Coll of Aurora	1998	534	294	1	55.1%	0.2%		
	1999	491	235	1	47.9%	0.2%		
	2000	**484**	**241**	**2**	**49.8%**	**0.4%**	**52.4%**	**0.2%**
Comm Coll of Denver	1998	810	470	18	58.0%	2.2%		
	1999	856	481	14	56.2%	1.6%		
	2000	**811**	**457**	**11**	**56.4%**	**1.4%**	**58.2%**	**1.6%**
Colo Mountain Coll	1998	1,666	1,198	12	71.9%	0.7%		
	1999	1,813	1,378	19	76.0%	1.0%		
	2000	**1,774**	**1,283**	**27**	**72.3%**	**1.5%**	**77.5%**	**0.8%**
Colo NW Comm Coll	1998	779	556	64	71.4%	8.2%		
	1999	756	550	50	72.8%	6.6%		
	2000	**634**	**551**	**1**	**86.9%**	**0.2%**	**74.2%**	**6.5%**
Front Range Comm Coll	1998	1,540	698	50	45.3%	3.2%		
	1999	1,668	759	40	45.5%	2.4%		
	2000	**1,669**	**725**	**39**	**43.4%**	**2.3%**	**46.4%**	**2.3%**
Lamar Comm Coll	1998	255	181	6	71.0%	2.4%		
	1999	237	171	1	72.2%	0.4%		
	2000	**277**	**202**	**2**	**72.9%**	**0.7%**	**73.6%**	**0.4%**
Morgan Comm Coll	1998	348	313	1	89.9%	0.3%		
	1999	363	302	2	83.2%	0.6%		
	2000	**375**	**298**	**1**	**79.5%**	**0.3%**	**88.3%**	**0.4%**
Northeastern Junior Coll	1998	554	342	30	61.7%	5.4%		
	1999	653	428	28	65.5%	4.3%		
	2000	**686**	**478**	**24**	**69.7%**	**3.5%**	**66.8%**	**4.2%**
Otero Junior Coll	1998	245	139	15	56.7%	6.1%		
	1999	292	177	15	60.6%	5.1%		
	2000	**288**	**171**	**13**	**59.4%**	**4.5%**	**61.8%**	**5.0%**
Pikes Peak Comm Coll	1998	1,612	968	8	60.0%	0.5%		
	1999	1,663	987	11	59.4%	0.7%		
	2000	**1,686**	**1,051**	**3**	**62.3%**	**0.2%**	**60.9%**	**0.6%**
Pueblo Comm Coll	1998	1,163	822	10	70.7%	0.9%		
	1999	1,117	770	10	68.9%	0.9%		
	2000	**985**	**698**	**11**	**70.9%**	**1.1%**	**71.2%**	**0.9%**
Red Rocks Comm Coll	1998	1,270	755	50	59.4%	3.9%		
	1999	1,912	1,424	23	74.5%	1.2%		
	2000	**1,426**	**955**	**17**	**67.0%**	**1.2%**	**76.0%**	**1.2%**
Trinidad State Jun Coll	1998	700	584	5	83.4%	0.7%		
	1999	663	573	7	86.4%	1.1%		
	2000	**645**	**543**	**3**	**84.2%**	**0.5%**	**88.1%**	**0.9%**
Total Public Two-Year Inst								
	1998	13,738	8,820	307	64.2%	2.2%		
	1999	14,820	9,761	266	65.9%	1.8%		
	2000	**13,993**	**9,126**	**189**	**65.2%**	**1.4%**	**n/a**	**n/a**

Source: Institution files; definitions for undergraduate class size per Common Data Set.

QIS Measure 7: FACULTY INSTRUCTIONAL WORKLOAD AT COLORADO PUBLIC HIGHER EDUCATION INSTITUTIONS
Academic Year 2001 - 2002

Institution	Type A (Group) Instruction Avg. Weekly Teaching Hours per Instructor Category*--					Benchmark -- Nat'l Study of Postsecondary Faculty	Type B (Individualized Instruction) Enrollments for All Full-time Faculty Categories	Type B (Individualized Instruction) Avg. Student Enrollment per Full-time Faculty FTE
	Tenured Faculty FTE	Tenure-Track Faculty FTE	Other** Full-time Faculty Faculty FTE	Faculty FTE Total	Total Full-time Faculty FTE			
Four-Year Public Institutions								
Adams State Coll	11.4	13.2	9.5	100.0	**11.8**	**11.1 - 11.5**	1,036	10.4
Colo State Univ	8.2	6.8	13.2	929.0	**8.6**	**7.8 - 8.1**	7,573	8.2
U of Southern CO (to be CSU-Pueblo)	9.8	9.6	9.3	168.0	**9.7**	**11.1 - 11.5**	336	2.0
Fort Lewis Coll	14.0	12.9	12.5	167.3	**13.5**	**11.1 - 11.5**	1,066	6.4
Mesa State Coll	15.7	14.4	17.2	198.7	**15.7**	**11.1 - 11.5**	114	7.3
Metropolitan St Coll of Denver	11.2	11.8	15.8	422.3	**12.6**	**11.1 - 11.5**	8,098	19.2
Univ of Colo - Boulder	5.0	5.5	11.7	1,023.0	**6.4**	**7.8 - 8.1**	7,914	7.7
Univ of Colo - Colo Springs	11.1	12.1	13.8	162.0	**12.1**	**9.2 - 9.6**	1,752	10.8
Univ of Colo - Denver	7.9	9.0	13.9	336.0	**9.4**	**9.2 - 9.6**	2,124.0	6.3
Univ of Northern Colo	11.0	10.4	13.6	395.0	**11.4**	**9.2 - 9.6**	4,437	11.2
Western State Coll	12.1	11.2	---	87.0	**11.7**	**11.1 - 11.5**	818	9.4
Two-Year Public Institutions								
Aims Comm Coll				106.0	**15.6**	**17.2 - 17.9**	354	3.3
Arapahoe Comm Coll				92.3	**13.4**	**17.2 - 17.9**	2,468	26.7
Colo Mountain Coll				79.0	**23.1**	**17.2 - 17.9**	186	2.4
Colo NW Comm Coll				46.0	**13.7**	**17.2 - 17.9**	299	6.5
Comm Coll of Aurora				29.7	**18.0**	**17.2 - 17.9**	43	1.4
Comm Coll of Denver				92.0	**16.4**	**17.2 - 17.9**	57	0.6
Front Range Comm Coll				122.7	**15.3**	**17.2 - 17.9**	1,894	15.4
Lamar Comm Coll				20.4	**22.4**	**17.2 - 17.9**	0	0.0
Morgan Comm Coll				32.9	**26.1**	**17.2 - 17.9**	67	2.0
Northeastern Junior Coll				60.8	**17.9**	**17.2 - 17.9**	231	3.8
Otero Junior Coll				34.0	**18.4**	**17.2 - 17.9**	0	0.0
Pikes Peak Comm Coll				122.8	**25.4**	**17.2 - 17.9**	2,087	17.0
Pueblo Comm Coll				65.5	**12.7**	**17.2 - 17.9**	381	5.8
Red Rocks Comm Coll				68.2	**15.6**	**17.2 - 17.9**	1,855	27.2
Trinidad State Junior Coll				48.5	**18.9**	**17.2 - 17.9**	238	4.9

*Full-time equivalent (FTE) faculty totals represent state-funded (or general funded) instruction in fall and spring terms. Faculty time paid for by contracts, grants, or extended studies fees were excluded from FTE totals.

**Based on faculty who are neither tenured or tenure-track but have the expectation of an on-going appointment and are full-time as defined by the institution.

Notes: (1) Average measures for group and individual instruction should not be combined. Group instruction is measured in contact hours while individualized instruction is based on student headcount.

(2) Type A instruction involves direct contact of faculty with students and includes the following: lecture, lab, recitation/discussion/ seminar, audit, private instruction, physical education/recreation activity, studio, and field instruction.

(3) Type B instruction encompasses distance education and a variety of individualized faculty/student relationships such as independent study, master's thesis/doctoral dissertation, student teaching, co-ops, internships, and practica.

Benchmark Source: National Center for Education Statistics, 1999 National Study of Postsecondary Faculty (NSOPF:99) *Background Characteristics, Work Activities, and Compensation of Faculty and Instructional Staff in Postsecondary Institutions: Fall 1998.* Doc 2001-152, Table 26, April 2001. Data from fall 1998.

QIS Measures 8 and 9: INSTITUTION-SPECIFIC INDICATORS

Institution	Indicator #8	Indicator #9
Four-Year Public Institutions		
ASC	Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location. Measures: a. Tuition/fees below $2,722 (median 01-02 tuition/fees for CO public, 4-yr). b. Maintain or show an increase in access to courses at off-campus sites and at non-traditional times. Results: a. Tuition/fees are <u>below</u> the median at $2,278 b. <u>Maintained</u> or <u>increased</u> student access	Indicator: The academic, intellectual and social experiences will be used to measure the success of college in providing personal attention to and faculty interaction with students. The questions from the 2002 National Study on Student Engagement (NSSE) are: 1. Discussed grades or assignments with an instructor. 2. Participated in a learning community. 3. Had serious conversations with students of a different race or ethnicity than your own. 4. Had serious conversations with students who differ from you in terms of their religious beliefs, political opinions, or personal values. Measure: Meet or exceed the national average scores on questions dealing with personal attention & faculty interaction with students from NSSE. Results: Exceeded the national average scores.
CSU	Indicator: First-year seminars emphasizing thinking, reading, speaking, and writing to help students become lifelong learners and facilitate academic performance and student retention. Measure: CSU will be in the top quartile when compared to national peer institutions in terms of requiring all first-year students to complete a 2-3 credit first-year seminar during the first 45 credits of their college careers. Results: CSU continues to be the only institution among 19 peer institutions to require a first year seminar. This past year, 237 sections averaging 17 students enabled over 4,000 students to enroll.	Indicator: Service-learning to enhance students' sense of civic engagement, educational success, and development of life skills. Measure: CSU will be above the median in volunteerism and service-learning activities compared national comparison of peer institutions in Campus Compact. Results: CSU has more than twice the number of courses with a service-learning component than peer institutions and ranks well above the 17th percentile in students involved.
USC (to be CSU-P)	Indicator**:** Increase the proportion of minority graduates. Measure**:** Exceed the prior year's percentage of minority graduates, based on the SURDS degree files submitted to CCHE. Results: The proportion of USC graduates receiving a baccalaureate degree who are minority in FY 2001-02 rose to 31.8%, up from 27.8% in FY 2000-01.	Indicator: The number of publicly available computer workstations to students at USC will meet or exceed the national average for four-year public colleges and universities. Measure: National standard for ratio of computers available for general student use to student headcount. Results: According to *Campus Computing 2001: 12th Annual Survey of Computing and Information Technology in Higher Education* by Kenneth Green, 4-year public universities average 13.56 students per workstation and 4-year public colleges average 12.21 students for each workstation. At USC, the ratio of students to workstations for fall 2001 was 6.95:1 and was an improvement from the fall 2000 ratio of 7.90:1.

Institution	Indicator #8	Indicator #9
FLC	Indicator: National and liberal arts peer comparison on student learning outcomes and institutional resources. Measure: The questions from the 2001 National Study on Student Engagement (NSSE) were organized around seven principles of good practice and used to assess student engagement at FLC. Results: FLC met or exceeded the national average scores for liberal arts colleges in most principles (indicators): 1. Encourage Student-Faculty Contact: FLC was above the national college average in 4 of 4 measures but below liberal arts colleges in 3 of 4. 2. Encourage Student Cooperation: FLC was above the average for both national and liberal arts colleges in 4 of 4 measures. 3. Encourage Active Learning: FLC was above the national college average in 4 of 4 measures, and above the liberal arts colleges in 3 of 4. 4. Give Prompt Feedback to Students FLC was above the national college average in 4 of 4 measures, and above the liberal arts colleges in 2 of 4. 5. Emphasize Time on Task: FLC was above the national college average in 4 of 4 measures, and above the liberal arts colleges in 2 of 4. 6. Communicate High Expectations: FLC was above the national college average in 4 of 4 measures, and above the liberal arts colleges in 3 of 4. 7. Respect Diverse Talents and Ways of Learning: FLC was equal to or above the national college average in 2 of 2 measures but below liberal arts colleges in 2 of 2. FLC has designed actions to encourage improvement in each of these areas of good practice.	Indicator: Quality of undergraduate education and preparation for working world Measure: Responses from approximately 600 FLC alumni who graduated since 1995 on the nationally normed ACT Alumni Outcomes Survey 2001 administered in spring 2002. Benchmark: FLC will meet or exceed national averages for responses related to successful employment, graduate education, and satisfaction with their college experience. Results: Based on the following components, FLC exceeded national averages: 1. Working and/or continuing education National avg: 84% FLC avg. 93% 2. How well did your experiences at this school prepare you for your current job? (% responding exceptionally well or more than adequately) National avg: 39% FLC avg. 53% 3. Would you recommend this school to someone who asked your opinion? (% responding yes) National avg: 94% FLC avg. 99%
Mesa	Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location. Measures: a. Tuition/fees below $2,722 (median 01-02 tuition/fees for CO public, 4-yr). b. Maintain or show an increase in access to courses at off-campus sites and at non-traditional times. Results: a. Tuition/fees are <u>below</u> the median at $2,288 b. <u>Increased</u> student access	Indicator: Student participation in a co-curricular experience (internship, practica, field-experience, structured research project, etc.) as part of their education. Measure: Equal or exceed the average of previous two years in percent of graduates with co-curricular experience (69%) Results: Equaled the average percent of 69%.

Institution	Indicator #8	Indicator #9
Metro	Indicator: Provide students with opportunities to participate in workplace experiences. Measure: Increase the percent of MSCD graduates with workplace experience (e.g., cooperative education, service learning, practica, internships). Results: The percentage for 2001-2002 graduates was 43.9%, exceeding the prior year benchmark of 43%.	Indicator: Student satisfaction with their education. Measure: Responses to questions from the 2002 National Study on Student Engagement (NSSE) by Metro seniors will compare favorably to those from 500 urban institutions. Results: Based on the following questions, Metro student responses are summarized below: 1. How would you evaluate your entire educational experience at this institution? The MSCD mean (3.21) was significantly higher ($p<.001$) than the benchmark of seniors at all urban institutions (2.97). 2. If you could start over again, would you go to the same institution you are now attending? The MSCD mean (3.16) was significantly higher ($p<.001$) than the benchmark of seniors at all urban institutions (2.89).
UCB	Indicator: Undergraduate Participation in Special Academic Opportunities. Measure: Percent participating in special academic opportunities, of calendar year 2001 bachelors degree recipients who entered CU-Boulder as full-time fall freshmen. Benchmark: Maintain the participation level at or above 67%. Results: 78% of calendar year 2000 bachelors recipients who had entered as freshmen (N=2,891) had participated in at least one special opportunity. This exceeds the benchmark and institution's long-term goal. The four most popular programs each garnered participation by over 15% of the 2001 graduates: honors courses (17%), study abroad (27%), formal minors (17%) and first-year residential academic programs (22%). UCB is especially pleased that 27% of graduates entering as freshmen had studied abroad, for this program is probably the most intense. Comparable overall (unduplicated) participation figures from other institutions are not available. Informal comparisons with estimates published in the Best Colleges issue of U.S. News and World Report show that CU-Boulder has much higher rates of participation in study abroad and honors than do other public AAU institutions that reported.	Indicator: State appropriations for undergraduate programs, per resident bachelor's degree. Measure: State appropriations for undergraduate programs per bachelor's degree awarded to resident students, both for a single fiscal year. "State appropriations" means funds from state tax dollars and excludes tuition. Benchmark: AAU public average. Results (all figures rounded to the nearest $100): ♦ CU-Boulder: $23,900 in state appropriations for undergraduate programs per resident bachelor's degree ♦ AAU publics ♦ Average $71,500, median $71,200, N = 33 ♦ The result for CU-Boulder is approximately one third the AAU average or median ♦ CU-Boulder is 33rd of 33 schools (Data not available for the 34th US AAU public, Rutgers)
UCCS	Indicator: Student Academic Quality. a. Increased Academic Quality of Students. Measure: Average CCHE admission index scores for admitted freshmen will be at least 101.	Indicator: Academic Program Quality. Measure: Percent of professional programs that have current specialized accreditation of those eligible to apply for such status compared to similar programs at CCHE-designated peer institutions for UCCS. UCCS professional programs include:

Institution	Indicator #8	Indicator #9
UCCS (cont.)	Result: Average index score for fall 2002 admitted freshmen remains three points above the benchmark of 101. b. Increased Use of Transfer Window. Measure: Use of up to one-quarter of allowable "window" undergraduate transfers for a fall semester. Result: For Fall 2002, less than one-quarter of the allowable "window" admits for under-graduate transfers were used (3% of all admitted). c. Increase Number of Colorado Residents Enrolled at UCCS. Measure: The number of undergraduate students who are Colorado residents enrolled at UCCS compared with the previous fall semester. Result: CU-Colorado Springs enrolled 425 more Colorado undergraduate residents in Fall 2002 than were enrolled in Fall 2001. d. Increase Number of Ethnic Minority Students Enrolled at UCCS. Measure: The number of undergraduate students reporting as African-American, Asian-American/Pacific Islander, Latino/Chicano or Native American/American Indian in Fall 2002 compared with the previous fall semester, indicating that UCCS is attracting more ethnic minority students while increasing the academic quality of students. Result: UCCS enrolled 44 more ethnic minority undergraduate students in Fall 2002 than were enrolled in Fall 2001.	business, education, engineering, nursing, public administration, and other appropriate programs. Result: All of CU-Colorado Springs professional programs have specialized accreditation. Only 81% of similar programs at peer institutions are accredited, indicating that UCCS offers high quality professional programs tailored to serving the business, industry, government, education, and health care sectors compared to like institutions nationally.
UCD	Indictor: Provide undergraduate students with a quality of education that meets their professional and personal educational goals. a. Measure: Percent of employed bachelor's degree recipients (1 year after graduation) indicating that program of study helped get or keep job. Benchmark = 75% Results: FY 98-99 = 85.8% FY 99-00 = 81.9% b. Measure: Percent of degree recipients indicating that program of study met their educational goals. Benchmark = 95% Results: FY 98-99: 98% FY 99-00: 98%	Indicator: Provide undergraduate students a broad and convenient variety of enrollment opportunities that aid in progress toward their educational goals. a. Measure: Increase in the most recent fiscal year undergraduate enrollment, courses, and sections offered in online education. Results: Enrollment: FY 00 - 01 = 2,875 FY 01 - 02 = 3,635 +26% Courses: FY 00 - 01 = 81 FY 01 - 02 = 91 +12% Sections: FY 00 - 01 = 150 FY 01 - 02 = 169 +13% b. Measure: Increase in most recent academic year in number of high school students participating in higher education opportunities.

Institution	Indicator #8	Indicator #9
UCD (cont.)		Results: PSEO Enrollment: FY 00 - 01 = 80 FY 01 - 02 = 89 +11.3% CU-Succeed Enrollment: FY 00 - 01 = 3,498 FY 01 - 02 = 3,553 +1.6% Pre-Collegiate Enrollment: FY 00 - 01 = 567 FY 01 - 02 = 639 +12.7%
UNC	Indicator: After Graduation Performance. Measure: Percent of undergraduate student degree recipients who are employed and/or engaged in further study one year after graduation. Benchmark: 95% were placed, based on UNC annual survey of graduates Results: 97.6% of 2000-01UNC graduates are employed or attending graduate school based on response rate of 51.8%.	Indicator: Student Evaluation of Instructional Quality. Measure: Student response to 14 questions regarding instructional effectiveness. Benchmark: National average for students completing Noel-Levitz Student Satisfaction Inventory in Spring 2001. Results: UNC students expressed greater satisfaction with instructional effective-ness than did national group of four-year public institutions. On a 7 point scale, UNC scored 5.12 while the national average was 5.06.
WSC	Indicator: Progress in providing educational access to their students, relative to their particular role and mission and geographic location. Measure: Tuition/fees below $2,722 (median 01-02 tuition/fees for CO public, 4-yr). Results: a. Tuition/fees are <u>below</u> the median at $2,423 b. <u>Increased</u> student access	Indicator: Improve the Western State student experience to better meet student needs. Measure: Meet or exceed the national average score on the fall 2001- spring 2002 IDEA teaching evaluation in areas of teaching and course excellence. Result: Exceeded the national average score (4.05) by an average of .0225.
Two-Year Public Institutions		
Aims CC	Indicator: Providing Instructional Alternatives for Students. Measure: For fall 2001, classes offered at non-traditional times, places, blocks, learning and delivery modes. Results: 452 sections, which is 30% of the total 1,513 sections.	Indicator: Articulation and Collaboration Throughout the Service Area. Measure: Indicators are articulation agreements with high schools and collaboration in workplace in fall 2001. Results: Agreements exist with all high schools in the service area. Last year, 68 advanced studies courses were delivered to 150 high school students. Additionally, 214 CJT sessions were delivered to 7,510 employees in the area.
ACC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 99.0	Measure: Percent of course section offered at non-traditional times. System Benchmark: 38.8 Results: 61.0

Institution	Indicator #8	Indicator #9
CMC	Indicator: Participation Rate. Because CMC's commitment to access for residents of its communities remains strong, the College has selected the following goal as one of our Quality Action Projects through the North Central Association Academic Quality Improvement Project. Measure: Participation rate is defined as the number of in-district students, 18 and older, at Colorado Mountain College (unduplicated headcount), divided by the number of residents, 18 and older, in the College District and service area (based on 1990 census). Because of Colorado Mountain College's commitment to student access, and its locations of Campuses throughout the District, the goal for CMC's participation rate is at least 150% of the statewide average participation rate. Benchmark (Statewide): 2.3% Results: CMC Rate 13.8%	Indicator: Success of Developmental Studies. Measure: Part of Colorado Mountain College's long-term commitment to access is preparing students who are not yet ready to enter college-level courses by providing learners basic skills including basic literacy, adult high school and GED programs, and personal skills courses. Three rates are calculated for this indicator: percentage of students completing goals in beginning-level ESL programs, percentage of students completing goals in beginning-level ABE programs, and percentage of students enrolled in a GED program who earn the GED. Benchmark: The goal for each of these rates is 110% of the state average. Results: Completion of ABD Beginning Literacy Programs: Statewide Rate: 32% 110% Goal: 35.2% CMC Rate: 61% Completion of ABD Beginning Basic Education Programs: Statewide Rate: 32% 110% Goal: 35.2% CMC Rate: 71% Completion of Low-Beginning-Level ESL Programs: Statewide Rate: 24% 110% Goal: 26.4% CMC Rate: 33% Completion of High-Beginning-Level ESL Programs: Statewide Rate: 24% 110% Goal: 26.4% CMC Rate: 34%
CNCC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 99.0	Measure: Percent of course sections offered at nontraditional times. System Benchmark: 38.8 Results: 47.3
CCA	Measure: Percent of course sections offered at nontraditional times. System Benchmark: 38.8 Results: 44.2	Measure: Percent of minority students vs. availability in service area. System Benchmark: 1.0 Results: 1.19

Institution	Indicator #8	Indicator #9
CCD	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 95.2	Measure: Percent of successful students (graduation and/or transfer) of color compared to percent of adult service area who are people of color. System Benchmark: 1.0 Results: 1.1 Graduates; 1.2 Transfers
FRCC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 94.3	Measure: Percent of course sections offered at nontraditional times and percent of course sections offered in nontraditional formats. System Benchmark: 37.0 Results: 53.8
LCC	Measure: Service area participation rates. System Benchmark: 3.4 Results: 8.2	Measure: Percent of course sections offered at nontraditional times, percent of course sections offered in nontraditional formats, and percent of course sections in off-campus locations other than state-owned facilities. System Benchmark: 84.7 Results: 97.7
MCC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 98.0	Measure: Service area participation rates. System Benchmark: 3.4 Results: 8.9
NJC	Measure: Percent of course sections in off-campus locations other than state owned facilities. System Benchmark: 18.4 Results: 26.0	Measure: Service area participation rates. System Benchmark: 3.4 Results: 9.0
OJC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 97.0	Measure: Service area participation rates. System Benchmark: 3.4 Results: 9.3
PPCC	Measure: Percent of students expressing satisfaction with instruction. System Benchmark: 93.8 Results: 99.1	Measure: Percent of course sections offered in nontraditional formats. System Benchmark: 30.6 Results: 54.8
PCC	Measure: Percent of course sections offered at nontraditional times and percent of course sections offered in nontraditional formats. System Benchmark: 86.1 Results: 74.8	Measure: Percent of minority students compared to availability in service area. System Benchmark: 1.0 Results: 1.3

Institution	Indicator #8	Indicator #9
RRCC	Measure: Percent of minority students compared to availability in service area. System Benchmark: 1.0 Results: 1.2	Measure: Percent of course sections offered at nontraditional times and percent of course sections offered in nontraditional formats. System Benchmark: 67.3 Results: 65.0
TSJC	Measure: Percent minority faculty, executive, and other professional staff vs. statewide availability; minority clerical, technical, skilled craft and maintenance staff vs. service area availability. System Benchmark: 1.03 (for each category) Results: Minority faculty 2.3 Minority staff 1.2	Measure: Percent minority students vs. availability in service area. System Benchmark: 1.0 Results: 1.1

TOPIC: FIRST-YEAR TEACHER EDUCATION SURVEY

PREPARED BY: SHARON SAMSON

I. SUMMARY

CCHE collected survey responses to the Colorado First-Year Teacher Survey in May 2002. The survey includes sections on teaching and licensure areas, teacher education background, student teaching experience, subject matter content preparation and teaching skills preparation. Based on research findings, CCHE conducted a web-based survey, testing if it is possible to achieve a robust response rate using a web survey. The initial day the survey opened, the response overloaded the server capacity and many respondents needed to try later. The total number of respondents exceeded the response to the September 2001 telephone survey that had a response rate of 51 percent.

Descriptive and inferential data analysis was guided by the following research questions:

- What are the overall levels of content area preparation among first-year teachers in Colorado?
- What training and background variables explain differences in content area preparation?
- What are the overall levels of teaching skill preparation among first-year teachers in Colorado?
- What training and background variables explain differences in teaching skills preparation?

The survey data were analyzed by Dr. Susan Hutchinson and two graduate assistants, Dwayne Schmitz and Karen Raymond (Attachment A).

Regarding the first research question, the survey data supported the original assumptions of the teacher education reform movement. Students in Secondary Education programs were better prepared in subject matter than Elementary and Special Education teachers. In 2000-01 the major redesign occurred in Elementary and Special Education programs to select degree programs whose curriculum was aligned with content standards in subject areas. Formerly, a student majoring in any undergraduate degree program could be admitted into a teacher education program.

Mean Level at Which Undergraduate Programs Provided Sufficient Breath and Depth of Knowledge (7 point scale)

	Number	Breadth	Depth	Standard Deviation
Secondary	252	5.53	5.29	1.67
Elementary	229	5.35	5.10	1.66
Special Ed	44	4.16	3.95	2.22

The analysis on what variables explain these phenomena will be conducted in future years when we have a more complete data set. Since the survey measured students who graduated from the "old" teacher education programs, the actual results were of less interest than the recommendations for refining the 2003 survey. It is important to refine the reliability of the survey since the graduates of the newly approved teacher programs will be first surveyed in May 2003. In Spring 2003, an administrator survey will be developed to complement the 1st year teacher responses. The first interview with school administrators occurred in December 2002 to determine the appropriate questions.

The report concludes with recommendations to improve the reliability and validity of the primary performance indicators.

1. *Ensure a better pool of survey respondents. This is the most critical issue for CCHE to resolve in the next few months. Colorado Department of Education's Human Resource file is fairly suspect for drawing a valid sample of first-year teachers. Even after the initial elimination of 1,200 records, another 400 teachers indicated that they had two or more years of teaching experience.*
2. *Collaborate with Denver Public Schools to find an alternate way to identify and include DPS's first year teachers in the survey. Not only is this a large school district, it hires a high percentage of first-year teachers.*
3. *Refine survey questions so that all responses relate directly to the quality of the program. Current phrasing if often ambiguous.*

II. BACKGROUND

In April 2001, results from a pilot survey of first year teachers were published by the Colorado Department of Education. This pilot survey was sent to first and third year teachers who had been prepared in Colorado. Because the overall response rate from teachers was too low (21 percent) to be valid for performance modeling, the Colorado Commission on Higher Education conducted a telephone survey to determine if a telephone survey would elicit a higher response rate. The CCHE telephone pilot achieved a 49 percent response rate, despite the fact that the telephone survey was cut short in the first week of September. The contractor believed that the response rate will increase if the survey was conducted during the time when school is in session year and the questions limited to a 20-minute interview time.

The 2001 pilot survey highlighted some significant methodological issues. Consequently, staff recommended taking several steps to ensure a valid and reliable measurement tool and process, (1) better definition of the universe of first and third year teachers, (2) redesign of questions, and (3) final field testing to identify weak or vague questions in 2002 survey. The 2001-02 is the last year to measure teachers coming out of pre-reform programs, so it is critical to use this opportunity to refine the methodology. The overall findings from the pilot survey included:

- Even with a 50 percent response rate, several years of consecutive data will be required to use the data to measure performance at the institution and program level.

- The survey population was incomplete since three large Colorado school districts did not provide data on first year teachers (Aurora, Cherry Creek, and Denver Public Schools).

- The pilot telephone survey results indicated ambiguity in the vocabulary, ambiguity in phrasing within questions, and non-comparable scales.

- Survey redesign is necessary in order to clearly connect questions to performance indicators and teachers to the institutions they attended.

- The survey primarily measured simple teaching skills. Few questions related to content preparation were asked.

In summary, the telephone survey served a valuable function. Its purpose was to establish a legitimate response rate using a different survey method, namely telephone interviews. During the analysis, it became apparent that bias may be introduced with phrasing questions certain ways.

During 2001-02, CCHE staff convened a technical committee to focus the questions and identify ways to collect a valid survey population. The survey project included the following steps:

1. Defining the goal of the survey:/ scope of work statement.
2. Selecting the sampling method, size, predictors, and methodology.
3. Collecting the data.
4. Summarizing the sample statistics.
5. Inferring population parameters.
6. Draw conclusions.

The Scope of Work Statement

The specific short term goals of the 2002 survey included replicating or surpassing the 50 percent response rate of the 2001 survey and testing the questions for ambiguity, bias, and value in a performance model. The First Year Teacher survey will be used as a criterion-referenced measure to evaluate the quality of Colorado Teacher Education Programs in the areas of content preparation and teaching skills preparation, as outlined in CCHE Teacher Education Policy 4.00 (content preparation) and CDE Performance-Based Standards for Colorado Teachers (teaching skills preparation). Accordingly, excluding demographic information, 50 percent of the survey will address content preparation and 50 percent of the survey will address teaching skills preparation. The survey indicator will be used in combination with other indicators, such as cumulative college GPA,

general education assessment, content assessment (currently the PLACE) results, and rates of job placement in the licensure area trained, to document evidence for reauthorization of teacher preparation programs in Colorado.

Because of its use in the performance model, for each institution, a confidence level of 95 percent with +/- 15 percent accuracy on each item will be the goal. This accuracy range is reasonable and achievable, but requires a well-defined sampling frame with a high response rate and appropriate survey methodology. Results from individual items will be aggregated into general content and skill preparation areas, but individual items may be used as evidence for reauthorizing or discontinuing teacher education programs as well. The accuracy range will allow identification of outliers and will be clearly stated in the analysis of data to protect against misuse of the data.

The baseline established by the First Year Teacher Survey administered in 2002 will be used to evaluate Colorado teacher education policy, as it will eventually allow comparison of performance of old teacher education programs (pre SB 99-154) with performance of redesigned teacher education programs (post SB 99-154). While the results of the 2002 administration of the First Year Teacher Survey will not be used to rank teacher preparation programs, they may be used to compare the attainment of standards in content and teaching skill preparation between teacher preparation programs.

Selecting the target population, size, and predictors.

The target population is Colorado teachers who are in their first year of classroom teaching. The whole universe will be surveyed to ensure a valid number of data points to analyze the impact of different variables on the quality of new teachers. The Colorado Department of Education agreed to share the Human Resource file that it collects annually as the base file since it contains not only Colorado-educated classroom teachers but those who are hired from other states. The collection due date for this file is December 31 which allows three months for CDE to edit the data, merge the Human Resource file with the licensure database, and provide a "clean" data file. This would permit the survey to be conducted at the end of the school year (i.e., April and May).

The following table lists the variables that will be part of the survey file.

Preparation	Predicator	Data Source
	Teacher Education Program	Survey, licensure DB
	Highest level of degree	HR DB
	Undergraduate major	Survey, licensure DB, HR DB
	Student teaching time	Survey
	Student teaching quality	Survey
	Transfer from one inst to another	Survey, possible Enrollment DB
	Years to complete program	Survey

	Years prior education experience	Survey
Job placement	School size	HR DB/ look up table
	School setting	HR DB/ look up table
	Similarity of school to student teaching school	Survey
	Average class size	Survey
	Number of first year supports	Survey
	Number of extracurricular duties	Survey
	Quality of mentor/master teacher	Survey
Teacher characteristics	Gender	HR DB
	Ethnicity	HR DB
	Age	HR DB

Collecting the Data

After soliciting cost estimates from vendors to conduct a telephone survey, the technical committee advised switching to a web-based survey.

The First Year Survey began May 1, 2002. CCHE staff contacted each identified first year teacher by mail and email advising them of the link to a website to complete the survey. To ensure that only "qualified" first-year teachers respond, teachers were sent user ids and passwords.

The survey team encountered an unexpected delay in notifying the survey population. The file provided by CDE contained approximately 2700 records, of which only 1,500 appeared valid. For example, some "first-year teachers" held master teaching licensure or administrator licenses. These obvious data anomalies were screened prior to the contacting the teachers.

III. STAFF ANALYSIS

Summarizing the descriptive survey statistics

Usable survey responses were received from 633 first-year Colorado teachers, the majority of whom were female (73.9 percent) and white (91.9 percent) with an average age of 30. Approximately 39 percent of respondents were licensed as elementary teachers while only 3.3 percent were licensed special education teachers. In contrast, 7.4 percent of the first-year teachers were teaching as special education teachers.

Fifty percent of first-year teachers (316) were trained at a Colorado college or university while the other 317 first-year teachers received their training out-of-state. From an analysis perspective, it is important to have at least 10 respondents from an institution to examine the patterns at the institutional level. Equally important is the question does the survey population adequately represent the institutions?

Table 2: Comparison of Teacher Education Graduates with Survey Response

	Graduates		**Survey**	
	N	**Percent**	**N**	**Percent**
Adams State College			10	3.2
Colorado College			10	3.2
Colorado Christian College			7	2.2
Colorado State University			30	9.5
Denver, University of			18	5.7
Fort Lewis College			8	2.5
Mesa State College			17	5.4
Metro State College			52	16.5
Regis University			18	5.7
Univ. Colorado at Boulder			25	7.9
Univ. Colorado at Colorado Springs			16	5.1
Univ. Colorado at Denver			20	6.3
Univ. Northern Colorado			63	19.9
Univ. Southern Colorado			11	3.5
Western State College			7	2.2

Inferring population parameters

Table 1: Mean Level at Which Undergraduate Programs Provided Sufficient Breath and Depth of Knowledge (7 point scale)

	Number	Breadth	Depth	SD
Secondary	252	5.53	5.29	1.67
Elementary	229	5.35	5.10	1.66
Special Education	44	4.16	3.95	2.22

Table 2: Teaching Skills

	Number
Secondary	
Elementary	
Special Education	

Because mean scores can camouflage quality, both positively and negatively, it is interesting to look beyond the mean. Because of the high percentage of elementary education teachers, we examined several elements in greater depth.

ELCTNT1 ug provided breadth of knowledge needed as teacher

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 very strongly disagree	8	3.1	3.7	3.7
	2	4	1.6	1.8	5.5
	3	16	6.3	7.3	12.8
	4	21	8.3	9.6	22.4
	5	47	18.5	21.5	43.8
	6	67	26.4	30.6	74.4
	7 very strongly agree	56	22.0	25.6	100.0
	Total	219	86.2	100.0	
Missing	8 not applicable	23	9.1		
	99999999	12	4.7		
	Total	35	13.8		
Total		254	100.0		

Selected Results: Elementary Education

How prepared did first-year elementary teachers feel?

Elementary and early childhood teachers were asked 17 questions pertaining to their perceived content area preparation. These items fell into four distinct categories as follows: math and language, science, social science, and general depth/breadth of knowledge. On all 17 items, the majority of respondents (> 50 percent) agreed that they felt prepared during their first few weeks as teachers, though there were considerable differences among the various content areas. With respect to the six math and language items, the percent of respondents agreeing exceeded 70 percent on all items with the highest level of agreement to the items asking about use of conventional grammar, punctuation, etc. (85.5 percent) and ability to identify purpose, perspective, and cultural influence of the speaker (86.0 percent). Agreement was lowest on items asking about use of algebra to solve problems (71.8 percent) and use of geometry to solve problems (71.9 percent). Perceived content preparation was substantially lower in the science area. While 74.4 percent did feel their understanding of biology was good, only 57.7 percent and 50.1 percent reported having a good understanding of chemistry and physics, respectively. For some of these items, there were differences in perceived preparation between first-year teachers who had received their teacher training at a Colorado institution versus those who received their training elsewhere. For example, a greater percent of non-Colorado teachers felt experienced in scientific investigation (80.8 percent versus 71.9 percent) and believed their understanding of chemistry was good (63.2 percent versus 54.3 percent). Most respondents (74 percent and higher) felt prepared in understanding political institutions such as the U.S. government, identifying and remembering events and people in U.S. history, and in using world geography to study regions. However, far fewer respondents (only 53.5 percent) believed they were prepared

in identifying and remembering events and people in Colorado history. The majority of respondents indicated their undergraduate major provided both the breadth (77.7 percent) and depth (69.8 percent) of knowledge needed as a teacher. And when asked about their overall perception of the education and training they received, 80 percent reported they had strong preparation for teaching students at the start of the school year.

First-year teachers were also asked 10 questions regarding how well their education coursework prepared them in their teaching skills. The 10 items fell into two distinct categories: teaching skills and interpersonal/classroom management skills. On 5 of the 6 teaching skills items, more than 80 percent of respondents agreed that that were good at incorporating math and literacy in their instruction, practicing a variety of instructional methods, and using assessment to improve students' achievement. They were somewhat less confident about their ability to use technology to enhance student achievement (73.6 percent). Regarding interpersonal and classroom management skills, respondents generally reported having the skills necessary to manage a classroom (79.6 percent), talk to parents about either a student's performance (82.5 percent) or student's emotional problems (77.5 percent), and prepare lesson plans (87.1 percent).

What were the student teaching experiences of elementary educators?

When considering only those respondents teaching in either elementary or early childhood education (N = 254), most seemed to have had positive student teaching experiences. The majority agreed that they received adequate feedback from their supervisor (81.7 percent), their cooperating teacher was a good role model (73.9 percent), and that their student teaching experience overall was positive (73 percent). It should be noted, however, that despite the generally positive responses, there was a substantial number of teachers who reported negative responses to these items.

Approximately 18 percent of the respondents indicated their cooperating teachers did not serve as good role models and 20 percent reported they did not have a good student teaching experience. In addition, only half of the respondents did their student teaching in schools similar to where they were teaching during their first year. Length of student teaching varied from 1 to 20 weeks and from 4 to over 30 hours per week. Most respondents (82.1 percent) had worked with students at least 25 hours per week during their student teaching.

What were the first-year experiences of elementary teachers?

Half of the elementary and early childhood respondents (N = 127) taught in the Denver metropolitan area their first year, with another 27.6 percent teaching in outlying cities or in outlying towns (11 percent). Respondents reported having as few as 10 or fewer students in their average class (4.3 percent) to as many as 31 to 35 students in their average class (1.2 percent), with most respondents having classes of between 16 and 25 students (64.8 percent). Only 28.5 percent of respondents had ever worked as a teacher aide or paraprofessional prior to their first year of teaching. Other first-year experiences

included additional duties they were required to perform including extracurricular assignments (such as coaching, Odyssey of the Mind, etc.) (29.9 percent), traveling to more than one school to teach (1.9 percent), and other non-teaching duties (including lunchroom, hall, and recess duties) (79.4 percent).

In terms of support teachers received during their first year, relatively few were granted a reduced teaching load (4 percent), extra prep time (7.2 percent), or extra classroom assistance (35.2 percent). The majority of respondents did receive support in the form of common planning time with teachers in their subject area or grade level (76.2 percent), seminars or classes for beginning teachers (82.2 percent), or regular, supportive communication with their principal or with other administrators (75.1 percent). The quality of mentoring during their induction was reported as generally positive with 66.4 percent of respondents agreeing they had adequate contact with their mentor during induction and 65.2 percent agreeing they were able to rely upon their mentor to provide good advice. Again, despite the majority reporting positive experiences with their mentors, approximately one third of the respondents did not have positive experiences.

What are elementary teachers' plans for the future?

Most of the respondents planned to teach next year (96.8 percent) with 85.9 percent intending to teach at the same school.

Drawing Conclusions.

1. *Ensure a better sample frame. This is the most critical issue for CCHE to resolve in the next few months. The Human Resource file is fairly suspect for drawing a valid sample of first-year teachers. Even after the initial elimination of 1,200 records, another 400 teachers indicated that they had two or more years of teaching experience.*
2. *Collaborate with Denver Public Schools to find an alternate way to identify and include DPS's first year teachers in the survey. Not only is this a large school district, it hires a high percentage of first-year teachers.*
3. *Refine survey questions so that all responses relate directly to the quality of the program. Current phrasing if often ambiguous*.

Colorado First Year Teacher Survey
May 2002

Preliminary Results

Report Prepared by

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Table of Contents

Executive Summary

In late April, 2002, the Colorado Commission on Higher Education administered the Colorado First Year Teacher Survey, a web-based survey designed to evaluate the quality of Colorado teacher education programs in the areas of content preparation and teaching skills preparation. Data from the 2002 survey will provide baseline information as part of the Colorado Teacher Education Performance Model and will be used in conjunction with other indicators related to teacher performance.

Usable survey responses were received from 633 first-year Colorado teachers, the majority of whom were female (73.9%) and white (91.9%), with an average age of 30 years (ranging from 22 to 62 years of age, SD = 8.3). Almost half of the respondents received their teacher preparation at a Colorado college or university, with 27.2% (n = 172) completing their bachelor's degree in teacher preparation in Colorado and 22.4% (n = 142) entering a Colorado teacher preparation program having already completed a bachelor's degree. Of the respondents who completed their undergraduate teacher preparation in Colorado, most attended University of Northern Colorado (29.9%), Metropolitan State (18.4), or Colorado State University (9.8%). For respondents completing a post-baccalaureate teacher preparation program in Colorado, the greatest number did so at Metropolitan State (14.1%), University of Colorado at Denver (14.1%), or University of Denver (12.0%).

Survey responses were analyzed in terms of student teaching experiences, content area preparation, teaching skills preparation, first-year teaching experiences, and future teaching plans. Teacher perceptions in these areas were examined in terms of teaching area (i.e., elementary/early childhood, special education, and secondary education), location and type of teacher training, and various contextual factors such as paraprofessional experience and characteristics of current teaching position. The following points are among the major findings of the study.

♦ Overall, first year teachers in Colorado appeared to be generally satisfied with their student teaching experience. While there were some differences in how respondents from different Colorado teacher preparation programs rated their supervisors, average responses across all institutions were generally favorable.

♦ First year teachers in Colorado also positively perceived their content area preparation, though they did rate general breadth and depth of content preparation and math and language content preparation more favorably than their preparation in science and social studies. There were some differences in perceptions of content area preparation among teachers working in elementary/early childhood, secondary, and special education, with special education respondents tending to rate the adequacy of the breadth and depth of their content preparation less positively than either elementary/early childhood or secondary respondents.

♦ First year teachers also rated their teaching skills preparation as generally favorable, though again, teachers in elementary/early childhood, special education, and secondary education differed in their perceptions with elementary/early childhood respondents reporting better preparation than secondary respondents.

♦ Perceptions of content area and teaching skills preparation were also related to respondents' preparation background, with two clear patterns emerging. Differences in respondents' perceptions seemed to depend most upon whether or not they were trained at a Colorado institution and on whether they were trained in a "traditional" setting versus received emergency certification. For elementary/early childhood and special education teachers, ratings of content preparation were more positive for respondents trained in teacher education programs outside of Colorado compared with those trained in either baccalaureate or post-baccalaureate programs within Colorado. For secondary teachers, ratings on content preparation were more favorable for respondents from Colorado baccalaureate teacher preparation programs than they were for respondents under emergency or substitute certification.

♦ Of respondents having a mentor as part of induction, about two-thirds rated their interactions with the mentor in a favorable way, although only about half of the respondents reported having a mentor. Thus, the positive ratings of mentor behavior might produce an artificially positive impression of induction quality.

♦ The vast majority of respondents (95%) intended to return to teaching the following year, which suggests overall satisfaction among respondents with their first year teaching experience.

During analysis of the results, several problem areas were noted in the survey design and implementation and are described in the Conclusions and Recommendations sections of this report. Three the problems are highlighted below.

♦ Survey responses were received from 713 teachers who reported two years or more of teaching experience, suggesting a seriously inadequate record-keeping system for identifying first year teachers in Colorado. Prior to administration of future First Year Colorado Teacher surveys, an examination of the record-keeping and personnel tracking systems across school districts is warranted.

♦ There is evidence to suggest that the initial screening question on the survey regarding number of years teaching was ambiguous and thus might have led to elimination of some eligible teachers who did not understand the question. In earlier drafts of the survey, the question was stated more clearly but was altered for the web-based version. Interviews or additional pilot testing should be conducted prior to the next survey administration to assess interpretability of this item

♦ Patterns of missing data and responses of "not applicable" may indicate a potential validity problem. This is of particular concern on questions related to adequacy of induction and student teaching for which respondents might have selected "not applicable" in lieu of giving low ratings. Followup interviews or focus groups might be used to determine the reasons many respondents failed to provide ratings of their student teaching and induction experiences.

Introduction and Survey Background

In late April, 2002, the Colorado Commission on Higher Education administered the Colorado First Year Teacher Survey, a web-based survey designed to evaluate the quality of Colorado teacher education programs in the areas of content preparation and teaching skills preparation. Data from the 2002 survey will provide baseline information as part of the Colorado Teacher Education Performance Model and will be used in conjunction with other indicators related to teacher performance. Given the absence of appropriate psychometric data to support valid inferences from the survey responses, results of this initial survey should be interpreted with discretion and should be used for descriptive purposes only.

The survey includes sections on teaching and licensure areas, teacher education and training background, student teaching experience, first year teaching experience, future teaching plans, content area preparation, and teaching skills preparation. Data analyses reported in this document include both descriptive and inferential and were guided by the following research questions:

- What are the overall levels of perceived content area preparation among first-year teachers in Colorado?
- What training and background variables explain differences in perceived content area preparation?
- What are the overall levels of perceived teaching skills preparation among first-year teachers in Colorado?
- What training and background variables explain differences in perceived teaching skills preparation?
- What are the future teaching plans of first-year teachers in Colorado?
- What training, background, and first-year teaching experiences explain first-year teachers' future teaching plans?

This report begins with a description of the survey respondents in terms of their demographic characteristics and teacher education and training background, followed by information concerning respondents' student teaching experiences, content area preparation, teaching skills preparation, first year teaching experiences, and future teaching plans. Conclusions about the survey findings and recommendations regarding future teacher surveys are then presented. The report concludes with a Technical Report describing specific aspects of the survey data and data analyses procedures.

Description of Survey Respondents

Demographic Characteristics of Respondents

Usable survey responses were received from 633 first-year Colorado teachers, the majority of whom were female (73.9%) and white (91.9%), with an average age of 30 years (ranging from 22 to 62 years of age, SD = 8.3). No response rate information was available at the time of this report. Response rate calculations are pending determination of the number of eligible teachers to whom the survey was mailed. As noted in the Technical Report, the difficulty of determining response rate is compounded by the fact that nearly half (46.5%) of the surveys received came from ineligible teachers, i.e., teachers who reported more than one year of teaching experience. These 713 ineligible responses were eliminated from the data prior to compiling the results seen in this report, however, they do suggest a serious flaw in the sampling frame used to obtain respondents. What is not known is how many ineligible teachers were sent the survey by mistake.

Over thirty-nine percent of respondents (n = 250) were licensed in either early childhood education or in elementary education, 20.2% (n = 128) were not yet licensed, and the remainder were licensed in either special education (3.3%) or in various specialty areas within secondary education (40%). Table 1displays the licensure areas among all respondents. (Note that all tables are included in the Appendix). The 128 respondents who were not yet licensed planned to pursue licensure in 16 different areas including math (15.6%), elementary education (13.3%), science (12.5%), and foreign language (11.7%).

Regardless of licensure status, the majority of respondents (53.4%) were teaching in secondary areas with the greatest proportions teaching in math (10.7%), science (10.2%), or social studies (9.3%). Although most respondents (78.8%) were teaching in only one subject area, 14.2% were teaching in two areas, with the remaining 44 teachers teaching in three or more areas. Two teachers reported currently teaching in eight different areas. The complete list of reported teaching areas is presented in Table 2. Twenty-three percent (n = 145) of the respondents were teaching outside of their licensure areas.

Teacher Education and Training

Almost half of the respondents received their teacher preparation at a Colorado college or university, with 27.2% (n = 172) completing their bachelor's degree in teacher preparation in Colorado and 22.4% (n = 142) entering a Colorado teacher preparation program having already completed a bachelor's degree. The majority of teachers not trained in a Colorado institution either completed a bachelor's degree in teacher education outside of Colorado (20.2%), participated in an alternative teacher licensure program (11.1%), or received emergency or substitute certification (10.4%). Of the respondents who completed their undergraduate teacher preparation in Colorado, most attended University of Northern Colorado (29.9%), Metropolitan State (18.4), or Colorado State

University (9.8%). For respondents completing a post-baccalaureate teacher preparation program in Colorado, the greatest number did so at Metropolitan State (14.1%), University of Colorado at Denver (14.1%), or University of Denver (12.0%). Table 3 presents the relative frequencies among Colorado colleges and universities from which respondents either completed their undergraduate or their post-baccalaureate teacher preparation programs. The most popular undergraduate majors among the respondents included education (15.9%), English (9.1%), biology (5.9%), history (5.5%), psychology (5.4%), and math (4.5%). Most respondents (67.9%) required more than four years to complete their undergraduate training for various reasons including the need to work to support themselves (39%), changing majors (27.3%), poor advising (19.5%), course scheduling/unavailability (17.1%), and other, unspecified reasons (20.5%). A greater proportion of respondents who completed their teacher education training outside of Colorado (43.3%) did so in four years or less when compared with respondents who completed their teacher education at a Colorado institution (23.8%). Approximately a third of the respondents (31%) transferred between institutions at some point during their undergraduate experience with most (47.8%) transferring from institutions outside of Colorado.

In addition to formal, undergraduate teacher training, some teachers had also worked as either a professional aide or paraprofessional prior to their first year of teaching. Relatively more special education respondents (48.9%) than either secondary (19.5%) or elementary/early childhood (28.5%) respondents had gained this type of teaching experience.

Survey Results

Student Teaching Experiences

Respondents appeared to have had generally positive student teaching experiences with the majority reporting they had received adequate feedback from their college/university faculty supervisor (79.2%), their cooperating teacher was a good role model (69.7%), and their student teaching experience overall was positive (70.1%). It should be noted, however, that despite the generally positive ratings of student teaching experiences, there was a substantial number of teachers who provided negative responses to the survey items pertaining to student teaching. Approximately 23% of the respondents indicated their cooperating teachers did not serve as good role models and 23% reported they did not have a good student teaching experience. Although these percentages differed slightly among secondary, elementary/early childhood, and special education respondents, these differences were not statistically significant.[1] Among respondents completing either their undergraduate or post-baccalaureate teacher training in Colorado, average ratings of supervisor feedback (on a scale of 1 to 7) ranged from a low of 4.09 (SD = 1.58, n = 11) for University of Southern Colorado to a high of 6.50 for both Colorado College (SD = 1.0, n = 4) and University of Colorado at Colorado Springs (SD

[1]Details regarding statistical analyses conducted can be found in the Technical Report section of this report.

= .76, n = 8). A mean of 5.0 or higher suggests a favorable response to that aspect of the student teaching experience. Average ratings for University of Southern Colorado were significantly lower than for Colorado State University, Mesa State College, University of Colorado at Colorado Springs, and University of Northern Colorado. No other differences in ratings of student teaching were found based on Colorado teacher preparation college/university. These results should be interpreted with caution, however, given the relatively small numbers of respondents for many of the institutions. Tables 4 through 6 present average responses to the three survey items related to quality of student teaching experience.

Length of student teaching varied among respondents from 1 to 20 weeks with the largest single group of respondents (24.7%) spending 17 weeks in their student teaching (M = 15.72, SD = 3.59). Respondents from University of Northern Colorado and University of Denver spent the fewest number of weeks in student teaching (M = 14.52, SD = 2.99 and M = 14.67, SD = 2.70, respectively) whereas respondents from Colorado College and from University of Colorado at Colorado Springs spent the greatest number of weeks (M = 17.90, SD = 3.57 and M = 17.83 and SD = 3.16, respectively). Table 7 presents average number of weeks spent in student teaching by Colorado university/college. No differences in weeks spent student teaching were found among elementary/early childhood, secondary, or special education respondents.

Respondents reported spending between 4 and over 30 hours per week working with students during the majority of their student teaching weeks. Most respondents (80.1%) had worked with students at least 25 hours per week during their student teaching. This was true regardless of whether the respondent was teaching in elementary/early childhood, secondary, or special education. Comparisons across teacher preparation institutions were not possible given the sparse cells.

Content Area Preparation

Perceptions of first-year teachers' subject area preparation were assessed through three different sets of questions, depending upon whether a respondent was in early childhood/elementary, secondary, or special education. Direct comparisons of perceived content area preparation among the three groups of teachers was possible on only two items common to all three groups. These items asked respondents to rate the extent to which the degree or major provided them with the depth and breadth of knowledge needed as a teacher. Both elementary/early childhood and secondary respondents reported significantly higher mean ratings on these two items than special education respondents. Means and standard deviations on these two items across the three groups are presented in Tables 8 and 9.

Elementary and early childhood teachers. Usable surveys were received from 254 respondents indicating they were teaching in either elementary or early childhood education. Of these, most (88.2%) were licensed in elementary education with only 7.5%

not yet licensed. When comparing licensure rates of elementary/early childhood respondents with those of secondary and special education respondents, proportionally more of the elementary/early childhood respondents had licensure than either of the other two groups. Elementary/early childhood respondents also differed from the secondary and special education respondents by representing a greater relative proportion that completed either a baccalaureate (33.1%) or post-baccalaureate (28.0%) teacher preparation program in Colorado. The Colorado institutions from which most respondents received their baccalaureate teacher training included University of Northern Colorado (27.4%), Metropolitan State (21.4%), and University of Colorado at Boulder (9.5%). Most respondents who completed post-baccalaureate training in Colorado attended University of Colorado at Denver (16.9%), University of Denver (15.5%), Metropolitan State (15.5%), or University of Colorado at Boulder (11.3%). As was the case with the complete sample, elementary/early childhood respondents were primarily female (86.6%), white (92.9%), and close to 30 years of age ($\underline{M}$ = 29.72, $\underline{SD}$ = 8.13).

Respondents teaching in either early childhood or elementary education were asked 17 questions pertaining to perceptions of their content area preparation. Prior to examining relationships between perceptions of content area preparation and various other variables from the survey, factor analysis was used to identify meaningful and reliable subsets of items.[2] As a result of the factor analysis, four interpretable scales were identified as shown in Table 10. The relatively high (> .80) values of Cronbach's alpha indicate generally consistent (i.e., reliable) responses to all items within each scale. Means of the scales were computed so that scores ranged between 1 and 7 with a response of 1 indicating very strong disagreement and a value of 7 indicating very strong agreement to the statement. A mean of 5.0 or greater indicated overall agreement with the content preparation items within that scale.

Overall, respondents reported positive perceptions of their content area preparation as reflected in the means at or above 5.0 on the four content area scales. Respondents felt most prepared in math and language ($\underline{M}$ = 5.67, $\underline{SD}$ = 1.31) and in their general depth and breadth of content ($\underline{M}$ = 5.29, $\underline{SD}$ = 1.51) and least prepared in science ($\underline{M}$ = 4.91, $\underline{SD}$ = 1.55) and social studies ($\underline{M}$ = 4.99, $\underline{SD}$ = 1.48). Note that although the means for science and social studies appear to be less than 5.0, they do not differ significantly from 5.0 and therefore also indicate respondents' overall agreement with the content preparation items. Examination of correlations among the content area dimensions (see Table 11) suggests that general depth and breadth of content preparation was not as strongly related to specific content area preparation as the content areas were among themselves. Science and math/language were the most strongly related content areas.

Statistical analyses were conducted to determine if various training and background variables might help explain differences in perceived content area preparation. Few of the analyses yielded significant findings. No significant relationships were found between respondents' demographic characteristics (i.e., gender, ethnicity, and

[2] Details about the factor analysis and reliability analysis can be found in the Technical Report.

age) and perceived preparation on any of the four content areas. No statistically significant differences were found among the Colorado teacher preparation institutions on the four content areas. A significant difference was found on the general content preparation scale when comparing respondents who received their teacher training in Colorado (M = 5.08, SD= 1.55) versus those who received their teacher training outside of Colorado (M = 5.59, SD = 1.41) with non-Colorado trained teachers rating their preparation more favorably than Colorado-trained teachers. Despite the differences between the two groups, the mean for Colorado-trained teachers still reflected an overall positive perception. No differences were found based on whether or not respondents spent their entire undergraduate experience at the same institution.

Differences in perceived content preparation were also examined with respect to previous student teaching experiences and prior paraprofessional classroom experience. No relationships were found based on number of weeks in student teaching or number of hours per week spent with students during student teaching. Nor were there any differences in perceived content preparation depending on whether or not respondents had previous experience as a teacher's aid or paraprofessional. Perceptions of content preparation were also unrelated to similarity of student teaching site with current school. Small, but statistically significant ($p < .0001$) correlations were found between student teaching experiences and preparation in math and language ($r = .35$), preparation in science ($r = .28$), and general breadth and depth of preparation ($r = .28$).

Relationships between perceived content preparation and factors associated with the first year teaching experience were also examined. However, no relationships were found between perceived content preparation and quality of induction, average class size, school district size, school setting, number of first year teaching supports, or number of extracurricular duties.

Secondary teachers. Usable survey responses were received from 338 first-year Secondary teachers. Almost half of the respondents received their teacher preparation in Colorado 42.3% (n=143). Of these, 23.4% (n = 79) completed an undergraduate degree in a teacher preparation program at a Colorado college or university, and 18.9% (n = 64) already had an undergraduate degree before entering a teacher preparation program at a Colorado college or university. Of the remaining respondents, 23.3% (n=79) completed a teacher preparation program outside of Colorado, and 33.5% (n=113) participated in some type of alternative teacher preparation program or received emergency certification. Of the respondents who completed their undergraduate teacher preparation in Colorado, most attended University of Northern Colorado (35.4%), Colorado State University (20.3%), or Metropolitan State (15.2). For respondents completing a post-baccalaureate teacher preparation program in Colorado, the greatest number did so at Colorado State University (20.3%), Metropolitan State (12.5%), University of Colorado at Denver (12.5%), University of Denver (9.4%), or University of Colorado at Colorado Springs (9.4%). Most respondents (74.3%) required more than four years to complete their undergraduate training and just over one fourth of the respondents (26.6%) transferred between institutions at some point during their undergraduate experience.

Secondary teachers were asked 5 questions pertaining to their perceived content area preparation. Teachers felt least prepared concerning the depth of knowledge needed to teach with 73.2% feeling prepared and 14% feeling unprepared. Seventy-eight percent of the respondents felt prepared regarding their breadth of knowledge; 10.1% did not. The majority of teachers felt prepared in the remaining three categories of content knowledge: understanding of subject area (84.3%), analyzing information within subject area (90.3%), and solving problems within subject area (91.4%).

Prior to examining relationships between perceptions of content area preparation and various other variables from the survey, factor analysis was used to identify meaningful and reliable subsets of items. As a result of the factor analysis, a single scale was identified that includes all five questions regarding content preparation. The relatively high (.92) value of Cronbach's alpha indicates a generally consistent response to all items within the scale. Means of the scale were computed so that scores ranged between 1 and 7. A mean of 5.0 or greater indicated overall agreement with the content preparation items within that scale. Overall, respondents had generally positive perceptions of their content area preparation ($\underline{M}$ = 5.79, $\underline{SD}$ = 1.50).

There are significant differences in mean perceived preparation for content when comparing "regular" teacher education program graduates ($\underline{M}$ = 5.98, $\underline{SD}$ = 1.19) and emergency/alternative certifications ($\underline{M}$ = 5.42, $\underline{SD}$ = 1.92). Viewed another way, a greater percent of secondary teachers with emergency certifications felt unprepared in understanding their subject area when compared to teachers who completed a bachelor degree in teacher preparation in Colorado (34.5% versus 2%).

Statistical analyses were conducted to determine if various training and background variables might help explain differences in perceived content area preparation. No significant relationships were found between respondents' demographic characteristics (i.e., gender, ethnicity, and age) and perceived preparation in content area. No statistically significant differences were found among the Colorado teacher preparation institutions for content area. No significant difference was found on the general content preparation scale when comparing respondents who received their teacher training in Colorado versus those who received their teacher training outside of Colorado. No differences were found based on whether or not respondents spent their entire undergraduate experience at the same institution. When differences in perceived content preparation were examined with respect to previous student teaching experiences, induction, and prior paraprofessional classroom experience, none of these variables was found to be significant. Nor were there any differences in perceived content preparation depending on whether or not respondents had previous experience as a teacher's aid or paraprofessional.

Special education teachers. Forty-seven (7%) of the respondents to the First Year Teacher Survey indicated they were special education teachers. Of the 47, 37 (78.7%) were female, 10 (21.3%) were male. Twenty (42.6%) respondents were actually licensed to teach in special education, 15 (31.9%) indicated that they were "not yet licensed," and

14 of these 15 said they would pursue licensure in special education. Twelve (25.5%) indicated they are licensed in areas other than special education. Therefore, less than half of the special education teachers are licensed in special education. Almost 30% of respondents did not provide information on the level of students they were teaching or on the setting within which they provided services. However, of those who provided information on level of students (n=33), 27% taught mild/moderate needs, 24% moderate needs, 27% severe needs, 6% severe/profound needs, and 15% indicated that they taught all of the above. Of those respondents who provided information on setting (n=33), 33% indicated classroom inclusion as the setting for services, 30% indicated resource rooms, 21% indicated self-contained services, 3% indicated segregated services, and 12% indicated other.

As with many of the other items on the survey, the special education content items were in many cases left blank or identified as "not applicable" to large portions of the survey respondents; anywhere from one-third to one-half of the data were missing. Some missing data, whether due to respondents' leaving questions blank or because the question was not applicable, would be expected given that 57% of the sample is teaching in special education classrooms but is not licensed in special education. However, it is peculiar that portions exceeding 25% of the sample have not answered these questions. Thus, these results must be viewed with caution.

Because of the small sample size, neither factor analysis nor reliability analysis could be conducted to determine if any meaningful scales could be created from the content preparation items. Consequently, only item level analyses were performed. Based on a descriptive analysis of those who did respond to the special education content questions, there appear to be mixed results on feelings of preparation. Those questions that asked respondents to agree with the statements “my undergraduate major provided me with the breadth of knowledge needed as a teacher” and “my undergraduate major provided me with the depth of knowledge needed as a teacher” demonstrate that less than half of the respondents agreed with these two questions. This would suggest that of the first year special education teachers answering these two questions (approximately 30 respondents to each) overall quality of preparation was perceived as quite low. As stated earlier, ratings on these two items for special education respondents were significantly lower than they were for elementary/early childhood and secondary respondents. Contrast this to the items that ask about overall abilities and understanding of specific content areas and the opposite result emerges. More than half of the respondents to these questions agreed that they were good at using conventional grammar, identifying the purpose and perspective of a speaker, using number systems, algebra, and geometry to solve problems, and using tools/techniques to measure attributes of length and weight. Similarly, more than half agreed that their understanding of social studies, scientific principles, language, reading and writing, typical child growth, and deviations of child growth, principles of diagnosis, and understanding of processing problems was good. It should be noted that there was more missing data on these items than on the two questions which directly ask about undergraduate preparation.

To investigate whether preparation background was related to perceived subject area preparation a composite score of the sum of the two items which asked respondents directly if their undergraduate programs provided the breadth and depth of knowledge necessary to teach was made for all respondents answering these two questions. Comparisons were made among three teacher preparation groups. One group consisted of all respondents who indicated that they either completed an undergraduate degree in teacher education or a post-baccalaureate teacher preparation program at a Colorado university or institution, a second group consisted of those who indicated they completed a similar training program out of state, and a final group consisted of those who indicated they were participating in an alternative licensing program including emergency or substitute certification or teacher-in-residence programs. The results indicate that those prepared for teaching in a Colorado university or institution differed significantly from those who were prepared out-of-state, with out-of-state trained teachers reporting more positive perceptions of preparation than Colorado trained teachers. These results should be interpreted with caution and should not be interpreted as evidence for inferior in-state teacher programs. The group sample sizes were quite small (approximately 10 in each group) and the composite score was based on only two items, which may or may not have been an accurate measure of preparation. Lastly, there are other possible explanations as to why out-of-state trained respondents might feel more prepared as a group (i.e., psychological resilience of individuals moving from different states, etc.).

Teaching Skills Preparation

All survey respondents were asked 10 questions about their classroom and teaching skills preparation. Prior to examining relationships between perceptions of preparation in classroom and teaching skills and various other variables from the survey, factor analysis was used to identify meaningful and reliable subsets of items. Factor analysis produced two interpretable factors representing teaching skills and interpersonal/classroom management skills as shown in Table 12. The relatively high (> .80) values of Cronbach's alpha indicate generally consistent responses to all items within each scale. Means of the scales were computed so that scores ranged between 1 and 7. An additional measure of perceived preparation for teaching was a single item asking respondents to rate the extent to which their education and training prepared them for teaching at the start of the school year.

Respondents provided generally favorable ratings of both their teaching skills (M 5.59, SD = 1.15) and their interpersonal and classroom management skills (M = 5.78, SD = 1.14), though ratings of interpersonal and classroom management skills were significantly more favorable than ratings of teachings skills. Ratings on the global teaching preparation item were also positive with 78.8% agreeing that their training had prepared them to teach at the beginning of the school year (M = 5.61, SD = 1.44). No differences in ratings of teaching skills were found based on gender, ethnicity, or age. When comparing elementary/early childhood, secondary, and special education respondents, a significant difference was found on perceptions of teaching skills with elementary/early childhood respondents reporting better preparation (M = 5.83, SD =

1.06) than secondary respondents (M = 5.44, SD = 1.14). No differences were found among these three groups on interpersonal and classroom management skills or on the global teacher preparation item.

Ratings of perceived teaching skills preparation differed among some Colorado teacher training institutions. Highest mean ratings of teaching skills were given by respondents from Colorado College (M = 6.4, SD = .59), University of Colorado at Denver (M = 6.03, SD = .70), and Western State College (M = 6.01, SD = .52). Lowest average ratings were reported by respondents trained at University of Southern Colorado (M = 4.94, SD = 1.13), University of Colorado at Boulder (M = 5.29, SD = 1.33), and Adams State College (M = 5.37, SD = 1.15). The only statistically significant differences were between Colorado College and both University of Northern Colorado and University of Southern Colorado. Caution should be exercised in interpreting these mean differences given the small number of respondents for some institutions. Further, even the lowest mean rating of teaching skills, provided by graduates from University of Southern Colorado, was not significantly lower than 5.0, indicating respondents from that institution felt generally prepared in their teaching skills. No significant differences in ratings of interpersonal and classroom management skills were found among the Colorado institutions. Tables 13 and 14 present mean ratings by Colorado college/university for the teaching skills and interpersonal/classroom management skills, respectively. Perceptions of teaching skills preparation also did not differ based on whether or not respondents received their training at a Colorado institution nor on whether or not they had spent their entire undergraduate experience at the same institution.

When examining relationships between perceived teaching skills preparation and respondents' student teaching experiences, quality of induction, and previous paraprofessional experience, results were similar to those found with respect to perceptions of content area preparation. These variables did not appear to contribute much to understanding differences in respondents' perceptions of their training. Neither quality of induction nor previous paraprofessional experience was related to perceptions of teaching skills preparation. Student teaching experiences also made little difference. No relationships were found between perceived teaching skills preparation and either number of weeks in student teaching or number of hours per week spent with students during student teaching. Ratings of teaching skills preparation also did not differ based on similarity of the student teaching site with the school where respondents taught their first year. There was, however, a small, but statistically significant, $p < .0001$, correlation between quality of student teaching and perception of teaching skills preparation ($r = .28$).

Relationships between perceived teaching skills preparation and factors associated with the first year teaching experience were also examined. Similar to what was found in terms of content area preparation, no relationships were found between perceived teaching skills preparation and average class size, school district size, school setting, number of first year teaching supports, or number of extracurricular duties.

Correlations between perceptions of content area preparation and teaching skills resulted in the strongest relationship between the teaching skills scale and both general breadth/depth of content preparation (r = .46) and math and language preparation (r = .43). For the interpersonal and classroom management scale, the most strongly related content preparation area was also general breadth/depth of content preparation (r =.36).

Elementary and early childhood teachers. For elementary and early childhood respondents, factor analysis of the teaching skills preparation items produced the same two factors found for the entire set of respondents. Cronbach's alpha reliability estimates were slightly higher than they were for all respondents, at .89 for teaching skills and .86 for interpersonal and classroom management skills, respectively.

Means on both dimensions of classroom and teaching skills were greater than 5.0 indicating overall agreement with the classroom and teaching skills preparation items within each scale. Elementary and early childhood respondents reported satisfactory preparation in both their interpersonal and classroom management skills (M = 5.83, SD = 1.06) and in their teaching skills (M = 5.87, SD = 1.17). In addition, the majority of respondents (80%) expressed confidence in the quality of their education and training by agreeing to the item asking them to rate their overall preparation for teaching students at the beginning of the school year (M = 5.72, SD = 1.34).

When examining various factors that might help explain differences in perceptions of teaching skills preparation, results for elementary and early childhood respondents followed the same general pattern seen for respondents overall and as seen in analyses of perceived content area preparation. Perceptions of teaching skills preparation did not differ by gender, ethnicity, age, Colorado teacher training institution, location of training (i.e., within versus outside of Colorado), time spent in student teaching, amount of student contact during student teaching, quality of induction, or previous paraprofessional experience. Variables associated with respondents' teaching situation including average class size, number of supports, number of extracurricular duties, size of school district, and school setting also appeared to make little difference in respondents' perceptions of the adequacy of their teaching skills preparation. Quality of student teaching experience did exhibit a small, but statistically significant relationship with both perceived teaching skills preparation (r = .26) and with interpersonal and classroom management skills (r = .22).

Secondary teachers. For secondary respondents, factor analysis of these items produced two interpretable factors representing teaching skills (8 items) and parent contact skills (2 items) as shown in Table 16. The relatively high (> .85) values of Cronbach's alpha indicate generally consistent responses to all items within each scale. Means of the scales were computed so that scores ranged between 1 and 7.

Means on both dimensions of classroom and teaching skills were greater than 5.0 indicating overall agreement with the classroom and teaching skills preparation items

within each scale. Secondary respondents reported satisfactory preparation in teaching skills (M = 5.44, SD = 1.17) and in their parent contact skills (M = 5.66, SD = 1.32). In addition, the majority of respondents (79.6%) expressed confidence in the quality of their education and training by agreeing to the item asking them to rate their overall preparation for teaching students at the beginning of the school year (M = 5.6, SD = 1.48).

There are significant differences in mean perceived preparation for teaching skills when comparing "regular" teacher education program graduates (M = 5.62, SD = 1.01) and emergency/alternative certifications (M = 5.09, SD = 1.37). Significant differences were found between "received emergency or substitute certification" (M = 4.81, SD = 1.43) and "had bachelor degree before entering a Colorado teacher preparation program" (M = 5.64, SD = .98) as well as for " completed teacher preparation program outside Colorado" (M = 5.88, SD = .81). Also, "participated in an alternative teacher licensure program" (M = 5.18, SD = 1.40) had a mean response significantly different than that of "completed teacher preparation program outside Colorado."

Statistical analyses were conducted to determine if other training and background variables might help explain differences in perceived teaching skills preparation. No significant relationships were found between respondents' demographic characteristics (i.e., gender, ethnicity, and age) and perceived preparation in teaching skills. No statistically significant differences were found among the Colorado teacher preparation institutions for teaching skills. No significant difference was found on the teaching skills preparation scale when comparing respondents who received their teacher training in Colorado versus those who received their teacher training outside of Colorado. No differences were found based on whether or not respondents spent their entire undergraduate experience at the same institution. Nor were there any differences in perceived teaching skill preparation depending on whether or not respondents had previous experience as a teacher's aid or paraprofessional. Student teaching experiences, induction, and prior paraprofessional classroom experience were also unrelated to perceived teaching skills preparation.

There is a significant difference between the means on the parent contact scale based on participation in induction. In this sample of teachers the induction participants had a lower mean score (M = 5.47, SD = 1.36) than the non-participants (M = 5.87, SD = .113). Coupled with the observation that induction did not have a statistically significant relationship with the teaching skill scale (i.e., We might have expected participants to feel more prepared than non-participants) perhaps this indicates the need to collect more specific information concerning induction on future surveys to evaluate its value.

Special education teachers. In general, respondents rated their preparedness for a variety of classroom and teaching skills highly. In particular, more than half indicated that they felt prepared for incorporating literacy and math into their instruction, for practicing different instructional methods, for managing a classroom, for using assessments to improve achievement, for talking with parents about academics and emotional problems, for preparing lesson plans and prepared for using technology. Sixty-

five percent agreed that their education and training overall prepared them for teaching students at the beginning of the year. There were no significant group differences in feelings of overall preparation, as measured by the one item which asked about overall preparation, by preparation background (i.e., instate versus out-of-state, etc.).

First-Year Teaching Experiences

Nearly half (45.6%) of all respondents were teaching in the Denver metro area, with another 30.4% teaching in outlying cities or in outlying towns (10.9%). Respondents were working in school districts ranging in size from 301 students to over 25,000 students with the single largest group of respondents (38.4%) from districts with between 6,001 and 25,000 students. Another 28.5% were from the largest districts (over 25,000 students) and an additional 27.4% were working in districts with between 1,201 and 6,000 students. In addition, only 44.8% of the respondents did their student teaching in schools similar to where they were teaching during their first year. Average class size for respondents ranged between 10 and fewer (7.3%) to over 35 (2 respondents) with most respondents (63.4%) teaching classes of between 21 and 30 students. These proportions differed significantly among respondents in elementary/early childhood, secondary, and special education as would be expected. Class size was smallest for special educators and largest for secondary teachers. While most (82%) of the respondents overall had 25% or fewer of their students with IEPs, the pattern was reversed for special education respondents, 80.9% of whom had between 76% and 100% of their students with IEPs.

Other first-year experiences included additional duties respondents were required to perform including extracurricular assignments (such as coaching, Odyssey of the Mind, etc.) (47.6%), traveling to more than one school to teach (3.7%), and other non-teaching duties (including lunchroom, hall, and recess duties) (75.7%). Relative involvement in these duties differed among elementary/early childhood, secondary, and special education respondents. Secondary teachers were most likely to be engaged in extracurricular duties (61.7%) compared with either elementary educators (29.8%) or special educators (40.4%) whereas special education respondents were more frequently required to travel to multiple schools (14.9%) than either secondary (4.3%) or elementary respondents (.8%).

In terms of support teachers received during their first year, relatively few were granted a reduced teaching load (7.8%), extra prep time (9.4%), or extra classroom assistance (28.6%). The majority of respondents did receive support in the form of common planning time with teachers in their subject area or grade level (62.1%), seminars or classes for beginning teachers (77.8%), or regular, supportive communication with their principal or with other administrators (76.7%). Level of support differed among elementary/early childhood, secondary, and special education respondents. Fewer special education respondents (3.7%) received reduced teaching schedules than either secondary (10.4%) or elementary/early childhood respondents (10.6%). Similarly, only about a third of special education respondents (34%) were provided common planning time with other teachers in their area and grade level compared with the majority of both

secondary (54.6%) and elementary/early childhood respondents (77.6%) who received this type of support. In contrast, special education respondents received more classroom assistance (40.4%) than did secondary (22.1%) or elementary/early childhood respondents (35.2%).

Regarding the quality of induction, only about half of the respondents reported having a mentor. Of these, the majority rated the mentoring during their induction as generally positive with 62.5% of respondents agreeing they had adequate contact with their mentor and 62.2% agreeing they were able to rely upon their mentor to provide good advice. Despite the majority reporting positive experiences with their mentors, approximately one third of the respondents did not report having positive experiences. In addition, it is noteworthy that nearly half (49.8%) of the respondents indicated that having adequate contact with a mentor as part of their induction program was "not applicable" and that even more (53.7%) of the respondents marked "not applicable" on the item asking them to rate the extent to which they can rely on their mentor to give good advice. No differences were found in quality of mentoring among elementary/early childhood, secondary, and special education respondents.

Future Teaching Plans

The majority of respondents planned to teach next year (95.4%) with 85.5% intending to teach at the same school. These percentages were comparable for elementary/early childhood, secondary, and special education respondents. Although only 29 respondents did not plan to teach the next year, 161 respondents provided reasons they might consider for leaving teaching. The most frequently cited reason was financial (39.1%) followed by insufficient support from the school or administration (13.7%), personal reasons (12.4%), and too much time involved (11.2%). The relative frequencies of reasons for leaving teaching differed somewhat among elementary/early childhood, secondary, and special education respondents. Special education respondents cited lack of school/administrative support as their primary reason for leaving teaching (28.6%) whereas only 15% and 6.4% of secondary and elementary/early childhood respondents, respectively, indicated this as their primary reason for leaving. Special education respondents were also more likely to consider leaving based on the time involved (21.4%) compared with either secondary (8%) or elementary/early childhood respondents (14.9%).

Conclusions and Recommendations

Based on responses to the Colorado First Year Teacher Survey, beginning teachers in Colorado appeared to be generally satisfied with their student teaching experience, the quality of mentoring during induction, content area preparation, and teaching skills preparation. Regarding student teaching, while there were some differences in how respondents from different Colorado teacher preparation programs rated their supervisors, average responses across all institutions were generally favorable. First year teachers also positively perceived their content area and teaching skills

preparation, though they did rate general breadth and depth of content preparation and math and language content preparation more favorably than their preparation in science and social studies. There were also some differences in perceptions of content area and teaching skills preparation among teachers working in elementary/early childhood, secondary, and special education. Special education respondents tended to rate the adequacy of the breadth and depth of their content preparation less positively than did either elementary/early childhood or secondary respondents. This may not be too surprising given the nature of special education, which is somewhat less content driven than either elementary/early childhood or secondary education. These three groups also differed in their perceptions of teaching skills preparation with elementary/early childhood respondents reporting better preparation than secondary respondents.

Perceptions of content area and teaching skills preparation were also related to respondents' preparation background, with two clear patterns emerging. Differences in respondents' perceptions seemed to depend most upon whether or not they were trained at a Colorado institution and on whether they were trained in a "traditional" setting versus received emergency certification. When examining ratings of teaching skills preparation for all respondents, ratings were more positive for respondents receiving a baccalaureate degree in teacher education outside of Colorado than they were for those who either completed their baccalaureate teacher training at a Colorado institution or who received emergency or substitute certification. Similar findings were seen regarding perceptions of general breadth and depth of content preparation for both elementary/early childhood and special education respondents. In both groups, ratings of content preparation were more positive for respondents trained in teacher education programs outside of Colorado compared with those trained in either baccalaureate or post-baccalaureate programs within Colorado. For secondary teachers ratings on content preparation were more favorable for respondents from Colorado baccalaureate teacher preparation programs than they were for respondents under emergency or substitute certification. Given the consistent pattern of these differences, efforts should be taken to further investigate possible reasons for the findings. The type/location of preparation background seemed to play a more important role in respondents' perceptions of content area and teaching skills preparation than did the specific Colorado institution at which respondents were trained. For example, no differences were found in ratings of either content area preparation or teaching skills preparation among Colorado institutions for either elementary/early childhood or secondary respondents. Sample size was too small to make such comparisons for special education respondents. When all respondents were included in the analysis, a few differences among Colorado teacher education institutions were found in ratings of teaching skills preparation. However, these should be interpreted with caution given the small sample size for some institutions. The only other variable that appeared to be associated with perceptions of either content area or teaching skills preparation was student teaching. For elementary/early childhood respondents correlations were found between a composite measure of student teaching and ratings of content area preparation as well as ratings of teaching skills preparation. When all respondents were considered, correlations were also found between student teaching and perceptions of teaching skills.

Respondents did receive different types of support during their first year of teaching, mostly in the form of common planning time with teachers in their subject area or grade level, seminars or classes for beginning teachers, and regular, supportive communication with their principal or other administrators. However, the level and type of support differed somewhat among elementary/early childhood, secondary, and special education respondents. Of respondents having a mentor as part of induction, about two-thirds rated their interactions with the mentor in a favorable way, although only about half of the respondents reported having a mentor. Thus, the positive ratings of mentor behavior might produce an artificially positive impression of induction quality. Nevertheless, the vast majority of respondents intended to return to teaching the following year which does seem to suggest overall satisfaction among respondents with their first year teaching experience.

Problem Areas and Recommendations

- The use of self-report to measure content area and teaching skills preparation is a primary concern in this study. In particular, the reader should keep in mind that perceptions of preparation do not necessarily reflect actual quality of undergraduate teacher education.

- A related issue is the possible presence of a social desirability effect whereby respondents are providing misleadingly positive responses, i.e., some might be concerned about admitting to lack of preparation given that their identities can be linked with their survey responses. Interviews might help ascertain if respondents were concerned about the lack of anonymity of the survey.

- Nonresponse bias is also a possibility in this survey. Although the response rate has not yet been determined, the rate of nonresponse to this survey is presumed to be relatively high (i.e., at least 50%). It is possible therefore that teachers who were the least prepared and the most dissatisfied with both their training and first-year teaching experiences, were also less likely to respond to the survey. Thus, on the survey item pertaining to plans for teaching next year, the reported percent intending to remain in teaching might be an overestimate. Teachers not planning to return to teaching, might have felt less invested in completing the survey. One possible way to determine the presence of nonresponse bias would be to conduct focus groups or followup interviews. In addition, statistical comparisons need to be made between the sample demographic characteristics and the characteristics of the known population of Colorado first year teachers.

- In assessing perceptions of content area knowledge and teaching skills preparation, it is not possible to determine if the survey responses reflect the extent to which such knowledge and skills were obtained through the undergraduate teacher preparation programs or whether they reflected more general abilities. Only two of the content area items asked of all three groups of respondents (education/early childhood, secondary, and special education) actually mention the link between knowledge and undergraduate training. It is therefore possible that some respondents might have rated

their abilities without necessarily attributing them to what they had learned as undergraduates. For example, their ability to use conventional grammar, punctuation, etc. might have been more a function of parents' influence or earlier schooling (e.g., elementary or secondary training). Although the instructions to the questions ask respondents to consider these items in terms of undergraduate training, the items themselves do not provide this context. If respondents were rating their abilities in a more general sense, this could help explain the lack of relationship between perceptions of content and teaching skills abilities and other variables, including Colorado teacher preparation institution.

- A related problem is the potential difficulty in accurately assessing teachers' first-week's perceptions of content and teaching skills preparation after their having completed a year of teaching. Requiring respondents to answer the questions based on their retrospective perceptions of competence during the first week possibly did not provide accurate ratings of how they actually felt at that time. A teacher's success or lack thereof during the year could certainly influence their recall of readiness to teach at the beginning of the year. If the purpose of the survey is to assess teachers' perceptions of preparation at the beginning of their first year of teaching then future surveys should be designed to collect data during the first few weeks of the school year. Data regarding induction, support, future plans, etc. should then be collected at the end of the year. If instead, the intent of the survey is to measure teachers' perceptions of their preparation in light of seeing what they need "on the job" then perhaps collecting data at the end of their first semester of teaching would provide a more accurate assessment.

- The measurement of induction might have been problematic as indicated by the large amount of missing data. If induction is a mandatory program for beginning teachers, then reasons for the high rate of "not applicable" responses need to be explored. The absence of relationships between induction and perceptions of content and teaching skills preparation could suggest that the induction experience was not well measured on the survey or it could simply indicate that the induction process is not effective. A future survey should possibly include more than two questions on induction not limited to ratings about contact with the mentor.

- The large amount of missing data on the student teaching items might also indicate a measurement problem. Similar to what was seen on the induction items, a large proportion of respondents selected the "not applicable" options. Of the 633 teachers in the data, 363 indicated not applicable on at least one of the four student teaching questions. Of particular concern are the 266 teachers who responded not applicable when asked to rate the item, "I had a good student teaching experience." Since it is assumed that most first year teachers (other than those on emergency or substitute certification) would have completed a student teaching experience, perhaps some respondents chose the "not applicable" option in lieu of providing a low rating. If so, then the means on the student teaching items would be inflated. Followup interviews or focus groups might be used to determine the reasons many respondents failed to provide ratings of their student teaching.

- As mentioned in the Technical Report, there is evidence to suggest that the initial screening question on the survey regarding number of years teaching was ambiguous and thus might have led to elimination of some eligible teachers who did not understand the question. In earlier drafts of the survey, the question was stated more clearly but was altered for the web-based version. In particular, the qualification that respondents should exclude student teaching or paraprofessional experience was omitted on the web survey. Without this qualification, some respondents might have included prior student teaching and paraprofessional experience in their calculations and therefore would have selected the "more than one year" option. Patterns of duplicate responses in the survey data suggest this is a definite possibility. Interviews could be used to determine how respondents interpret this question.

- In general, although efforts were made during data analyses to control for the inflated risk of Type I error resulting from conducting numerous statistical tests, caution should still be exercised when interpreting some of the statistically significant comparisons among Colorado teaching institutions given the extremely small sample sizes for some colleges/universities. A few extremely satisfied graduates or a few very disgruntled graduates could unduly influence the results when samples sizes are small.

- The presence of numerous duplicate surveys noted in the Technical Report appears to be the result of programming flaws associated with the web-based survey as well in the procedure used by CCHE to match personnel records with survey responses. If a web-based delivery format is to be used in future surveys, care should be taken to ensure that respondents not be permitted to resend duplicate copies of their survey responses. In the most extreme case, one respondent sent 21 copies of his/her survey. The other source of duplicate records was the manner in which teacher personnel records were matched with survey responses. In cases where teachers were licensed in multiple areas or were teaching in multiple subject areas, new records were generated for each area. Thus, for example, a teacher licensed in three areas would appear in the data on three different records, with identical survey responses on all three records but different personnel information. An effort needs to be made to solve this matching problem, by adding fields to the personnel portion of the data to account for these multiple teaching/licensure areas.

- Finally, the sampling frame used to obtain names and addresses of Colorado first year teachers needs to be carefully scrutinized. The fact that survey responses were received from 713 teachers who reported two years or more of teaching experience, suggests a seriously inadequate record-keeping system for identifying first year teachers in the state. One problem could be the way first year teaching is defined by different school districts. For example, a teacher moving to Colorado from another state is defined in some districts as being "first year" despite the fact that the teacher might be bringing in years of prior teaching experience from a different state. For the purpose of this survey, these teachers would not be considered first year, though they might be identified as such by the state. Prior to administration of future First Year Colorado Teacher surveys, an examination of the record-keeping and personnel policies across school districts is warranted.

Technical Report

Data Description

Data processing began with an original data file comprised of 1,535 survey responses. Of these, 713 (46.4%) represented ineligible respondents, i.e., teachers reporting more than one year of experience, and were thus eliminated. Of the remaining 822 responses from eligible teachers, approximately 272 represented duplicate survey entries. Duplicates included resubmissions of the same survey responses as indicated by identical hidden identification numbers and identical survey response information, but different record numbers. Other duplicates were created by the procedure to match CCHE teacher database information with survey responses. These were indicated by identical hidden identification numbers, identical record numbers, and identical survey response information, but differences on some of the CCHE variables, e.g., subject area or program. In addition, a relatively small number of duplicates reflected different survey responses by the same teacher on multiple submissions. For obvious resubmissions of identical surveys, one record was retained and the others deleted. For duplicates resulting from the CCHE matching algorithm, a decision was made to retain one record and delete the others, even though some, unique information was lost. However, this was deemed reasonable as the unique information appeared to be primarily related to teaching area which was also provided through the survey self-report. For the few duplicates that appeared to contain somewhat different survey responses, each case was reviewed on the basis of completeness. After deleting all duplicates, the final sample of responses comprised 633 records.

At the time this report was compiled calculation of the response rate was not possible given the inability to ascertain the number of eligible teachers sent surveys as mentioned earlier in the report.

Data Analyses

All data analyses were conducted using SPSS, versions 10.0.5 and 11.0. Data analytic procedures included frequencies, descriptive statistics, reliability analysis, χ^2 tests of independence, independent samples and single sample t-tests, bivariate correlations, and analysis of variance (ANOVA). Prior to comparing various subgroups on survey items, factor analysis was used to determine if items could be aggregated into meaningful composite scores. Factor analyses were run on the content preparation items for both elementary/early childhood and secondary respondents, on the teaching skills items for all respondents, and separately for elementary/early childhood and secondary respondents, and for first year supports. Underlying factors were identified using principal components analysis to obtain pattern coefficients based on both oblique (promax) and orthogonal (varimax) rotation. Criteria for judging solutions included

examination of the scree plot, approximation to simple structure based on salient loadings of .3 and higher, and percent common variance. Following the factor analysis, reliability estimates were obtained based on Cronbach's alpha. For all scales created, Cronbach's alpha estimates exceeded .80, indicating satisfactory internal consistency reliability. In a few cases, item analyses suggested the possible deletion of items to improve overall scale reliability. However, a decision was made to retain all items given the satisfactory reliability with all items in the scale.

Differences among groups were assessed using oneway ANOVAs and independent samples t-tests. Prior to interpreting results of the ANOVAs and t-tests, tenability of the homogeneity of variance assumption was assessed using Levene's statistic. In cases where the assumption was violated in the independent samples t-test, results were based on the t-tests not assuming equal variances, and for ANOVAs, in lieu of interpreting the omnibus F tests, pairwise comparisons based on the Games-Howell procedure were examined as the Games-Howell does not require the homogeneity of variance assumption. Although factorial ANOVAs would have permitted statistical control of potentially extraneous variables, in most cases, they were not possible due to sparse cells. However, given the consistent lack of relationship between teacher perceptions and virtually all of the contextual and extraneous variables, use of oneway was deemed adequate. What is not known is the potential for interaction effects among these contextual variables.

All statistical tests were based on an alpha of .05. Where multiple tests were conducted, the Bonferroni-adjusted alpha was applied to minimize the risk of Type I error. For bivariate correlations, relationships were treated as interpretable if tests were statistically significant and if coefficients were of the magnitude of .20 and higher. Based on standard effect size criteria, correlation coefficients of .10 are considered to reflect trivial effects, even if statistically significant, whereas coefficients of .30 are viewed as moderate effects. The cutoff of .20 we selected would reflect a moderately small effect size.

Appendix

Table 1.

Licensure Areas Among All Survey Respondents

			Frequency	Valid Percent
Valid	1	agriculture	1	.2
	2	health	2	.3
	3	art	15	2.4
	4	math	23	3.6
	5	business	11	1.7
	6	music	14	2.2
	7	home ec	2	.3
	8	physical ed	14	2.2
	9	drama	2	.3
	10	science	40	6.3
	12	social studies	54	8.5
	13	early childhood	5	.8
	14	spcial education	21	3.3
	15	elementary	245	38.7
	16	speech	1	.2
	17	english language arts	39	6.2
	18	technology educ	3	.5
	19	foreign language	11	1.7
	20	industrial educ	2	.3
	21	not yet licensed	128	20.2
	Total		633	100.0

Table 2

Subject Areas in Which Respondents Were Teaching

Subject Areas	Count	Pct of Responses	Pct of Cases
agriculture	1	.1	.2
foreign language	25	2.8	3.9
art	22	2.5	3.5
health	25	2.8	3.9
bilingual education	9	1.0	1.4
math	95	10.7	15.0
business/marketing	22	2.5	3.5
music	17	1.9	2.7
home economics	8	.9	1.3
physical education	23	2.6	3.6
drama	10	1.1	1.6
science	90	10.2	14.2
social studies	82	9.3	13.0
early childhood	4	.5	.6
special education	47	5.3	7.4
elementary	251	28.3	39.7
speech	10	1.1	1.6
English as a second language	22	2.5	3.5
technology education	32	3.6	5.1
English language arts	87	9.8	13.7
trade and industry education	4	.5	.6
Total responses	886	100.0	140.0

0 missing cases; 633 valid cases

Note: The column, Pct of Cases, sums to more than 100% because some respondents were teaching in more than one subject area.

Table 3

Colorado Institutions from Which Respondents Received Teacher Preparation

			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	adams state college	10	1.6	3.2	3.2
	2.00	colorado college	10	1.6	3.2	6.3
	3.00	colorado christian univ	7	1.1	2.2	8.5
	4.00	csu	30	4.7	9.5	18.0
	5.00	univ of denver	18	2.8	5.7	23.7
	6.00	fort lewis college	8	1.3	2.5	26.3
	7.00	mesa state college	17	2.7	5.4	31.6
	8.00	metro state	52	8.2	16.5	48.1
	9.00	regis univ	18	2.8	5.7	53.8
	10.00	CU Boulder	25	3.9	7.9	61.7
	11.00	CU Colorado Springs	16	2.5	5.1	66.8
	12.00	CU Denver	20	3.2	6.3	73.1
	13.00	UNC	63	10.0	19.9	93.0
	14.00	USC	11	1.7	3.5	96.5
	15.00	western state college	7	1.1	2.2	98.7
	16.00	other	4	.6	1.3	100.0
	Total		316	49.9	100.0	
Missing	System		317	50.1		
Total			633	100.0		

Table 4

Mean Responses by Institution Regarding Adequacy of Feedback from College/University Faculty Supervisor

STUDTCH1 during student teaching, received adequate feedback from supervisor

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	9	5.56	1.13	4	7
2.00 colorado college	4	6.50	1.00	5	7
3.00 colorado christian univ	4	6.00	2.00	3	7
4.00 csu	21	6.10	1.34	2	7
5.00 univ of denver	7	5.43	1.72	3	7
6.00 fort lewis college	4	4.75	1.71	3	7
7.00 mesa state college	12	6.42	.67	5	7
8.00 metro state	35	5.66	1.43	2	7
9.00 regis univ	8	5.88	1.64	3	7
10.00 CU Boulder	20	5.75	1.62	2	7
11.00 CU Colorado Springs	8	6.50	.76	5	7
12.00 CU Denver	13	5.08	1.85	2	7
13.00 UNC	44	6.02	1.36	2	7
14.00 USC	11	4.09	1.58	2	7
15.00 western state college	4	6.00	1.41	4	7
Total	204	5.75	1.48	2	7

Note: Means are based on a scale ranging from 1 (very strongly disagree) to 7 (very strongly agree)

Table 5

Mean Responses by Institution Regarding Extent to Which Cooperating Teacher Was a Good Professional Role Model

STUDTCH2 during student teaching, my cooperating teacher was good role model

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	4	5.00	2.45	2	7
2.00 colorado college	4	4.75	2.22	2	7
3.00 colorado christian univ	1	7.00	.	7	7
4.00 csu	11	6.64	.67	5	7
5.00 univ of denver	10	5.40	2.07	2	7
6.00 fort lewis college	3	5.33	1.53	4	7
7.00 mesa state college	5	6.00	1.73	3	7
8.00 metro state	21	4.90	1.76	2	7
9.00 regis univ	3	4.33	2.52	2	7
10.00 CU Boulder	8	5.75	2.05	2	7
11.00 CU Colorado Springs	5	5.80	1.79	3	7
12.00 CU Denver	9	5.56	1.67	2	7
13.00 UNC	23	5.57	1.97	2	7
14.00 USC	9	4.67	1.66	2	7
15.00 western state college	3	5.67	1.53	4	7
Total	119	5.44	1.80	2	7

Note: Means are based on a scale ranging from 1 (very strongly disagree) to 7 (very strongly agree)

Table 6

Mean Responses by Institution Regarding Extent to Which Respondents Had a Good Student Teaching Experience

STUDTCH3 i had good student teaching experience

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	5	5.40	1.34	4	7
2.00 colorado college	5	5.60	1.67	3	7
3.00 colorado christian univ	1	7.00	.	7	7
4.00 csu	16	6.69	.48	6	7
5.00 univ of denver	9	5.22	1.99	2	7
6.00 fort lewis college	4	6.50	.58	6	7
7.00 mesa state college	8	5.38	2.20	2	7
8.00 metro state	23	5.22	1.91	2	7
9.00 regis univ	3	4.33	1.53	3	6
10.00 CU Boulder	12	5.50	2.11	2	7
11.00 CU Colorado Springs	7	6.29	1.25	4	7
12.00 CU Denver	14	6.00	1.47	2	7
13.00 UNC	22	5.41	1.89	2	7
14.00 USC	9	4.11	1.54	2	7
15.00 western state college	2	4.50	.71	4	5
Total	140	5.55	1.73	2	7

Note: Means are based on a scale ranging from 1 (very strongly disagree) to 7 (very strongly agree)

Table 7

Mean Number of Weeks in Student Teaching by Institution

MOSTUTEA how many weeks was your student teaching assignment

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	10	17.60	2.591	11	20
2.00 colorado college	10	17.90	3.573	10	20
3.00 colorado christian univ	7	15.43	4.650	9	20
4.00 csu	30	17.00	2.034	9	20
5.00 univ of denver	18	14.67	2.701	13	20
6.00 fort lewis college	8	15.63	4.955	5	20
7.00 mesa state college	17	17.59	2.238	13	20
8.00 metro state	49	15.18	2.667	9	20
9.00 regis univ	17	16.24	1.678	13	19
10.00 CU Boulder	25	17.48	2.104	11	20
11.00 CU Colorado Springs	12	17.83	3.157	9	20
12.00 CU Denver	19	16.79	3.568	7	20
13.00 UNC	62	14.52	2.985	9	20
14.00 USC	10	15.40	1.713	11	17
15.00 western state college	7	16.57	2.760	11	20
16.00 other	3	15.00	2.000	13	17
Total	304	16.01	2.992	5	20

Table 8

Mean Level to Which Undergraduate Degree Provided Sufficient Breadth of Knowledge by Teaching Area

CNTPREP1 undergrad degree provided breadth of knowledge needed as teacher

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 secondary	244	5.5328	1.64146	1.00	7.00
2.00 elementary	224	5.3571	1.55530	1.00	7.00
3.00 special ed	42	4.1667	2.25147	1.00	7.00
Total	510	5.3431	1.69881	1.00	7.00

Table 9

Mean Level to Which Undergraduate Degree Provided Sufficient Depth of Knowledge by Teaching Area

CNTPREP2 undergrad degree provided depth of knowledge needed as teacher

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 secondary	252	5.2937	1.67269	1.00	7.00
2.00 elementary	229	5.1092	1.64139	1.00	7.00
3.00 special ed	44	3.9545	2.21994	1.00	7.00
Total	525	5.1010	1.74503	1.00	7.00

Table 10

Content Area Preparation Scales for Elementary and Early Childhood Teachers

Math and Language Scale (Cronbach's Alpha Reliability = .85)

- I was good at using number systems to solve problems
- I was good at using algebra to solve problems
- I was good at using geometry to solve problems
- I was good at using various tools and techniques to measure attributes such as length, weight, and mass to solve problems
- I was good at using conventional grammar, punctuation, etc.
- I was good at identifying the purpose, perspective, and cultural influences of a speaker or author

Science Scale (Cronbach's Alpha Reliability = .91)

- My understanding of chemistry was good
- My understanding of physics was good
- My understanding of biology was good
- My understanding of the composition of the earth and the processes that shaped it was good
- I was experienced in scientific investigations

Social Studies Scale (Cronbach's Alpha Reliability = .83)

- I was good at understanding political institutions such as the US government
- I was good at identifying and remembering significant events and people in US history
- I was good at identifying and remembering significant events/people in Colorado history
- I was good at knowing world geography and using it to define and study regions

General Content Preparation Scale (Cronbach's Alpha Reliability = .89)

- My undergraduate major provided me with the depth of knowledge I need as a teacher
- My undergraduate major provided me with the breadth of knowledge I need as a teacher

Table 11

Correlations among Content Preparation Areas

		PREPMATH math and language preparation composite	PREPSCI science preparation composite	PREPSOC social studies preparation composite	PREPGENL general preparation composite
PREPMATH math and language preparation composite	Pearson Correlation	1.000	.656**	.507**	.284**
	Sig. (2-tailed)	.	.000	.000	.000
	N	230	228	227	221
PREPSCI science preparation composite	Pearson Correlation	.656**	1.000	.488**	.387**
	Sig. (2-tailed)	.000	.	.000	.000
	N	228	237	233	227
PREPSOC social studies preparation composite	Pearson Correlation	.507**	.488**	1.000	.168*
	Sig. (2-tailed)	.000	.000	.	.011
	N	227	233	236	226
PREPGENL general preparation composite	Pearson Correlation	.284**	.387**	.168*	1.000
	Sig. (2-tailed)	.000	.000	.011	.
	N	221	227	226	230

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12

Classroom and Teaching Skills Preparation Scales for All Respondents

Teaching Skills Scale (Cronbach's Alpha Reliability = .84)

- I was good at incorporating mathematics in my classroom instruction
- Overall, ,my education coursework provided me with the classroom and teaching skills I needed as a teacher
- I was good at incorporating literacy in my classroom instruction
- I was good at practicing a variety of instructional methods
- I was good at using assessment results to improve my students' achievement
- I was good at using technology to enhance student achievement

Interpersonal and Classroom Management Scale (Cronbach's Alpha Reliability = .82)

- I was good at talking with parents or guardians about a student's emotional or discipline problems
- I was good at talking with parents or guardians about a student's academic performance
- I was good at managing a classroom
- I was good at preparing lesson plans

Table 13

Mean Teaching Skills Ratings by Colorado Institution

SKILLTCH teaching skills composite score

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	10	5.3667	1.14536	3.80	7.00
2.00 colorado college	9	6.5352	.58940	5.17	7.00
3.00 colorado christian univ	6	5.7500	.92201	4.60	6.67
4.00 csu	30	5.7128	1.07083	2.00	7.00
5.00 univ of denver	17	5.8922	.79123	3.67	7.00
6.00 fort lewis college	8	5.8146	.83312	4.60	7.00
7.00 mesa state college	16	5.5844	1.16176	2.80	7.00
8.00 metro state	52	5.6208	.99049	3.33	7.00
9.00 regis univ	15	5.6456	1.31473	2.83	7.00
10.00 CU Boulder	24	5.2903	1.33379	2.67	7.00
11.00 CU Colorado Springs	15	5.5833	1.29827	2.33	7.00
12.00 CU Denver	19	6.0272	.69713	4.33	7.00
13.00 UNC	62	5.3745	1.09949	2.83	7.00
14.00 USC	11	4.9424	1.12606	3.17	6.67
15.00 western state college	7	6.0119	.52358	5.25	6.50
16.00 other	2	3.5833	3.65339	1.00	6.17
Total	303	5.5889	1.10672	1.00	7.00

Table 14

Mean Interpersonal and Classroom Management Ratings by Colorado Institution

SKILCLAS interpersonal & classroom mgmt skills composite

	N	Mean	Std. Deviation	Minimum	Maximum
1.00 adams state college	9	5.2778	.53684	4.50	6.00
2.00 colorado college	9	6.1111	1.00087	4.50	7.00
3.00 colorado christian univ	7	6.2262	.99153	4.50	7.00
4.00 csu	27	5.8426	.75403	4.50	7.00
5.00 univ of denver	17	6.0049	1.17942	3.00	7.00
6.00 fort lewis college	8	5.9479	.92789	4.50	7.00
7.00 mesa state college	16	5.8594	1.16893	3.00	7.00
8.00 metro state	50	5.8033	1.10820	3.00	7.00
9.00 regis univ	15	6.1222	1.15163	3.25	7.00
10.00 CU Boulder	24	5.3333	1.41741	2.50	7.00
11.00 CU Colorado Springs	14	5.5655	1.61562	2.00	7.00
12.00 CU Denver	18	6.0556	.95486	3.50	7.00
13.00 UNC	59	5.6215	1.05742	3.00	7.00
14.00 USC	11	5.0682	1.26041	2.75	7.00
15.00 western state college	7	6.0357	.78300	5.00	7.00
16.00 other	2	2.5000	2.12132	1.00	4.00
Total	293	5.7298	1.14960	1.00	7.00

Table 15

Correlations between Content Area Preparation and Teaching Skills Preparation

		SKILLTCH teaching skills composite score	SKILCLAS interpersonal & classroom mgmt skills composite	PREPMATH math and language preparation composite	PREPSCI science preparation composite	PREPSOC social studies preparation composite	PREPGENL general preparation composite
SKILLTCH teaching skills composite score	Pearson Correlation	1.000	.636**	.425**	.345**	.255**	.458**
	Sig. (2-tailed)	.	.000	.000	.000	.000	.000
	N	577	552	242	251	249	245
SKILCLAS interpersonal & classroom mgmt skills composite	Pearson Correlation	.636**	1.000	.363**	.166**	.162*	.228**
	Sig. (2-tailed)	.000	.	.000	.010	.012	.000
	N	552	554	235	242	240	237
PREPMATH math and language preparation composite	Pearson Correlation	.425**	.363**	1.000	.641**	.508**	.260**
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000
	N	242	235	253	251	250	243
PREPSCI science preparation composite	Pearson Correlation	.345**	.166**	.641**	1.000	.519**	.388**
	Sig. (2-tailed)	.000	.010	.000	.	.000	.000
	N	251	242	251	261	257	250
PREPSOC social studies preparation composite	Pearson Correlation	.255**	.162*	.508**	.519**	1.000	.196**
	Sig. (2-tailed)	.000	.012	.000	.000	.	.002
	N	249	240	250	257	260	249
PREPGENL general preparation composite	Pearson Correlation	.458**	.228**	.260**	.388**	.196**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.
	N	245	237	243	250	249	253

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 16

Classroom and Teaching Skills Preparation Scales for Secondary Teachers

Teaching Skills Scale (Cronbach's Alpha Reliability = .8548)

- I was good at incorporating mathematics in my classroom instruction
- Overall, my education coursework provided me with the classroom and teaching skills I needed as a teacher
- I was good at incorporating literacy in my classroom instruction
- I was good at practicing a variety of instructional methods
- I was good at using assessment results to improve my students' achievement
- I was good at using technology to enhance student achievement
- I was good at managing a classroom
- I was good at preparing lesson plans

Parent Contact Scale (Cronbach's Alpha Reliability = .8979)

- I was good at talking with parents or guardians about a student's emotional or discipline problems
- I was good at talking with parents or guardians about a student's academic performance

TOPIC: CONCEPT PAPERS

PREPARED BY: WILLIAM G. KUEPPER

I. SUMMARY

This agenda item presents staff analysis of each concept papers prepared since the last Commission meeting:

Doctor of Philosophy in Nursing Education at the University of Northern Colorado

Master of Arts/Master of Fine Arts in Arts and Media at the University of Colorado at Denver

Master of Science in Nursing at the University of Southern Colorado

The report includes a summary of the issues identified by CCHE staff for each concept paper and a copy of the paper. At this time, Commission staff found no issues of role and mission, program duplication, or bona fide demand for the three proposed programs: the Ph.D. in Nursing Education at UNC; the MA/MFA in Arts and Media at UCD, and the MSN at USC.

II. ACTION

No action is required of the Commission at this time, but if the Commission wishes to have additional issues addressed or questions answered in the full proposal, these can be added to those in the staff report.

TOPIC: CONCEPT PAPER: PH.D. IN NURSING EDUCATION AT THE UNIVERSITY OF NORTHERN COLORADO

PREPARED BY: WILLIAM G. KUEPPER

I. BACKGROUND

The University of Northern Colorado has submitted a concept paper for a Doctor of Philosophy (Ph.D.) in Nursing Education (Attachment A). The program is intended to "increase the number of qualified nurses prepared specifically in nursing education at the doctoral level." Graduates of the program would be prepared to assume nursing faculty positions in educational institutions and health care agencies. The concept paper notes the shortage of nurses in the state and the nation is acute, a shortage that, nationally, could reach 400,000 in a little more than a decade. One important response to the current and projected shortages is to enlarge the capacity of nursing programs. To do so, will require an expansion in the number of nursing Ph.D.s.

The proposed program would be offered in an accelerated format allowing a student to move from the B.S.N. to the Ph.D. in four years. This would not preclude a student's obtaining a master's degree as well as the Ph.D. Although the primary target population would be holders of the B.S.N., nurses with a M.S.N. would also be accepted. To increase access to the program, the curriculum would have a web-based component as well as course work on the campus. The institution hopes to enroll 10-15 students per year in the new program

The proposed degree is within the mission of UNC and an extension of its existing nursing degree programs. The university currently offers the B.S.N. and M.S.N. degrees with strong enrollments in both.

The University of Colorado Health Sciences Center offers a Ph.D. in Nursing in the state. That degree is described in the concept paper as being focused more on the preparation of researchers rather than on preparing teaching faculty, the emphasis of the UNC program.

Commission staff see no reason that UNC should not develop a full proposal for a Ph.D. in Nursing Education.

II. ITEMS TO BE ADDRESSED IN THE FULL PROPOSAL

After reviewing the concept paper, Commission staff met with UNC governing board staff and faculty and administration from the institution. At that meeting it was agreed that the

following should be included in a proposal for a Ph.D. in Nursing Education at the University of Northern Colorado:

1. The distinction between the proposed degree program and the one currently offered at the University of Colorado Health Sciences Center.

2. An elaboration of the demand for the program among potential students and the "catchment basin" in which UNC would recruit students.

3. The necessary qualifications in a potential student to become a nurse educator through this program, including the extent of clinical experience.

4. The nature and extent of the "web-based" component of the curriculum, including how quality control will be maintained in the use of such technology.

5. An explanation of the faculty needs for the program and specifically how these needs will be met by the institution, and the development costs associated with new courses and use of non-traditional modes of instruction.

6. Details of a plan for assessment of learning outcomes and for reviewing program quality.

7. Characteristics of the program, which would allow it to achieve both a regional and national reputation.

III. INFORMING THE GOVERNING BOARD

Following this meeting, Commission staff will inform staff of the Trustees of the University of Northern Colorado of the matters to be addressed in the full proposal for a Ph.D. in Nursing Education, including any issues the Commission may raise at this meeting.

Attachment A

CONCEPT PAPER

Doctor of Philosophy (PhD) in Nursing Education
School of Nursing
College of Health and Human Sciences
University of Northern Colorado

Background

The University of Northern Colorado (UNC) School of Nursing offers baccalaureate and master's programs in nursing and has graduated approximately 3000 undergraduates and 200 master's level students. Graduates are highly regarded by health care agencies in the state and an average of 80 percent are employed throughout Colorado. The master's program in nursing education, approved by CCHE in the fall of 1988, prepares graduates for the teaching role in both educational institutions and health care settings.

This proposal for the PhD in Nursing describes the initiation of a doctoral program in Nursing Education utilizing the strengths of the nursing faculty and the unique resources of the University of Northern Colorado in relation to the preparation of educational personnel. The escalating shortage of registered nurses in the United States is compounded by an even more critical shortage of nursing faculty.

Description of the PhD in Nursing Program

The primary goal of this program would be to increase the number of qualified nurses prepared specifically in nursing education at the doctoral level. The proposed Ph.D. program in nursing at UNC would be offered in an expedited bachelors of science in nursing (BSN) to PhD format. Students, however, may choose to receive the master's degree in nursing during their progress through the doctoral program or enter with a master's and complete the doctoral degree as well. The proposed BSN to PhD would involve four years of study that would include a Web based component as well as on-campus experiences in order to increase access to potential students across the state. Graduates of the program would be qualified to fill nursing faculty positions in educational institutions and health care agencies. An enrollment of 10-15 students per year will be sought through aggressive recruitment efforts beginning during students' baccalaureate programs.

Link to UNC's Role and Mission

One of the strengths and a unique aspect of the proposed PhD program is the emphasis on education that correlates with the statutory mission of UNC in relation to the preparation of educational personnel. The faculty expertise and educational focus across campus provide an opportunity for

nursing faculty and students to collaborate with other colleges/disciplines within the university in relation to coursework and research. The only other PhD program in Nursing in the state is at the University of Colorado Health Science Center. This program's focus is to prepare nurse researchers whereas the UNC program will emphasize the preparation of nurse educators.

The presence of the master's in nursing education program provides a strong foundation for the development and implementation of a BSN to PhD program that incorporates its coursework and faculty expertise.

Need for the Degree

The Nursing Shortage In 2000, the national supply of FTE registered nurses was estimated at 1.89 million while the demand was estimated at 2 million, a shortage of 110,000 or 6 percent. Based on what is known about trends in the supply of RNs and their anticipated demand, the shortage is expected to grow relatively slowly until 2010, by which time it will have reached 12 percent. At that point demand will begin to exceed supply at an accelerated rate and by 2015 the shortage will have almost quadrupled to 20 percent. This translates into a shortage of more than 400,000 RNs nationwide. The factors contributing to the nursing shortage include the declining number of nursing school graduates, the aging of the RN workforce, a shortage of nursing faculty, declines in relative earnings, and the emergence of alternative job opportunities. For example, currently just 9 percent of all RNs employed in the US are age 29 or under, a 41% drop in the past 15 years.

Colorado, according to the US Department of Health and Human Services, National Center for health Workforce Analysis data, experienced an 11 percent shortage (difference between supply and demand) in 2000, and will experience a 12 percent shortage in 2005, 17 percent in 2010, 24 percent in 2015, and 31.3 percent by 2020. In the Denver area alone, in July 2002, there was a reported 1660 vacancies for RNs, 56% of which were for baccalaureate and graduate degree prepared nurses.

The implications of the nursing shortage across the country are serious in terms of the effect it is likely to have on the quality of health care afforded the public. This has been validated recently by a study reported in the October 2002 issue of JAMA regarding the association between patient-to-nurse ratio, and patient mortality and failure-to-rescue (deaths following complications) among surgical patients. For each additional patient a nurse was associated with, there was a 7% increase in the likelihood of dying within 30 days of admission and a 7% increase in the odds of failure to rescue (Aiken, L. et al, JAMA, Vol.288 No. 16, Oct. 2002).

The Shortage of Nursing Faculty: Faculty shortages at nursing schools across the country are contributing to the overall decline in new enrollments at a time when the need for nurses is continuing to grow. Budget constraints, an aging faculty, and increasing job competition from clinical sites have contributed to the nursing crisis

In particular, the shortfall in the number of nursing faculty with a doctorate is a continuing and growing problem. Although the doctorate is considered the academic standard for teaching at the

collegiate level, only 49.4 percent of full-time nurse faculty in schools of nursing with baccalaureate and graduate programs in 2001 held doctoral degrees (Berlin and Sechrist, *Nurs Outlook* 2002; 50:50-6). During the past several years, the deficit of faculty has become an issue of grave concern as the current faculty workforce rapidly advances toward retirement and the pool of younger faculty dwindles. Another recurring theme contributing to the shortage of faculty includes the move of PhD prepared nurses from academia to more lucrative opportunities in the clinical and private sectors.

A study was completed in April of 2002 by the Colorado Alliance of Nursing Workforce Development Opportunities on Colorado nursing faculty vacancies.

Of the 20 nursing programs reporting, there were 19.5 full-time FTE faculty vacancies and 32.5 part-time FTE faculty vacancies.

Trends in Nursing Doctoral Programs**:** There were 79 doctoral programs in nursing across the country in 2001 with an enrollment of approximately 3000 students. The majority of programs award the PhD (88%), 17 percent the doctor of nursing science/nursing doctorate, and only one program offered the EdD. In the Western US (Arizona, California, Colorado, Oregon, and Washington), there are 8 doctoral nursing programs. A research focus remains the primary component of nursing doctorate programs in the US. Approximately, 60 percent of doctoral nursing students are part-time enrollees. The graduation rate from doctoral programs over the last 5 years is relatively stable with a small decline.

There are disturbing patterns in the demographics related to nursing doctoral students. (1) From 1999 to 2000, the mean number of years registered in a doctoral program was 8.3 years for nursing graduates, compared with 6.8 years for all doctoral awardees. (2) The current tradition among nurses is to delay doctoral study until later in their professional career. The average age of nurses in doctoral programs is 46 years and almost half of all graduates are 45 to 54 years old (48.8%). Only 6.8 percent were younger than 35. (Berlin & Sechrist, 2002). This late career pattern is a major factor in the shortage of well-prepared faculty and contributes to a limited number of years of potential productivity.

Need for Greater Emphasis on Nursing Education. There is a notable absence of inclusion of educational content/practicum in doctoral nursing programs. Few programs require educational courses or experiences. Only 5 surveyed in a 2002 study by Minnick and Halstead (*Nurs Outlook* 2002; 50:24-9) required a teaching practicum. This is despite the fact that well over half of nurses with a doctorate are employed in faculty roles. In October of 2002, the National League for Nursing issued the following position statement:

> *To insure an adequate supply of competent nurse educators, the national League for Nursing strongly urges the nursing education community to engage in an immediate and focused effort to provide increased opportunities in graduate programs to prepare faculty and to provide greater support for faculty development activities. The National League for Nursing also strongly advocates that careers in nursing education be promoted vigorously to talented*

neophytes and experienced nurses who have already demonstrated nurse educator skills, and that funding to support the preparation of nurse educators and the development of the science of nursing education be increased significantly.

In light of the looming crisis in the supply of faculty to teach in schools of nursing, the time has come for the nursing profession to outline a preferred future for the preparation of nurse educators. This crisis must be used as an opportunity to recruit qualified individuals to the ***educator role, to ensure that these individuals are appropriately*** *prepared for the responsibilities they will assume as faculty and staff development educators, and to implement strategies that will serve to retain a qualified nurse educator workforce.*

The National League for Nursing asserts that the nurse educator role requires specialized preparation and every individual engaged in the academic enterprise must be prepared to implement that role successfully. In addition, each academic unit in nursing must have a cadre of experts in nursing education who provide the leadership needed to advance nursing education, conduct pedagogical research, and contribute to the ongoing development of the science of nursing education.

Need for a New Educational Pathway to Doctoral Nursing Preparation. There is a need for a new educational and research tradition in nursing education that includes a focus on supporting doctoral preparation earlier in a nursing career (National Institutes of Nursing Research, 2000). Earlier age entry into doctoral study and full-time doctoral study are imperative. One such strategy is the BSN to PhD program, an expedited program option. Such an option has been successfully initiated at Oregon Health Sciences University and the University of Michigan in 2001 and served as a model for this UNC initiative**.**

Goals and Objectives of the Ph.D. Program in Nursing Education

The primary goal is to increase the number of nurses with a doctorate in nursing education. In addition, the expedited program option, BSN to PhD, will serve to increase the number and length of nursing faculty careers by encouraging earlier entry into a doctoral program.

The PhD program in Nursing Education is designed to focus on the development of teaching competency in the discipline of nursing, both clinical and theoretical, as well as the development of a research trajectory specific to nursing education.

Graduates of the program will

*Demonstrate exceptional teaching expertise both in the clinical and theoretical context utilizing a variety of methods and technologies

*Complete an original investigation that provides evidence of independent thinking, scholarly ability, critical judgment and knowledge of research methods and techniques

*Utilize leadership strategies for ethical, political, socio-cultural and economic issues influencing nursing education, the health care system, and health and nursing

*Develop expertise in a specific aspect of nursing science including clinical methods or applications

Program Needs

The primary resource needed to implement the program will be two new full-time faculty positions at the assistant, associate or professor level, with experience in graduate nursing education and a history of relevant research. Institutional support of these and existing nursing faculty for research and scholarly activities will need to be addressed.

Existing classroom and seminar space in Gunter Hall where the SON is located will accommodate course scheduling. Two new faculty can be housed in nursing part-time faculty offices. Re-assigning two offices in Gunter Hall to nursing or designing two new office complexes on the second floor of Gunter Hall, however, would be more desirable.

Of the 18 nursing faculty currently in the SON in academic year 2002-03 who teach at both the undergraduate and graduate level, 10 hold the doctoral degree. Thus, there is a cadre of qualified faculty to assist in the development and implementation of the PhD program in nursing. The present master's in nursing education program enrolls approximately 25 students per year. The approximately 3 FTE faculty involved in teaching in this program will also be involved in the doctoral program. This would include teaching, guiding the student's development of teaching expertise, and mentoring student research.

Student scholarships for this fast paced program will be developed or sought in a number of arenas. Schools of Nursing with faculty shortages will be encouraged to provide student scholarships or loans that would require graduates to work as faculty for each year of loan repayment or scholarship funding with commitment pay-off beginning when the graduate degree is awarded. Federal dollars will hopefully be available through the recently enacted Nurse Reinvestment Act (2002) that has a provision to encourage careers as nursing faculty and assist nurses in furthering their education.

Program Review and Assessment

The BSN to PhD program will be developed based on standards adopted by the American Association of Colleges of Nursing (AACN). These quality indicators address faculty quality, curriculum, adequacy of resources, student characteristics and an evaluation plan.

The SON will also conduct a program review following the CCHE review process for new degree programs and the program review schedule of the College of Health and Human Sciences.

Length of Study/Degree Requirements

The anticipated time to completion of the program is four years. It is possible to exit the program in the middle of the program with a master's degree in nursing, or enter the program with a master's degree and begin doctoral study. It is also possible for students who wish to add a master's degree in nursing to the BSN to PhD to do so, although this may require added credit hours depending on emphasis requirements.

The program of 96 credit hours will distribute requirements as follows:

33	Nursing Education	The professorial role; coursework/experience in teaching strategies, curriculum & instruction, informatics/technology, clinical teaching, educ. theory, faculty role, academic policy & administration, and teaching practica.
30	Nursing Science/Knowledge	nursing science & philosophy, health policy, nursing specialty content (i.e. holistic nursing, chronic illness, transcultural Nursing), nursing theory & theory construction, adv. pathophysiology, adv. pharmacology, adv. health assessment and advanced clinical practice
27	Research/Dissertation	advanced research methods/design, statistics, applied research, dissertation (12 cr)
6	Electives	courses should prepare the student to develop comprehension of the work of other disciplines at an advanced level.
96	Credit hours	

Admission

In addition to the UNC Graduate School requirements for admission into a doctoral program, applicants will be required to submit evidence of the following:

- BSN from an NLN or CCNE accredited nursing program
- Current RN licensure
- Professional Resume / Portfolio
- Submission of an original paper/project reflecting research ability/potential

- Three letters of recommendation (at least one that addresses the applicant's interest in/potential for teaching from a former nursing faculty)

- Submission of goals or a personal statement of interest in nursing education

* Experience: Although nursing practice experience is not required for admission, students will be encouraged from the beginning of the program that it is important to secure nursing employment during the months/weeks when school is not in session. Clinical experiences will be built into required curriculum hours.

Recruitment

In an effort to address a major issue, i.e., how to institute a rapid progression program for nurses interested in a career in education, an intensive recruitment program will be developed. Since nurses often significantly delay pursuit of a doctoral degree, incentives are necessary to highlight this program that specifically targets post-baccalaureate student early in their professional career. To that effort, strong baccalaureate nursing students in the region with interests in education and research will be identified and will be provided career counseling as well as assistance in obtaining financial support. The profile of the recruit being sought is a student who has demonstrated the potential for making a significant contribution to nursing and nursing education, a GPA of 3.5 or higher, excellent GRE scores and has obtained the bachelor's degree in nursing within the past 3 years. Masters prepared nurses who demonstrate interest and aptitude for nursing education will also be considered for mid-point entry into the program.

Advising and on-going evaluation of student performance

Upon admission each student will be assigned an academic advisor/mentor who functions as described in UNC Graduate School Policy throughout the student's program. Students in conjunction with a three person doctoral degree committee will prepare a plan of study that clearly specifies their course requirements, research tools, and measurement of student outcome competencies. A matrix of these outcome competencies for purposes of assessment follows:

Ph.D. Degree in Nursing Education
School of Nursing
Doctoral Comprehensive Performance Assessment
Matrix of Performance Options

Each student will identify how the competency may be demonstrated in each area below:

Areas of Competence For the PhD	Written Performance	Oral Performance	Other
Theory: a. The study and application of nursing theory as related to the practice and education of nurses. b. The study and application of education learning theory as related to nursing.			
Clinical Competence The application of an advanced knowledge base to the nursing practice discipline			
Effective teaching Demonstration of the application of teaching /learning principles in collegiate education of nurses			
Scholarly Inquiry The study and application of advanced procedures and research methods in the nursing discipline			
Scholarly Activity The planning, development and presentation of scholarly work			
Leadership/Administration Study and application of procedures and methods for participating, mentoring, applying methods of leadership and management in the discipline			

In conclusion, the PhD program in Nursing Education at the University of Northern Colorado will offer an innovative solution to both the nursing and faculty shortage in Colorado. The particular strengths of the School of Nursing and the University in education and technology will be utilized in the development and implementation of the program. The Nursing Education program will reflect professional standards for doctoral programs in nursing and will be assessed on an ongoing basis based on university and CCHE guidelines.

TOPIC: **CONCEPT PAPER: MASTER OF ARTS/MASTER OF FINE ARTS IN ARTS AND MEDIA AT THE UNIVERSITY OF COLORADO AT DENVER**

PREPARED BY: **WILLIAM G. KUEPPER**

I. SUMMARY

The Regents of the University of Colorado have submitted a concept paper for a Master of Arts (M.A.)/Master of Fine Arts (M.F.A.) in Arts and Media at the University of Colorado at Denver (Attachment A). The program is "designed to prepare students for 21st Century professional and academic careers in a broad array of fields that relate to the intersection of the arts, technology and commerce."

Commission staff believe that the proposed graduate program is within the mission of UC-Denver with its existing emphasis on arts and media. No other institution in Colorado offers a graduate degree program in this field. The concept paper states that no other institution in the United States has a program, which "explore(s) art, technology and commerce in the interdisciplinary studio environment" in the way the proposed program would. On the other hand, the proposed program may compete for students with UC-Denver's recently approved M.S. in Recording Arts.

Several matters listed in Section III need to be addressed in a full proposal. In the view of Commission staff, the most significant issue with the proposed degree is the capacity of the institution to offer the program, especially in light of budget reductions, and other degree proposals from the Regents that are anticipated for Commission review.

II. BACKGROUND

The proposed program is designed to: 1) "foster the discovery of knowledge and applications" in technology and innovative artistry; 2) "help redefine the role of the artist and his/her art" in a rapidly changing cultural and business environment; and 3) "prepare skilled practitioners" for the secondary and higher education communities "who can bridge the worlds of arts and entertainment, the traditional and technological media, the museum and the marketplace."

The typical preparation for the program will be an undergraduate degree in the visual or performing arts, film or multimedia. Students already holding an M.A. in the arts may also be accepted into the program.

The concept paper posits that two factors point to a potential demand for the proposed degree

program. First, while Colorado has been exceeding the national growth rate of undergraduate degrees awarded in the arts, the growth rate of graduate degrees is fairly modest. Second, employment projections for Colorado in arts-related fields show a growth rate above that for employment in general. A projected shortage of graduates appropriately trained for work in these fields is described in the concept paper as being particularly acute in the Denver metro area with its concentration of business and industry in the arts and entertainment fields.

The concept paper notes the particular advantages that CU-Denver has to offer a cross-disciplinary degree program at the interface of the arts, technology, and business. For example, its College of Arts and Media includes departments of Music and Entertainment Industry Studies; Theater, Film and Video Production; and Visual and Multimedia Arts.

The M.A. will be a 33-credit course of study, including a research thesis, and is designed to be completed in two years. The MFA, a performance-oriented, terminal degree in the field, will require 62 credits, including a culminating creative works portfolio or performance project. The M.F.A. can be completed in three years.

Both degrees contain discipline-specific and interdisciplinary coursework. The M.A. will provide approximately 55 percent in required classroom work, 27 percent in practical studio course work, and 18 percent in elective course work. The M.F.A .will provide approximately 63 percent in practical studio course work, 20 percent in required classroom work, and 17 percent in elective course work. These percentages align with accreditation requirements in the visual arts, music and theatre. While the program will be "based in a foundational arts discipline, students will participate in multidisciplinary seminars each term. In those seminars, students will have the opportunity to share research and, creative work, and to converse with professionals in the field.

III. ITEMS TO BE ADDRESSED IN THE FULL PROPOSAL

After discussions between Commission staff and representatives of the institution and the governing board, it was agreed that the following would be included in the full proposal for an M.A. and M.F.A. in Arts and Media:

1. Differences in the curricula for the M.A. and the M.F.A. that distinguish one degree from the other, and the conceptual similarities in the two curricula that support the two being considered in one proposal.

2. Characteristics of the program that distinguish it from UCD's Recording Arts graduate program. Specifically, could a student interested in studying the recording arts earn the proposed degree?

3. How technology will be employed in delivering the program.
4. Advantages in the job market that holders of these graduate degrees would have over someone with only a baccalaureate degree in the field(s) and specific examples of job opportunities for holders of the proposed degrees.

5. A comprehensive analysis of the resources needed for the proposed degree program, and, given the current budget situation in Colorado, how the institution and the Regents will support the program.

6. The specific agreements made for utilization of space needed on the Auaraia campus.

7. How the proposed degrees will impact existing programs at UCD.

8. The assessment plan that will be employed to assess the learning outcomes of students in the program.

IV. INFORMING THE GOVERNING BOARD

Following this meeting, Commission staff will inform the governing board staff of the above matters and any others that may be raised by the Commission.

Attachment A

Master of Arts ● Master of Fine Arts in Arts and Media
University of Colorado at Denver
College of Arts and Media

Section 1. The Concept Paper

An innovative approach to intersections of art, technology and commerce…

While most graduate programs in the arts and media incorporate and encourage some interdisciplinary and/or elective arts coursework, there are few graduate programs in the United States that have elected this concept as a foundation to their programs. One such exception is the Master of Fine Arts in Studio program at the School of the Art Institute of Chicago.

As the arts and related media continue to expand and find increasing ways of intersecting with technology and commerce, the once clear lines that existed to define the various arts disciplines will continue to dissolve in order to meet the innovative challenges and needs of the world of industry.

Because of its stated mission, CU-Denver's College of Arts and Media is in a unique position to meet programmatically this growing need through the implementation of the graduate programs outlined in the following Concept Paper. The College is committed to serve as an intersection of art, technology, and commerce, and aims to integrate interdisciplinary ways of learning in its classrooms, studios, galleries, concert halls and theatres.

I. BASIC DESIGN

These graduate degrees are designed to prepare students for 21st Century professional and academic careers in a broad array of fields that relate to the intersection of the arts, technology and commerce. Career fields include not only traditional arts disciplines like visual art, music, theatre and film/television, but also include applied fields in entertainment, communications, technology and design. The Master of Fine Arts degree is designed for the advanced interdisciplinary artist-practitioner, while the Master of Arts is designed to satisfy needs of the interdisciplinary artist-scholar.

Each degree program is based in a foundational arts discipline (e.g. visual art, music, theatre, film/television, multimedia), where studio classes in the discipline foster student mastery of content knowledge and technical skill, provide a range of experiences that develop student confidence, and develop skill, knowledge and experience in the application of new technologies and commerce to the discipline. Students participate in multidisciplinary studio seminars each semester, where students and faculty share current research and creative work and participate in conversations with working professionals in a wide range of fields. Elective courses will allow each student to develop additional skills and knowledge in arts-related disciplines, including Education, Business, Computer Science, and Architecture. A limited number of graduate transfer credit hours in applicable arts courses will be accepted, and residency will be required for the completion of either or both programs.

Students may choose the degree track that best meets their career and educational objectives. The Master of Arts degree is a two-year (four-semester), 33 credit hour program of study that culminates in a Research Thesis. The Master of Fine Arts degree is a three-year (six-semester), 62 credit hour terminal degree program that culminates in a Creative Work Portfolio or Performance Project.

QUALITY OF BODY OF KNOWLEDGE

Master-level research and established texts in visual art, music business and performance, theatre, film/television and multimedia are abundant and readily accessible. There is a demonstrated need for more scholarly inquiry and literature on multidisciplinary creative work that intersects the traditional arts, new technology and commercial applications in each of the arts. The M.F.A. and M.A. degree programs will contribute to the body of knowledge in these emerging cross-disciplinary fields. (See Selected Bibliography in Appendix 2.)

SCHOLARLY WORK IN THE FIELD

There is an established body of scholarly and creative work related to the disciplines of visual art, music business and performance, theatre, film/television and multimedia. Textbooks, professional journals, convention and conference proceedings, master's theses, doctoral dissertations and trade journals report on the research, practice and application of these disciplines in both the arts and entertainment industries. There is a demonstrated need for more scholarly inquiry and literature on multidisciplinary creative work that intersects the traditional arts, new technology and commercial applications in each of the arts. The M.F.A. and M.A. degree programs will contribute to the body of knowledge in these emerging cross-disciplinary fields. (See Selected Bibliography in Appendix 2.)

PROFESSIONAL ASSOCIATIONS AND RESPECTED JOURNALS

Each arts discipline has educational, professional and commercial associations and trade associations. These organizations produce a wide variety of publications and journals that are scholarly, creative, or commercial in focus and advance current research and practice in these fields. (See Professional Associations in Appendix 1.)

II. GOALS OF THE PROGRAMS

Both of the proposed degree programs share the same fundamental goal to create graduate programs in the arts and media that integrate interdisciplinary modes of learning and creating that focus on intersections of the arts, technology and commerce. Both programs, however, do so at different levels of depth and concentration with varying degrees of academic focus and rigor, in order to meet the academic and artistic needs and employment goals of potential students. The programs aim to provide advanced academic and studio experience in order to prepare students for careers in academia and/or the professions.

Both of the proposed graduate degrees are comprised of practical studio work in a discipline, scholarly study, inquiry into complementary arts or entertainment applications, and elective studies. Both degrees contain discipline-specific and interdisciplinary coursework. The M.A., a research-oriented degree, would provide approximately 55% in academic course work, 27% in practical studio course work, and 18% in elective course work. The M.F.A., a performance-oriented degree, would provide approximately 63% in practical studio course work, 20% in academic course work, and 17% in elective course work. These percentages align with accreditation requirements in the visual arts, music and theatre.

Further, these programs are designed to fulfill identifiable needs in a modern and dynamic technological society. First, the programs foster the discovery of 21st century knowledge and applications of the ever-expanding field of technology and innovative artistry that has transformed the arts and media during the latter half of the 20th century. Second, the goal of both of the proposed programs is to help redefine the role of the artist and his/her art to meet the challenges posed by a culture and a business environment that is experiencing rapid and unpredictable change precipitated through technological innovation, globalization, and the exponential increase in the demand for content created by American arts and entertainment industries. Third, the programs will prepare skilled practitioners who can fill a growing need for experienced educators in the secondary higher education communities who can bridge the worlds of art and entertainment, the traditional and technological media, the museum and the marketplace.

III. TARGET MARKET

This program is designed for students who desire career preparation for the broad array of arts and media-related industries. An undergraduate degree in the visual arts, music, theatre, film or multimedia is a typical prerequisite for candidacy in this program. CU-Denver's current undergraduate degrees (BA, BFA, BS) in visual arts, music, theatre, multimedia and film/video provide models for prerequisite preparation. Candidates from arts and arts and media-related undergraduate programs in Colorado, the Rocky Mountain west, the nation and international programs with similar preparation will be targets for recruiting. Students with a current M.A. degree in the arts or those wishing to transfer from other M.A. or M.F.A. arts programs are viable candidates for the two proposed degree programs.

STUDENT DEMAND

The visual and performing arts have grown rapidly as a chosen field of studies by undergraduates. Nationally, from 1970 to 2000, first bachelors' degrees granted in the arts increased by an annual average of 3.1%, exceeding the average annual 1.6% growth in bachelors' degrees in all fields. From 1986 to 1999, the period for which the Colorado Commission on Higher Education's statistics on degrees granted are available, the annual growth in arts-related bachelors' degrees in Colorado averages 5.8%. (National Digest of Educational Statistics 2001, National Center for Educational Statistics, U.S. Department of Education [NCES 2002-130], Table 255; Degrees Granted by Program Area and Institution, Colorado Commission on Higher Education, April 2000 at http://www.state.co.us/cche/degtoc.html).

In contrast to the high rate of growth in undergraduate degrees awarded in the arts, the number of masters' degrees awarded in the visual and performing arts has grown more slowly in Colorado, at 1.2% since 1986. Colorado's growth rate is lower than the national average of 2.1%. (National Digest of Educational Statistics 2001, National Center for Educational Statistics, U.S. Department of Education [NCES 2002-130], Table 256.) This is a surprising statistic, since Colorado's growth in undergraduate education in arts disciplines outstrips national growth rates so significantly. These data lead to the conclusion that Colorado public higher education is not keeping pace with national demand for graduate level degree programs in arts and entertainment fields. One might assume that Colorado's undergraduates are leaving the state for graduate study in these areas. Another possible explanation for this phenomenon is that the portfolio of graduate degree programs being offered currently in Colorado is failing to connect in an essential way with student and employer interest for specific kinds of educational credentials and experiences at the graduate level, particularly in the arena of new media and its intersection with traditional arts disciplines. The proposed degrees would be designed to address those graduate education needs that are unmet in the current portfolio of graduate offerings.

Coupled with Colorado employment projections in arts and arts-related fields (See Appendix 6), the slow growth in graduate education in arts disciplines is creating a gap in the production of highly trained workers with appropriate degrees. This is particularly true in the immediate Denver area, where no public higher education institution offers masters' level instruction and degrees in arts disciplines to meet the demand for new positions in Colorado that are projected to grow at several times the national average. The first public graduate program in a related arts field, the Master of Science in Recording Arts, was submitted by UCD's College of Arts and Media for CCHE consideration in June 2002. Approval by CCHE was granted in August 2002. The Master of Science in Recording Arts began its program in Fall 2002.

IV. CAMPUS MISSION

The Denver Campus of the University of Colorado has the exclusive mission to offer graduate degrees and graduate certificate studies for the Auraria Higher Education Center. It enrolls the largest percentage of graduate student population of all institutions in the state. This campus, additionally, has targeted support of the cultural, technological and business educational needs of the region as part of its mission.

COLLEGE STRATEGIC ACADEMIC PLAN

The UCD College of Arts and Media (founded in 1998), with Departments of Music and Entertainment Industry Studies; Theater, Film and Video Production; and Visual and Multimedia Arts, is positioned to service the graduate needs of the state and, in particular, the Denver metropolitan region. Its continued and growing relationships with commerce and industry (e.g., the Starz FilmCenter) assure instructional and financial participation that strengthens the academic integrity and efficiency of its programs. The development of graduate programs in Arts and Media has been part of the College's Academic Strategic Plan since 1999. This proposal directly relates to the "CU-2010" vision of the University of Colorado, focusing on initiatives for "A Culture of Excellence" and "A University Without Walls". (See Academic Strategic Plan for the College of Arts and Media in Appendix 4 and President Hoffman's CU-2010 Vision in Appendix 5.)

INSTITUTIONAL STRENGTHS

- ***Undergraduate Programs in Arts and Media.*** The College has created and grown a number of signature undergraduate programs that provide an excellent foundation for the proposed graduate degrees. These programs include multimedia design, music industry studies, and film and video production. A new undergraduate emphasis in 3-D graphics and digital animation was launched in Fall 2002, thanks to a start-up grant from the Colorado Institute for Technology. In addition, CU-Denver has almost three decades of experience in the preparation of undergraduate artists in the areas of painting, drawing, photography, sculpture, art history, music performance, theatre performance, and theatre design and technology. The undergraduate program in the recording arts as well as the music business program are nationally recognized and ranked within the top ten by the Audio Engineering Society and the Music and Entertainment Industry Studies Association, respectively.

- ***Current Faculty.*** The College has been building a faculty with a balance of formal academic study and professional experience in arts, technology and business facets of both the cultural

and entertainment sectors. All tenure-track and tenured faculty have the appropriate credentials to teach in the proposed program. (See Faculty Vitas in Appendix 3.).

- ***Visiting Artists and Professional Lecturers.*** The College has an active and growing visiting artists and professional lecturers program, providing students and faculty with models of excellence and cutting-edge thinking from cultural, technological and entrepreneurial perspectives.

- ***Current Interdisciplinary Connections.*** Interdisciplinary instruction in art, technology and commerce has been at the core of the College's mission since its creation in 1998. The proposed programs will only strengthen those connections as well as build new hybrids that bridge the traditional arts like music, visual art, film and theatre. Additional cross-disciplinary connections, both formal and informal, exist currently between the College of Arts and Media and CU-Denver's College of Engineering and Applied Sciences, School of Education, and the College of Liberal Arts and Sciences. It is anticipated that these natural links will continue and expand upon approval of these proposed degree programs.

- ***Excellent Facilities.*** The instructional environment for arts and media on the CU-Denver campus has seen considerable investment and development over the past five years, investment that has been shared successfully through careful negotiations and thorough agreements crafted with our Auraria sister institutions: the Metropolitan State College of Denver and the Community College of Denver. Excellent facilities now exist for advanced instruction in the recording arts and sciences, multimedia design, digital animation (new in Fall 2002), and music and theatre performance. Of particular note is the development of the Kenneth King Academic and Performing Arts Center, shared with MSCD and CCD, which contains four theatres, two concert halls, a dance studio, and significant shop and support space. The Starz FilmCenter, which opened in April 2002, provides excellent facilities for film exhibition and a lively education program with visiting filmmakers and related symposia. At the Lowry campus, a unique collaboration between the Community College of Aurora and CU-Denver provides strong studio facilities for student filmmakers. The Auraria Media Center provides a state-of-the art digital television production studio facility as well as a cable broadcast channel (Channel 54) open for development. The Emmanuel Gallery on campus, shared with MSCD and CCD, and the Downtown Denver Courtyard by Marriott "In Partnership Gallery" provide two excellent gallery spaces for student art exhibitions. Finally, the Arts Building, slated for a complete renovation when state capital construction dollars are available again, provides nearly 100,000 square feet of studio space for all of the arts, once again through careful and cooperative use of space with MSCD and CCD. Much of the future redesign of the Arts Building will support both the graduate programs concurrently, particularly for the visual arts and the recording arts and sciences; however, the launch of the proposed programs is not dependent upon that renovation. In addition, UCD understands fully that any implementation of the proposed MA/MFA in arts and media must be done without adversely impacting the current space utilization of the King Center and the Arts Building by MSCD and CCD. This consideration will be an important aspect for consideration in the development of the full proposal for these degrees.

V. DUPLICATION WITH OTHER INSTITUTIONS

There are no graduate degrees offered in this field of study in the state of Colorado, and no graduate programs presently offered in the U.S. explore art, technology and commerce in the interdisciplinary studio environment outlined in this concept paper. The closest parallel to the proposed degree is offered by the Queensland Institute of Technology in Australia.

VI. STATE EDUCATION NEEDS OR PRIORITIES

Colorado, and specifically Denver, is a strong and growing center of activity in cable television, telecommunications, media production, performing arts, commercial music performance, film and broadcast production, computer hardware and software development, and in the industries of audio research and manufacturing. There is a demonstrated opportunity for the University of Colorado at Denver to expand its participatory presence in these rapidly emerging areas of intersection for art, technology and commerce. The level of education required of the workforce in these industries has elevated measurably in the past decade. Existing undergraduate intern programs in related fields at CU-Denver, and continuing requests from regional employers confirm the need for advanced education in these fields within Colorado. Located in the center of both the industrial and cultural activities of the state, the proposed graduate programs will serve the needs for a skilled and innovative workforce in these arenas. Given that the majority of CU-Denver students are rooted in the Metro-Denver region and will likely remain in the region upon graduation, Colorado's cultural and entertainment sectors will directly benefit from the state's investment in these degree programs.

Advanced training in the arts and media is especially important in Colorado, where projected job growth in arts and media-related fields is very high. According to the Bureau of Labor Statistics, Colorado ranks first among the states in the projected rate of jobs for musicians, actors and other entertainers. The rate of job growth for artists is much higher than the national average (45% and 26% respectively) and for photographers, the state growth rate is projected to be double the national norm. Much of this growth can be attributed to the location of cable, multimedia, entertainment and high technology companies in this region. A search of employers classified by Standard Industry Codes yields 8,245 Colorado firms in fields directly related to the arts and entertainment. (See Appendix 6.) In addition, there are many firms in fields such as biomedical and aerospace technology, law, publishing, software development, petroleum and other engineering disciplines that hire individuals to staff working groups in visual or audio-related media and the arts.

APPENDICES:

Appendix 1	Professional Associations
Appendix 2	Selected Bibliography
Appendix 3	Faculty Vitae
Appendix 4	CAM Academic Strategic Plan
Appendix 5	CU 2010 Vision
Appendix 6	Representative Colorado and National Employers in Arts and Media
Appendix 7	U.S. Employers/Internship Sites for Arts and Media
Appendix 8	Letters of Approval from CU-Denver

TOPIC: CONCEPT PAPER: MASTER OF SCIENCE IN NURSING AT THE UNIVERSITY OF SOUTHERN COLORADO

PREPARED BY: WILLIAM G. KUEPPER

I. BACKGROUND

The Colorado State University System has submitted a concept paper for a Master of Science in Nursing (MSN) at the University of Southern Colorado (Attachment A). The degree program would "complement the current baccalaureate program (at USC) and address shortage of nurses prepared at the graduate level available to serve the populations of Southern Colorado." The following statements were extracted from the concept paper.

The proposed program would emphasize the preparation of Acute Care Nurse Practitioners (ACPNs). The concept paper notes that this emphasis would distinguish the program from the other M.S.N. programs in the state, as none currently have an ACPN track.

The shortage of nurses nationwide, and in several areas of Colorado, has been well documented. As one example, the concept paper notes that Pueblo County, the prime service area of USC, has 40 percent more patients per nurse practitioner than in the northern urban counties. Additionally, the Colorado Department of Corrections, which has three-quarters of its facilities in the southern part of the state, has 40 percent of its nurse practitioner positions currently unfilled.

Acute Care Nurse Practitioners can serve as primary health-care providers, and, in a hospital setting, can manage patient care from admission to discharge. These capabilities are particularly important in areas of the state with a shortage of physicians.

The shortage of nurses includes an insufficient number both in practice and in nursing faculties at colleges and universities. According to the concept paper, the accreditation of some A.D.N. programs in Colorado may be in jeopardy because too many of the teaching staff hold only the B.S.N. degree rather than the M.S.N.

The mission of USC includes offering "selective graduate programs" especially those, which serve southeastern Colorado. Three institutions, UC Health Sciences Center, UNC, and Regis, currently offer nurse practitioner programs although none has the acute care specialization.

The concept paper reports that Centura Health Systems will make a major two-year financial contribution to assist in program implementation. While this contribution will play a significant role in getting the program started, the long-term resource issue is a critical one. Nursing programs are expensive and, in this time of budget shortfalls in the state, a thorough assessment of the university's ability to support the program is essential.

II. ISSUES TO BE ADDRESSED IN THE FULL PROPOSAL

Commission staff have discussed the paper with CSU governing board staff and with representatives of the institution. It was agreed that the following issues of role and mission, differentiation, quality, and resources would be included in a full proposal for an MSN degree program at the University of Southern Colorado:

1. Why a graduate program in nursing is seen as a higher priority at the institution than the expansion, either in enrollment or in areas of specialization, of the existing baccalaureate program.

2. The ways the program can achieve its goal of having its graduates practice in areas of high need.

3. The geographic area from which the proposed program would be expected to draw students.

4. How the proposed program would differ from those currently available elsewhere in the state, including the M.S.N. offered in the Bethel School of Nursing at the University of Colorado at Colorado Springs.

5. Program admission requirements.

6. How the program would accommodate the working professional nurse it intends to serve.

7. In what ways the program would relate to the initiative in nursing education allowing a student to go from an A.D.N. through a B.S.N. to an M.S.N. in a seamless process.

8. How instructional technology would be employed in the program to improve access and program quality.

9. The faculty and other resources necessary to implement a quality M.S.N. degree program, and how the institution will provide those resources.

10. The impact of the M.S.N. on other programs at the university, especially the B.S.N. program.

III. INFORMING THE GOVERNING BOARD

Following this meeting, the Commission shall inform the governing board about the above matters, and any additional items that the Commission may raise about the proposed Master of Science in Nursing at the University of Southern Colorado.

Attachment A

CONCEPT PAPER
Master of Science Degree in Nursing
University of Southern Colorado

The College of Education, Engineering, and Professional Studies at the University of Southern Colorado (USC) requests permission to establish a new academic-degree program entitled Master of Science in Nursing (MSN). USC currently offers a Bachelor of Science degree in Nursing. A master's degree would complement the current baccalaureate program and address the shortage of nurses prepared at the graduate level available to serve the populations of Southern Colorado.

The primary track to be offered in the Master of Science Degree in Nursing will be the Acute Care Nurse Practitioner (ACNP). This is a relatively new area of professional focus in nursing that enables the graduate to assume primary responsibility for direct care of patients with acute and chronic conditions in a variety of care settings. Acute Care Nurse Practitioners have the opportunity to practice in settings such as hospitals, institutions, emergency rooms, and urgent-care centers as well as other community-based settings. The ACNP is capable of providing health care to all age groups. Students can select an area of emphasis such as critical care, cardiology, pulmonary, neurology, oncology, trauma, as well as additional specialty areas. A study conducted by the American Academy of Nurse Practitioners (2002) noted that one of the highest-paid nurse practitioners was the ACNP with an average starting salary of $60,000 per year.

The ACNP would be a unique degree focus for Colorado, as no other institution of higher education currently offers a Master's in Nursing with an ACNP track. Other programs in the state offer family, adult, geriatric, neonatal, and pediatric nurse- practitioner tracks. According to the All Nursing Schools' web site (www.allnursingschools.com) there are only thirty-four ACNP programs across the nation. The program should attract local as well as national student interest.

The current nursing program is well prepared for a master's degree program offering due to its record of achievement in baccalaureate-nursing education. According to the State of Colorado Board of Nursing (2002), the USC pass rate for the NCLEX exam is 90.0 percent over the past five years (1997-2001) compared to a state average of 88.2 percent. This pass rate is the second highest in the state for baccalaureate degree programs.

The Department has seven full-time faculty members of whom four hold Ph.D. degrees and three are Master's prepared. While one of the current faculty members will retire this year, the salary level of that faculty line is sufficient to attract candidates holding doctoral degrees. The current faculty's academic and clinical skill areas complement each other well and they are all knowledgeable in distance learning.

The current program has a strong relationship with several clinical settings and is currently developing rural clinical sites that will be used by nurses in training. The addition of a master's program would serve to strengthen the clinical collaborative relationships that USC has in the Southern Colorado area.

The MSN program will submit a self-study to the National League of Accreditation Commission in the fall 2005. An onsite review team visit would likely take place during the fall of 2005. If accredited, the MSN students would meet the criteria for Acute Care Nurse Practitioner Certification from the American Nurse Credentialing Center (ANCC) upon completion of the program.

Currently there are three nursing master's programs in Colorado. If USC achieves accreditation, it would be the only accredited Acute Care Nurse Practitioner program in Colorado. The MSN would be a competitive degree that would bring increased enrollment to USC. The rationale and desire for this new degree program rests on the following points.

The health-care industry is experiencing a shortage of nurses in all scopes of practice.

There is a significant shortage of qualified nursing professionals. The serious shortage is related to several factors. For example, the United States Bureau of Labor Statistics projects a need for 765,000 additional RNs by the year 2005 to meet the health needs of the nation's aging "baby boomers." A survey conducted by the University of Colorado Health Science Center (UCHSC) and Colorado Area Health Education Center (AHEC) Program in August 2001 noted that the average-mean age for nurses in Colorado is forty-seven. This data supports the need to produce more nurses to replace those that are aging. In five years the total loss to the nursing and medical workforce may be as high as 45 percent (UCHSC, 2001).

According to the Colorado Department of Public Health and Environment (CDPHE, 2002), over 75 percent of the counties in Colorado were designated medically underserved and health-professional shortage areas. The Coalition for the Medically Underserved (CMU, 2002) noted that every county in Colorado is suffering a critical shortage of health-care providers. A shortage crisis is occurring in Colorado, specifically Southern Colorado, at all levels of nursing (CDPHE, 2001). The solution is not short term, but long term, and a commitment of resources and innovative strategies is needed to address the need for qualified nurses in Colorado and the nation.

The CDPHE (2001) also noted that the distribution of providers is uneven and in some counties especially in Southern Colorado there are fewer doctors, nurses, dentists and other providers as compared to their northern urban counter parts. The rural areas throughout Colorado have always been strapped for health-care providers, and this trend will continue if the focus remains on the urban areas.

The demand for advanced practice nurses in the health industry is rapidly expanding in Colorado.

According to the Colorado State Board of Nursing (2000), 1,652 nurse practitioners are registered in the state of Colorado. Of the 1,652 registered nurse practitioners, 80.4 percent (1,328) are practicing in Northern Colorado in the areas served by the University of Northern Colorado and the University of Colorado Schools of Nursing. For the remaining counties in Colorado, there are fewer than 19.6 percent (323) practicing nurse practitioners with only 2.5 percent (41) located in Pueblo County. There are 2,595 patients per provider in the northern urban areas as compared to 3,535 patients per provider in Pueblo County. Other medical providers appear to have the same statistical spread (CMU, 2002).

The area schools of nursing noted that over 40 percent of their faculty positions were in a critical status because they are using Bachelor of Science in Nursing (BSN) nurses to fill the vacancies instead of the required master's prepared nurses (Vojir, 1999). This will have a significant negative affect on accreditation status and quality of student outcomes.

The Department of Corrections, which has over 75 percent of their facilities located in southern and southeastern Colorado, has an over 40 percent vacancy rate for nurse practitioners. The Las Animas facility, which will house inmates who have chronic medical conditions, will need a full complement of nurse practitioners to meet the needs of the patients at that facility.

There is a new national and state initiative to offer associate-degree nurses the option to go from an associate degree in nursing through the BSN to a master's degree in a seamless process with only one initial admissions application. This project was initiated due to the high complexity of patient care and the need for nurses to have more advanced training. If this national and state project (Project Renew) sponsored by the UCHSC School of Nursing and the Colorado Association of Nurses succeeds, then the USC MSN could be utilized to support the initiative.

The shortage of physicians in Colorado increases the need for master-degree nurses.

The present critical shortage of physicians in Colorado (CMU, 2002) supports the need for Acute Care Nurse Practitioners. The ACNP can fill the void when physicians are not available providing quality care to the residents of Colorado. Many patients who do not have a designated physician are admitted to hospitals throughout Colorado. Acute Care Nurse Practitioners are ideally prepared to fill the gap as the primary health-care provider in many situations.

Acute Care Nurse Practitioners employed in emergency rooms can provide necessary care and serve as the "In-House Provider" for the patients without a designated doctor. The ACNP is capable of managing patient care from admission to discharge. Many hospitals that provide care to the uninsured and underinsured find this staffing pattern to be very cost effective. Centura Health Care System is a national chain of hospitals, clinics, and other facilities that care for Colorado residents and patients in over twenty other states. They have over 114 facilities in Colorado. As one of the major employers of nurse practitioners in Colorado, Centura has identified a need for acute-care practitioners and plans on collaborating with the program at USC in order to meet their need. Centura's goal is to initiate the ACNP model in Pueblo and then implement it throughout the nation.

The Master's in Nursing degree will strengthen the relationship between community providers, medical centers, and family-practice residency programs.

USC has already begun to develop a formal relationship with Southern Colorado Family Residency Program (SCFM), originally a University of Colorado Health Science Center program, to provide clinical physician preceptors, shared faculty, clinical sites, laboratory equipment, distant learning technology, and clinical educational opportunities. The plan is to build a strong collaboration between the SCFM and the USC MSN. The Physician Director of the Southern Colorado Family Residency Program will be designated as the Clinical Director for the MSN Advanced Practice program at USC. Along with the Clinical director and any other physical faculty members, two of the clinical nurse practitioner faculty members will be housed at SCFM. Half of the clinical nurse practitioner faculty member's time will be allotted to teaching and the other half will be allotted as to providing care to the underinsured and uninsured patients who are without a designated doctor. Centura Health Systems, one of the largest employers in the area, has committed $197,540 each year for two years to the program. This commitment will fund one full-time faculty and two part-time faculty positions as well as providing some funding for advertising, computers, software, and minor office remodeling. This relationship between the Centura Health Care System, the SCFM Residency program and USC is unique and demonstrates strong evidence of community support.

Another local partnership that is unique in the state of Colorado is the strong collaboration between Parkview Medical Center, Southern Colorado Family Medicine, and School District No. 60 which has established the School Based Wellness Centers (SBWC). The SBWC will be further developed into a Clinical Enterprise model and become an integral part of the USC Department of Nursing's effort to lead nursing education into the 21st Century. By having the students complete

some of their clinical training at the SBWC, the students will get involved in real-life, hands-on experiences providing care to the underinsured and uninsured residents of Pueblo County. The SBWC provides an opportunity for students to learn beyond the traditional classroom and to work closely with faculty on research activities.

Through this collaboration between physicians, community institutions, and higher education, many of the staffing needs for the MSN program have already been identified.

There is a significant growth in the number of students in the USC Nursing Program and in students expressing a desire to pursue graduate degrees.

In Southern and Southeastern Colorado, extensive efforts have been taken to market the nursing profession and recruit students to the USC BSN program. The USC Department of Nursing is experiencing a significant increase in enrollment in the traditional BSN program. Seventy-two students are expected for the spring 2003 entering class. This represents an 80 percent increase from the 40 students that were admitted last spring. The Department anticipates a total enrollment of over 400 students in the pre-nursing and basic nursing programs by 2005. The growth in the BSN program may be explained by the support of community providers and medical centers through tuition reimbursement and clinical faculty. Area recruitment is being performed in the local health-care facilities and K-12 Health Academies. The increase in enrollment in the basic program will also assist in supporting the proposed master's program. Resources, such as facilities and clinical sites as well as faculty can be shared. The increasing number of basic students stating a desire to continue their education and complete a MSN will assist in the success of the MSN program.

A survey of local nurses working in three Pueblo area hospitals was recently conducted. Five hundred surveys were distributed, of which 178 responded, which is sufficient for the results to be statistically significant. Of the respondents, 78 (44 percent) indicated that they were interested in a master's program in Nursing. The results also showed that respondents with less than five years of nursing practice were the most likely to seek a graduate degree. Most of the respondents who would likely enroll in the MSN were recent graduates of the USC BSN program. This suggests that the BSN program will continue to provide a steady source of MSN applicants.

Seventy-six percent of the respondents were employed full time and expected to remain so during their education. The majority of nursing employers would offer support to the MSN program through tuition reimbursement and flexible scheduling for their employees attending school. A local MSN program would be an advantage due to the tight scheduling between work, home, and school that occurs for many students.

Over 90 percent of the respondents work in acute-care or inpatient settings and expressed a desire to remain in acute care. This supports a preference for the acute-care setting and provides an ideal fit for the ACNP track to increase the likelihood the student could remain in acute-care nursing.

Of the students wanting to return for the MSN, 27 percent of the respondents lived in rural settings (over thirty miles from USC) and 51 percent lived less than fifteen-miles away. Fifty-seven percent of the respondents plan on returning to school in the near future to obtain their MSN (89 respondents). Of the 57 percent, over 75 percent would choose USC to obtain their degree (67 respondents). These respondents could provide an initial cadre of master's students to initiate and sustain the program. The MSN is projected to produce approximately 15 graduates per year.

The MSN program would support the USC/CSU-Pueblo mission and strategic plan.

The University's student profile indicates that USC provides access to higher education for students whose economic and social circumstances require that they remain in the Southern Colorado

area. An accredited MSN degree program would provide access to students in Southern Colorado and northern New Mexico. One role of the university is to prepare more residents for master's level professional positions. An accredited MSN program would meet this goal.

As a part of USC's mission to serve the needs of minorities and specifically the high Hispanic population found in the service area, the Nursing Department will focus on this population when providing graduate-level education. USC is well recognized and supported by the Hispanic Association of Colleges and Universities (HACU), which recently proposed aid for Hispanic higher education (HACU, 2000). USC is a member of HACU and has a history of competence in service to the special needs of a diverse student enrollment. As a member of HACU, USC would be eligible for funds to support higher education for nurses seeking graduate education such as the Advanced Nurse Education, Basic Nursing Education and Practice, and Work Force Diversity Program through the Bureau of Health Professions.

The development of a MSN degree is cited as a goal in the University strategic plan and the role, mission, and name change documents. The resources needed to support the degree will be in place to begin the program as soon as it receives all necessary approvals. The pledged support by Centura Health will provide start-up staff and equipment support. The resulting increase in enrollment will provide the necessary funding to continue support for the program in the future as the University assumes the cost of the theory and clinical instructors. The Physician Director of the Southern Colorado Family Residency Program will continue as the MSN Clinical Director at no cost to the University.

After approval of the MSN program, USC will have a program director, a theory instructor, and two clinical instructors as well as other support faculty. Significant work has already been performed leading to the completion of the self-study for accreditation including curriculum design, additional laboratory equipment, and development of external clinical site agreements. The University has recently upgraded the available laboratory space and has identified a dedicated classroom that will become available by the spring 2003 semester. With the addition of laboratory equipment and office upgrades that have been committed by Centura Health Systems, the equipment and facilities necessary for the accreditation will also be in place.

Although no one can predict the exact nursing education program needs that will be required by the health-care system in the future, two things are clear. First, demand for baccalaureate and master's programs will continue to grow. The health-care system increasingly requires more nurses prepared at these levels that can work independently, function in community settings, and effectively manage the primary health care of patients. Second, the nursing profession must continue to develop education programs that are integrated into the continuum of practice, yet remain flexible enough to evolve along with the changing needs of the nursing profession and the health-care delivery system (American Academy of Colleges of Nursing, 2002).

Master of Science in Nursing Curriculum

The Acute Care Nurse Practitioner (ACNP) program of study enables the student to assume primary responsibility for direct care of patients with acute and chronic conditions in a variety of care settings. These settings may include emergency departments, intensive-care units, acute-care units or specialty labs, clinics, or physician practices. Students can select an area of emphasis such as critical care, cardiology, pulmonary, neurology, oncology, and trauma, as well as additional specialty areas.

The program consists of advanced clinical practice and nursing science, built on a core of physiology, pathophysiology, and pharmacology. Clinical preceptors in various clinical settings will help the student prepare to:

- conduct comprehensive health assessments
- appraise health risks and behaviors
- order and interpret diagnostic tests
- diagnose and manage commonly occurring health problems and disease-related symptoms
- prescribe and evaluate drugs and other treatments
- coordinate care during transitions in settings
- provide guidance and counseling to restore, promote, and maintain health and quality of life
- work independently and collaboratively to enhance access to quality care for patients and families
- achieve a cost-effective, outcome-oriented practice

Graduates would be eligible for certification through the American Nurses Credentialing Association as an ACNP. The ACNP program will consists of 60 credits of course work, with 600 clinical hours. The program may be completed in five semesters or 16 months of intensive study, or within three years of part-time study. The student will work with ACNP and physician preceptors in a variety of clinical settings. Students will complete either a thesis or scholarly project.

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TOPIC: DEGREE PROGRAM NAME CHANGES

PREPARED BY: JOANN EVANS

I. SUMMARY

This agenda item describes the degree program changes that the Executive Director has approved during the month. This agenda item serves as public confirmation of an approved change unless the proposed action is not acceptable to the Commission.

In November 1997, the Commission adopted a policy requiring Commission approval of name changes that involve substantive changes to the curriculum, a different target market population, or expansion of the scope of the degree program. If non-substantive, the Executive Director approves the requested change.

A. Institution: Metropolitan State College of Denver

Current Degree Program Title: Bachelor of Fine Arts (B.F.A.) in Art

Revised Degree Program Title: Bachelor of Arts/Bachelor of Fine Arts (B.A./B.F.A.)

Approved by: Board of Trustees of Metropolitan State College of Denver

Rationale:

The revised degree title more accurately reflects the prevailing practice in the field of art.

Scope of Proposed Change:

Students majoring in Studio Art may earn a B.F.A. Students interested in Art History and Art Theory/Criticism will earn a B.A.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately, with the stipulation that students can transfer into the B.A./B.F.A. in Art with sixty (60) credit hours of the Associate of Arts (A.A.) degree and apply toward graduation.

B. Institution: University of Colorado at Denver

Current Degree Program Title: Master of Basic Science (M.B.S.)

Revised Degree Program Title: Master of Integrated Sciences (M.I.S.)

Approved by: Regents of the University of Colorado, August 8, 2002

Rationale:

The purpose of this change is to better reflect the nature of the degree program and to provide a more favorable connotation to prospective students and potential employers of graduates of this program.

Scope of Proposed Change:

No change in curriculum will be made as a result of the name change. Students currently enrolled in the existing division will be notified of the change.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately.

C. Institution: Colorado School of Mines

Current Degree Program Title: Master of Science in Physics (M.S.)

Revised Degree Program Title: Master of Science in Applied Physics (M.S.)

Approved by: Colorado School of Mines Board of Trustees, December 12, 2002

Rationale:

To improve the alignment of the Department of Physics graduate program offerings (the Department already offers a Ph.D. in Applied Physics), to emphasize the applications orientation of the M.S. degree, and to couple more effectively with the applications character of the B.S. in Engineering Physics, especially as it relates to the development of a "5-year" combined B.S.-M.S. program.

Scope of Proposed Change:

No change in curriculum will be made as a result of the name change.

Proposed Action by the Executive Director:

Approve the degree title change as requested, effective immediately.

TOPIC: FTE – SERVICE AREA EXEMPTIONS

PREPARED BY: SHARON M. SAMSON

I. SUMMARY

This agenda item outlines approved service area exemptions that allow community colleges, local district colleges and area vocational school to provide short-term access to a certificate or degree program not available in another institution's defined service area. The approved FTE may be claimed for state revenue support.

C.R.S. 23-1-109 limits state support to credit hours offered within the geographic boundaries of the campus. The geographic service areas for community colleges defined in CCHE policy Section I, Part N *Service Areas of Colorado Public Institutions of Higher Education* apply to two-year colleges, area vocational schools (AVS), Adams State College (ASC) and Mesa State College (MSC).

While the Commission recognizes that the FTE Policy may not address every possible circumstance, institutions may request an exemption from the Commission when encountering a circumstance that the policy does not explicitly address. Exemptions approved by CCHE staff and entered into the public record do not alter or establish the service area, but only apply to the institution seeking an exemption for the particular circumstance for a specified period of time.

CCHE staff approved the following service areas exemptions. No further action is needed.

INSTITUTION	HOST INSTITUTION	PROGRAM	SERVICE AREA	FTE	Approval Period
Community College of Denver	Red Rocks Comm. College	Paralegal	Jefferson County	.5	1/2003 – 12/2003
Morgan Comm. College	Arapahoe Comm. College	Young Farmers	Arapahoe County Jefferson County	3	1/2003-12/2005
Morgan Comm. College	Arapahoe Comm. College	Agri-Business	Arapahoe County Jefferson County	6	1/2003-12/2005
Morgan Comm. College	Arapahoe Comm. College	Heavy Equipment	Arapahoe County	10	1/2003-12/2005

			Jefferson County		
Morgan Comm. College	Arapahoe Comm. College	Transportation Mgmt	Arapahoe County Jefferson County	3	1/2003-12/2005
Morgan Comm. College	Red Rocks Comm. College	Young Farmers	Gilpin, Park and Clear County	2	1/2003-12/2005
Morgan Comm. College	Red Rocks Comm. College	Agri-Business	Gilpin, Park and Clear County	6 +1	1/2003-12/2005
Morgan Comm. College	Red Rocks Comm. College	Heavy Equipment	Gilpin, Park and Clear County	4	1/2003-12/2005
Morgan Comm. College	Red Rocks Comm. College	Transportation Mgmt.	Gilpin, Park and Clear County	2	1/2003-12/2005
Morgan Comm. College	Trinidad State Jr. College	Heavy Equipment	Alamosa, Trinidad, Walsenburg	4	1/2003-12/2005

Exemption requests for courses or degrees that are delivered in another community college service area where the community college is approved to offer the program are not approved for state funding.

TOPIC: REPORT ON OUT-OF-STATE INSTRUCTION

PREPARED BY: ANDREW BRECKEL III

I. SUMMARY

The Commission's statutory responsibilities include the approval of instruction offered out-of-state beyond the seven states contiguous to Colorado. By action of the Commission in 1986 the Executive Director may act for the Commission to approve or deny requests from governing boards for approval of courses and programs to be offered by their institutions. This agenda item includes instruction that the Executive Director has certified as meeting the criteria for out-of-state delivery. It is sponsored by the Trustees of Metropolitan State College of Denver and the Board of Regents of the University of Colorado.

II. BACKGROUND

Prior to 1983, instruction out-of-state was offered at will by Colorado institutions, primarily through the Extended Studies Program. An Attorney General's opinion of July 3, 1980, concluded that there was no authorizing legislation, and out-of-state programs were discontinued. In 1983, the General Assembly enacted legislation, that authorized non-state-funded out-of-state instruction but also required governing board approval. When the instruction is beyond the contiguous states, Commission approval is required as well.

At its meeting of May 2, 1986, the Commission delegated authority to the Executive Director to determine when out-of-state instruction beyond the contiguous states complies with statutory requirements. In June 1986, the Commission received the first notification of out-of-state instruction certified by the Executive Director. Additional approved out-of-state instruction is reported to the Commission as it is received and reviewed.

III. ACTION

The Executive Director has approved the following out-of-state instruction.

The Trustees of Metropolitan State College of Denver has submitted a request for out-of-state instructional programs, delivered by Metropolitan State College of Denver.

ICS 490B Seminar on Egypt. Dates: June 28-August 1, 2003. Location: Egypt.

GER 1800 International German Year I, GER 2800 International German Year II, or GER 3800 International Advanced German. Dates: May 30 - June 28, 2003. Location: Munich (The Federal Republic of Germany)

FRE 1800 International French I, FRE 2800 International French II, or FRE 3800 International Advanced French Dates: May 31-June 28, 2003 Location: Hyères, France

HMT 488E Advanced Study of Wine Dates: May 19-June 3, 2003. Location: Denmark, France, and Germany.

HMT 4810 Tour Management Dates: May 19-June 3, 2003. Location: Denmark, France, and Germany.

The Board of Regents of the University of Colorado has submitted a request for out-of-state instructional programs to be delivered by the University of Colorado Health Sciences Center.

Keystone Symposia on Molecular & Cellular Biology-2003 Series, A series of sixteen programs to be presented in Santa Fe and Taos, New Mexico; Alberta, Canada; Snowbird, Utah; Big Sky, Montana; and Tahoe City, California occurring from January 7 – April 6, 2003.

"Challenges and Changes in Health Care," described herein as an out-of-state instructional program to be presented in Orlando, Florida on February 5-7, 2003.

"Peripheral Arterial Disease (PAD) & Intermittent Claudication: Standards of Care: Do the Numbers Tell All?" described herein as an out-of-state instructional program to be presented in Ft. Lauderdale, FL; Long Beach, CA; Rosemont, IL;Washington, D.C.; and Boston, MA on February 15, April 4, June 19-22, October 16-18, and November 7-9, 2003.

"23rd Annual Jackson Hole Urologic Conference" described herein as an out-of-state instructional program to be presented in Jackson Hole, Wyoming on January 25-31, 2003.

"Beyond the Headlines: Evaluating the Comparative Risks of Over the Counter (OTC) Analgesics" described herein as an out-of-state instructional program to be presented in Ft. Lauderdale, FL; Long Beach, CA; Rosemont, IL; Washington, D.C.; and Boston, MA on February 14, April 3, June 19-22, October 16-18, and November 7-9, 2003.

The Board of Regents of the University of Colorado has submitted a request for an out-of-state instructional program to be delivered by the University of Colorado at Colorado Springs.

HTR 280 –3, Theatre Tour: London Student Theatre," offered as a Spring Semester 2003 credit course in London, England.

Appendix A

STATUTORY AUTHORITY

The Commission is given responsibility for approval of out-of-state instruction beyond the contiguous states in C.R.S. 23-5-116.

TOPIC: **DISTANCE EDUCATION ENROLLMENTS AT COLORADO PUBLIC INSTITUTIONS OF HIGHER EDUCATION FISCAL YEARS 1997 - 2001**

PREPARED BY: **JEFF RICHARDSON AND RICK HUM**

I. SUMMARY

A report covering distance education enrollments in Colorado public institutions of higher education during Fiscal Years 1997 through 2001 is presented. Total enrollment in FY 01 were 59,303 across five key modalities of delivery (online, 2-way video, 1-way video, audio, and other). Enrollment data for correspondence courses are not covered by this report. The major findings of the report are summarized in the Staff Analysis section below.

II. BACKGROUND

The purpose of this report is to document growth trends in an important new educational access channel (distance education) to develop a baseline a to support future policy decisions.

The Colorado Commission on Higher Education began collecting data on distance education in concert with the House Bill 99-1289 study of higher education. Chapter 12 in that report provided an overview of distance education in Colorado and data on enrollments for Fiscal Years 1997, 1998, and 1999. This report is the Commission's subsequent review of distance education enrollment. It presents data for Fiscal Year 2001 and to the extent possible includes data on all five years, Fiscal Year 1997 – 2001.

III. STAFF ANALYSIS

Enrollment in distance education totaled 59,303 in FY 01, an increase of 30 percent from FY 00, 250 percent since FY 97. Over the five-year span of the report, the online medium has come to dominate with 73 percent of enrollment. Online enrollment doubled between FY 99 and FY 00 and increased by 71 percent from FY 00 to FY 01. Use of synchronous video (one-way and two-way) has been essentially flat, declining slightly from FY 00 to FY 01. The four campuses with the largest online enrollments (in rank order): Metropolitan State College of Denver, Colorado State University, Front Range Community College, and the University of Colorado at Denver.

Two-year institutions account for about half (46 percent) of all distance education enrollment (both lower and upper division). Two-year institutions, over the five-year span, have generated the majority of lower division enrollment. But over the same five-year span, the percentage contribution to lower division enrollment from four-year institutions has more than doubled, from about 14 percent in FY 97 to 37 percent in FY 01.

Lower division courses account for three-quarters (75 percent) of total enrollment. Growth in enrollment is occurring at all levels of instruction. At the lower division level, the largest number of enrollees (totaled across two- and four-year institutions) were found in the following 2-digit CIP code titles: Business Management and Administrative Services, Mathematics, Social Sciences and History, and English Language and Literature/Letters. These four disciplines accounted for 60 percent of all lower division enrollees. Two-year institutions dominate lower division enrollments in almost all discipline areas except mathematics and communications.

The dominant disciplines at the upper division level were Business Management and Administrative Services, Health Professions and Related Sciences, Education, Engineering, and Social Sciences and History. These five disciplines accounted for three-quarters (74 percent) of all enrollees in upper division courses.

There is strong evidence that the majority of distance education enrollment is generated by students who have physical access to campus. CCHE staff asked how many of the enrollees in a given distance education class were for students who also took at least one class physically on campus – 61 percent did.

The overall class size average was eleven students. The 11 to 20-class-size accounted for about 37 percent of all classes. Classes of size between 11 and 50 accounted for almost three-quarters (74 percent) of all classes.

IV. STAFF RECOMMENDATION

Staff recommend that data collection be suspended for FY 02 and reintroduced in FY 03 pending review and redevelopment. The review should examine the purpose, scope and methodology of the data collection effort. Data should be collected that clearly supports the likely policy questions in the next several years. The scope should be expanded to include the traditional classroom, in particular, the use of online education as a supplement to traditional classroom activity. The methodology should be reassessed to ensure data is collected on students' views of the effectiveness of the use of technology in the classroom (whether that classroom is online or a physical location) and to better integrate the data collection effort with other ongoing data collection requirements such as SURDS.

Appendix A

STATUTORY AUTHORITY

C.R.S. 23-13-104(1)(d). Technology integration to lower the institution's capital and administrative costs and improve the quality and delivery of education and provide effective stewardship of existing assets, recognizing that all technology changes may not result in lower costs in the academic arena. To meet this goal, each institution shall:

(I) Integrate technology to reduce the institution's cost per unit of education;
(II) Integrate technology to improve the marketability of graduates in the workplace;
(III) Improve student access and continuing education through increased distance learning;
(IV) Improve learning productivity.

COLORADO COMMISSION ON

HIGHER EDUCATION

ACCESS TO HIGH-QUALITY, AFFORDABLE EDUCATION FOR ALL COLORADANS

Distance Education Enrollments at Colorado Public Institutions of Higher Education Fiscal Years 1997 – 2001

DECEMBER 13, 2002

1380 Lawrence Street, Suite 1200 • Denver, Colorado 80204 • (303) 866-2723
TIMOTHY E. FOSTER, EXECUTIVE DIRECTOR

CONTENTS

I. PURPOSE

The purpose of collecting statewide public higher education distance education enrollment statistics is to track trends in distance education – a significant new mode of educational delivery and access – in order to inform policy decisions regarding distance education. Statewide data is necessary as distance education transcends traditional geographical service delivery boundaries and constraints.

Data collected to date shows approximately one to two percent of all class enrollments are being made in distance education courses as opposed to traditional bricks and mortar classrooms, with enrollments doubling each year or so. If this trend continues, soon a minor but truly significant proportion of all classes will be delivered in this way, presenting to the student a new means of access to higher education. At that point, a number of policy questions may arise, either from the legislature, the public, or in the institutions themselves.

The state will be much better to address future policy issues with regarding distance education if it has at hand an existing and ongoing baseline documenting the growth and character of distance education in Colorado.

II. BACKGROUND

The Colorado Commission on Higher Education began collecting data on distance education in concert with the House Bill 99-1289 study of higher education. Chapter 12 in that report provided an overview of distance education in Colorado and data on enrollments for Fiscal Years 1997, 1998, and 1999. The present report is the next report by the Commission on distance education enrollments. It presents data collected for Fiscal Year 2001 and, to the extent possible, the tables and figures include data for five years, Fiscal Year 1997 – 2001.

III. DATA COLLECTION

Each fiscal year of data covers the summer, fall, interim, and spring semesters or quarters. Data elements collected included: institution code, fiscal year, term, six-digit CIP code, course prefix number and section number, course level, course funding status (e.g., state reimbursed or cash funded), delivery medium, student enrollment at end of term, and number of credit hours generated. For Fiscal Year 2001 two optional additional data items were requested: student enrollment at course census date, and the number of students completing a distance education course and at least one on-campus classroom-based course in the same term.

The unit of analysis has evolved over the three data collection cycles. For the first two cycles the unit of analysis was undefined. Consequently, records from different institutions represented different units of analysis, ranging from one record per course (summarizing all student enrollments in a given course for a given term), to one record per class (e.g., course section in a given term). Consequently, prior to FY 2001 it was not possible to analyze class size.

There were slight variations in the nomenclature used to characterize mode of delivery over the five-year period covered by this report, but the definitions of the categories has been consistent. Distance education media are categorized into five categories in this report:

1. Asynchronous Internet-based (e.g., online or World Wide Web)
2. Synchronous two-way video (e.g. interactive video, active video)
3. Synchronous one-way video (e.g., one-way live video transmission, passive video)

4. Audio (e.g., one-way video augmented with audio)
5. Other (includes mailed videotape, often called "telecourse")

The above category terms were used consistently over the five years covered by this report as shown above. The only change in definition was for "One-way Video," which included both synchronous (real-time) and asynchronous (delayed) for FYs 97 to 00, but was defined as solely synchrounos in FY01. Following this definitional change, one-way asynchronous enrollments reported as "One-way" in FFs 97 to 00 would have been coded as "Other" in FY 01. This inconsistency involves relatively small numbers of enrollments.

The FY 2000 data request included "Correspondence" as a medium. This medium was not collected in the other years. Therefore, for comparability among different years, the data presented here does not include correspondence courses.

Throughout, the term, "enrollments," signifies duplicated headcount.

All public institutions of higher education in Colorado participated and provided data concerning their distance education enrollments.

IV. FINDINGS

Total Enrollments

1. Enrollments in distance education totaled 59,303 in FY 01, an increase of 30 percent from FY 00; 250 percent since FY 97. See Table 1 for enrollments by institution. Note: the large Fiscal Year 2000 – 2001 enrollments growth for Colorado State University represents the inclusion for the first time of self-paced course enrollments in these data (1,453 enrolllments).

Media

2. Over the five-year span of the report, the online medium has come to dominate with 73 percent of enrollments (see Table 2 and Figure 2). Online enrollments doubled between FY 99 and FY 00 and increased by 71 percent from FY 00 to FY 01. The four campuses with the largest online enrollments are (in rank order) are: Metropolitan State College of Denver, Colorado State University, Front Range Community College, University of Colorado at Denver.

3. Use of synchronous video (one-way and two-way) has been essentially flat, declining slightly from FY 00 to FY 01.

Institutional Level

4. 2-year institutions account for about half (46 percent) of all distance education enrollments (both lower and upper division).

5. 2-year institutions, over the five-year span, have generated the majority of lower division enrollments (see Figure 3). But over the five-year span, the percentage contribution to lower division enrollments from 4-year institutions has more than doubled, from about 14 percent in FY 97 to 37 percent in FY 01.

Instructional Level

6. Lower division courses account for three-quarters (75 percent) of total enrollments (see Table 4, Figure 4).

7. Growth in enrollments is occurring at all levels of instruction (see Figure 4). Note: the low enrollments for Graduate Level-2 are a reporting anomaly.

Lower Division Enrollments by Discipline

8. At the lower division level, the largest number of enrollments (totaled across 2- and 4-year institutions) were found in the following 2-digit CIP code titles: Business Management and Administrative Services, Mathematics, Social Sciences and History, and English Language and Literature/Letters. These four disciplines accounted for 60 percent of all lower division enrollments (see Figure 5).

9. 2-year institutions dominate lower division enrollments in almost all discipline areas except mathematics and communications.

Upper Division Enrollments (at 4-Year Institutions)

10. The dominant disciplines at the upper division level were Business Management and Administrative Services, Health Professions and Related Sciences, Education, Engineering, and Social Sciences and History. These five disciplines accounted for three-quarters (74 percent) of all enrollments in upper division courses (see Figure 6).

Use of Distance Education by On-Campus Students

11. There is strong evidence that the majority of distance education enrollments are generated by students who have physical access to campus. We asked how many of the enrollments in a given distance education class were for students who also took at least one class physically on campus – 61 percent did. (Note, while not all campuses reported data for this statistic, the sample size for this figure is about half of the total enrollments.) See Table 5.

Average Distance Education Class Size

12. The overall class size average was eleven students (see Table 6). Figure 7 shows that most classes fell into the 11 to 20 enrollment category, which accounted for about 37 percent of all enrollments. Class sizes between 11 and 50 account for three-quarters (74 percent) of all enrollments.

    These class size statistics do not include classes in excess of 100 enrollments. Class sizes in excess of 100 are self-paced courses involving computer-based modules and testing or large videotape courses. For these delivery modes, the concept of "class size" doesn't apply. Therefore, in Figure 7, we have left these large sections out of the class size analysis. Enrollments in these self-paced sections left out totaled 9,057.

    Table 6 has an extra institution line for CCCOnline. CCCOnline is a centralized distance education provider for the Colorado Community Colleges. Enrollments in CCCOnline sections are reported by each individual community college for their students with a unique identifier tying the enrollments back to a given CCCOnline class section. Therefore, in order to compute class size for community colleges, CCCOnline records were aggregated for the corresponding sections. Some community college courses are not offered via CCCOnline and are offered by the community college itself. The class sizes reported for community colleges in Table 6 are for distance education classes offered directly by the college and <u>not</u> through CCCOnline.

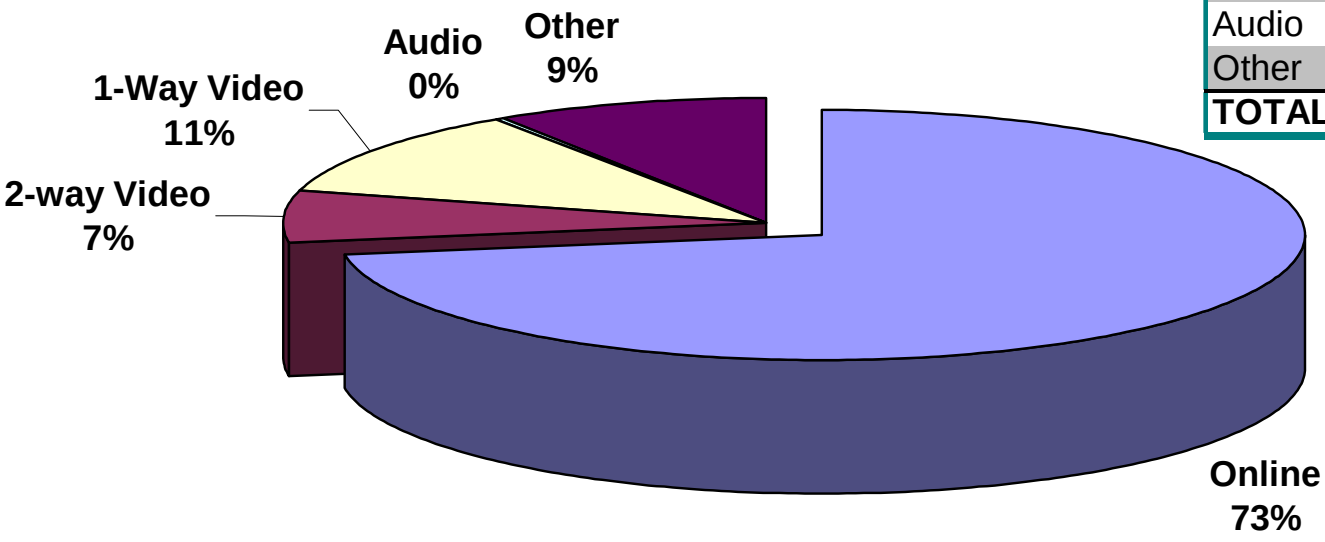
    The University of Colorado at Denver also had cross-listed courses, and self-reported the average class size listed.

    All other institutions' records are assumed to comply with the reporting convention of one record per class section per term and therefore yield average class size when total enrollment is divided by total number of records (e.g., class sections).

Figure 1

Distance Education Enrollments by Media for FY 01

Colorado Public Higher Education Institutions



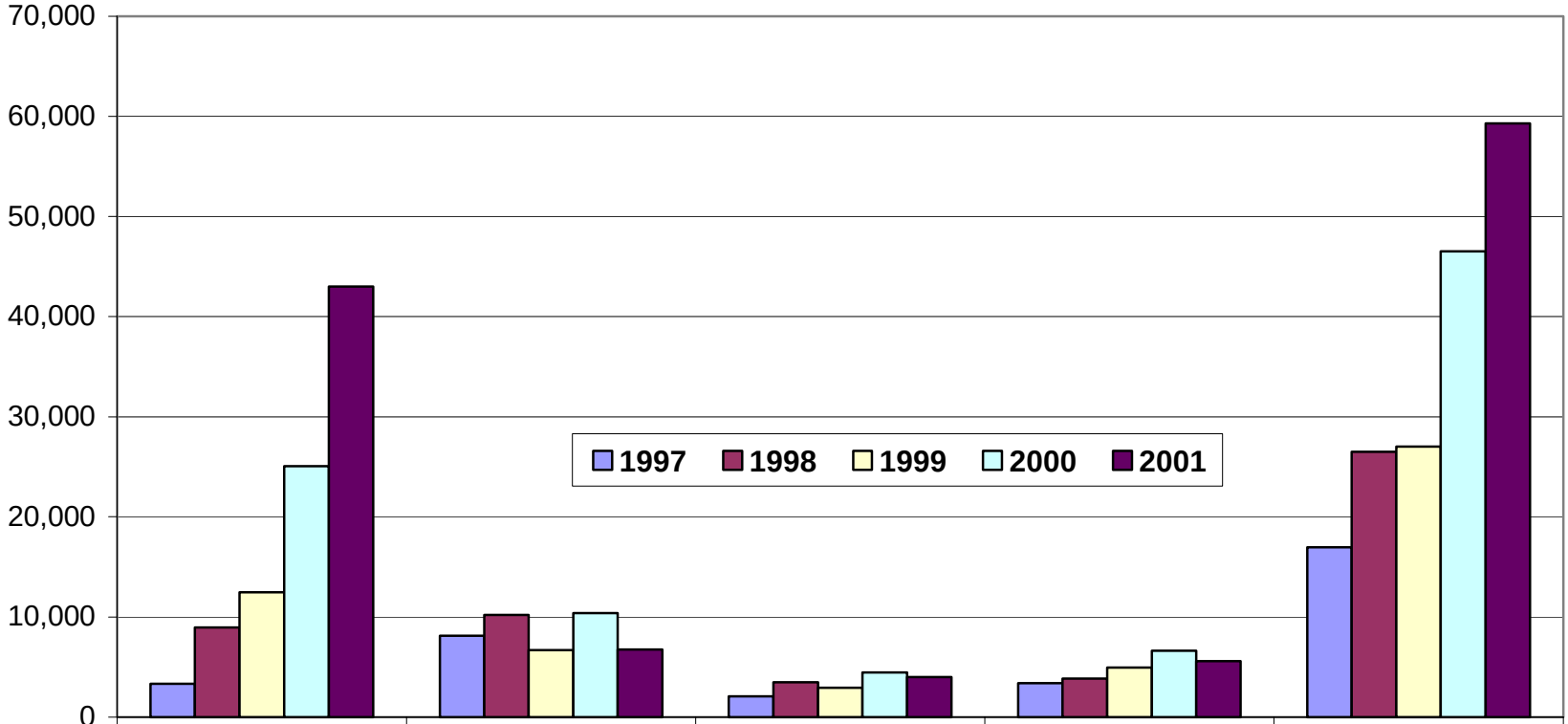
FY 2001

Medium	*Enrollments*
Online	43,016
2-way Video	3,976
1-Way Video	6,743
Audio	80
Other	5,488
TOTAL	**59,303**

Figure 2

Distance Education Enrollments by Media FY 97 - FY 01

Colorado Public Institutions of Higher Education

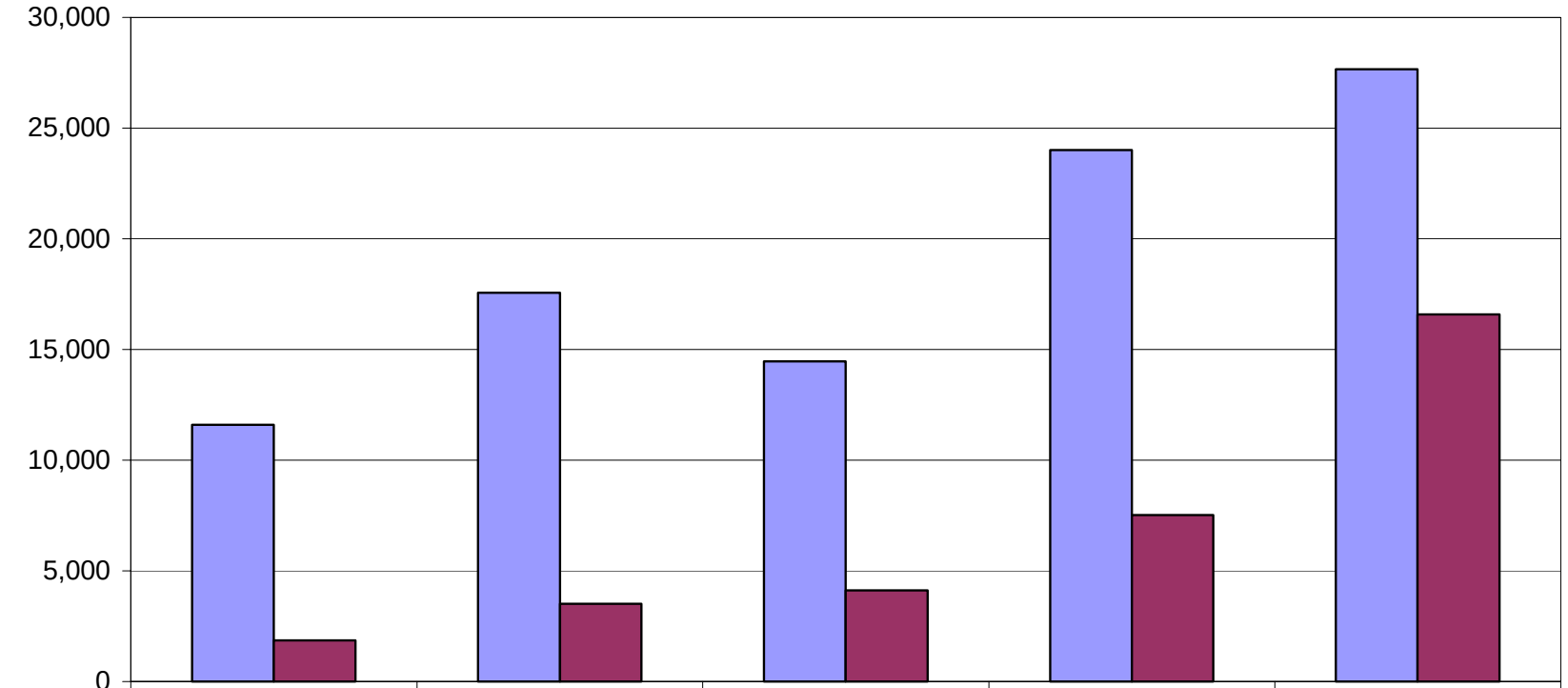


	Online	Passive Video	Active Video	Other	Total
1997	3,336	8,132	2,081	3,393	16,942
1998	8,951	10,202	3,486	3,829	26,468
1999	12,474	6,691	2,917	4,949	27,031
2000	25,082	10,377	4,428	6,622	46,509
2001	43,016	6,743	3,976	5,568	59,303

Figure 3

Lower Division Distance Education Enrollments by Institution Type FY 97 - FY 01

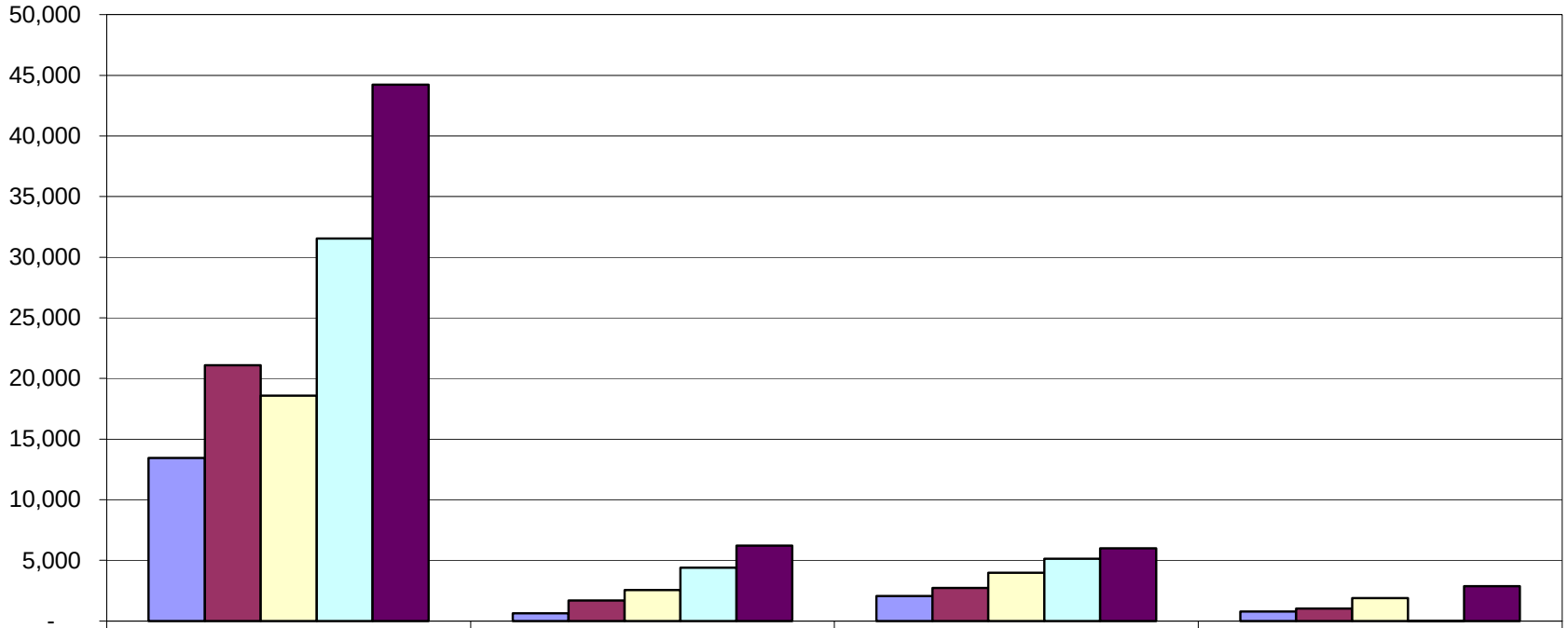
Colorado Public Institutions of Higher Education



	1997	1998	1999	2000	2001
2-Year	11,598	17,569	14,465	24,015	27,663
4-Year	1,858	3,516	4,124	7,525	16,588

Figure 4

Distance Education Enrollments
by Level of Instruction FY 97 - FY 01
Colorado Public Instituions of Higher Education



	Lower Division	Upper Division	Graduate Level-1	Graduate Level-2
1997	13,456	643	2,073	770
1998	21,085	1,692	2,714	1,034
1999	18,589	2,562	3,989	1,891
2000	31,540	4,388	5,132	22
2001	44,230	6,213	5,991	2,869

Figure 5

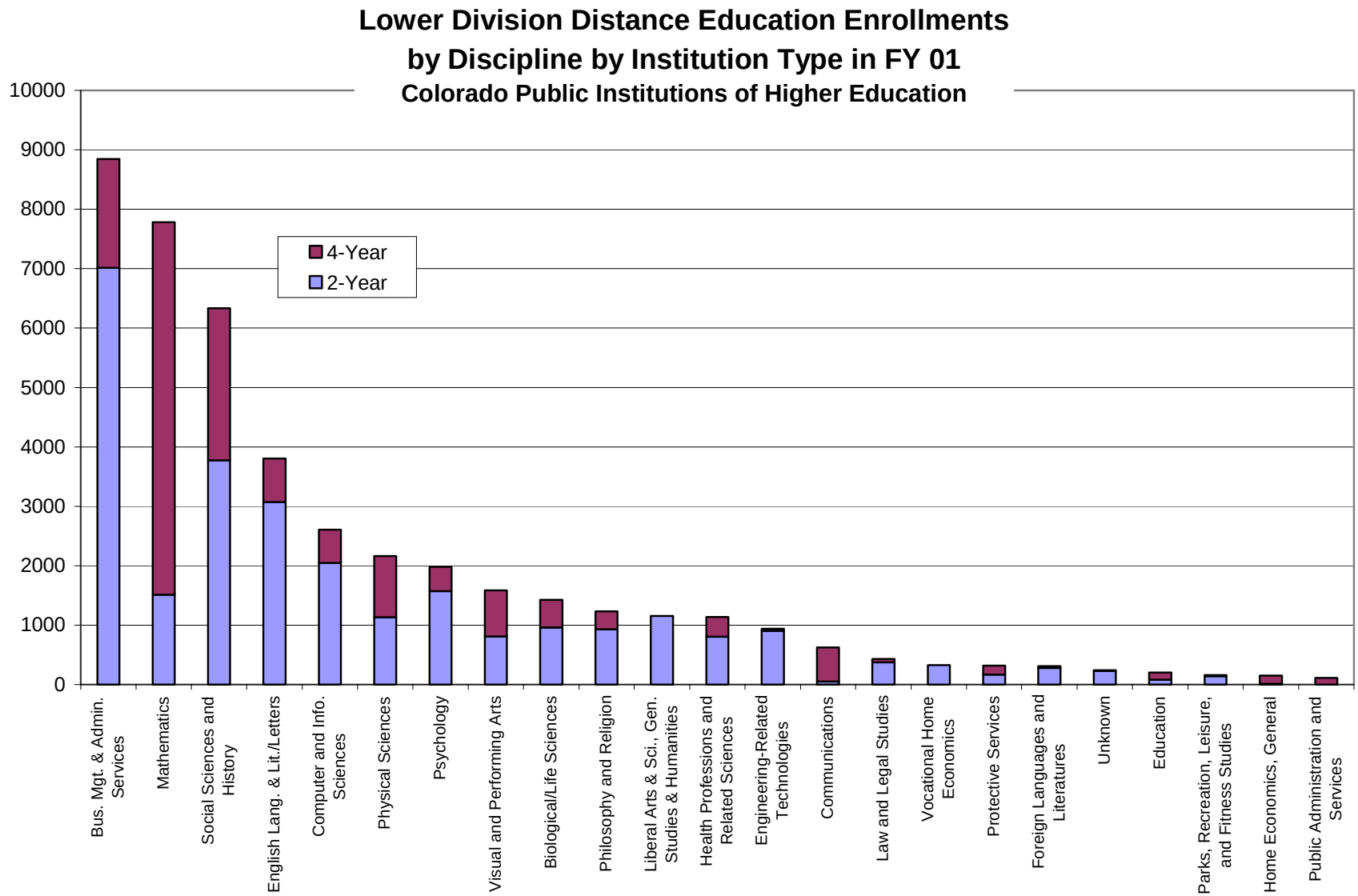

Lower Division Distance Education Enrollments
by Discipline by Institution Type in FY 01
Colorado Public Institutions of Higher Education
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
4-Year
2-Year
Bus. Mgt. & Admin. Services
Mathematics
Social Sciences and History
English Lang. & Lit./Letters
Computer and Info. Sciences
Physical Sciences
Psychology
Visual and Performing Arts
Biological/Life Sciences
Philosophy and Religion
Liberal Arts & Sci., Gen. Studies & Humanities
Health Professions and Related Sciences
Engineering-Related Technologies
Communications
Law and Legal Studies
Vocational Home Economics
Protective Services
Foreign Languages and Literatures
Unknown
Education
Parks, Recreation, Leisure, and Fitness Studies
Home Economics, General
Public Administration and Services

Figure 6

Upper Division Distance Education Enrollment by Discipline at 4-Year Institutions in FY 01

Colorado Public Institutions of Higher Education

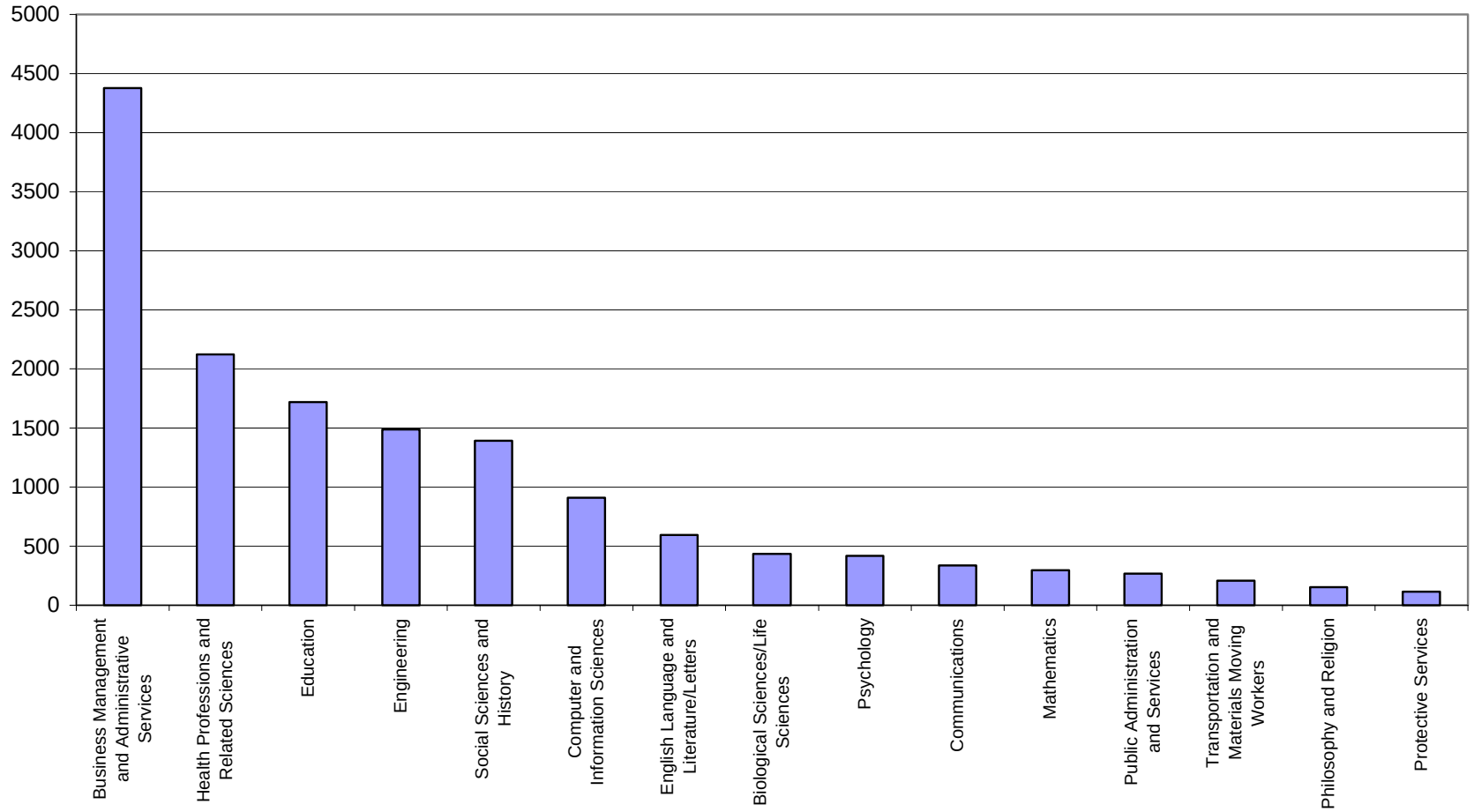


Figure 7

Distance Education Class Size*
and Total Enrollments Per Class Size In FY 01
Colorado Public Institutions of Higher Education

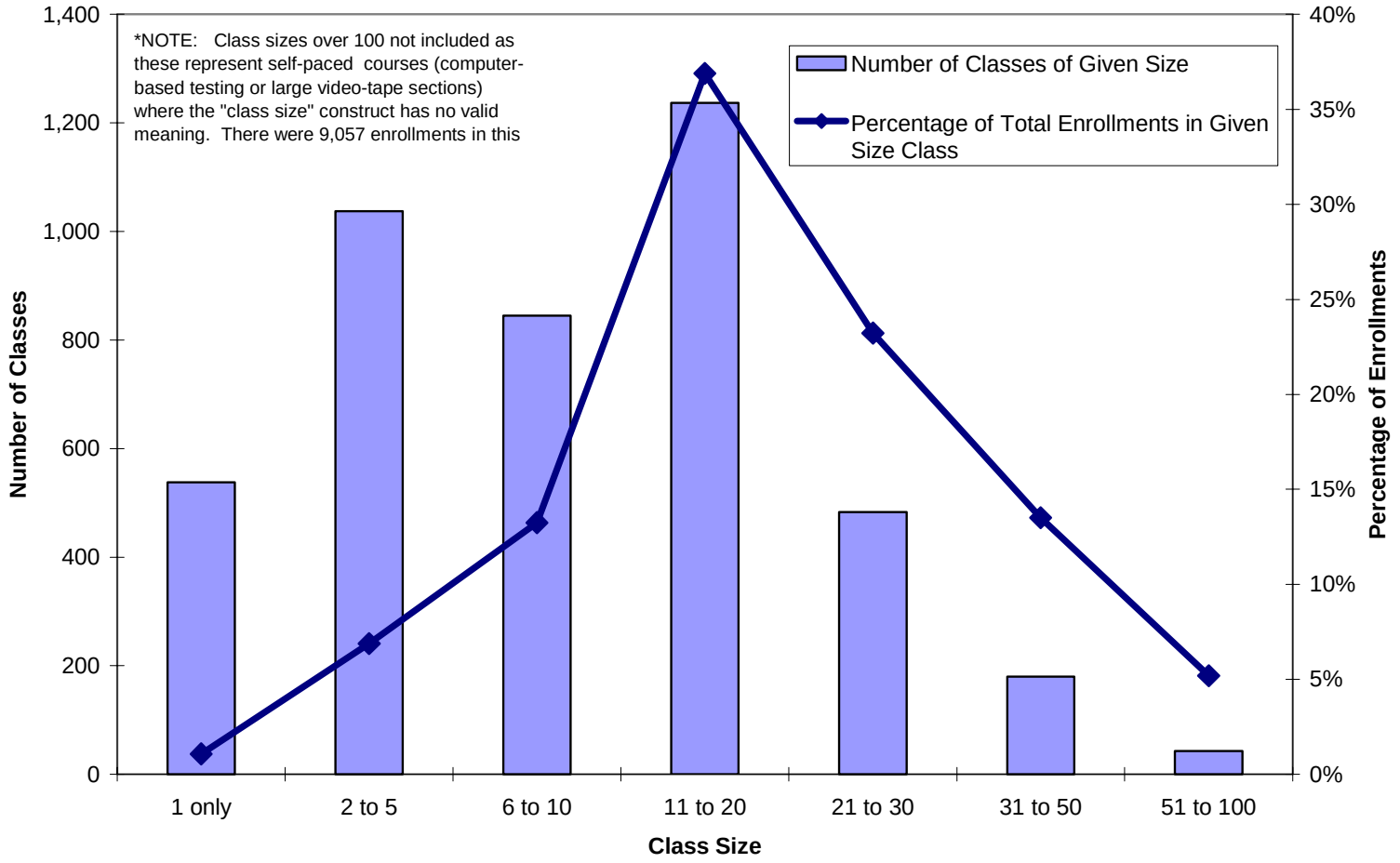


Table 1

Distance Education Enrollments by Year by Institution FY 97 - FY 01

Colorado Public Institutions of Higher Education

		Student Enrollments					Growth
Inst Code	*Institution Name*	*1997*	*1998*	*1999*	*2000*	*2001*	*00-01*
0491	Community College of Aurora	715	990	1,506	2,711	3,186	18%
0492	Pueblo Community College	870	1,095	1,123	1,125	1,538	37%
0496	Adams State College	35		67	387	420	9%
0497	Arapahoe Community College	1,064	1,126	1,694	2,250	2,696	20%
0500	Colorado School of Mines		11		10		N/A
0501	Colorado Mountain College	1,799	4,030		2,080	1,914	-8%
0502	University of Northern Colorado	77	193	522	978	1,231	26%
0504	Colorado State University *	1,389	1,588	2,228	2,572	8,709	239%
0505	Aims Community College	987	1,901		1,862	1,695	-9%
0507	Front Range Community College	2,354	3,601	4,340	4,894	6,149	26%
0508	Red Rocks Community College	734	1,052	1,141	5,171	2,443	-53%
0509	Pikes Peak Community College	675	845	1,148	1,450	3,136	116%
0510	Fort Lewis College	8	136	100	94	166	77%
0511	Community College of Denver	223	260	346	661	655	-1%
0514	Lamar Community College		10	41	69	100	45%
0518	Mesa State College	15	18	64	146	66	-55%
0519	Metropolitan State College of Denver	929	1,576	2,599	4,187	6,891	65%
0520	Northeastern Junior College	71	32	160	141	258	83%
0522	Otero Junior College	140	199	345	622	630	1%
0524	University of Southern Colorado	720	843	853	1,454	2,717	87%
0525	Colo. Northwestern Community College	408	285	340	682	712	4%
0528	Trinidad State Junior College	550	755	848	736	953	29%
0532	University of Colorado - Boulder	1,465	1,717	2,171	3,508	4,098	17%
0533	University of Colorado - Denver	402	2,400	2,797	3,335	3,928	18%
0535	University of Colo. - Colorado Springs	357	660	1,045	1,143	1,821	59%
0536	Western State College			21	168	159	-5%
0544	Morgan Community College	1,008	1,388	1,433	1,753	1,553	-11%
6057	Univ. of Colo. - Health Sciences Center	24	37	621	1,327	1,479	11%
TOTAL		**17,019**	**26,748**	**27,553**	**45,516**	**59,303**	**30%**

*Note: The large growth shown for CSU is attributable to the inclusion for the first time large enrollment (1,453 enrollments) in a self-paced mathematics program (as shown in the "Other" column in Table 2 under CSU).

Table 2

Distance Education Enrollments by Media by Institution in FY 01

Colorado Public Institutions of Higher Education

Inst. #	*Institutional Name*	*Online*		*2-Way Video*		*1-Way Video*		*Audio*		*Other*		*Total*
0491	Community College of Aurora	2,888	91%							298	9%	3,186
0492	Pueblo Community College	334	22%	7		737	48%			460	30%	1,538
0496	Adams State College	420	100%									420
0497	Arapahoe Community College	2,140	79%							556	21%	2,696
0501	Colorado Mountain College	20	1%	328	17%					1,566	82%	1,914
0502	University of Northern Colorado	1,107	90%	124	10%							1,231
0504	Colorado State University	6,181	71%			1,075	12%			1,453	17%	8,709
0505	Aims Community College	1,695	100%									1,695
0507	Front Range Community College	5,009	81%	1,140	19%							6,149
0508	Red Rocks Community College	1,389	57%	165	7%					889	36%	2,443
0509	Pikes Peak Community College	2,453	78%			683	22%					3,136
0510	Fort Lewis College	166	100%									166
0511	Community College of Denver	614	94%	41	6%							655
0514	Lamar Community College	100	100%									100
0518	Mesa State College			66	100%							66
0519	Metropolitan State College of Denver	6,696	97%			195	3%					6,891
0520	Northeastern Junior College	222	86%			36	14%					258
0522	Otero Junior College	202	32%			428	68%					630
0524	University of Southern Colorado	677	25%			2,040	75%					2,717
0525	Colorado Northwestern Community College	210	29%	206	29%	141	20%	80	11%	75	11%	712
0528	Trinidad State Junior College	402	42%	551	58%							953
0532	University of Colorado - Boulder	2,690	66%			1,408	34%					4,098
0533	University of Colorado - Denver	3,928	100%									3,928
0535	University of Colorado - Colorado Springs	1,821	100%									1,821
0536	Western State College	150	94%	9	6%							159
0544	Morgan Community College	136	9%	1,226	79%					191	12%	1,553
6057	University of Colorado - Health Sciences Center	1,366	92%	113	8%							1,479
	TOTAL	**43,016**	**73%**	**3,976**	**7%**	**6,743**	**11%**	**80**	**0%**	**5,488**	**9%**	**59,303**

Table 3

Rank Order of Online Enrollments by Institution in FY 01

Colorado Public Institutions of Higher Education

Inst. #	*Rank*	*Institutional Name*	*Online*
0519	1	Metropolitan State College of Denver	6,696
0504	2	Colorado State University	6,181
0507	3	Front Range Community College	5,009
0533	4	University of Colorado - Denver	3,928
0491	5	Community College of Aurora	2,888
0532	6	University of Colorado - Boulder	2,690
0509	7	Pikes Peak Community College	2,453
0497	8	Arapahoe Community College	2,140
0535	9	University of Colorado - Colorado Springs	1,821
0505	10	Aims Community College	1,695
0508	11	Red Rocks Community College	1,389
6057	12	University of Colorado - Health Sciences Center	1,366
0502	13	University of Northern Colorado	1,107
0524	14	University of Southern Colorado	677
0511	15	Community College of Denver	614
0496	16	Adams State College	420
0528	17	Trinidad State Junior College	402
0492	18	Pueblo Community College	334
0520	19	Northeastern Junior College	222
0525	20	Colorado Northwestern Community College	210
0522	21	Otero Junior College	202
0510	22	Fort Lewis College	166
0536	23	Western State College	150
0544	24	Morgan Community College	136
0514	25	Lamar Community College	100
0501	26	Colorado Mountain College	20

Table 4

Distance Education Enrollments by Level of Instruction in FY 01

Colorado Public Institutions of Higher Education

Inst. #	*Institutional Name*	*Lower Level*		*Upper Level*		*Grad Level 1*		*Grad Level 2*		*Total*
0491	Community College of Aurora	3,186	100%							3,186
0492	Pueblo Community College	1,538	100%							1,538
0496	Adams State College			46	11%	374	89%			420
0497	Arapahoe Community College	2,696	100%							2,696
0501	Colorado Mountain College	1,914	100%							1,914
0502	University of Northern Colorado	185	15%	158	13%	876	71%	12	1%	1,231
0504	Colorado State University	5,935	68%	385	4%	203	2%	2,186	25%	8,709
0505	Aims Community College	1,695	100%							1,695
0507	Front Range Community College	6,149	100%							6,149
0508	Red Rocks Community College	2,443	100%							2,443
0509	Pikes Peak Community College	3,136	100%							3,136
0510	Fort Lewis College	72	43%	94	57%					166
0511	Community College of Denver	655	100%							655
0514	Lamar Community College	100	100%							100
0518	Mesa State College	36	55%	20	30%					66
0519	Metropolitan State College of Denver	4,240	62%	2,651	38%					6,891
0520	Northeastern Junior College	258	100%							258
0522	Otero Junior College	630	100%							630
0524	University of Southern Colorado	2,257	83%	460	17%					2,717
0525	Colorado Northwestern Community College	712	100%							712
0528	Trinidad State Junior College	953	100%							953
0532	University of Colorado - Boulder	1,987	48%	604	15%	1,461	36%	46	1%	4,098
0533	University of Colorado - Denver	1,508	38%	1,351	34%	1,055	27%	14	0%	3,928
0535	University of Colorado - Colorado Springs	309	17%	243	13%	1,017	56%	252	14%	1,821
0536	Western State College	74	47%	85	53%					159
0544	Morgan Community College	1,553	100%							1,553
6057	University of Colorado - Health Sciences Center			115	8%	1,005	68%	359	24%	1,479
TOTALS		**44,221**	**75%**	**6,212**	**10%**	**5,991**	**10%**	**2,869**	**5%**	**59,303**

Table 5

Distance Education Students Also Taking One Course On Campus in FY 01

Colorado Public Institutions of Higher Education

Inst. Code	*Institutional Name **	*Distance Educaton Enrollments ***	*Also on Campus*	*Also On Campus (%)*
0496	Adams State College	420	219	52%
0501	Colorado Mountain College	1,905	708	37%
0510	Fort Lewis College	166	140	84%
0511	Community College of Denver	655	125	19%
0514	Lamar Community College	100	34	34%
0518	Mesa State College	66	56	85%
0519	Metropolitan State College of Denver	6,891	4,926	71%
0520	Northeastern Junior College	258	102	40%
0522	Otero Junior College	630	526	83%
0524	University of Southern Colorado	2,620	2,620	100%
0528	Trinidad State Junior College	953	443	46%
0532	University of Colorado - Boulder	4,098	2,170	53%
0533	University of Colorado - Denver	3,928	2,428	62%
0535	University of Colorado - Colorado Springs	1,821	627	34%
0536	Western State College	159	96	60%
6057	University of Colorado - Health Sciences Center	1,479	835	56%
TOTALS		**26,149**	**16,055**	**61%**

** These data were optional and were only reported by the above institutions.*

*** Duplicated headcount*

Average Distance Education Class Size* FY 01

Table 6

Colorado Public Institutions of Higher Education

Inst. #	*Institution*	*Average Class Size*
0491	Community College of Aurora ***	12
0492	Pueblo Community College ***	9
0496	Adams State College	14
0497	Arapahoe Community College ***	11
0501	Colorado School of Mines	12
0502	University of Northern Colorado	12
0504	Colorado State University	7
0505	Aims Community College	5
0507	Front Range Community College ***	11
0508	Red Rocks Community College ***	10
0509	Pikes Peak Community College ***	12
0510	Fort Lewis College	9
0511	Community College of Denver ***	11
0518	Mesa State College	8
0519	Metropolitan State College of Denver	19
0520	Northeastern Junior College ***	7
0522	Otero Junior College ***	13
0524	University of Southern Colorado	21
0525	Colo. Northwestern Community College ***	4
0528	Trinidad State Junior College ***	8
0532	University of Colorado - Boulder	12
0533	University of Colorado - Denver **	20
0535	University of Colo. - Colorado Springs	26
0536	Western State College	7
0544	Morgan Community College ***	14
6057	Univ. of Colo. - Health Sciences Center	9
9999	CCCOnline **	12
AVERAGE		**11**

* Assumes no cross-listing except as noted by **

** Corrected for cross-listing

*** Class size excepting courses offered by institution through CCCOnline.