

# Commission for the Advancement of 21st Century Skills and Careers

(P-20 Commission)

Briefing Document, April 28, 2009

## Educational Attainment and the Economy

The knowledge and skills of our residents are among the most important drivers of Connecticut's economic success. In 2000, the states ranked highest in educational attainment also led the nation in per capita income -- with Connecticut heading the list.

Since then, Connecticut has lost its lead in educational attainment. While the percentage of our adults holding a four-year degree climbed from 27.2 percent to 31.6 percent during the 1990's, other states have outpaced us; we are now ranked fourth behind Massachusetts, Colorado and Maryland. And even worse may be yet to come: our falling competitive ranking could well be coupled with a significant drop in the absolute number of college-educated residents.

---

*"In a global economy, where the most valuable skill you can sell is your knowledge, a good education is no longer just a pathway to opportunity, it is a prerequisite."*  
*(President Obama's Address to Congress, February 24, 2009)*

---

A recent regional analysis, *New England 2020*, predicts a disturbing decline in Connecticut's level of postsecondary educational attainment. The report matches current college success rates with expected shifts in our population to project that by 2020, college graduates will become a smaller share of our young workers between the ages of 25 - 30. For the first time in 50 years, we will not replace our retirees with a more educated younger generation.

This dire projection may be the most important factor shaping our state's economy, and the employability and earning power of each of us and our children. We ignore these changes at our peril in an ever more competitive, information-based, global economy.

Raising the educational attainment of our residents drives our economic as well as personal success. On average, people with a bachelor's degree earn \$50,900 a year, while those with only a high school diploma earn \$31,500 a year, and those who drop out of high school earn \$23,400 a year. The Alliance for Excellent Education estimates that, in Connecticut, the lost lifetime earnings from the class of 2008 who dropped out of high school will amount to nearly \$2.5 billion.

Connecticut is obviously not alone in facing this challenge. In his first address before the U.S. Congress, President Obama called on all Americans to complete at least one year of postsecondary education, and for the U.S. to have the highest proportion of college graduates in the world by 2020. In Connecticut, we need more than simply one year - we need to strive for the completion of a postsecondary credential.

Fortunately, Connecticut has a track record of improving the education level and competitiveness of our citizens. During the 20th century, we did just this in the face of two world wars, a devastating economic depression, and dramatic shifts in migration. We can and must do that again as the 21st century transforms the skills expected of our workforce.

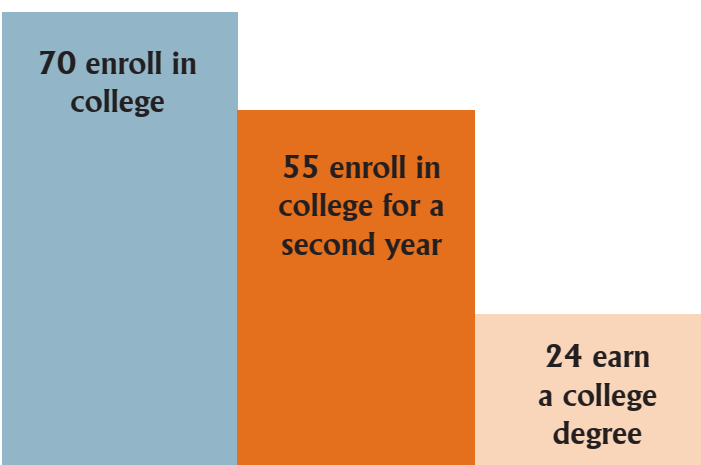
## How Well Educated are Connecticut Citizens?

Some might conclude that being fourth in national rankings of education attainment is acceptable, and that we must be doing something right to still be so near the top. To be sure, Connecticut's education system performs well by several measures, and especially for the most talented of our students:

- Seventy-seven percent of our 9th graders graduate high school four years later.
- More of our high school seniors take at least one Advanced Placement (AP) exam than the national average (28% v. 25%), and more pass at least one exam (20% v. 15%).
- Fifty-eight percent of our graduated high school seniors are accepted into a four-year college.

A look across our secondary and postsecondary systems, however, reveals serious leaks in the education pipeline: **fewer than one in four of Connecticut's current ninth graders will go on to earn a college degree**, despite their aspirations to do so.

Of every 100 Connecticut 9th graders, only...



Of Connecticut students who graduate from high school and go on to college within one year, approximately three out of five will stay in-state. Most of those staying in-state will attend a public college or university (approximately 19% go to a community college, and 20% go to the Connecticut State University System or the University of Connecticut). The graduation rates for these systems vary dramatically:

- At UConn, 71 percent graduate within six years.
- At the Connecticut State University System, 38-46 percent graduate within six years.
- At the state's community colleges, 7-24 percent graduate within three years.

Nationally, 56 percent graduate within six years.

Even before students graduate and take placement exams in college, indications of academic achievement problems are evident. Performance on the Connecticut Academic Performance Test (CAPT) in 2007 reveals that **fewer than half** of public school 10th graders meet state goals for English, mathematics and science, and the gap is especially severe for minority and lower-income students. While slightly more than 50 percent of white and higher-income students meet state goals, minority (with the exception of Asian students) and lower-income students are meeting state goals at far lower rates (as low as 17% on reading). According to the National Center for Higher Education Management Systems, if Connecticut's Hispanic, black, and Native American students achieved at the same levels of education as white students by 2020, Connecticut's aggregate personal income would increase by \$4.3 billion. With a growing minority population and workforce, it is imperative that Connecticut address its achievement gap - across its entire education system.

## College Readiness: The Challenge and the Opportunity

Many factors influence a student's decision to drop out of college, but the need for remediation is an especially reliable predictor of failure to complete college. According to national data in the *Diploma to Nowhere* report, many students enter college without the basic skills or knowledge needed for college-level courses: 29 percent of entering four-year students and 43 percent of entering two-year students need some form of math, science or English remediation.

We do not have similar figures for Connecticut; however, our community college system estimates that 80 percent of its entering students test as needing one or more courses in developmental math or English. Using the national estimates from *Diploma to Nowhere*, about 10,000 of Connecticut's college-bound public school graduates leave needing remediation, and it is likely that the majority of these students enter Connecticut's community colleges and state universities.

Connecticut's modest size provides us with a unique opportunity to address our achievement gap. We are geographically small, and the students entering our higher education institutions generally come from high school districts located within a 15 to 30 minute radius - a distinct contrast with the traditional notion of traveling hundreds of miles "to go away to college." For many Connecticut students, their travel time to college is little more than the time spent going back and forth to high school.

Further, we are fortunate to have many school districts in which elementary, middle and high schools routinely coordinate among themselves to promote student success. The opportunity before us is to extend this coordination to include nearby higher education institutions so that the entire system works in tandem toward the same goal



of student success. It would also be wise to invite local employers as well to inform educators at all levels about workforce needs. While this is already taking place in limited fashion across the state, little opportunity exists for lesson-sharing and expansion. Our limited size affords us a tremendous opportunity to join together in identifying ways to improve the educational achievement of our students at all stages of the pipeline.

## Connecticut's P-20 Commission

The Commission's purpose is to support collaboration among four systems (early childhood, K-12, higher education, and workforce training) to maximize the number of skilled people in our state with a meaningful postsecondary degree or other credential. The Commission will achieve this by improving Connecticut's existing educational policies and programs and moving quickly to initiate new ones where needed. Specifically, the Commission will:

- Develop a public policy framework for state leaders that increases collaboration across the systems at their current and potential points of intersection;
- Explore how the systems can work more effectively together to deliver services; and
- Realign existing activities and operations to make the education pipeline more responsive to the diverse needs of students.

Connecticut's achievement gap doesn't stop at high school; closing it will require an **active partnership** between our K-12 and higher education systems and others. Such active partnerships could include:

- **Active partnerships between K-12 and higher education to improve curriculum development for secondary schools.** The State Departments of Education and Higher Education along with their constituent units together engage higher education faculty who teach content and developmental courses, along with campus and system leaders who are all fully committed to raise academic achievement.
- **Regional partnerships to track student success.** High schools and colleges within the same region would convene an annual conversation of practitioners - e.g. college faculty and administrators, and high school principals, teachers and curriculum coordinators - to assess college readiness and changes that occurred from the previous year. Did student preparedness improve? What were specific weaknesses and strengths? How can these conclusions inform educational reform and workforce preparedness?
- **Local partnerships to promote student transition to college between higher education faculty and secondary school mathematics and English teachers.** Connecticut high schools that send significant numbers of their students on to specific community colleges or state universities would collaborate with those receiving institutions on a continuing basis to determine how best to prepare students for college.

Fortunately, Connecticut has made significant progress on many of the issues that might be considered to fall within the purview of the P-20 Commission. The Early Childhood Education Cabinet already has finished much important work on the transition from preschool to elementary school, requiring little additional attention by the P-20 Commission. Similarly, the State Board of Education's Ad Hoc Committee on Secondary School Reform has completed most of its planning responsibilities; the

Commission, however, will likely need to play a role in the implementation of *The Connecticut Plan for Secondary School Reform*.

Building on these efforts and other work conducted across the country, Connecticut's new P-20 Commission can help create an education and career pipeline that maximizes the knowledge and skills of Connecticut residents. Areas of focus the Commission might consider include:

1. Ensuring that students see a clear pathway for themselves from middle and high school to college and careers.
2. Training a new generation of teachers and providing professional development to current teachers that ensure students will learn the content and skills they need to succeed.
3. Building longitudinal data systems to monitor progress.

## Creating Pathways to Student Success

To nourish the college-going aspirations of our citizens, we must create pathways toward achieving postsecondary credentials that are visible and attainable by all. To a large extent, Connecticut's secondary school reform is designed to accomplish this, but for those students for whom the traditional school to career pipeline does not work, alternative pathways are needed. These might include intensive support services that motivate students to apply for and go to college and then support them as they earn their degrees. Another pathway might be composed of alternative high schools that partner with colleges to allow students to earn college credits. Additional pathways consider students' needs to couple education and work to meet their goals.

"Pathway programs" are well-established. Both federal and state funds have supported college access programs for underrepresented students since the 1960's. Programs such as Gear Up, ConnCAP (Connecticut College Access Program), and Educational Talent Search (ETS) have made college



possible for thousands who otherwise might not have been prepared to attend. These initiatives have been bolstered by similar efforts at the local level, conducted by school districts, community-based organizations, community colleges and state universities using funds from national and local philanthropic sources and, at times, with support from the surrounding business community. These partnerships, however, are limited, and much work remains to make pathway programs more readily accessible.

## Strengthening Teacher Preparation and Professional Development

Connecticut has a national reputation for high teacher certification standards and has consistently reviewed its policies to remain current with the latest practices. Although education has consistently ranked among the state’s top five degree-producing fields for the past 25 years, our colleges and universities are not producing enough graduates to meet workforce demand, especially in shortage areas. Last year, Connecticut graduated 3,590 students with degrees in education compared to 5,249 openings the year before. And only 43 percent of new certified teachers were in shortage areas. Equally important are teacher professional development activities for improving classroom teaching and student learning that is appropriate for both new, incoming teachers as well as veteran teachers. These opportunities help teachers remain current in their subject area fields and to stay on top of new innovations and technology. Connecticut’s P-20 Commission must improve collaboration among elementary, secondary and higher education to expand the supply of teachers who are prepared to educate students in subjects with teacher shortages, high-need districts and curricular areas that support new graduation requirements.

### Building Data Systems

In order to measure the effectiveness of our efforts to transition students from high school through college and into the workforce, we must be able to track student progress across this continuum. Currently, no such data systems are in place in Connecticut, leaving us unable to chart student advancement and make informed decisions based on identified strengths and weaknesses.

Nationally, the *Data Quality Campaign* (DQC) supports state efforts to use high-quality education data to improve student achievement. DQC tracks states’ progress in achieving 10 essential elements needed to build an effective longitudinal data system. The chart provided shows how Connecticut compares to other states.

Essential Elements of a Longitudinal Data System	Connecticut	Total # of States with Element
1. A unique statewide student identifier.	✓	48
2. Student-level enrollment, demographic and program participation information.	✓	49
3. The ability to match individual students’ test records from year to year to measure academic growth.	✓	48
4. Information on untested students.	✓	41
5. A teacher identifier system with the ability to match teachers to students.		21
6. Student-level transcript information, including information on courses completed and grades earned.		17
7. Student-level college readiness test scores.	✓	29
8. Student-level graduation and dropout data.	✓	50
9. The ability to match student records between the P-12 and postsecondary systems.		28
10. A state data audit system assessing data quality, validity and reliability.	✓	45

Source: *Data Quality Campaign Annual State Survey, 2008*

Though Connecticut does well by having seven of the 10 essential elements, the three remaining elements are crucial for us to be able to answer questions related to college preparedness, academic growth, teacher effectiveness and other important matters.

Connecticut's Early Childhood Cabinet and State Department of Education have made substantial efforts to upgrade our state's data systems. The Cabinet is working with the Council of Chief State School Officers and the Data Quality Campaign to develop a preschool data system that will link to the K-12 system. The State Department of Education was awarded a grant in 2007 from the U.S. Department of Education to help develop a longitudinal data system, and recently was awarded an additional \$2.9 million to expand this work with the Department of Higher Education. This new grant will help address some of the areas in which Connecticut falls short of the DQC standards, including the ability to link teacher information with student records and course information, and the interfacing of data systems (referred to as data interoperability) among the State Departments of Education, Higher Education and Labor.

The P-20 Commission is positioned to bring together the keepers and users of data to identify the key policy questions Connecticut should be answering in order to develop policies and practices that keep the state competitive nationally and globally.

## **Conclusion**

The P-20 Commission is Connecticut's opportunity to improve the knowledge and skills of our citizens so that our state is prepared to lead in a time of accelerating change and global competitiveness. The Commission is uniquely qualified to do so because of its ability to bring together key stakeholders from early childhood, elementary through secondary education, higher education, and workforce training to reverse our state's downward trends in educational attainment and economic vitality.