

COLORADO RURAL SCHOOLS CAUCUS

**RURAL SCHOOL DISTRICT STUDY:
THE IMPACT OF THE HIGHER EDUCATION
ADMISSION REQUIREMENTS ON
COLORADO'S RURAL SCHOOL DISTRICTS**

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EXECUTIVE SUMMARY

This report presents the results of the Rural Impact Survey conducted by the Colorado Rural Schools Caucus (CRSC). It provides both statistical and philosophical contexts for a discussion about the impact of the implementation of the Phase I and Phase II higher education admissions requirements (HEAR) on Colorado's rural school districts.

Several themes guided the survey:

1. Number of highly qualified teachers
2. High school curricula and graduation requirements
3. Changes made to accommodate the Phase I HEAR
4. Adjustments that will need to be made to meet the Phase II HEAR

The CRSC shares the concerns of the higher education community regarding the need to raise expectations in our high schools. However, the implementation of the HEAR are creating additional strains on the already thinning budgets of many of Colorado's rural school districts.

Should the Colorado Commission on Higher Education (CCHE) move forward as planned with the fall 2006 implementation of the Phase II requirements, rural school districts will likely be altered in the following ways:

1. The breadth of education that will be offered in Colorado's rural high schools will decrease;
2. There will be a drop in rural Colorado students applying for and attending the state's four-year higher education institutions;
3. High school graduation rates may decline.

The CRSC wants rural students to remain in Colorado and to succeed, but rural schools do not currently have the resources (money, teachers, and technological infrastructure) to meet all of the state and federal performance standards, much less to accommodate the new HEAR policies of CCHE. And unless major changes occur, these limitations of choice will become a full blown crisis of opportunity.

Therefore, the CRSC has the following recommendations for CCHE:

1. Postpone the Phase II college entrance requirements until such time as the effectiveness of the Phase I requirements can be evaluated, or allow each college/university to use the Phase I entrance requirements as a base line but to set its own entrance requirements, if it so chooses, above and/or beyond Phase I;
2. Develop a weighted admissions system that takes into account the rigor of a student's particular area of pre-collegiate study;
3. Allow more flexibility in the types of courses that satisfy the entrance requirements, i.e. accounting as a valid math class;
4. Engage in a collaborative dialogue that highlights and promotes what is working in K-12 and higher education but that also takes a realistic look at areas in which and ways in which we can improve P-16;

5. Take part in the discussions currently being promoted by CASB and other organizations to address what we want our students to know and be able to do when they receive a high school diploma;
6. Work with the CRSC to draw attention to the need for a statewide communications network and associated policy structure that can provide accelerated learning opportunities for all of Colorado's students;

Introduction and Background Information

In November 2005, members of the Colorado Rural Schools Caucus (CRSC) began meeting with representatives of the Colorado Commission on Higher Education (CCHE) to discuss the CRSC's concerns regarding the implementation of the Phase II college entrance requirements and the affects they would have on many of Colorado's rural school districts. For several months, the Caucus had been hearing from its members that there was a general frustration with the new entrance requirements, and many district superintendents and boards of education were concerned that CCHE was making policy decisions without the substantive input and stakeholder dialogue necessary for such comprehensive systemic changes.

Concerns surrounding the Phase II requirements ranged from the philosophical – vocational education, music, the arts and humanities will be squeezed out of the high school curriculum because kids wanting to go to college will be forced to take courses they are not interested in and they may never use again, to the practical – the new requirements will over stress an already tight teacher supply in mathematics and foreign languages, and it is likely that rural schools will bear the brunt of that shortage. There was also speculation as to the motives for the increased requirements: political, financial, or truly educational? Moreover, there was an outcry from rural parents claiming that their children were being “tracked” by identifying which ones would be placed in pre-algebra in the seventh grade; they assume that if their child does not get into this class then he/she will not be able to attend college. CCHE's Phase II entrance requirements and the way they are being marketed to middle school parents, they said, have only exacerbated this perception.

While these concerns were very real for the rural districts, for the representatives of CCHE they were perceived as anecdotes versus robust, verifiable information that could be taken to the CCHE board of directors in order to recommend any change in policy. Both the Rural Caucus and CCHE representatives agreed that what was needed was compelling evidence that truly substantiated the need for the requirements to be altered or postponed.

Thus, the Rural Impact Study was created. The goals of the assessment were to gather the “compelling evidence” requested by representatives of CCHE and to produce a body of evidence that corresponds to the student success observed each day in rural Colorado schools so as to shape any possible adjustments to the CCHE college admission policies.

Survey Parameters

On April 1, 2006, Rural Impact Surveys were sent to 140 school districts: every school district with an enrollment count of 3000 students or less (the common state legislative definition of a rural school district). Topics included current student enrollment in grades eight through twelve, the number of highly qualified high school instructors, high school curriculum, graduation rates and requirements, and the district's ability to implement

both the Phase I and Phase II college entrance requirements.

Of particular interest to the representatives from CCHE were the number of highly qualified teachers within each district in the fields of math, science and foreign languages. The CRSC was interested in finding out how many districts had made changes to their curriculum and graduation requirements based upon the Phase I entrance requirements and what classes would be compromised if additional changes needed to be made to address the classes needed for Phase II. Both parties wanted to know more about potential fiscal impacts on the rural districts' resources.

Survey Results

Of the 140 surveys sent out, 34 were returned. Although a 24% rate of return may seem low, it should not be perceived as apathy or a lack of interest by the rural schools. The timing of the survey coincided with the preparation of many state reporting requirements, and without a large staff to tackle individual assignments the superintendent and his/her assistants often did not have time to take on another project. In addition, this year saw a tremendous turnover in superintendents (30 in the rural districts alone). Many districts were trying to tie up loose ends to prepare for new leadership, and the rural impact surveys got set aside in the commotion.

While 34 surveys was not the depth of return the Caucus was hoping for, the breadth of districts (the various district sizes and regions represented by those surveys returned) provided a wealth of information and, we believe, enough data to analyze trends taking place throughout rural Colorado.

Because many districts were concerned the information they provided might in some way be held against them, the Caucus promised complete confidentiality with respect to survey responses. In addition, the Caucus also agreed that no one other than the CRSC Executive Director and the members of the Rural Caucus Executive Committee would be allowed to see the completed questionnaires. Therefore, specific quotations are not attributed to any one district in particular.

Current Enrollment: Grades 8-12

- ~6000
- 21% in the graduating class of 2010 (8th graders)
- 19% in the graduating class of 2008 (10th graders)

Class sizes (the total number of eighth graders, freshman, sophomores, juniors or seniors in a district) ranged from 2 in the smallest district to 228 in the largest.

Current High School Faculty

- ~500
- 11% math
- 10% science
- 5% foreign languages

Highly Qualified Instructors

- 12 districts meet NCLB's HQT requirements in 100% of their classrooms
- 22 districts (64%) have teachers in one or more classrooms who do not meet the NCLB definition of highly qualified.

District size was not as great a factor in meeting this requirement as was expected, as some of the smallest districts reporting were those that have met the 100% compliance rate. However, the majority of districts that reported having teachers who do not meet the NCLB HQT requirement fall into the district student population range of 50 – 500.

Classes currently being taught by faculty members without HQT endorsements include:

- Math
- Science
- social studies
- English
- Foreign languages
- Vocational education
- Special education
- Electives – P.E., Music, Art

(See Appendix A for a complete breakdown)

Reasons cited for a district's inability to meet the HQT requirements included:

1. Inability to attract teachers to small, rural towns that cannot offer the same salaries as a Front Range school;
2. Inability to retain teachers after one or two years because they want more money and more opportunities;
3. HQTs employed in hard to fill curricular areas (math, science and special education) moved away, and the district has not been able to find qualified teachers to fill their positions;
4. Because of the small size of the district, employees must teach in several core subjects, and it is difficult for them to meet HQT requirements in each;
5. There are not enough foreign language teachers to go around;
6. Job openings are filled with people who can do the job and do it well, not simply those people who meet NCLB's HQT parameters;
7. Having high standards and requirements are OK, but having great teachers is far more important.

Current Courses Offered in High School

Regardless of size, every high school reported offering each of the following in district:

- **Math:** Algebra I & II, Geometry
- **Science:** Biology, Chemistry, Physical Science
- **Social Studies:** Civics, U.S. History, World History
- **English:** English I, II & III
- **Physical Education:** P.E., Weights, Health
- **Electives:** various courses from which to choose
- **Extracurricular Activities:** various sports, organizations and competitions

(See Appendix B for a listing of district curricula and Appendix C for a listing of extracurricular activities)

Vocational Education

- Vocational education courses are offered in 94% of districts (see Appendix D for a listing of vocational courses).
- Participation rates range from 25% to 100% and are on average 66%
- 17% of districts reported a drop in participation rates since the inception of the Phase I entrance requirements (this trend is expected to continue as the Phase II entrance requirements commence)

The reasons for the decline were given as follows:

1. *In order to provide the courses required by Phase I, we had to drop several of our elective classes, the same will hold true if Phase II is adopted;*
2. *Our students have the opportunity to take a class where they build a house over a two year period. The first year they put up the frame and enclose the house. The second year is dedicated to working on the inside. The number of students taking this vocational program has been drastically reduced since CCHE increased their entrance requirements and began pushing the idea that everyone should have a college degree. This is an excellent program and one of only a few in Northeastern Colorado, but it could be wiped out if the Phase II requirements go into effect.*
3. *If Phase II goes into effect, in order to protect our vocational programs we will need to create a zero hour for math and kids will not be able to access district transportation services. In a district that spans 1000 sq/mi. that may not be an option for us.*

While seen by some as perhaps a necessary evil to provide a higher, more rigorous level of course work for college bound students, the deterioration of vocational education is of grave concern in our rural districts where as many as 38% of students either enter the workforce directly or pursue a post-secondary education that is strictly vocation centered. Moreover, these classes often provide the only links to real life experiences that many students need in order to remain in school to at minimum earn a high school diploma.

Foreign Language

- 47% of rural school districts offer foreign languages in-house
- 81% of those districts provide only Spanish

The majority of Colorado's rural school districts have to utilize the online system of supplemental courses in order to satisfy the students' desires to complete a foreign language class. But because resources are tight to diminishing in 79% of rural districts, some districts have limited these classes to college bound students only. Others have had to pass the costs of these courses directly on to students.

Supplemental Curriculum (Dual Enrollment and Online Coursework)

- 100% of responding districts take advantage of either on-line or distance learning programs or dual enrollment opportunities
- Participation rates range from 8% (one student in a senior class of twelve) to 100% of juniors and seniors.
- On average over 50% of all of the reporting high schools' juniors and seniors take one or more supplemental classes

Said one superintendent, "We couldn't do it without Colorado Online Learning." Said another superintendent, "50% of our juniors and seniors take advantage of the Early Scholars Program through Mesa State College. Each takes 2-4 semester long concurrent courses a year." These were typical sentiments expressed by every district from which we heard.

Graduation Rates and Statistics

Between 3 and 230 students per district per year graduate in rural Colorado.

- The average graduation rate is 94%
- 8 districts reported a rate of 100%
- 1 school district reported a graduation rate of 79%

Data collected over the past three years shows:

- 60% of rural students attend a four year college and/or university
- 20% attend 4 year colleges and universities that are out of state
- 78% of students attend some type of in-state post-secondary learning institution

The median number of credits needed for graduation is 25.5. The range, however, is between 22 and 28 with the majority of districts insisting students earn 24 to 28 credits. In addition, in their high school handbooks many districts have statements similar to the following,

"The requirements are a minimum and in no way infer that once the minimum has been met a student should be eligible to graduate without completing [a specified set of] semesters of work beginning the freshman year. It is the desire of this district for the student to take as many subjects as his/her ability allows so he/she can be well informed and be able to carry on a useful vocation upon leaving his/her school or to enter higher education."

Every district's handbook also contains an outline/description of the college entrance requirements established by CCHE, and most highlight the courses that meets the HEAR guidelines.

Dual Diplomas

One rural school district (one of the smallest in the state) reported offering two types of diplomas: a general diploma and an honors diploma.

Changes in High School Graduation Requirements

- 63% of districts carried out an evaluation of their curriculum and graduation standards as a result of changes made to the HEARs
- 34% of districts reported making adjustments (shifting resources, cutting classes, adding classes, contracting classes through colleges and junior colleges, etc) to meet Phase I.

Following is what some districts had to say about the process in which they engaged:

1. "We hired an additional teacher and [enrolled in] more classes through Colorado Online Learning, and the board adopted new graduation requirements matching the Phase I entrance requirements;"
2. "The establishment of the new college entrance requirements caused us to re-evaluate our graduation requirements. We decided to place greater emphasis on technology;"
3. "We are now looking at dual credits and more than one type of diploma;"
4. "We may move from [requiring] two years of math to three years;"
5. "Our district did not change its graduation requirements but added the college entrance requirements and gave students and parents the choice of which curriculum to follow;"
6. More supplemental classes were added (additional classes are taught by each teacher) and we moved athletics to after school to make room for them;
7. "We revamped our math department, requirements and curriculum and hired one additional teacher. We then had to cut one .5 science teacher and one .5 social studies teacher...we are debating whether to add an additional math class, but even if we could require it, we may only have the top 10-15% of seniors able to take the class (Calculus);"
8. "We re-evaluated and restructured the curriculum and class offerings (including many online courses) to facilitate the maximum number of opportunities for students. We also hired additional staff in the areas of math and science;"
9. "The establishment of the higher entrance requirements caused our district to re-evaluate its graduation requirements. Art classes were dropped and in some other subject areas, a section was dropped. One problem we observed during the re-evaluation process is the dual tracking the new requirements could present for schools in [the area of] Math. For example, we now teach Algebra I in 8th grade, Geometry in grade 9 and Algebra II/Pre-Calculus in grade 10 in order to better prepare students for CSAP. Should we allow students who do not intend to

further their education to take a lower form of math course in their Junior and Senior years?”

10. “The district had to reduce the number and types of electives to comply with the CCHE Phase I requirements. For example, we had economics and removed it from the schedule to put in World History. We removed the lower level math courses such as consumer math and pre-algebra in order to have room for the math requirements CCHE states. We moved our math curriculum down so that our 7th and 8th graders are getting these lower level math courses so they are prepared for the upper level math courses;”
11. “We made adjustments through a greater offering of online college and AP courses available to students.”

For the majority of districts (65%), Phase I was simply “met with minor inconveniences,” and at present every district has the ability to meet the Phase I demands. However, most have chosen not to force every student into this “pre-collegiate” high school graduation track. The reason is the belief that “students planning to attend four year colleges will take the proper courses,” but “not every student is college bound and those that aren’t shouldn’t be forced to take coursework that won’t be relevant to them.”

Impacts of Phase II

- 44% of rural districts do not have the ability to offer all of the requisite courses to satisfy the Phase II entrance requirements
- 55% will have to make serious adjustments come this fall
- Over 50% of districts will offer fewer electives, and some may have to get rid of an entire elective program.

The following sentiments were expressed by our districts:

1. “The higher level math courses could create problems, depending on current staff. Right now in math we are fine, but if a teacher resigns we could face a problem with Calculus. We also currently have a problem in Physics and Chemistry. There are science teachers who have a deeper specialty in life science as compared to physical science and having two on staff creates problems.”
2. “We will have to schedule a fourth math class against our music program, which is currently protected, or we may need to make a decision about negatively impacting vocational programs by offering the fourth math class during that time slot. Foreign languages will have to be offered via on-line or via fiber, but both of those programs come with a cost. At this point, we are not sure what we are going to do”
3. “Although we have the ability to meet the Phase II requirements, all of the students must now be able to go through Trigonometry or Pre-Calculus to meet the math requirements because we do not currently offer any other math courses that meet the HEAR requirements other than Algebra I and II, Geometry, Trigonometry and Calculus.”
4. “We will need to find more time for foreign language, which means cutting a Speech class and doubling up one language arts class. [But], cutting Speech,

- which we believe is an essential skill for life and combining 2 language arts classes into one is not in the best interests of the students.”
5. “The addition of English and math classes creates huge issues for us, as we only have one math and one English teacher both of who have 6 different preps as well as all of the junior high school courses.”
 6. “If the foreign language piece stays in place we will need to consider an instructor. We will also end up remediating at every level and more students will have to take math, science, etc. a second or third time.”
 7. “We currently do not have a foreign language instructor. We will have to pick these classes up over the fiber that is offered through the ECBOCES.”

Average Costs to Districts

- \$40,475 is the average cost that will have to be assumed by districts in order to provide the necessary course work to meet the Phase II entrance requirements.
- 96% of districts would require budget increases from \$2500 - \$150,000.

Observations

A General Lack of Resources

According to the Colorado School Finance Project’s (CSFP) adequacy study funding for Colorado’s school districts must increase in the range of \$800 million to \$1.5 billion to be “adequate,” meaning that schools will then have enough per pupil money “for a student with no special needs to meet the expectations implicit in accreditation, school accountability reports and NLCB.” This figure does not include the expectation that every child meet the Higher Education Admissions Requirements.

Based upon their 2004 capital needs analysis project, the Donnell-Kay Foundation found that Colorado has a serious issue with crumbling classrooms, and between \$5.7 billion and \$10 billion is needed for capital construction and upgrades alone. This is a real issue for rural Colorado where the operating costs to maintain old buildings continue to increase. Many sparsely populated districts do not have the property tax revenue to fund school construction, and a growing number of districts lack the assessed property value to bond for an amount sufficient to fix any capital construction problems.

Though outside the purview of the state, for the past three years the federal government has consistently cut funding for rural education by shifting more Title I and Title II resources to poor, underperforming urban districts. In addition, next year, the Bush administration has proposed a \$59 million decrease in the total education budget with a \$221 million cut in the Enhancing Education Through Technology Program and the elimination of the Perkins Grants for vocational education as well as 47 other programs many of which are largely utilized by our rural school districts.

Compounding the issue even further is the fact that 79% of all of Colorado’s rural school districts are experiencing declining enrollment, and each year they are stretched beyond capacity to meet the basic needs of state and federal mandates. In many districts this has

resulted in a reduction in staff levels, the elimination of classes and programs, less teacher training, an inability to make capital improvements and passing on expenses to students. The bottom line is that our rural school districts are in dire need of resources, and unless changes are made in the way and level at which our public schools are being funded the likelihood of rural high schools having the ability to keep pace with the increasing demands of policymakers is slim.

“The Quiet Crisis” – Colorado’s and America’s Teacher Shortage

Even if Colorado’s rural schools had an abundant pool of financial resources from which to draw, schools would still be faced with the issue of finding employees for the additional classes necessitated by the Phase II entrance requirements.

As quoted in CCHE’s Report to the Governor and General Assembly on Teacher Education, January 2006, only 10,869 students were enrolled in teacher education programs in the state of Colorado in 2004-2005: 2.6% were enrolled in Mathematics and less than 2% were seeking licensure in foreign language instruction. In addition, Dr. Eugene Sheehan, Dean of the College of Education at University of Northern Colorado, reported that Colorado’s colleges are not ready to provide the additional math and foreign language teachers within the timeline of a 2010 high school graduation. “We graduate 5-7 new foreign language teachers a year. Almost all of them are in Spanish. Obviously, this is not enough to meet the needs of the state,” said Sheehan. Even CCHE’s Gully Stanford, upon being questioned by Stephen Bohrer, Superintendent of Holyoke School District, during a HEAR Task Force meeting about where all of the new math and foreign language teachers were going to come from admitted, “There is a crisis.”

This crisis is not limited to the state of Colorado. It is nation wide - thus, the reason for the President’s announcement of the American Competitiveness Initiative during his 2006 State of the Union Address. One of the many things the plan seeks to do is train 70,000 new science and math teachers and to bring 30,000 math and science professionals to teach in classrooms through an Adjunct Teacher Corps program. However, 70,000 math and science teachers and 30,000 math and science professionals will not be enough to fill the gaps in the country’s highest paying urban school districts much less in Colorado’s small, resource challenged rural ones. Besides, an influx of math and science teachers will not address the issue of Colorado schools needing a much larger number of qualified foreign language teachers.

Technology – The Door to Opportunity Requires Resources

From the US Department of Education to higher education commissions to individual high schools and private education groups and foundations, technology is being pushed as the solution to increase students’ access to accelerated learning opportunities. The idea is that if, by location, rural students are not afforded the ability to enroll and succeed in courses such as foreign languages, higher math, advanced science, AP or IB, then one way to bring these classes to the student is through the use of technology. 100% of Colorado’s rural high schools agree with that philosophy.

Thus, the question for our rural school districts and the state of Colorado is not IF they will use supplemental online courses but HOW they will implement them. Just as hiring teachers costs money, upgrading computer labs and enrolling 2 to 40+ students in an online course takes a substantial investment of resources. Data lines must be installed, computers must be purchased, computer technicians and teachers must be trained, and the course work must be bought, all of which can add up to a considerable sum of money not only for the initial investment but also for yearly maintenance and upgrades.

In the East Central BOCES for example, the cost of creating a distance learning program, the Video Network for Educational Technology Services (VNETS), that currently serves 17 eastern plains school districts and the ECBOCES office has taken four years and over \$400,000 in start up capital to establish. In addition, each district that chose to have access to the program had to purchase equipment valued at approximately \$12,000 and commit to a ten year lease payment of \$22,500 per year. On top of those expenses, each district must also contribute \$4000 - \$5000 annually for a Curriculum Coordinator and Technical Support Staff. Last but not least are the ongoing curricular costs: \$200 per student per class –an expensive proposition for districts with enrollment levels that range from 60 – 3000.

Though many rural school districts are making gains by collaborating in the development of online networks and interactive media, because Colorado is not focused on this effort at a state level, the extent of these programs often falls short of providing every student the opportunity to access his/her learning potential. This is especially true in school districts without regional assistance because individual schools are left to develop these learning networks of their own accord, and many do not have the resources to complete the task. For example, one of Colorado's small Eastern Plains schools would like to enroll 40 students in two online courses: Spanish I and Spanish II, but the district does not have the computer lab capacity to handle the scheduling. Therefore, the class size may have to be reduced or the students may have to do without.

Areas of Impact

The CRSC acknowledges that the knowledge and skills today's graduates need are different than they were in the past, and they will only continue to be more so. However, as discussed above, unless major reforms are enacted with respect to school funding and teacher recruitment the changes in college entrance policies enacted by CCHE will have substantial fiscal and curricular impacts on Colorado's rural schools.

Bearing the brunt of the impact will be vocational education and high school electives. Yet, it is this curricula that imparts the competencies that are consistently highlighted by businesses as the skills they most desire in an employee. Communication skills, honesty/integrity, interpersonal skills, motivation/initiative, work ethic, analytical skills, flexibility, computer skills and detail orientation are, according to the National Association of Colleges and Employers, the attributes that make up the list of the top ten skills employers are looking for in a high school/college graduate.

In other words, four years of core classes (math, science, English and social sciences) whether taken in high school or college and a high grade point average are not enough to make an individual stand out from the competition. As Charles A. Ross IV, Marketing Leader for the Solae Company said in a recent interview, “It is all about experiential learning: applied, real-world character and skills. As a manager, I am more interested in a candidate who has solid communication skills and leadership ability than I am a person who can do algorithms.” He is not alone in this position.

Bill Coplin, a professor and student advisor at Syracuse University and the author of 10 Things Employers Want You to Learn in College: The Know-How You Need to Succeed, and former White House speechwriter David Pink, author of A Whole New Mind: Moving From the Information Age to the Conceptual Age, agree that employers are looking for more than just accumulated knowledge and that the right brain aptitudes which are often ignored (artistry, empathy, taking the long view, pushing the transcendent) will increasingly determine who will succeed. Thus, classes like speech, music, drama, art and career-related experiences such as FBLA, FFA, vocational education, internships are critical components in the formation of a well-rounded, educated student body.

The Goals of Recent Policy Changes

If the goal of creating the Phase I and Phase II college entrance requirements is to ensure greater success rates with respect to college graduation, then common sense and sound research practices would dictate that we would have to wait until this year’s high school sophomores graduate from college to collect any relevant data as to the effectiveness of the plan. After all, if Colorado’s colleges and universities do not see a significant rise in graduation rates beginning in 6 years, the theory behind the adjustments will have proven false. However, if six years is too long a time frame for policy makers to wait, Indiana and its “Core 40” can be used as a barometer of what to expect.

Twelve years ago, Indiana began its “Core 40” college preparatory program. According to the Indiana Department of Education’s Core 40 Information Center web site, the idea was to “provide all Indiana students with a balanced sequence of academically rigorous high school courses in the core subjects of English/language arts, mathematics, science and social studies; physical education/health and wellness; and electives including world languages, career/technical, and fine arts.” The Core 40 requirement, it states, gives all students the opportunity to compete with the best.

In 1994 several boards of education began tying the Core 40 to their own graduation requirements. As a result, the percentage of students graduating from high school with the new Core 40 diploma escalated, and in 2004, Indiana's Education Roundtable recommended that the state require the Core 40 college-prep curriculum for all students. In 2005, the state legislature agreed, and that same year, Indiana’s State Board of Education mandated the Core 40 as required curriculum for all students entering high school as the class of 2006-2007. The Core 40 is now the minimum entrance requirement for Indiana's public four-year colleges and universities.

Statistics kept by the Indiana Department of Education show that over the past decade and as a direct result of the Core 40 more Indiana students have been enrolling in Indiana's colleges and universities. However, in a 2006 presentation about P-16 education initiatives made to the Colorado Joint House and Senate Education Committees by the Education Commission of the States (ECS), Carl Kruger, an ECS Assistant Policy Analyst, said that although Indiana is held up as the best example of a state that has taken on a P-16 education focus, and although they have seen greater enrollment of Indiana kids in colleges, there is no data to show an appreciable increase in college graduation for those same students.

Thus, the Indiana experience shows that micromanaging high school curriculum does not necessarily lead to greater student success and superior graduation rates in college.

Perhaps then the goal of increasing the HEAR was to create the catalyst that would force a discussion of P-16 strategies and create a stronger alignment between high school and college curricula. If this is the case, CCHE has largely accomplished what it set out to do, as the survey results show that 63% of rural school districts took on the task of evaluating their curriculum and many districts made adjustments to the courses they offered demanding more rigor and relevance. In addition, the Colorado legislature, CASB, CASE, CEA and a number of individual school districts, along with the Governor's Alignment Council, have taken on the task of looking at how the state can work to more closely align its P-16 educational efforts.

Conclusion

Lately, everyone has been told that the U.S. is falling behind because the "world is flat" and American kids are no longer keeping pace in science and mathematics. But what many people tend to dismiss is the need for balance, as eloquently highlighted by the author of The World is Flat, Thomas Friedman, in a March 25, 2006, AP article:

"India and China, which have mastered rote learning and have everyone else terrified about their growing armies of engineers, are wondering whether too much math and science – unleavened by art, literature, music and humanities – aren't making Indira and Zhou dull children and not good innovators... Innovation is often a synthesis of art and science, and the best innovators often combine the two..."

Hence the concern I found in India that it must move quickly from business process outsourcing - running back rooms, answering phones or writing code for U.S. companies – into knowledge process outsourcing – coming up with more original designs and products.

My guess is that we're at the start of a global convergence in education: China and India will try to inspire more creativity in their students. America will get more rigorous in math and science. And this convergence will be a great spur to

global growth and innovation. It's a win-win. But some will win more than others – and it will be those who get the balance right the fastest, in the most schools.”

Recommendations

In the past ten years, Colorado has often led the way in education reform, but recently the state seems to be mired in knee-jerk reactions to an apparent crisis in public education. This course of action is neither sound nor reliable. It is also completely unnecessary. There is time to adjust our ways of thinking and our approaches to the problems vexing public education, but what is needed now is, as Friedman wrote, balance.

In an effort to provide both balance and improvement, The CRSC would like to make the following recommendations to CCHE:

1. Postpone the Phase II college entrance requirements until such time as the effectiveness of the Phase I requirements can be evaluated, or allow each college/university to use the Phase I entrance requirements as a base line but to set its own entrance requirements, if it so chooses, above and/or beyond Phase I;
2. Develop a weighted admissions system that takes into account the rigor of a student's particular area of pre-collegiate study;
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4. Engage in a collaborative dialogue that highlights and promotes what is working in K-12 and higher education but that also takes a realistic look at areas in which and ways in which we can improve P-16;
5. Take part in the discussions currently being promoted by CASB and other organizations to address what we want our students to know and be able to do when they receive a high school diploma;
6. Work with the CRSC to draw attention to the need for a statewide communications network and associated policy structure that can provide accelerated learning opportunities for all of Colorado's students;

APPENDIX A

CURRICULUM BEING TAUGHT BY NON-HQT FACULTY

Math: 7 districts

Basic Math – 2 districts
Pre-Algebra – 1 district
Algebra I – 1 district
Geometry – 1 district

One district stated that all of its math classes are currently being taught by someone without an HQT endorsement.

Science: 2 districts

Physics – 1 district
Anatomy & Physiology – 1 district

Social Studies: 4 districts

Civics – 2 districts
Comparative Government – 1 district
History – 1 district

English: 4 districts

Speech – 2 districts
Language Arts, grades 9 and 10 – 1 district

One district stated that all of its English classes (English I-IV) are currently being taught by someone without an HQT endorsement.

Foreign Languages: 6 districts

Spanish I – 3 districts
Spanish II – 2 districts
German I & II – 1 district

Special Education: 2 district

Special Education – 1 district
ESL – 1 district

Electives: Several Districts

P.E.
Drama
Music/Band
Choir/Chorus
Vocational Arts
Accounting

APPENDIX B

CORE COURSES OFFERED IN RURAL HIGH SCHOOLS

Math

Algebra I & II, Geometry – all districts
Trigonometry/Pre-Calculus – 41% of districts

Calculus – 21% of districts

Pre-Algebra – 18% of districts

Basic Math – 11% of districts

Advanced Math – 9% of districts

Business Math – 9% districts

Consumer Math – 9% districts

Algebra III – 6% of districts

Algebra IV – 6% of districts

AP Calculus – 3% of districts

Remedial Math – 1 district

Science:

Biology, Chemistry, Physical Science – all districts

Physics – 90% of districts

Earth Science – 24% of districts

Advanced Biology or Chemistry – 24% of districts

Environmental Science – 21% of districts

Anatomy & Physiology – 18% of districts

Astronomy – 12% of districts

High School Science – 6% of districts

Life Science – 6% of districts

Genealogy/Genetics – 6% of districts

Aquaculture – 1 district

Social Studies:

Civics, U.S. History, World History – all districts

Geography – 38% of districts

Psychology – 24% of districts

Economics – 12% of districts

AP History -12% of districts

Western Civilization – 9% of districts

Cultural History – 9% of districts

Sociology – 8% of districts

Southwest History – 8% of districts

Colorado History – 6% of districts

Humanities – 5% of districts

English: 4 districts

English I, II, III - all districts

Speech/Reading – 35% of districts

English IV – 32% of districts

Literature – 29% of districts

Creative Writing – 26% of districts

Composition – 15% of districts

Language Arts – 3% of districts

College English – 2% of districts

Foreign Languages

Foreign Language I – 47% of districts

Foreign Language II – 41% of districts

Foreign Language III – 29% of districts

Foreign Language IV – 24% of districts

Physical Education

P.E., Weights, Health – all districts

Various sports

Outdoor classes

Electives:

Vocational Education – all but 2 districts

Art – 84% of districts

Computers – 73% of districts

Choir/Music/Band – 64% of districts

Woods/Carpentry – 44% of districts

Business Courses – 35% of districts

Drama: 29% of districts

Accounting – 24% of districts

Automotive Courses – 12% of districts

APPENDIX C

EXTRACURRICULAR ACTIVITIES

Sports

Volleyball
Cross Country
Basketball
Track
Football
Wrestling
Baseball
Skiing
Golf
Soccer
Climbing
Cheerleading
Softball
Dance
Rodeo
Hockey
Lacrosse

Clubs

Chess Club
Math Club
Gay-Straight Alliance
"O" Club
Riverwatch
Spanish Club
Pep Club

Organizations

Student Council
FFA
FBLA
Future Teachers of America
National Honors Society
FCM
FCCLA
EPYCS
VICA

Competitions

Science Fair
Knowledge Bowl
Model UN
Solar Car Team
Destination Imagination

Other Activities

Drama/Plays
Yearbook
Newspaper
Band
Choir
Art
Speech Team
Forensics
El Pomar
Vocational Programs

APPENDIX D

VOCATIONAL EDUCATION COURSES

Agriculture

Vocational Agriculture I – IV

Agriculture

Agriculture Mechanics

Natural Science

Agricultural Math

Agricultural Science

Heavy Equipment

Web Design

Media

Desktop Publishing

Journalism

Radio Broadcasting

Photography

Media

Business

Career Education

Vocational Business I – V

Business Education

Economic Education

Business Technology I & II

Business and Consumer Law

Accounting I & II

Start Your Own Business

Internship

E-Commerce

Consumer and Family Studies

Consumer Projects

Other

Aviation Maintenance

Health and Nursing

Vocational Exploration

Construction

Build a House (2 year program)

Drafting and Construction Trades

Welding

Carpentry

Woods

Drafting

Automotive

Automotive I – III

Heavy Equipment

Small Engines

Computers

Computer Tools I & II

Computer Keyboarding

E-Commerce

Technical Drawing

Technology