

ACCESS TO HIGH-QUALITY, AFFORDABLE EDUCATION FOR ALL COLORADANS

# **REMEDIAL EDUCATION REPORT**

FEBRUARY 2002

## I. <u>EXECUTIVE SUMMARY</u>

The statute (**C.R.S. 23-1-113.3**) defined the Commission's role and responsibilities, including to (1) design and implement statewide policies for remedial education, (2) provide the General Assembly information on the number, type, and cost of remedial education provided, (3) develop appropriate funding policies that support the institutional roles and missions, (4) ensure the comparability of these placement or assessment tests, and (5) ensure that each student identified as needing basic skills remedial course work is provided with written notification identifying which state institutions offer such basic skills courses and the approximate cost and relative availability of such courses, including any electronic on-line courses.

In August 2000 the Commission adopted its Remedial Education Policy.

In March 2001 the Commission revised its FTE Policy. The policy clearly identifies that only community colleges, Adams State College and Mesa State College may claim FTE in remedial courses for state support.

In October 2001 the Commission accepted the remedial plans submitted by the Colorado public colleges and universities. In all cases, students had two opportunities to demonstrate that they had mathematics, writing and reading skills necessary to succeed in college. Institutions have integrated the testing into Student Success Centers and advised students on available options to satisfy remedial needs, including the availability of online courses.

CCHE staff, in consultation with the governing boards, developed a reporting system. The reporting system is designed to provide the General Assembly with information on remedial students and provide feedback reports to the high schools. The first remedial assessment file was submitted October 15, 2001. Institutions will report remedial enrollments on the 2001-02 Student Enrollment File. Linking the remedial assessment data with the enrollment data will provide a composite picture of remedial needs, the responsiveness of Colorado higher education to meet student needs, and costs of remedial education.

The initial data indicate that 40% of assessed first-time students need some form of remedial assistance. The greatest need is in mathematics, with 8,518 students requiring at least one remedial math course. This equates to 32% of students entering a two-year or four-year public college who need math remediation. The four-year college math remediation rate is 13% while 74% of the students entering a two-year college need math remediation.

ACT has agreed to assist CCHE in future analyses. ACT and CCHE share a mutual interest in learning whether Colorado's junior year ACT test increases the college participation rate of Colorado high school students and whether statewide testing improves the level of college preparation. This study will be included in the January 2003 legislative report.

#### II. <u>BACKGROUND</u>

The policy applies to all state-supported institutions of higher education, including all four-year state-supported universities and colleges that admit freshmen, extension programs of the state-supported universities and colleges, junior and community colleges, and local district colleges. The governing boards and institutions of the public system of higher education in Colorado are obligated to conform to the policies set by the Commission within the authorities delegated to it by C.R.S. 23-1-113.3.

**C.R.S. 23-1-113.3 Commission directive – basic skills courses.** (1) ON OR BEFORE SEPTEMBER 1, 2000; THE COMMISSION SHALL ADOPT AND THE GOVERNING BOARDS SHALL IMPLEMENT STANDARDS AND PROCEDURES WHEREBY BASIC SKILLS COURSES, AS DEFINED IN SECTION 23-1-113 (4) (c), MAY BE OFFERED BY STATE INSTITUTIONS OF HIGHER EDUCATION PURSUANT TO THIS SECTION.

## III. <u>CCHE REMEDIAL POLICIES</u>

At its August 2000 meeting, the Commission approved a new Remedial Policy designed around three policy goals:

- All degree-seeking first-time students are prepared to succeed in college level courses.
- Students assessed as needing remedial instruction have accurate information regarding course availability and options to meet the college entry-level competencies.
- Colorado public high schools are informed about the level of college readiness of their recent high school graduate.

In March 2001 the Commission revised its FTE Policy. The current FTE Policy clearly identifies that only community colleges, Adams State College and Mesa State College may claim state support for remedial education and what circumstances apply. As part of the policy design, a new FTE reporting form was included in the annual FTE Report making it possible to monitor the state cost of supporting remedial education.

#### IV. <u>REMEDIAL PLANS</u>

In accordance with CCHE's Remedial Policy, each governing board submitted remedial plans for its institution. CCHE staff reviewed the remedial plans for completeness, comparability of cut scores and compliance with the statute. While certain institutions are using additional assessment tools to determine the level of college readiness, the scores on these tests correlate to the ACT subtest scores. The Academic Council had previously negotiated common cut scores for ACT subtests, including:

A student must score a 19 or higher on the Act Math subtest to be considered college-ready in mathematics.

A student must score 18 or higher on the ACT English subtest to be considered college-ready in writing.

A student must score 17 or higher on the ACT English subtest to be considered reading at college level.

Setting the common cut scores was critical to ensure that no student would be tested twice or receive conflicting advice regarding their need for remedial assistance.

The cut scores were based on an analysis conducted by ACT that 50% of the students who earn a 19 or higher on the ACT Math subtest will earn a C or better in college level math. Similarly, a student who scores 18 or higher on the ACT English subtest will earn a C or better in college composition course. Reading did not have a similar statistic research base but the studies show that reading is closely correlated to writing skills: students who lack college-level reading skills most probably will lack college-level writing skills. CCHE and the institutions agreed to monitor the reading cut score.

The remedial plans share a common definition of who will be assessed -- all first-time, degree-seeking students. First-time means a student who enrolls at a college for the first time or those who change enrollment status from non-degree-seeking to degree-seeking regardless of the number of college credits earned. Prior enrollment as a high school concurrent student does not prevent a student from being categorized as first-time. The following students are exempt from taking a placement test in reading, writing, or mathematics:

- Students who have earned a bachelor or associate degree.
- Students who have been previously assessed at a Colorado public college or university.
- Students who have successfully completed basic skills instruction in mathematics, writing or reading are exempt from testing in that subject area only.
- Students who have successfully completed a college-level course in English are exempt from the requirement for basic skills assessment in writing and reading.
- Students who have successfully completed a college-level course in mathematics are exempt from the requirement for basic skills assessment in mathematics.
- Students enrolled in a vocational certificate program, unless they seek to enroll in college-level English or mathematics

In general, colleges are using the ACT test either as a screening test or actual collegelevel basic skills test. A screening test differentiates students who demonstrate college readiness from those who need to take a specific placement test. For example, community colleges use the ACT test for screening and the Accuplacer for placing a student in a particular math or writing course. In all plans, a student who does not meet the basic skills standards in the initial testing has an opportunity to retake the test or use the placement assessment to measure college readiness. Because all incoming Colorado high school graduates will take the ACT test in their junior year, it minimizes the testing burden on the student.

The following table summarizes the institutional remedial plans, listing the placement or challenge test for each institution with the cut score following the assessment test, the frequency of testing, institution notification procedures for informing students of test results and information on remedial course availability.

INST	PLACEMENT / CHALLENGE TESTS	TEST AVAILABILITY
CC	Mathematics: Accuplacer Elementary Algebra test – 72	Provides assessment testing
	<b>Reading</b> : Accuplacer test – 83	continually before and during
	Writing: Accuplacer test in Sentence Skills 86	each semester. No cost to
		student
AIMS	Mathematics: Compass 88 or Accuplacer 70	Walk in testing at Greeley;
	Reading: Compass 83 or Accuplacer 83	testing by appointment at Fort
~ ~ ~	Writing: Compass 93-94 or Accuplacer 100	Lupton and Loveland
CMC	Mathematics: Accuplacer Elementary Algebra test – 72	Provides assessment testing
	<b>Reading</b> : Accuplacer test – 83	continually before and during
	Writing: Accuplacer test in Sentence Skills 86	each semester. No cost to
		student
ASC	Mathematics: Adams State developed a Mathematical	Testing is free but each
	Placement Exam based on questions developed by the	enrollment in remedial course is
	Mathematical Association of America Placement Testing	\$50.
	Program 19 English: Adams State English Placement – 46	
	<b>Reading:</b> CAAP Reading Test – 22	
CSM	Mathematics: NA – CSM does not admit students who	Prior to registering for first
COM	score below 25 on Math	semester courses
	<b>Reading:</b> CSM developed reading test; scored by 2	semester courses
	readers	
	Writing: CSM developed writing test; scored by 2	
	readers	
CSU	Mathematics: For students with ACT scores 19 or above	Orientation sessions
	CSU's Mathematics Placement Exam. For others:	
	Entry Level Mathematics Exam that was written to align	
	with high school exit standards	
	Writing: CSU's Composition Placement exam with a	
	score of 3 out of 6. Scoring guidelines parallel ACT	
	essay guides.	
FLC	Mathematics: FLC Mathematics Placement Exam with	Tested during freshmen
	score of 13	orientation session before
	<b>Reading</b> : Accuplacer test – 80	registering for class. Additional
	Writing: Accuplacer test in Sentence Skills 86	test dates continuously between
MEGA	Madhamadian Canada 50	first day of class and census date.
MESA	Mathematics: Compass 50	ACT scores are available before

INST	PLACEMENT / CHALLENGE TESTS	TEST AVAILABILITY
	Reading: Compass – 76	students register. Challenge
	Writing: Challenge by writing an essay score 3 on 6	essays may be written anytime.
	point scale.3	Compass is a computer-based
		assessment and scores area
		available immediately.
METRO	Mathematics: MSCD developed test 9 out of 15	Assessment testing by
	<b>Reading</b> : Nelson Denny Form G 84	appointment
	Writing: 30 minutes to write essay; scored by faculty	
	using Educational Testing Service scoring guidelines 3	
	out of possible 6	
UCB	Alternate demonstration of college readiness: Analyze	Students will be advised to enroll
	high school transcripts, including enrollment in AP	in a community college course
	courses in English or Math, four or more years in English	during the first semester of
	or Math with passing grades in all courses.	college enrollment.
UCCS	Opportunity to retake ACT exam	In addition to the state ACT test
		date, national test date, UCCS
	Alternate demonstration of college readiness: Analyze	offers the ACT exam at its
	high school transcripts, including enrollment in AP	testing center (\$33).
	courses in English or Math, four or more years in English	
	or Math with passing grades in all courses.	
UCD	Mathematics: Accuplacer Elementary Algebra test – 72	Contracts with CCD to test
	<b>Reading</b> : Accuplacer test – 83	transfer and freshmen without
	Writing: Accuplacer test in Sentence Skills 86	ACT scores students using the
		Accuplacer.
UNC	Mathematics Accuplacer Elementary Algebra test – 50	UNC offers on-line and paper
	<b>Reading</b> : Accuplacer test – 56	versions of Accuplacer test at the
	Writing: Accuplacer test in Sentence Skills – 66	Career Services Testing Center
USC	Mathematics: USC Placement exam scoring at	During Student orientation or by
	Intermediate Algebra mastery level; worked with ACT on	appointment at USC's Learning
	scoring guidelines	Center
	<b>Reading</b> : Accuplacer test – 81	
	Writing: USC proctored 300 – 500 word essay scored by	
	2 faculty.	
WSC	Mathematics: MAA Basic Algebra – 16	Placement tests offered during
	Reading: WSC English Placement I 15	orientation sessions.
	Writing: WSC English Placement II – 18	

	DELIVERY		STUDENT	INFORMATION ON	
INST	REGULAR COURSE	CASH FUNDED	CONTRACT WITH CC	INFORMED	REMEDIAL COURSE AVAILABILITY
CC	X		NA	Writing	Published in course schedule, catalog, and on web site.
AIMS	Х		NA		Published in course schedule, catalog, and on web site.
СМС	X		NA		Published in course schedule, catalog, and on web site.
ASC	X			Same day as test	Published in course schedule, catalog, and on web site.
CSM			X (RRCC)	Personal letter	Required one-on-one tutoring in CSM Writing Center during first CSM semester while co-enrolled in Remedial course.

	DELIVERY		STUDENT	INFORMATION ON	
INST	REGULAR COURSE	CASH FUNDED	CONTRACT WITH CC	INFORMED	REMEDIAL COURSE AVAILABILITY
CSU			X (FRCC)	Writing	Published in course schedule,
					catalog, and on web site.
FLC		Х			Published in course schedule,
					catalog, and on web site.
MESA	Х				Published in course schedule,
METRO			V (CCD)	With a	catalog, and on web site.
METRO			X (CCD)	Within 2	Available remedial courses listed
				days	on class schedule, information sheets at the Assessment Center
					and from academic advisors.
UCB				Individually	Provide student with list of
UCD				notified	remedial courses available in the
				notified	Denver Boulder area and on-line
UCCS		X	X (PPCC)	Mail	Deriver Bounder area and on-fine
UCCD			A (II CC)	notification	
UCD			X (CCD)	Notified	Student Success Advising Center
			()	individually	for freshmen and sophomores
				,	informs students, assists in
					registering, monitors progress.
					Provides list of all remedial
					courses offered in metro area.
UNC			X (AIMS)	Notified by	List of remedial courses that will
				College	satisfy requirements, including
				Transition	AIMS, video, correspondence,
				Center	weekend, on-line courses.
USC			X(PCC)	Notified	Notification at orientation
				with 24	session, catalog, semester
				hours of	bulletins, advising handbook and
				ACT test;	at web site.
				within 3 hours of	
				USC tests	
WSC		X		Prior to	Registration packet contains
, inse		A		registering	information on placement and
				fall semester	basic skills needs and course
					schedule for basic skills courses.
					Offered every semester.
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CCHE will continue to monitor the implementation of these plans to determine if they meet the needs of students.

#### V. <u>REMEDIAL DATA</u>

CCHE began collecting data on remedial assessment in 2001. The first file was submitted October 15, 2001. It includes assessment data on all undergraduate students entering Colorado's public colleges and universities. The remedial assessment data is designed to describe which students need remedial education and to inform school districts of their graduates' level of college readiness statewide.

The 2001 data collection year field-tested the robustness of the data design. The primary purpose of this submission was to ascertain if the data reported would answer the legislative questions regarding the state of remedial education or whether additional reports are necessary. Based on prior experience with new data submissions, CCHE anticipated that the 2001 file submission would have data shortfalls, but it would provide all constituent institutions an opportunity to verify their data for accuracy and consistency -- particularly the community colleges reporting undergraduate applicant data for the first time – before the first legislative remedial data report.

Although the first legislative report on the number, type and cost of remedial education is scheduled for January 2003, the following tables give a brief overview of student remedial needs. Table 1 illustrates the proportion of undergraduate degree-seeking students who would be enrolling in post-secondary education for the first time who were assessed as requiring remediation in at least one subject. As open admission institutions, students entering two-year colleges are less likely to have ACT test scores. This situation will improve next academic year because all Colorado graduates will have ACT scores from the 11<sup>th</sup> grade testing.

Table 1. Status of Remedial Assessment at Time of Report						
	Total Cohort	# Completely Assessed	#Exempt / Waived	% Completely Assessed (Excluding Exempt)		
2 Year School	18,165	8,388	2,551	53.7%		
4 Year School	21,196	18,587	377	89.3%		
Total	39,361	26,975	2,928	74.0%		

Table 2 shows the percentage of students who require some remedial assistance. Collectively, the four-year remedial rate parallels the size of the admission window. Institution analysis will show if this observation applies across the board to all admission selectivity levels. The two-year college freshmen class includes a higher proportion of adults than recent high school graduates. This accounts in part for the high remedial rate. The 2003 report will include more descriptive analysis, comparing recent high school graduates between sectors.

Table 2. Results of Remedial Assessment at Time of Report					
	# Assessed a # Completely Remedial in a Assessed Least One Are		% Assessed as Remedial		
2 Year School	8,388	7,127	85.0%		
4 Year School	18,587	3,774	20.3%		
Total	26,975	10,901	40.4%		

Table 3 demonstrates the distribution of remedial students across the remedial subject areas reading, writing, and mathematics. It confirms that 32% of students entering

Table 3. Type of Remediation Identified for Assessed Students						
[ [	2 Year Schools		4 Year Schools		Total	
No Remediation Required	1,261	15.0%	14,813	79.7%	16,074	59.6%
Math, Writing, and Reading	1,913	22.8%	205	1.1%	2,118	7.9%
Math and Writing	996	11.9%	518	2.8%	1,514	5.6%
Math and Reading	623	7.4%	148	0.8%	771	2.9%
Math Only	2,635	31.4%	1,479	8.0%	4,114	15.3%
Math or some combination						
with Math	6,167	74%	2,350	13%	8,518	32%
Writing Only	346	4.1%	409	2.2%	755	2.8%
Reading Only	251	3.0%	841	4.5%	1,092	4.0%
Writing and Reading	363	4.3%	174	0.9%	537	2.0%
Total Assessed	8,388		18,587		26,975	

college need math remediation. The four-year college math remediation rate is 13% while 74% of the students entering a two-year college need math remediation.