Dual Enrollment in Rhode Island

Opportunities for State Policy

Report to the Statewide PK-16 Council by Jobs for the Future

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JOBS FOR THE FUTURE
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Executive Summary

The state of Rhode Island, in partnership with its educational, business, and community leaders, has been deeply involved in discussions on how to meet the needs of a state economy that demands an increasingly well-trained workforce. A significant part of this initiative requires making systemic improvements from pre-kindergarten to postsecondary education. Thus, the state is interested in implementing and supporting dual enrollment and other early college approaches. The Governor's Statewide PK-16 Council retained Jobs for the Future, a national research and advocacy organization that promotes educational strategies for improved workforce preparation, to assess the overall status of dual enrollment programs in Rhode Island and to provide recommendations for developing dual enrollment approaches as an aspect of improving the high school to college transition.

In dual enrollment (sometimes called "concurrent enrollment"), high school students take college-level courses, usually during their junior and senior years. Nationally, policymakers and educators are increasingly looking to dual enrollment as an option for helping high school students prepare for and transition successfully into postsecondary education. Some research suggests that under certain conditions dual enrollment can better prepare high school students for college by exposing them early to the academic demands of postsecondary education and, if designed appropriately, be a powerful academic motivator for young people who did not previously envisage themselves in college.

There is much existing dual enrollment activity in Rhode Island on which the state can build. As we detail in the report, a policy under the Board of Regents for Elementary and Secondary Education directs high schools to develop dual enrollment programs, and we estimate that, indeed, a notable number of high school students (perhaps as many as 4,000 annually) are participating in a wide variety of dual enrollment programs.

However, dual enrollment is not currently designed to promote Rhode Island's PK-16 goals, to increase the rates of college degree attainment, nor does it encourage participation by state's low-income students, a segment of its young population that must be included in any effort to increase the overall viability of its workforce and economy.

While the overall purpose of dual enrollment approaches in Rhode Island is consistent—to give students a head start on college—programs have developed locally. Thus, there are numerous differences in practices. There are varied funding arrangements, rules, and guidance for course articulation and for course offerings and instructors. Most significant, criteria governing student eligibility to participate vary, and little data is collected to inform and improve practice.

The wide variation in dual enrollment programming and purposes is echoed in the perceptions of key groups with interest in and experience with these programs. School leaders, faculty, and key stakeholders in education and government differ greatly in their views of the

purpose of dual enrollment and the role they believe these programs can play in advancing Rhode Island's goals for high school reform. Key stakeholders views are as varied as the array of program offerings themselves.

This report summarizes JFF's findings and recommendations to enhance dual enrollment in Rhode Island, reshaping the programs from a collection of locally autonomous high school enrichment activities to a comprehensive statewide system that provides college transition opportunities to a wide range of students. Rhode Island has the opportunity to recast dual enrollment to meet the state's goal to construct a more seamless, **aligned PK-16 education pipeline**. But to establish a **widely accessible, high-quality** dual enrollment program is not without challenges, including a bleak short-term state fiscal outlook.

The recommendations are intended to help the state take incremental and realizable steps in the short-term toward larger educational improvement objectives while limiting costs. The recommendations also balance statewide goals with the need for local discretion, allowing room for programs to maintain their unique characteristics. In addition, the recommendations might be viewed as a "pilot" program for what could eventually be increasing and strategic expansion of dual enrollment in Rhode Island. The cutting-edge work that the state is doing to align its high school and postsecondary expectations within the framework of its Diploma System and to develop expected learning outcomes for key college courses is very compatible with an expansion of dual enrollment. Indeed, dual enrollment constitutes one component of a performance-based, seamless PK-16 education pipeline.

Recommended policies for governance, crediting, eligibility, funding, and course and program quality are detailed in the report. All are designed to promote a state dual enrollment program with the following basic design features:

- All students have an opportunity to receive up to a semester (four courses) of college credit.
- As is now the case, most students will continue to bear much of the cost of college courses, but the state will offer incentives for low-income dual enrollees to encourage their participation.
- College courses are aligned with general education or concentration requirements of state public postsecondary institutions or with courses required to receive an industry certificate or Associate's degree in a career area.[1]
- A limited number of college courses may be taken on college campuses.
- Dual enrollment enables acceleration through dual credit. That is, high school-required courses are replaced by equivalent or more advanced college courses. (For example, calculus is a course that is likely to be equivalent at the high school or college level.)
- Dual enrollment is aligned with the state's high school diploma system.

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Introduction

The transition to a knowledge-based economy is fueling an ever-increasing demand for college-educated workers who must effectively and efficiently meet the demands of jobs that are more complex and less static than in the past. However, far too many students face insurmountable challenges in negotiating the transition from high school into and through college. This challenge includes, but does not stop at, increasing high school graduation rates and college access. Although more students today begin college than did 20 years ago, greater proportions are not graduating. Nationally, for every 100 ninth-grade students, 68 graduate from high school, 39 immediately enroll in college, 26 are still enrolled in their sophomore year, and 18 graduate within 150 percent time with either an Associate's or a Bachelor's degree.[2]

Rhode Island's challenges are no less great. Over the past two decades, jobs with family-sustaining wages in the state have increasingly required postsecondary training at the same time that the fastest growing segments of the state's workforce continue to have the lowest levels of educational attainment. According to one report, only 49 percent of working-age Hispanics/Latinos in Rhode Island possess a high school diploma, and only 13 percent have a college degree, but by 2020 this group will compose 14 percent of the state's workforce (up from 2 percent in 1980).[3] The report concludes that the state's per capita income and tax base will consequently decline unless educational attainment substantially increases.

The state of Rhode Island, in partnership with its educational, business, and community leaders, has been deeply involved in discussions on how to meet these challenges through systemic improvements from pre-kindergarten to postsecondary education. As a significant part of this initiative, the state is interested in implementing and supporting dual enrollment and other early college approaches. The Governor's PK-16 Council retained Jobs for the Future, a national research and advocacy organization that promotes educational strategies for improved workforce preparation, to assess the overall status of dual enrollment programs in Rhode Island and to provide recommendations for developing dual enrollment approaches as an aspect of improving the high school to college transition.

Nationally, policymakers and educators are increasingly looking to dual enrollment as an option for helping high school students prepare for and transition successfully into postsecondary education. In dual enrollment (sometimes called "concurrent enrollment"), high school students take college-level courses, usually during their junior and senior years.[4] In most programs, the courses result in dual credit. That is, the college course replaces a required high school course. In some states, students choose either high school or college credit for the course. Courses can be offered on a college campus in "regular" college classes, in a high school taught by a visiting college professor, or by a high school teacher certified by the academic institution awarding credit. The latter is often called "college in the high school."

Dual enrollment is already commonplace nationally. Currently, 40 states have policies establishing dual enrollment programs.[5] According to the National Center for Education Statistics (2005), there were an estimated 1.2 million enrollments in dual credit courses during 2002-03. Demographic data on dual enrollment is not collected nationally, and thus we do not know from what social or academic backgrounds participants come. However, given that the original purposes of dual enrollment were to provide options for advanced of "gifted" students who had outgrown the high school curriculum or to provide more course options for students in schools with limited course options (e.g., rural districts), researchers believe that most participants are well-prepared students who are getting a head start on college.[6] There are also dual enrollment programs serving high school students in career or technical training pathways such as TechPrep.

Increasingly, a number of states, including Rhode Island, have become interested in expanding the purposes and scope of dual enrollment. Some research suggests that under certain conditions dual enrollment can better prepare high school students for college by exposing them early to the academic demands of postsecondary education and, if designed appropriately, can be a powerful academic motivator for young people who did not previously envisage themselves in college.[7] If designed well, dual enrollment can potentially:

- Increase students' motivation to do well by making the prospect of college more immediately attainable and encourage their development of a positive academic identity as a "college student";

- Strengthen connections between high school and postsecondary, sending clearer signals to students about the standard of performance required for success at the postsecondary level;

- Transform the upper high school experience into a supportive environment that makes seamless the critical transition into postsecondary degree or credential programs; and

- Increase the affordability and accessibility of postsecondary programs leading to a credential or degree, especially for low-income students.

There is much existing dual enrollment activity in Rhode Island upon which the state can build. As we detail in the report, a policy under the Board of Regents for Elementary and Secondary Education directs high schools to develop dual enrollment programs, and we estimate that, indeed, a notable number of high school students participate in a wide variety of dual enrollment programs. However, dual enrollment is not currently designed as a concerted state effort that strategically promotes Rhode Island's PK-16 goals, nor does it encourage participation by state's low-income students, a segment of its young population that must be included in any effort to increase the overall viability of its workforce and economy.

This report summarizes JFF's findings and recommendations to enhance dual enrollment in Rhode Island, reshaping the programs from a collection of locally autonomous high school enrichment activities, to a comprehensive statewide system that provides college transition opportunities to a wide range of students. We recognize the state will need to do this in a period of unprecedented educational reform and uncertain economic conditions, and we are mindful of the need to balance state goals with Rhode Island's strong tradition of local autonomy and innovation. The recommendations should serve as the foundation for detailed planning and implementation at the state level and with participants and stakeholders in dual enrollment programs across the state.

The primary focus of this research, and thus this report, was on dual enrollment, but we also were attentive to data about other college-level course-taking opportunities such as Advanced Placement and distance learning technology. We briefly touch upon these themes in Appendices A and B.

Scope of Project and Methodology

Our task was to assess the general state of dual enrollment programs and other early college approaches with an eye to how dual enrollment programs could grow into the public education system in Rhode Island. Throughout our analysis we took into account the culture of the public education system, the financing and governance structures already in place, and the overall goals of the statewide efforts to redesign high schools. Our data collection drew from the following sources:

- A review of literature and national policy context;
- A review of state and institutional policies governing K-12 and postsecondary education, including through interviews with senior education officials at the district and state levels;
- Interviews with program administrators and directors to learn more about specific programs and to identify those programs that offer promise for increasing the number of students gaining postsecondary credentials and aligning high school and college curricula;
- Site visits to several high schools that varied by geography, program type (i.e., career and technical, comprehensive, alternative) size, and student demographics to glean the challenges and opportunities facing existing dual enrollment in its diverse manifestations across the state;
- Individual interviews and focus groups with high school administrators, teachers, and guidance counselors and with college and university faculty to record their opinions of and recommendations for dual enrollment;
- Group discussions with students enrolled in dual enrollment courses to document their experiences;
- Individual interviews with policymakers, including members of governing boards and legislators, to gauge their interest in and support for dual enrollment; and
- Interviews with senior education officials and leaders.

Throughout the interview process, our goal was to observe whether dual enrollment programs showed potential for contributing to the goals of the PK-16 transformation. Programs were analyzed in terms of their potential to:

- Serve a wide range of students, including those not traditionally “college bound”;
- Provide academic, financial, and social supports to dually enrolled students;
- Develop college readiness skills and habits of mind;
- Involve a secondary/postsecondary partnership embedded in a broader high school reform or PK-16 effort;
- Sustain funding; and
- Track and analyze student outcomes.

From these criteria we more closely examined four programs from among the twelve dual enrollment/early college partnerships offered through the public system of education: the Running Start Program, the City Campus Program, the Early Enrollment Program, the Secondary/Postsecondary Articulation for Technical Education (SPATE). These four demonstrate at least some of the above criteria and helped to deepen our understanding of local dual enrollment practices. Profiles of all twelve programs are contained in Appendix D.

Analysis of the data was particularly attentive to the decentralized enterprise that characterizes dual enrollment in Rhode Island and how state policy and targeted investment could drive and support significant reform and improvement of college-level learning opportunities. We identified common concerns, program areas requiring attention and strengthening, and short- and long-term directions for state policymaking.

Dual Enrollment Opportunities in Rhode Island

Scale of Existing Programs

Like most New England states, Rhode Island has no state legislation pertaining to dual enrollment. Rather, a statewide policy established through the Board of Regents for Elementary and Secondary Education mandates the development of concurrent enrollment opportunities for high school students. The policy, which has been in place since the mid-1980s states, "School districts shall develop concurrent enrollment programs and policies and disseminate information concerning participation in these programs."[8]

Indeed, an impressive array of innovative secondary/postsecondary partnerships offers Rhode Island high school students a variety of ways to earn high school and college credit simultaneously. There is no systematic, accurate means of tracking dual enrollment participation rates and programs, but based on our interviews with program directors, we developed the following rough estimates about participation in 2004-05:

- Approximately 4,000 students—roughly 16 percent of all juniors and seniors—are enrolled in a dual enrollment course offered through their local high school or on the campus of one of the three public institutions of higher education.

- Twelve different programs were offered through the three public institutions of higher education that permit high school students throughout the state and nearby Massachusetts to engage in college level coursework.

- Dual enrollment programs offered through the three public institutions include partnerships with fifty-five high schools (including forty-one comprehensive public high schools, nine career and technical schools, and five private high schools).

- Most students (86 percent) are enrolled in dual enrollment courses that are offered through their local high school. Only 14 percent attend classes on a college campus.

- Over 100 different articulated course agreements exist between high schools and public higher education institutions, including many courses that also transfer from Associate's degree programs to Bachelor's degree programs under the Public Higher Education Joint Admissions Agreement.[9]

- Over 81 percent of the fifty-nine public secondary schools in Rhode Island offer some vehicle for high school students to engage in dual credit coursework.

- Longstanding, locally controlled secondary/postsecondary partnerships meet a variety of school and student needs.

Overview of Dual Enrollment Program Characteristics

Local dual enrollment program features vary widely. *While there are activities common to many programs, there are just as many differences in practices and program focus.* Below, we highlight similarities and variations in major characteristics of these programs.

Course Offerings and Instructors

- Courses are offered in technical fields, including information technology, health sciences, business administration, and pre-engineering. Courses are also offered in accounting, social sciences, humanities, world languages, mathematics, and science.

- Although the means of oversight and quality control vary considerably, high school faculty must be approved to teach courses that bear dual credit by the chair of the appropriate college academic department.

- Instructor eligibility standards vary by program. For instance, high school teachers who wish to teach an early enrollment course through Rhode Island College must possess the same qualifications as adjunct faculty. High school instructors who teach the composition course offered through the University of Rhode Island are certified based on the approval of the program coordinator.

- Currently, over 100 courses are taught in high schools and certified as college-level by a public institution of higher education. Course content, textbook, syllabi, and other course materials are reviewed regularly and approved by the appropriate academic department to ensure that they meet the same rigorous standards as college-level courses.

Alignment and Articulation

- Over 100 dual credit courses are accepted for credit at partnering public postsecondary institutions in Rhode Island, with more agreements under consideration. Many of these courses transfer not only from high schools to the partnering institutions but are also listed as course equivalents at the other public postsecondary institutions. This arrangement, known as the Joint Admissions Agreement (JAA), makes it possible for students who have taken college-level courses during high school to move seamlessly and efficiently through the public higher education system.

- While dual enrollment courses are generally accepted for credit, many existing agreements require that students receive a minimal grade in order to receive any credit at all. For example, the High School/CCRI Partnership program encompasses several individual agreements, each with its own criteria for granting credit. Some of these agreements stipulate that students earn a C or better, while other require that students earn a grade of B or better in order to receive credit. In addition, students must enroll at CCRI to get credit for courses taken during high school.

- Many of the courses that transfer to the public postsecondary institutions are also accepted at other postsecondary institutions, although the granting of course credit is less certain. Early Enrollment Program (EEP) courses, for instance, transfer to more than 25 colleges and universities nationwide. Also, dual enrollment students may actually lose college cost savings if they earn so many credits that they are reclassified as transfer students and thus become ineligible for some scholarships.

- In addition to the inter-institutional JAA program, Rhode Island has in place another program for aligning high school and college curriculum. The Secondary/Postsecondary Articulation for Technical Education (SPATE), developed through a partnership between the CCRI and the Rhode Island Department of Education, enables Rhode Island school districts, through the eRIDE database system, to submit an application for articulation

approval for various career and technical education courses. This online system allows district representatives to crosswalk between various sets of national standards and the district curriculum in order to decide whether their curriculum meets college-level course requirements.

Eligibility

- In theory, eligibility criteria for many Rhode Island programs are fairly open, and admission criteria are not overly stringent. Nonetheless, programs reported that few middle- and lower-achieving students see dual enrollment as an opportunity for which they can strive; teachers and counselors may not encourage such academic "stretch" experiences.

Funding

- In Rhode Island, students have the opportunity to take courses at their high school or on a college campus. In most cases, when students take dual credit courses on a college campus, they bear the cost of tuition. The Running Start program at CCRI, for instance, charges in-state tuition or $1,235 per semester.

- When students enroll in dual credit courses offered at their high school, they typically pay a fee—$50 per credit for the RIC Early Enrollment Program courses and a flat fee of $125 for the composition course offered by URI. While most programs offer scholarships, reduced tuition arrangements, or payment plans to low-income students, program directors report that tuition is still a major barrier to participation for many low-income students. Generally, students may enroll in dual-credit programs offered at their high school, but they do not receive college credit for the course unless they also pay course fees.

- Among the few smaller efforts to serve special populations, funding arrangements vary. The City Campus program, a college transition/dual credit program that targets urban high school students, is funded by participant schools and through small grants and in-kind funding from CCRI. Such financial arrangements are generally difficult to replicate and sustain. However, CCRI could learn from an evaluation of programs such as City Campus and SPATE and build upon these early efforts by retaining and furthering links with local businesses and the community. Its partnership with the Bridge Program at Dorcas Place, an adult and family learning center in Providence, to provide college guidance services and a free college course is another interesting effort in this regard.

Tracking Student Participants and Outcomes

Few programs have systems in place to monitor student progress toward degree completion or to collect data about the overall effectiveness of their programs.

- CCRI cannot identify dual enrollment students who matriculate because it maintains an open admission policy that does not require a student to submit a high school transcript.

- Several programs, such as EEP, track student progress by administering surveys to students who have graduated from high school and enrolled in college. But this type of program evaluation provides incomplete data at best.

Stakeholder Involvement and Support

The wide variation in dual enrollment programming and purposes is echoed in the perceptions of key groups with interest in and experience with these programs. School leaders, faculty, and key stakeholders in education and government differ greatly in their view of the purpose of dual enrollment and the role they believe these programs can play in advancing Rhode Island's goals for high school reform. *Key stakeholders views are as varied as the array of program offerings themselves.*

High Schools

HIGH SCHOOL PRINCIPALS

While high school principals support dual enrollment as a college preparatory tool, they do not generally see it as a vehicle for improving access to higher education for lower-achieving students, and they are reluctant to expand access to dual enrollment programs without a sustainable funding source or financial commitment from the state. Most school principals we spoke with view dual enrollment as an add-on, rather than an integral part of high school reform efforts. Because many principals view dual enrollment programs as enrichment programs for higher achieving/academically motivated students, they do not generally envision dual enrollment as a tool to increase postsecondary access and success for underrepresented students. However, there are some interesting nuances:

- For *comprehensive high schools* with a traditional college preparatory curriculum, dual enrollment serves three main purposes: (1) as an enrichment program for high-achieving students who have outgrown the standard high school curriculum; (2) as a way to accelerate time to degree and decrease college costs; and (3) as a method to impart particular college-level skills among students who are otherwise intellectually ready for college.

- For *urban core high schools* serving at-risk students, dual enrollment serves as a way to develop college habits of mind among students who are the first in their family to attend college, and to bridge the social and cultural divide that exists between students from low-income communities and their peers from more affluent communities. For school principals in urban core/alternative high schools, dual enrollment is an essential part of their central mission to prepare at-risk, low-income, first-generation students for college. As one principal told us, *"You just cannot put a price on the value of bridging the cultural barriers between inner city kids and the dominant class culture inherent on most college campuses."*

- For *career and technical high schools principals*, dual enrollment is viewed as a way to meet Rhode Island's future labor market needs, particularly in the healthcare industry. For career and technical high school principals, it is critical that dual enrollment be used as a vehicle for linking new high school diploma system to the state's workforce development needs, so that "college provides the vocational education that leads to stable middle-class wages" for career and technical education students.

COUNSELORS AND TEACHERS

High school guidance counselors generally like dual enrollment courses because they enrich the high school curriculum, they can be used to get students to think about/prepare for college at an early age, and they decrease the cost of college for many families who struggle to

pay even in-state college tuition. Guidance counselors in alternative/urban core high schools like dual enrollment, especially those taught on a college campus because they help students realize that "*what a typical college student looks like is a lot like them."*

Teachers like the incentive dual enrollment programs provide for their students, but they generally prefer courses that are taught at the high schools, rather than on college campuses. Many believe that some students may be academically ready for the college but may not have the maturity to handle the level of independence that is expected of them. While teachers vary on which students should be targeted for dual enrollment, many agree that teaching the courses is rewarding and helps enrich the curriculum and increase the standards of other courses that they teach.

STUDENTS

Students, especially urban core students for whom the cultural barriers to college can seem insurmountable, view participation in dual enrollment programs as a way of signaling to their high school teachers that they are focused on their education and planning to go to college. As a student in the City Campus Program at CCRI reported, "*It's like I'm so much more important to the teachers now that I'm going* [participating]. *They pay attention to me because they know I'm serious and I'm not going to fool around in class and miss assignments and stuff like that. I'm college-bound now."*

PERSPECTIVES ON ADVANCED PLACEMENT

This research treats the tangential subject of Advanced Placement courses with more depth in Appendix A, but it is worth noting briefly here the perspectives from high schools about dual enrollment opportunities relative to AP courses.

Staff from comprehensive high schools in more affluent communities tended to view AP as a key college preparatory tool that was more apt to be recognized by, and make students more competitive for admission to, elite postsecondary institutions. Staff from high schools in less affluent communities, including small and alternative schools, reported difficulty finding reliable resources to offer AP courses and cover student test fees. They also preferred that their students take dual enrollment courses because they better reflect college-level work and assess student proficiency for credit in a number of ways rather than by one exam.

This is echoed in the views of many traditionally college-bound students who see dual enrollment as a way to save money and "beef up" their pre-college credentials and as an alternative to AP classes, which only "*give you one shot* [one test to determine eligibility for college credit] *at getting those credits after working really hard all term*."

Public Postsecondary Institutions

At the postsecondary level, dual enrollment programs are generally seen as a way to recruit both higher achieving students who might not ordinarily apply to in-state public institutions and low-income/at-risk students who would not ordinarily attempt college.

INSTITUTIONAL LEADERS

Institutional leaders believe dual enrollment is central to the mission to build a more economically and racially diverse student body, but they are also concerned with what they see as a decrease in quality control, especially for dual enrollment courses taught at high schools.

FACULTY

College academic departments/faculty are concerned about the quality of dual enrollment courses taught at high schools, as well as the costs associated with lost revenues from students who transfer in large number of credits. The level of concern for quality varies from department to department, but it is generally perceived by high school administrators to be "protecting turf" rather than ensuring quality or controlling costs.

STUDENT ADVISORS

Student advisors have concerns about how well informed high schools are about dual enrollment opportunities. They fear that only the most resourceful students get the message about the benefits of taking dual enrollment courses. They are particularly concerned for students in low-income communities, who are often heavily recruited by out-of-state, private, high-cost pre-baccalaureate colleges because they are led to believe that even if they do well in high school, they are not well prepared for college. They believe that if "*these students were exposed to a college experience at CCRI or RIC, for instance, they'd realize that the public system* [of higher education] *was better for them in the long run because they would get a quality college degree at half the price, without having to stray too far from their own communities*."

State Leadership

SENIOR EDUCATION OFFICIALS

Education policymakers believe dual enrollment is a useful vehicle for streamlining the PK-16 pipeline. Dual enrollment complements the new High School Diploma System because it helps schools leave behind the seat time-based system and provides a mechanism for proficiency-based learning. Rhode Island is moving toward becoming a "multiple measures state," and dual enrollment is "another way to provide multiple pathways to high school graduation and beyond. Some, however, raised concerns about the capacity of school systems to implement new programs, as well as the state's ability to fund new education programming.

LEGISLATORS

In the small sample of state legislators JFF interviewed, we found generally positive impressions of dual enrollment programs in Rhode Island and enthusiasm about the potential for harnessing dual enrollment as a key tool to the states PK-16 objectives, especially for the state's low-income students. However, legislators are not optimistic about the prospects for additional legislative funding, citing anticipated revenue shortfalls for the next fiscal year. Some expressed the view that any statewide policy should be initiated by the education sector as part of its regular programming and should not be a legislative initiative; existing policy should be expanded and funded through state education budgets.

INDUSTRY

Industry partners were perhaps the most vocal supporters of dual enrollment, because they see these programs as an essential "*tool in the tool box*" to recruit and train their future workforce. They expressed the acute need for such programs to keep up with the demand for skilled workers. A department manager from Rhode Island Hospital put it, "*Here we are . . . surrounded by all these kids who want to work here* [at the hospital]*, right across the street practically from the college that can train them, and we can't get our act together as a state to move them from high school through college and into the good jobs that are waiting right here for them*."

Reframing Dual Enrollment in Rhode Island: Opportunities and Challenges

Dual enrollment activity in Rhode Island is substantial, but it is not designed to have systemic impact on the educational attainment of the state's future workforce. It is more commonly viewed as an enrichment activity, or an escape from high school, for students who are already college-bound, rather than as a key enhancement of the high school experience and a bridge to postsecondary education for all students that promotes college readiness, access, and success.

Rhode Island has the opportunity to recast dual enrollment to meet the state's goal to construct a more seamless, **aligned PK-16 education pipeline**. Indeed, the state has much laudable local practice on which it can elaborate. Overall, the challenge will be to leverage this disparate set of programs and purposes in the service of these goals.

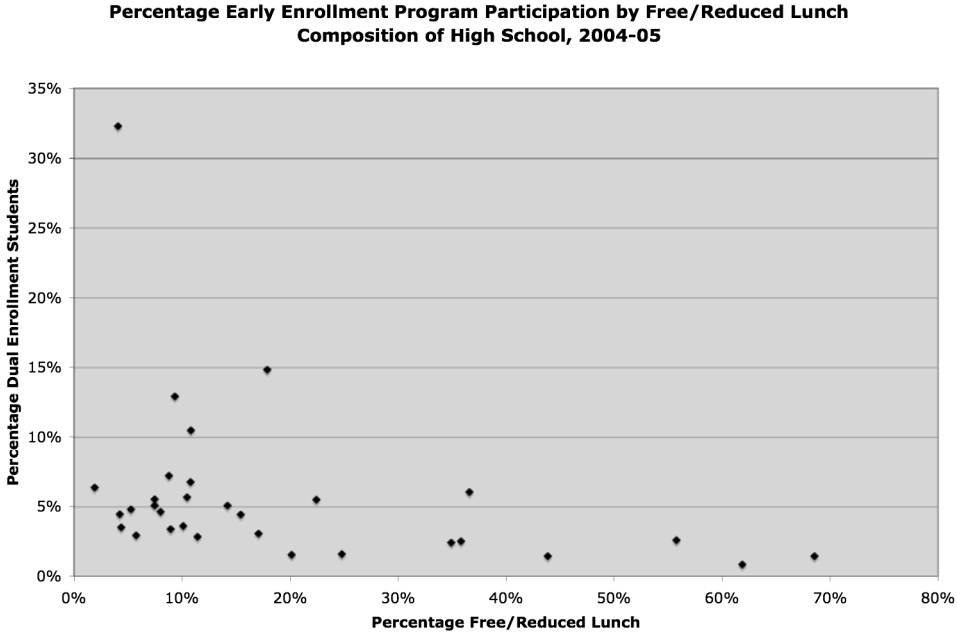
Some specific challenges include:

- Access: How can Rhode Island encourage greater accessibility to a wider range of students?
- Quality: How can Rhode Island ensure high quality for dual enrollment courses and programs?
- Alignment: How can Rhode Island encourage better use of dual enrollment as a tool for aligning high school and college expectations?

Access: How can Rhode Island encourage greater accessibility to a wider range of students?

- The responsibility for the cost of most programs rests largely with students, though high schools also bear some costs, and public postsecondary partners forgo some tuition revenues from college courses students take during high school. This funding model reportedly discourages low-income students from participating in dual enrollment. While good statewide, student-level dual enrollment participation data are lacking in Rhode Island and nationally, some existing school-level data can shed light on the nature of participation.

  An analysis of high school student participation in EEP, at $50 per credit, confirms that dual enrollment is currently out of reach of many low-income students. As the figure below shows, students in poorer schools generally see a smaller proportion of their students participating in this dual enrollment program. The figure compares the percentage of a high school's student body participating in EEP during the 2004-05 school year relative to the income composition of the high school. (Each data point represents a school, plotted horizontally by the percentage of students in the schools who qualify for free-reduced lunch and vertically by the percentage of students participating in EEP.)



Source: Early Enrollment Program, Rhode Island College and Rhode Island Department of Education; see Appendix C for data

- Expanding access will have to be done strategically, given an environment of projected fiscal constraints. Rhode Island faces a FY06 budget shortfall of $77 million, and some project a $22 million shortfall in FY07. This estimate is based on a projected 4 percent increase in revenue, 7 percent increase in expenses, and 11 percent increase in entitlement program outlays.

- Students who are not already college bound will have to be systematically recruited for dual enrollment opportunities, and eligibility criteria will have to be made clearer. Clear eligibility criteria and communications to students about early college course-taking opportunities can be a motivator to young people to learn what it takes to prepare themselves for college.

Quality: How can Rhode Island ensure high quality for dual enrollment courses and programs?

As the state seeks ways to expand dual enrollment opportunities, it will need to attend correspondingly to ensuring the quality of courses and programs.

- Quality questions are the crux of disputes around the transfer of credit to postsecondary institutions. For example, the question of who is allowed to teach dual enrollment courses, and thus whether the instruction is college-level, affects the perceived quality of the program and is a key issue in the transferability of credit. Colleges, especially private institutions, are beginning to require minimum grades for transfer of dual credit or will award elective credit only. To meet national/regional accreditation standards, the University of Rhode Island is requiring a more stringent adherence to its articulated course (WRT104) that places the cost of the program beyond the reach of some high schools. RIC has stepped up its demand for teacher qualification and is frequently challenging the credentials of high school teachers who wish to teach an EEP course.

- While taking short-term steps to ensure quality, the state will also need to think long term to ensure that broader access to dual enrollment continues to go hand-in-hand with quality. For example, although RIC's enforcement of a Master's degree for EEP teachers is advisable, in the long term the state may face shortages of qualified teachers because RIC and URI offer few of the Master's degree programs that are needed for such qualification. Also, although teacher credentialing and other assurances that courses are of college caliber are reasonable and expedient, quality can ultimately only be fully judged by evidence that is harder to obtain about what students are doing and learning in their dual enrollment courses.

- Currently, data collection about dual enrollment programs is hit or miss and not guided by clear questions about whether activities help to meet clearly defined goals. The state recently introduced a system to track student progress and measure postsecondary success and attainment among its public high school graduates. Nevertheless, dual enrollment programs have no systems in place to measure whether dual enrollment enhances the efficiency of the PK-16 systems by increasing postsecondary attainment rates, reducing the number of students in remediation, or reducing the total cost of educating students in the public education system. The state will need to play a greater role in data collection and analysis in this regard.

Alignment: How can Rhode Island encourage better use of dual enrollment as a tool for aligning high school and college expectations?

- High school educators do not consistently view dual enrollment as a strategy to align high school with college expectations. Many see it as enrichment or an add-on program. Thus, it should not be surprising that some high school staff were circumspect about the prospect of expanding dual enrollment: they view it as one more program adding to the burden of implementing the High School Diploma system and other comprehensive school reforms. Additional requirements involving dual enrollment must be considered carefully so as not to overburden an already stressed system and should be consistent with and integrated into current reform efforts.

- Likewise, to avoid its perception as an add on, dual enrollment courses should constitute a central role in the high school curriculum as a proficiency-based, accelerated pathway for participants to a postsecondary credential. Requiring that courses be dual credited for high school and college and that the courses students take actually advance credential-seeking goals are examples of how to achieve this.

- However, with respect to alignment efforts, Rhode Island has more opportunities than challenges to grow dual enrollment so that it leverages other compelling initiatives in order to build a proficiency-based, rather than time-based, system of educational attainment from PK-16. Eligibility criteria for dual enrollment can eventually be tied to the state's work with Achieve to define college-ready standards. Transfer of credit to postsecondary institutions can eventually be facilitated through demonstration of proficiency on learning outcomes being developed for general education courses. The only challenge is to sustain the will, leadership, and processes to link these efforts.

Recommendations for Rhode Island Dual Enrollment

In a state with a challenging revenue outlook in the short term, limited resources must be used very strategically if dual enrollment is to be used to introduce high school students to college and ease their transition into and through some college. As this report suggests, we recommend that dual enrollment be conceptualized as a component of Rhode Island's PK-16 strategy, an investment to improve the postsecondary degree attainment prospects of low-income and first generation students. Commensurate with this goal is the need for the state to increase access to dual enrollment for low-income students, make dual enrollment consistent with other state efforts to align high school and college expectations, and ensure the integrity and quality of college courses.

To achieve these goals, the recommendations assume that the state can build on its already substantial, often promising, local dual enrollment activity and harness it to create broader, systemic impact. One model that could be enhanced and expanded is Rhode Island's currently most accessible and inexpensive program, the Early Enrollment Program that offers college courses on high school campuses. This can be complemented by opportunities for students to experience courses on college campuses that can contribute to their development of a college-going identity.

In sum, the following recommendations are intended to help the state take incremental and realizable steps in the short term toward larger educational improvement objectives, while limiting costs and balancing state goals with the need for local autonomy. These might be viewed as constituting a "pilot" program for what could eventually be increasing and strategic expansion of dual enrollment in Rhode Island. Ultimately, the cutting-edge work that the state is doing to align its high school and postsecondary expectations within the framework of its Diploma System and to develop expected learning outcomes for key college courses could work in concert with expanded dual enrollment to constitute the makings of a truly performance-based, seamless PK-16 education pipeline. In this spirit, although our recommendations represent initially modest steps toward that vision, we also note future opportunities for the state to take larger steps when more resources become available.

General Principles

- All students have an opportunity to receive up to than a semester (four courses) of college credit.
- As is now the case, most students will continue to bear much of the cost of college courses, but the state will offer incentives in the form of scholarships for low-income dual enrollees to encourage their participation.
- College courses are aligned with general education or concentration requirements of state public postsecondary institutions or with courses required to receive an industry certificate or Associate's degree in a career area.[10]
- A limited number of college courses may be taken on college campuses.
- Dual enrollment enables acceleration through dual credit. That is, high school-required courses are replaced by equivalent or more advanced college courses. (For example, calculus is a course that is likely to be equivalent at the high school or college level.)
- Dual enrollment is aligned with the state's high school diploma system.

Governance and Oversight

Although most states have statutes or regulations authorizing and governing dual enrollment, oversight is typically relegated to either a K-12 or postsecondary agency/sector and is rarely structured to promote consistency with state goals across a PK-16 education system. Rhode Island has an opportunity to be a leader in this area, along with states such as Texas and Georgia where statewide PK-16 groups have a role in rulemaking for dual enrollment and early college high schools.

- The state should create an advisory body, or use an existing group, with representation across K-12 and postsecondary to recommend rules to the Board of Regents and Board of Governors regarding dual enrollment programs.

- The state should elaborate on current dual enrollment regulations in accordance with PK-16 education goals and in order to provide more guidance to local dual enrollment programs.

- A state employee, housed in an appropriate state agency, should be designated to monitor and guide the expansion and enhancement of dual enrollment programs to ensure their coherence and alignment with state goals. For example, this staff member would carry out the state's role regarding:

    - The establishment of guidelines and a template for required local agreements between high schools and postsecondary institutions engaging in dual enrollment partnerships

        - The agreements will specify fee and/or tuition rates, the use of campus facilities, responsibilities for books and transportation, and local governance mechanisms. The agreements will also outline expected revenues and expenditures, including in-kind costs, related to annual dual enrollment activities. A dedicated staff line should be devoted to enabling and maintaining the partnership.

    - Periodic audits of student work from dual enrollees taking college courses taught in the high school in order to ensure course quality

    - The review data from the state's integrated PK-16 data system about the high school and postsecondary outcomes of dual enrollees

        - Based on baseline data, the state should set annual goals for statewide participation and improvement.

    - The exploration of possibilities for expanding different dual enrollment opportunities and models

Eligibility

Nationally, states take a variety of approaches to determining high school student eligibility for college coursework. At one extreme, Texas sets the scores on standardized assessments; at the other, California allows each high school to recommend students and colleges to determine whether to admit them. Pennsylvania identifies the assessments against

which programs can judge eligibility but allows local programs to set the cut scores. Generally, good eligibility criteria should be tied to transparent, discipline-specific indictors of academic readiness and a determination of students' social readiness for college courses. Much like Georgia, which is attempting to use state-developed P-14 standards to determine academic advancement for early college high school students, Rhode Island would be best served by having eligibility criteria tied to its own standards-based assessment system.

- The state should require schools to inform all high school students and their parents annually of dual enrollment opportunities, including information eligibility criteria, costs, and availability of scholarships or fee waivers. With school guidance, all students should incorporate some college courses into their Individual Learning Plans.

    - As state resources permit, Rhode Island could supplement school-based communications with a state-led communications campaign to encourage high school students to become "College Ready in Rhode Island," promoting dual enrollment as one means to that goal.

- All students should have the opportunity to take up to four college courses by the end of high school, with no more than two taken on a college campus. Eligible courses are those meeting general education or concentration requirements of public postsecondary institutions in the state or those required to receive an industry certificate or Associate's degree in a career area. The limitation on college courses is a cost-saving feature that could be adjusted or removed depending upon the state's fiscal outlook.

- With the help of Achieve, Inc., Rhode Island is aligning its secondary standards, curricula, and assessments with postsecondary expectations. This work will result in multi-faceted indicators of high school students' college readiness. Once these college-ready standards are in place, they should be aligned with eligibility criteria by subject area for dual enrollment courses.

- In the interim, dual enrollment eligibility should depend on students' demonstrated proficiency at a tenth-grade level on assessments in the state's High School Diploma System, within the core areas (among six) that correspond to the subject area in which a student wishes to take a college course.

- Once academic readiness criteria are met, high school counselors and students should make a final determination about participation, assessing students' social readiness for college courses and the coherence of dual enrollment with students' Individual Learning Plans.

Course Quality and Accountability

To ensure course quality, Pennsylvania and Utah mandate that college courses taught at high schools be equivalent to on-campus courses in terms of syllabi and instructor qualifications. These are proxies for quality because they rely on inputs rather than on outcomes measured in student learning.

The work that the Rhode Island Board of Governors for Higher Education is leading to develop and codify expected learning outcomes for general education courses, and eventually for courses in concentrations, will ultimately provide a robust way to monitor dual enrollment program quality. However, Rhode Island will need to improve quality controls in the interim.

- Postsecondary institutions should continue to be responsible for establishing and monitoring the credentials of instructors teaching dual enrollment courses in the high school. The state should establish as minimum requirements that instructors have a Master's degree in an appropriate discipline and that syllabi for dual enrollment courses be equivalent to the same college courses when taught on the college campus. *Note*: Because there are disciplines for which no qualified teachers are available, the state should explore helping teacher attain credentials (such as a Master's in German or Russian) or consider employing doctoral students at local universities or underemployed academics. It could also explore distance learning opportunities.

- In addition, for dual enrollment courses taught in the high school, the crediting postsecondary institution should review sample portfolios of student work and ensure comparability of the contents of and student performance on end-of-course examinations.

- The state should conduct periodic audits of student work from dual enrollment courses taught at the high school.

Dual Enrollment Program Quality

- Rhode Island will want to ensure that dual enrollment opportunities serve the purpose of improving the high school achievement and postsecondary enrollment and success for all young people. Thus, the state should connect its monitoring and analyses of dual enrollment outcomes to current and future data-quality initiatives that improve its ability to track student performance across the secondary and postsecondary sectors (e.g., National Governors Association Honor States Grant-sponsored work). The system's architecture should be designed to answer questions such as those that follow, meaning at a minimum that dual enrollment high school students need to be identifiable and that the courses they take can be tracked to postsecondary institutions and instructors:

    - Who are dual enrollment participants? What is their gender, race, socioeconomic status, and previous academic achievement? How do they compare to non-dual enrollees in these respects?

    - What schools, districts, and colleges participate in dual enrollment? Is access equal for all of the state's students given where dual enrollment is made available? How does this compare to participation in AP and IB courses?

    - What types of courses are dual enrollment students taking and how do they perform in those courses? How many credits do dual enrollment students earn on average by the time they graduate high school?

    - What effect, if any, does dual enrollment have on student outcomes? Do students enter and succeed in college at higher rates than students from similar social and academic backgrounds with no dual enrollment experiences? What is the average time to degree for students who had taken dual enrollment courses versus those with no dual enrollment experience?

    - What factors are related to variances in dual enrollment student outcomes? Are outcomes related to factors such as what courses students take, where they take them, or the qualifications of instructors?

Funding

Typically, states fund dual enrollment: by specifying how high schools and colleges may or may not claim dual enrollees for the purposes of per-pupil reimbursements through existing funding formulae; by mandating that high schools pay for students' tuition; through a separate appropriation that reimburses high schools or colleges for dual enrollees; or through some combination of the preceding. To promote dual enrollment programs that encourage low-income student participation and the joint services that colleges and high schools must provide to ensure students succeed in these courses, funding should hold institutions harmless for engaging in dual enrollment and remove cost barriers for low-income students.

- Dual enrollment programs (e.g., EEP) thrive under existing conditions and pose few barriers to high schools and colleges from offering courses to those able to pay the fees.

- However, this student-dependent funding model does not promote access for low-income students. Therefore, the state should provide "PK-16 Scholarships" for income-eligible dual enrollees (e.g., who qualify for free and reduced lunch). Illinois similarly finances dual enrollment through "P-16 Initiative Grants" that community colleges use to waive or lower tuition. Rhode Island's "scholarships" would be provided to the postsecondary institution for the purpose of providing a negotiated reduced cost rate per credit hour for low-income students. Negotiated rates for on-campus courses would be based on the marginal costs of serving high school students in courses already offered.

Crediting

As in most states, Rhode Island higher education institutions exercise great autonomy in determining the acceptance of credits for transfer. They are particularly likely to scrutinize credits earned through dual enrollment, although the state has an interest in shortening student time to degree completion through the transfer of these courses. Short of centralizing and systematizing course articulation at the state level (as Florida has done), Rhode Island can take steps to promote smoother credit transfer and accelerated advancement for dual enrollees.

- Require public postsecondary institutions to honor existing articulation arrangements for the transferability of dual credit courses. Continue to encourage local efforts to enable the transferability of courses based on their alignment to standards such as SPATE.

- When learning outcomes for general education and concentration courses are eventually developed and codified, tie the acceptance of previous courses for transfer to students' demonstration of learning against those outcomes.

- If there is no guarantee that their dual enrollment courses will transfer, high school students should at least be assured that completing college courses will be recognized positively for the purposes of college admission. Therefore, the state should require high schools to develop a grade point average weighting system that reflects the successful completion of postsecondary courses while in high school. This policy would also give high-achieving students in low-income schools a leg up in college admissions akin to their peers in higher-income schools, which typically offer an array of AP courses.

References

American Association of State College and Universities. 2002. *The Open Door: Assessing the Promise and Problems of Dual Enrollment*. State Policy Briefing, Volume 1 (1).

Education Commission of the States. 2000. *Advanced Placement Courses and Examinations—State Level Policies.* Denver, CO: ECS Information Clearinghouse.

EPE Research Center. 2006. *Technology Counts 2006. The Information Edge: Using Data to Accelerate Achievement.* Bethesda, MD: Editorial Projects in Education.

Foster, K. C. and M. Nakkula. 2005. *Igniting and Sustaining Educational Identity Development: Findings from Two Early College High Schools.* Boston, MA: Harvard University Graduate School of Education and Jobs for the Future.

Greene, J. and M. Winters. 2005. *Public High School Graduation and College-Readiness Rates: 1991–2002.* Education Working Paper No. 8. February.

Hoffman, N. 2005. *Add and Subtract: Dual Enrollment as a State Strategy to Increase Postsecondary Success for Underrepresented Students*. Boston, MA: Jobs for the Future.

Hoffman, N. and Vargas, J. 2005. *Integrating Grades 9 Through 14: State Policies to Support and Sustain Early College High School*. Boston, MA: Jobs for the Future.

Karp, M., et al. 2004. *State Dual Enrollment Policies: Addressing Access and Quality*. NEW YORK: Community College Research Center, Columbia University, Teachers College.

Karp, M., T. et al. 2005. *Update to State Dual Enrollment Policies: Addressing Access and Quality*. Prepared for U.S. Department of Education Office of Vocational and Adult Education. Community College Research Center, Columbia University, Teachers College.

Marcel, K. 2004. *Using Technology to Increase Access to Accelerated Learning Opportunities in Four States.* Boulder, CO: Western Interstate Commission for Higher Education.

Measuring Up 2004: The State Report Card on Higher Education. The National Center for Public Policy and Higher Education.

National Center for Education Statistics. 2005. *Dual Credit and Exam-Based Courses in U.S. Public Schools: 2002-03*. Washington, DC: National Center for Education Statistics.

National Center for Public Policy and Higher Education. 2005. *Policy Alert Supplement*, November.

Rhode Island Board of Regents for Elementary and Secondary Education. 1989. “Basic Education Program for Rhode Island Public Schools,” Providence, RI: Rhode Island Department of Education.

Rhode Island Department of Elementary and Secondary Education. 2005. Inf*ormation Works! Measuring Rhode Island Schools for Change.*

Setzer, J.C. and, Lewis, L. 2005. *Distance Education Courses for Public Elementary and Secondary School Students: 2002-2003* (NCES 2005-010). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Spurling, S. and R. Gabriner. 2002. *The Effect of Concurrent Enrollment Programs Upon Student Success at City College of San Francisco.* San Francisco: Office of Research, Planning and Grants, City College of San Francisco.

University of Arizona. 1999. *Community College and AP Credit: An Analysis of the Impact on Freshman Grades.* http://aer.arizona.edu/Enrollment/ Papers/dualenr.pdf. Retrieved April 11, 2002.

Watson, J., et al. 2004. *Education Evolution: The Need to Keep Pace with Development of K-12 On-Line Learning.* Naperville, IL: Learning Point Associates/North Central Regional Educational Laboratory.

Windham, P. and G. Perkins. 2001. "Dual Enrollment as an Acceleration Mechanism: Are Students Prepared for Subsequent Courses?" Paper prepared for the 41st Annual Association for Institutional Research Forum, Long Beach, CA. June 3-6.

Appendix A
Advanced Placement

Among the many college-level learning opportunities available to Rhode Island students is Advanced Placement. AP courses prepare high school upper-classmen to take challenging subject matter tests in areas including English, calculus, several foreign languages, various sciences, music, and art. Depending upon the postsecondary institutions to which they are accepted, students who attain a specific score on an exam—typically 3 out of 5 but increasingly a 4 or higher is required—may receive college credit for their AP course. Some institutions allow students who have scored high enough on a sufficient number/range of AP exams to begin college as sophomores on the basis of the credits earned through the exams.

The College Board, a not-for-profit membership association of schools, colleges, and universities that administers the AP program, offers teacher training and works with high schools to develop curriculum to prepare students for AP exams. But many students, particularly those whose high schools cannot afford to offer AP courses, find it more difficult to compete with students from high schools with greater numbers of AP courses for seats in colleges and universities that consider AP course attendance in admissions. For some school districts, only those students who can afford the testing fee can sit for the exam (which was $82 as of the 2005-06 school year). Several states have taken steps to address these inequities by offering school districts financial support to train teachers to teach AP courses, while others have agreed to pay the fee or a portion of the fee required to take the AP examination. Several states, including Indiana, Ohio, South Carolina and West Virginia, mandate that high schools include AP courses in their college preparatory curriculum and provide financial incentives for school districts to build AP programming into their regular curriculum.[11]

Rhode Island has no policy that mandates AP in high schools, nor does it provide funding to promote it, but during the 2003-2004 school year, 17 percent of all seniors took at least one AP exam. Moreover, 60 percent of those seniors scored at the college-mastery level (score of 3 or above).[12] However, there are large gaps in who has access to these courses. Classical High School, a public exam high school in Providence, offers over 21 AP courses to its students. These course are an integral part of their college-preparatory curriculum, and it is "*the rare student who does not take at least one course*" during their senior year. High schools such as East Greenwich High School which is located in one of the wealthiest communities in the state had nearly three-fourths of their senior class (73 percent) sit for a least one AP exam in 2004. In Central Falls, one the poorest districts in the state with a high minority population, no seniors took AP exam in 2004.[13] These disparate opportunities can be found throughout the state, making it difficult for seniors in poorer districts to compete for college admissions with students from wealthier district.

In addition to reviewing state and national date pertaining to AP, our research captured the perspectives of high school principals and guidance counselors on AP. Over the course of the conversation, administrators from a variety of schools settings drew comparisons between the AP program and dual enrollment courses in their districts and schools. Administrators at comprehensive high schools were more likely to report that AP was an integral part of their college preparatory curriculum, but there were sharp divisions in opinion about the value of AP as a college preparatory tool among members of the group. On the one hand, administrators from better resourced schools argued that AP was a better way to indicate to colleges that the student had taken advanced level coursework and that dual enrollment courses, such as those

offered through EEP, were not universally recognized as rigorous college-level courses, particularly among more elite colleges and universities.

On the other hand, school administrators from more moderate-income communities looked to dual enrollment programs, rather than AP, to provide college-level learning opportunities to their students. Echoing what several students told us, they reported that dual enrollment courses, especially those developed with the assistance of college faculty, were much more in-depth than AP courses, and they felt they better prepared their students for college-level work. These administrators reported that AP courses prepared students to take an exam and gave students only one opportunity to gain college credit. They also reported that, because there was no reliable source of funding, they could only fund AP programs as their discretionary budget permitted. They cautioned the state "*to be careful where it puts its resources* [for college-level learning opportunities]. *If you want to fund programs that help students get into the publics* [institutions of higher education], *then fund dual enrollment, but if you want them to be able to go out of state, then AP may be the best bet."*

Alternative/urban core high school administrators reported that they could not offer AP courses because of the size of their faculty and the availability of funding. While some comprehensive high schools were able to "*find*" the money to pay for AP test fees for low-income students "*someway, somehow,*" urban core administrators reported that the sheer number of students they would have to support would not make subsidizing test fees possible.

Appendix B
Distance Learning

Distance learning, long a common tool for delivering postsecondary curriculum to hard-to-serve populations, has recently become more commonplace at the elementary and secondary levels. Distance learning—also referred to as online learning, e-learning, and virtual learning—encompasses both video-conferencing and Internet-based courses. Interactive video conferencing is an increasingly popular distance learning technology that offers real-time learning opportunities to low-income students and rural high school students who otherwise might not have access to these programs. Several states now use this technology. Although it can be costly, interactive video can offer a major benefit to students and teachers, including a familiar classroom setting that does not require them to acquire sophisticated technical skills to function effectively.[14]

On-line learning provides opportunities for students whose choices may be limited due to their rural location, who are unable to attend classes due to physical illness, who seek remediation or advanced courses, or who have scheduling conflicts in their home school. Online learning opportunities are also a popular alternative for students who have work and family obligations outside of school and for students with social or behavioral problems. Online learning opportunities are gaining popularity among high school reformers who look to distance learning as a way to bring back students who have left the education system. For all these reasons, it is becoming an increasingly popular instructional delivery tool for K-12 students.[15]

In 2002-03, there were an estimated 328,000 enrollments in distance education courses among students enrolled in public school districts. Of the total enrollments in distance education courses, 68 percent were in high schools. Of those high school students enrolled in online learning courses, 14 percent were enrolled in an AP or dual enrollment course offered through distance education. A survey of public school distance learning providers conducted U.S. Department of Education's Office of Instructional Technology found that one of the most frequently cited reasons for providing distance education courses was to offer accelerated learning opportunities, such as AP, IB, and concurrent and dual enrollment opportunities to their students.[16]

Accelerated learning opportunities may not be readily available to students in some rural or low-income school districts. The challenges some students encounter in gaining access to concurrent or dual enrollment courses include limited financial or teacher resources and distances that are too great for them to overcome in order to attend college classes on campus. Video conferencing offers an alternative way for schools to offer convenient accelerated learning opportunities to high school students.

Most school districts and schools provide students with computers access and Internet access of some sort, but all access is not equal. Some of the same schools that can afford to offer the high-quality, college-level learning opportunities to their students are the same schools that can make these opportunities available to their students through distance education. Conversely, low-income schools that lack the resources to offer accelerated learning opportunities to their students also do not have the technology to access quality dual enrollment programs off-site.[17]

Rhode Island is no exception to this rule. While the state's small geographic footprint would seem to indicate that distance from a college campus is not a significant barrier to accessing accelerated learning opportunities, some school administrators indicated that

traveling to a college campus was a hardship for their students, particularly students in rural areas who have no access to public transportation. The more pressing issue for Rhode Island is the availability of instructional technology. In a survey designed to assess the status of K-12 educational technology, *Education Week* cited the need for the state to improve access to technology.[18] Although the state was on an uptick from 2004 to 2005, it still lagged behind other states in terms of number of students per instructional computer, the number of instructional computers in the classroom, and access to high-speed, Internet-connected computers. These data would seem to indicate that Rhode Island is not well situated to expand distance-learning opportunities without a significant investment in instructional technology.

Appendix C
Participant Rates by High School in the Early Enrollment Program, 2004-05

High School	Number Enrolled in Dual Enrollment	Total School Enrollment	Percent of Students in Dual Enrollment	Percent of Free/Reduced Price Lunch
Central Falls	9	1036	0.87%	61.87%
Central	24	1647	1.46%	68.55%
Classical	16	1088	1.47%	43.84%
Shea Senior	30	1153	2.60%	55.77%
West Warwick	57	1119	5.09%	14.21%
Woonsocket	50	1965	2.54%	35.83%
Barrington	70	1095	6.39%	1.92%
Burrillville	27	878	3.08%	17.08%
Chariho Regional	131	1248	10.50%	10.82%
Coventry	97	1904	5.09%	7.46%
Cranston East	42	1721	2.44%	34.92%
Cranston West	99	1781	5.56%	7.47%
Cumberland	74	1536	4.82%	5.27%
East Greenwich	33	735	4.49%	4.22%
East Providence	112	2029	5.52%	22.42%
Exeter-West Greenwich	96	741	12.96%	9.31%
Lincoln Senior	37	1085	3.41%	8.94%
Middletown	32	719	4.45%	15.44%
Narragansett	38	524	7.25%	8.78%
North Providence	176	1185	14.85%	17.89%
North Smithfield	39	837	4.66%	8.00%
Pilgrim	22	1364	1.61%	24.78%
Ponaganset	36	990	3.64%	10.10%
Portsmouth	38	1078	3.53%	4.36%
Rogers	43	708	6.07%	36.58%
Scituate	16	541	2.96%	5.73%
Smithfield	286	885	32.32%	4.07%
South Kingstown	87	1282	6.79%	10.76%
Tiverton	42	736	5.71%	10.46%
Toll Gate	34	1191	2.85%	11.42%
Westerly	18	1143	1.57%	20.12%

Source: Early Enrollment Program (Rhode Island College) and Rhode Island Department of Education.

Appendix D
Rhode Island High School Partnerships/Dual Enrollment Programs
2004-05 Academic Year

Community College of Rhode Island

Program Name/ Starting Date	Secondary Partners	Financing	Program Description	Students Served, 2004-05	Instructors	Course Location & Student Mix
Bridges Project Fall 2003	W. Warwick HS	Participant school	Accuplacer placement testing of 10th and 11th graders. Test results used by counselors to advise students and by teachers to improve and align curriculum in reading, writing, and mathematics.	135	N/A	Program located at high school High school students only
CISCO Academy Fall 1998	Cranston CTC Exeter-West Greenwich HS Narragansett HS N. Kingstown HS Shea HS Warwick CTC Westerly HS Woonsocket HS	Participant schools Carl D. Perkins Vocational & Technical Education Act of 1998 (Perkins III) through RIDE	CCRI serves as the Regional Academy to provide professional development to local academy teachers and opportunities for articulated credit to students.	30	High school teachers trained and certified to teach by CCRI faculty	Program located at high school High school students only
City Campus Spring 2004	E3 Academy New Feinstein School Met School	Participant schools Participant employers grants	Collaborative program to provide students with a supported transition from urban high schools to college and career. Strives to develop in every student a toolkit of personal qualities and academic skills needed for success.	200	High school teachers CCRI faculty Adjunct faculty	Program located at CCRI High school students only

The Met Program Fall 2002	Metropolitan Regional Career and Technical Center	CCRI and student tuition	Offers juniors and seniors an opportunity to enroll in up to 6 college credits per semester at CCRI in courses not available at their high school.	55	CCRI faculty	Courses taught at CCRI High school/college mix
High School Enrichment Fall 1979	Open to all high schools	Student tuition	Offers juniors and seniors an opportunity to enroll in up to 6 college credits per semester at CCRI in courses not available at their high school.	193	CCRI faculty	Courses taught at CCRI High school/college mix
High School/CCRI Partnership Program Spring 2002	Open to all high schools 27 partner high schools 63 articulation agreements as of spring 2005	None	Offers high school students the opportunity to earn college credit for college level courses taken in high school.	42	High school teachers	Courses taught at high school High school students only
Hospitality and Tourism Fall 2002	Central Falls HS Chariho HS Exeter-West Greenwich HS W. Warwick HS Woonsocket HS	Carl D. Perkins Vocational & Technical Education Act of 1998 (Perkins III) through RIDE to Johnson & Wales University	Promotes travel/hospitality as a career choice among high school students and promotes articulation among high schools and two- and four-year colleges	N/A Planning phase		
Leadership SLC (Small Learning Community) Fall 2003	Hope High School	Participant school	Provides college preparatory dual enrollment, urban pilot program utilizing Accuplacer placement testing and follow-up developmental coursework on site.	Enrollment data not available for 2004-05	N/A	Program located at high school High school students only

Running Start	Open to all high schools Fall 2004: 18 partner high schools Fall 2005: 23 partner high schools	Student tuition	Offers qualified high school seniors an opportunity to enroll as full-time students at CCRI earning high school and college credit simultaneously.	97	CCRI faculty	Courses taught at CCRI High school/college mix
Secondary/ Postsecondary Articulation for Technical Education (SPATE)	Cranston CTC Davies CTHS East Providence CTC Middletown HS N. Kingstown HS Warwick Area CTC W. Warwick HS 16 articulation agreements as of spring 2005	Carl D. Perkins Vocational & Technical Education Act of 1998 (Perkins III) through RIDE Fall 2001	Provides a standards-based model, articulated curricula process in four career clusters (IT, Health Sciences, Pre-Engineering, and Business/Finance) and supports a web-enabled toolkit utilized by schools to improve curriculum and encourage articulation.	N/A Model Articulated Curriculum Improvement Program	High school teachers	Courses taught at high school High school students only

Rhode Island College

Program Name/ Starting Date	Secondary Partners	Financing	Program Description	Students Served, 2004-05	Instructors	Course Location & Student Mix
Early Enrollment Program 1980	Open to all high schools Program offered in 42	Student tuition	The EEP is a school-college partnership that offers high school seniors and select juniors an opportunity to earn college credits while they complete high school.	2,480	High school teachers	Courses taught at high school High school students only

University of Rhode Island

Program Name/ Starting Date	Secondary Partners	Financing	Program Description	Students Served, 2004-05	Instructors	Course Location & Student Mix
Early Credit High School Program in Composition 1978	Open to all high schools Program offered in 21	Student tuition	The ECHSP offers seniors in selected high schools across Rhode Island the chance to study college level composition and receive college credit.	800	High school teachers	Course taught at high school High school students only

Number of High Schools Participating		Number of Programs	Number of Articulation Agreements		Estimated Enrollment 2004-2005	
Comprehensive High Schools	39	12	CCRI	63	CCRI	752
Career & Tech. Centers	9		RIC	37	RIC	2,480
Private High Schools	5		URI	1	URI	800
Massachusetts High Schools	2		**Total**	**101**	**Total**	**4,032**
Total	**55**					

Appendix E
Rhode Island Dual Enrollment Project Interview Contacts

Name	Title	Institution	Program	Interview Date
Judith Swift	Vice Provost for Academic Affairs	URI	Institutional Overview	12/28/05
Ruth Sherman	VP Acad Affairs	CCRI	Institutional Overview	1/13/06
James McCroskery	Assistant VP Acad Affairs	RIC	Institutional Overview	12/29/05
Michael Poindexter	VP Student Affairs	CCRI	Institutional Overview	1/13/06
Diane Nobles	Project Director	CCRI	SPATE	1/10/06
Terri Kless	Assoc.Director	CCRI	Running Start, HS Enrich, Partnership	1/13/06
John Panzica	Assistant Dean	CCRI	Running Start, HS Enrich, Partnership	1/13/06
Elizabeth Mancini	Dean	CCRI	Running Start, HS Enrich, Partnership	1/13/06
Nedra Reynolds	Director	URI	ECHSP	1/5/06
Melanie Sullivan	Coordinator	CCRI	City Campus Initiative	1/20/06
Kathleen Mallon	Project Director	CCRI	City Campus Initiative	1/20/06
Jay DiSandro	Coordinator/Teacher	Smithfield HS	EEP	1/19/06
Elisa Morello	Coordinator	URI	ECHSP	1/12/06
Ken Jolicouer	Coordinator	URI-CCE	ECHSP	1/11/06
Priscilla Abrahamson	H.S. Teacher	Barrington HS	ECHSP	1/9/06
M. Gianfrancesco	Assistant Coordinator	RIC	EEP	1/12/06
K.C. Perry	H.S. Principal	New Feinstein H.S.	City Campus Initiative	3/14/06
Nancy Diaz	H.S. Principal	Metropolitan Regional CTE	City Campus Initiative	2/15/06
John Morgan	Industry Partner	Lifespan	City Campus Initiative	2/15/06
Al Fantasia	Industry Partner	Rhode Island Hospital	City Campus Initiative	2/15/06
Barry O'Connor, Jr	Super Advisor	CCRI	City Campus Initiative	2/15/06
Michelle Cox	Advisor	Metropolitan Regional CTE	City Campus Initiative	2/15/06
Joseph Crowley	H.S. Principal	Warwick Area CTC	High School Enrichment Program/SPATE	3/22/06
Anthony Leone	RIOHE	Associate Commissioner	Policy/Political Response	1/6/06
Rep. Carol Mumford	RI House	Finance Committee	Policy/Political Response	3/8/06
Sen. June Gibbs	RI Senate	Fiance Committee	Policy/Political Response	5/10/06
Sen. Dan Issa	RI Senate	Education Committee	Policy/Political Response	5/11/06
James DiPrete	Board of Regents/Governor	Chair	Policy/Political Response	3/23/06

Colleen Callahan	Board of Regents	PK-16 Council	Policy/Political Response	3/16/06
Todd Flaherty	RIDE	Deputy Commissioner	Policy/Political Response	3/7/06
Louis Toro	Guidance Director	Classical HS	EEP/AP	3/31/06
Jack Kelly	Guidance Director	North Providence HS	Dual Enrollment Focus Group	4/12/06
Steven Ruscito	Principal	Middletown HA	Dual Enrollment Focus Group	4/12/06
Mike Connolly	Chair, Social Studies	Shea HS	Dual Enrollment Focus Group	4/12/06
Kathleen Forrest	Chair, Foreign Language	Shea HS	Dual Enrollment Focus Group	4/12/06
Student Focus Group (9)		Urban Core High School	City Campus perspective	2/15/06
Student Focus Group (4)		Comprehensive High School	EEP/AP	3/8/06

Appendix F
Rhode Island Dual Enrollment Project
Interview Guide
Program Experts/Coordinators

Introduction

- Part of statewide initiative to redesign high schools and strengthen high school/college transitions
- Funded under the NGA Honors State Grant program
- Governor's Statewide PK-16 Council retained JFF to conduct research on dual enrollment programs in RI and to recommend ways to develop a dual enrollment system
- Look for promising strategies that meet the Commissioner's twin goals of (1) developing a system-wide dual enrollment policy that emerges from existing program's best practices and most promising strategies; (2) while maintaining academic quality.

Program Name

- Is it truly dual enrollment? (define dual enrollment as high school students enrolled in college courses, no matter the crediting arrangement. "Dual credit" is dual enrollment where students receive both high school and college credit.

History/Background

- How and why was the program implemented
- How long in operation
- What is its purpose? Has the purpose evolved?
- Why is college involved? Why is district involved?

Number Served

Primary population:

- Typically college bound, atypical college bound
- Urban, rural, suburban
- Minority, first-generation
- Low-income, moderate income
- High achievers, academically challenged
- Has the composition or eligibility standards for entry changed?

Program goals

- Academic enrichment, developmental, college readiness

Program Structure/Eligibility/Curriculum

- What courses are offered
    - How (if at all) do students choose which courses to take?

    - What is/was the rationale for organizing course sequences or discrete course options in this way? (Trying to get at if there was any thought given to "alignment" of high school and college curriculum.)
- Are they offered individually, in bundles, as introductory courses in a college program
- How many credits can students take
- Who teaches
- Where are courses taught
- How is eligibility/readiness for participation in college courses determined (e.g. test, course prerequisites, GPA, etc.)? Has this changed over time?
- How well does the course(s) transfer?

Governance

- Who certifies courses
- How are teachers selected
- How are credits awarded
- What is the level of collaboration between college and high school (both at level of governance and day-to-day practice)
- Has the collaboration changed over time?

Funding

- Who pays for what?
- Who loses money/who earns money
- Is student tuition waived/supplemented
- Additional expenses: books, fees, transportation
- Special funding streams used? (state, federal grants, f/a?)
- Has the way the program is funded changed over time?

Outcomes

- Is there a way to track student progress
- How are students tracked [great, would be good to get any data they have too]
- How is course integrity/rigor/quality monitored?
- What do these data say about student achievement and/or achievement of program goals?
- Have you seen changes in student achievement over time?

Policy Issues/Challenges

- What are the biggest challenges to sustaining this program
- Who are its biggest boosters? Where is the resistance to the program?
- What is the programs greatest strengths**?**

- Barriers to student participation
- What is standing in the way of sustaining or expanding this program
- What needs to be done in order to expand
    - Institutional-level initiatives
    - State-level initiatives
    - Student incentives
- In what ways could the state be helpful to the program—by getting involved or leaving it alone?
- How does program contribute to state goal of high school reform and PK-16 educational transformation

Endnotes

1 General education requirements represent a third of the baccalaureate at University of Rhode Island and so should provide ample choice for students.

2 Data for 2002. Source: The NCHEMS Information Center for State Higher Education Policymaking and Analysis, www.higheredinfo.org.

3 National Center for Public Policy and Higher Education 2005.

4 Such programs are also referred to as joint enrollment. Students typically receive college credit for passing these courses and, depending on state or institutional rules, can receive "dual credit"—that is, high school and college credit simultaneously.

5 Karp et al. 2005.

6 American Association of State Colleges and Universities 2002.

7 Spurling and Gabriner 2002; University of Arizona 1999; Windham and Perkins 2001; Foster and Nakkula 2005.

8 Rhode Island Board of Regents for Elementary and Secondary Education 1989.

9 The Joint Admissions Agreement is an agreement among CCRI, RIC, and URI that enables students to move efficiently from an Associate's degree program to a Bachelor's degree, and allows students from CCRI with an Associate's degree in general studies and 60 credits that will apply directly to a specified Bachelor's degree program at RIC or URI.

10 General education requirements represent a third of the baccalaureate at University of Rhode Island so should provide ample choice for students.

11 Education Commission of the States 2000.

12 Rhode Island Department of Elementary and Secondary Education 2005.

13 Rhode Island Department of Elementary and Secondary Education 2005.

14 Watson et al. 2004.

15 Watson, et al. 2004.

16 Setzer and Lewis 2005.

17 Marcel 2004.

18 EPE Research Center 2006.