

Data Story:

Educating for a Stronger Workforce



Essential Question: What are the challenges to improving Rhode Islanders' educational attainment?

Description:

This story investigates the details of educational building blocks and their relationship to completion of diplomas, degrees, and certificates.

Data Sources: Rhode Island Department of Education

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High educational attainment attracts dollars and jobs

The quality of a state's workforce is a critical consideration when businesses explore where to expand, invest resources, or site a new endeavor. Simply put: highly-educated workforces attract [dollars](#) and [jobs](#). Therefore, efforts to improve Rhode Island's economy must involve increasing RI's education levels overall.

This story informs those efforts, by mapping the continuum of educational skill levels to provide a clearer picture of the challenges facing RI's current and emerging workforce.

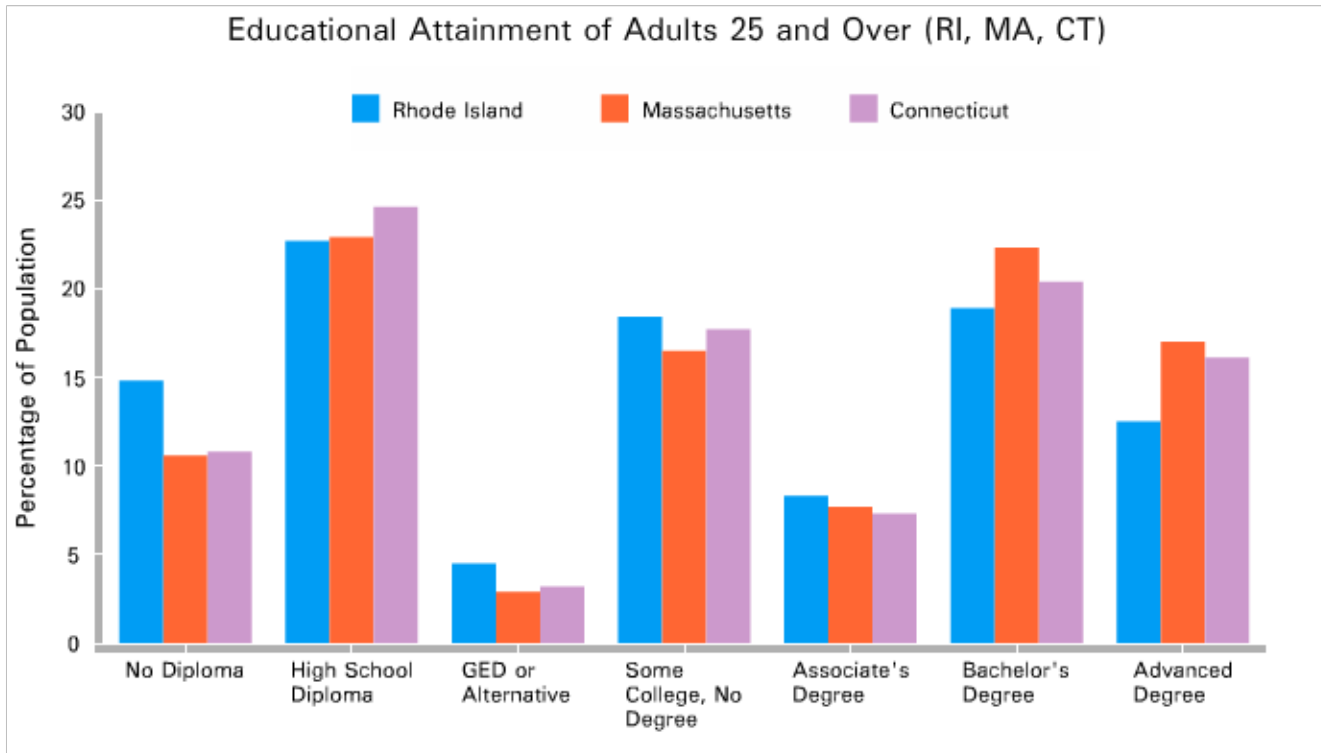
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Rhode Island lags behind New England in educational attainment



Nearly 15% of RI workers lack even high-school skills.

High-school diplomas, or equivalents, are the foundation for building further educational skills. Too many RI youth leave high school before finishing. The relatively high rate of GED* attainment indicates interest in educational advancement. But for established adults, who might already have jobs and/or children, obtaining a GED can be a far tougher route to an educational foundation than earning a conventional diploma.

Similarly, RI has higher rates than its neighbors of attempting, but not completing college, and fewer Rhode Islanders have bachelor's or advanced degrees. As noted in the first [Adult Education Data Story](#), the lower levels of education could help explain

the recent 9.9% increase in the out-of-state residents who work in RI jobs. Just catching up to the educational attainment of RI's neighbor states will be a substantial challenge.

* [GED](#) -- A General Educational Development certificate means the student has passed four tests -- in language arts, math, science, and social studies -- to demonstrate equivalent attainment to a high-school diploma.

Data source: [US Census Bureau](#), American Community Survey 2009-2013 5-Year Estimates.

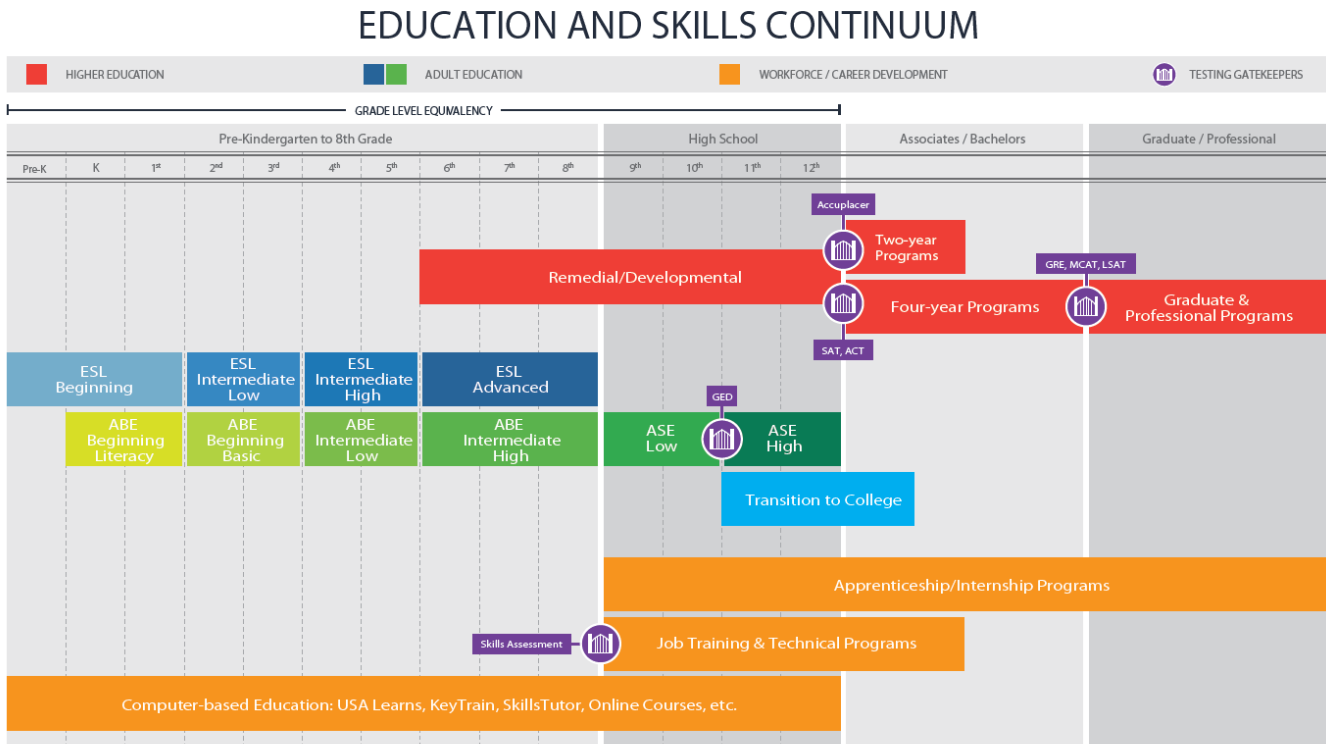
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Continuum of Education Resources in Rhode Island



www.RIdataHUB.org

This animation outlines the available educational resources and systems by Grade Level Equivalency (GLE) by breaking down big educational chunks (high school, two or four-year college, graduate and professional programs) into individual grade levels. Mapping these building blocks highlights the "distance," the time and effort required, for adult learners to advance to desired academic goals.

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The outline of this story's investigation

This story will focus on three areas that present concerns, but also opportunities for improvement:

*Challenge 1: **Strengthening the quantity and quality of high school diplomas.***

*Challenge 2: **Improving the flow through the workforce training pipeline.***

*Challenge 3: **Preparing a workforce-ready immigrant population.***



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Challenge 1: Strengthening both the quantity and quality of high school diplomas

Remediation: Community College of Rhode Island



74% of students enroll in remedial education.



30% of remedial students (74%) complete all required remedial courses.



Most students entering RI's community college are recent high school graduates from local public schools. The overwhelming majority -- 74% -- are not "college ready." Of that group, only 30% progress past remediation and into college credit-bearing courses.

Laudably, RI high schools are succeeding at keeping their students in school and seeing more of them through to graduation. But in 2012, of the in-coming freshmen at CCRI who were high school graduates -- those with diplomas in hand -- at least 46% of them needed remedial math coursework, and 58% needed remedial English.

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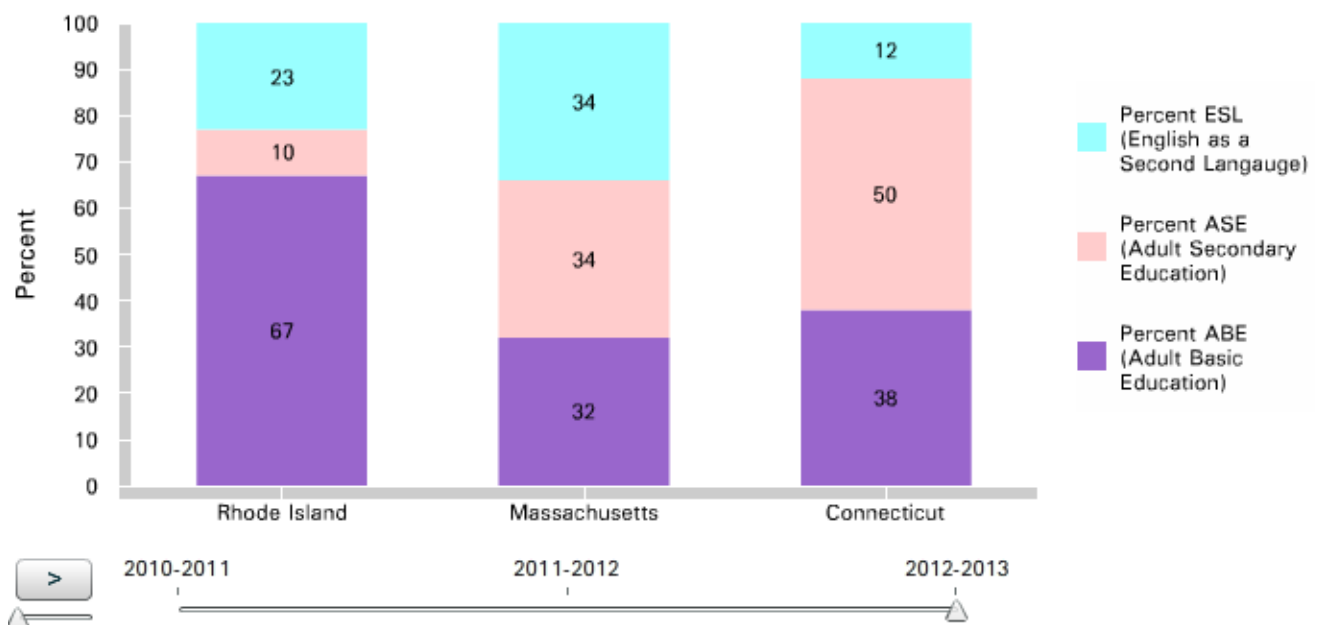
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Challenge 1 (Continued): A stronger K-12 system for a better-educated workforce.

Adult Education Designation - 16-24 year-old Learners



Twice as many young learners entering RI's Adult Education system need Adult Basic Education (ABE), equivalent to grades K-8, as its neighbors.

Ensuring rock-solid K-8 skills among RI's young people provides a sturdy foundation for further education, perhaps easing the need for Adult Education later on. Even with the large number of foreign-born persons in RI, the demand for basic academic skills greatly dwarfs the demand for English-language skills.

High-school dropouts may believe they will "just go get a GED" without understanding the distance between their current education level and the demands of college readiness or the GED, especially the new one. That distance is not clear to them, nor perhaps to those counseling them.

Data source: National Council of State Directors of Adult Education, Legislator's Resource Books, 2012, 2013, 2014.

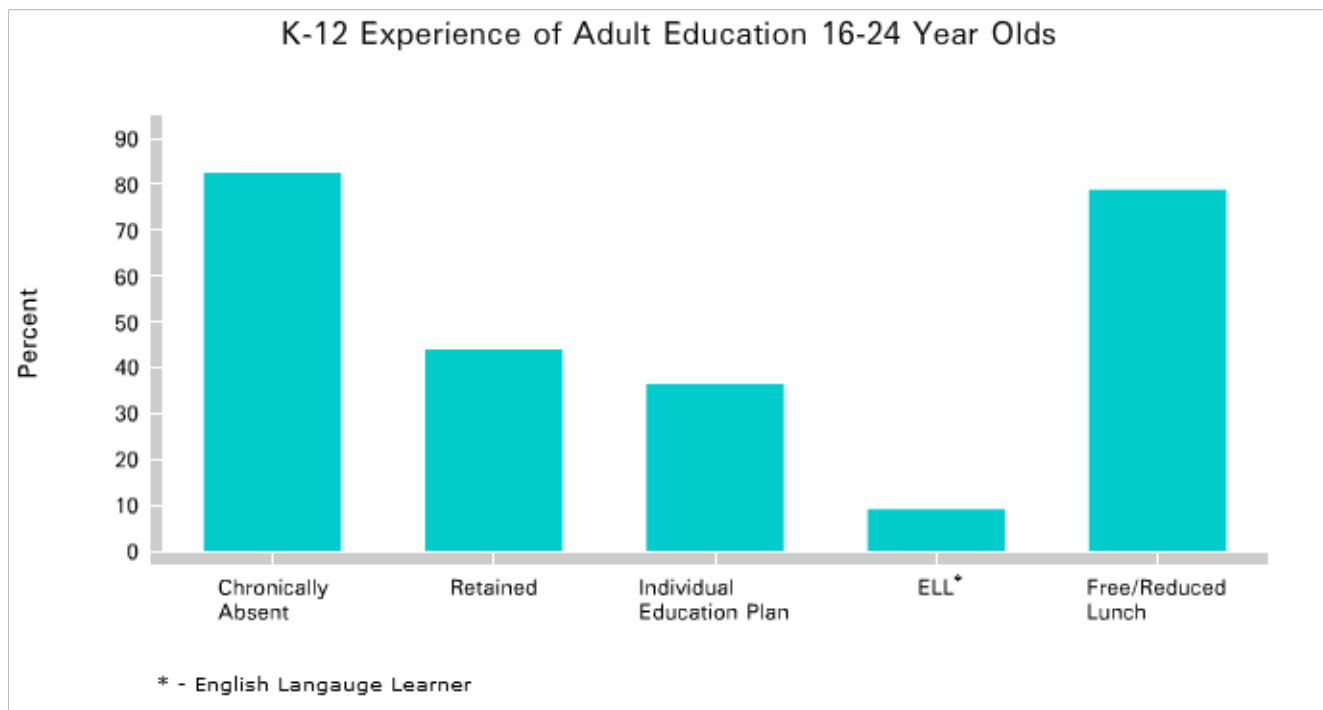
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Challenge 1 (Cont.): A 2012 snapshot of young adult-education students



Even worse than poverty and English-language needs, the negative effects of Chronic Absenteeism depress K-12 academic achievement.

While boosting education across the age span is important, supporting K-12 youth more effectively would likely yield the largest impact on foundational skills and by extension, on subsequent degree completion. Poverty has proved a daunting challenge in America, but it is not necessarily a reason to be absent from school.

Reducing absenteeism not only has been [shown](#) to improve the youngest students' skills, but might actually contribute to the long-term reduction of poverty.

Also using local data, this [Data Story](#) shows the educational "wash-out" effect of those students who missed excessive days of high school and later tried to continue with their education.

Data Note: *The chart represents the 59% of Adult Learners who were aged 16 to 24 in the 2011-2012 academic year who previously attended RI public schools. Categories do not sum to 100% because students are included in all categories for which they met the category's criteria for at least one academic year. Data source: RI Department of Education.*

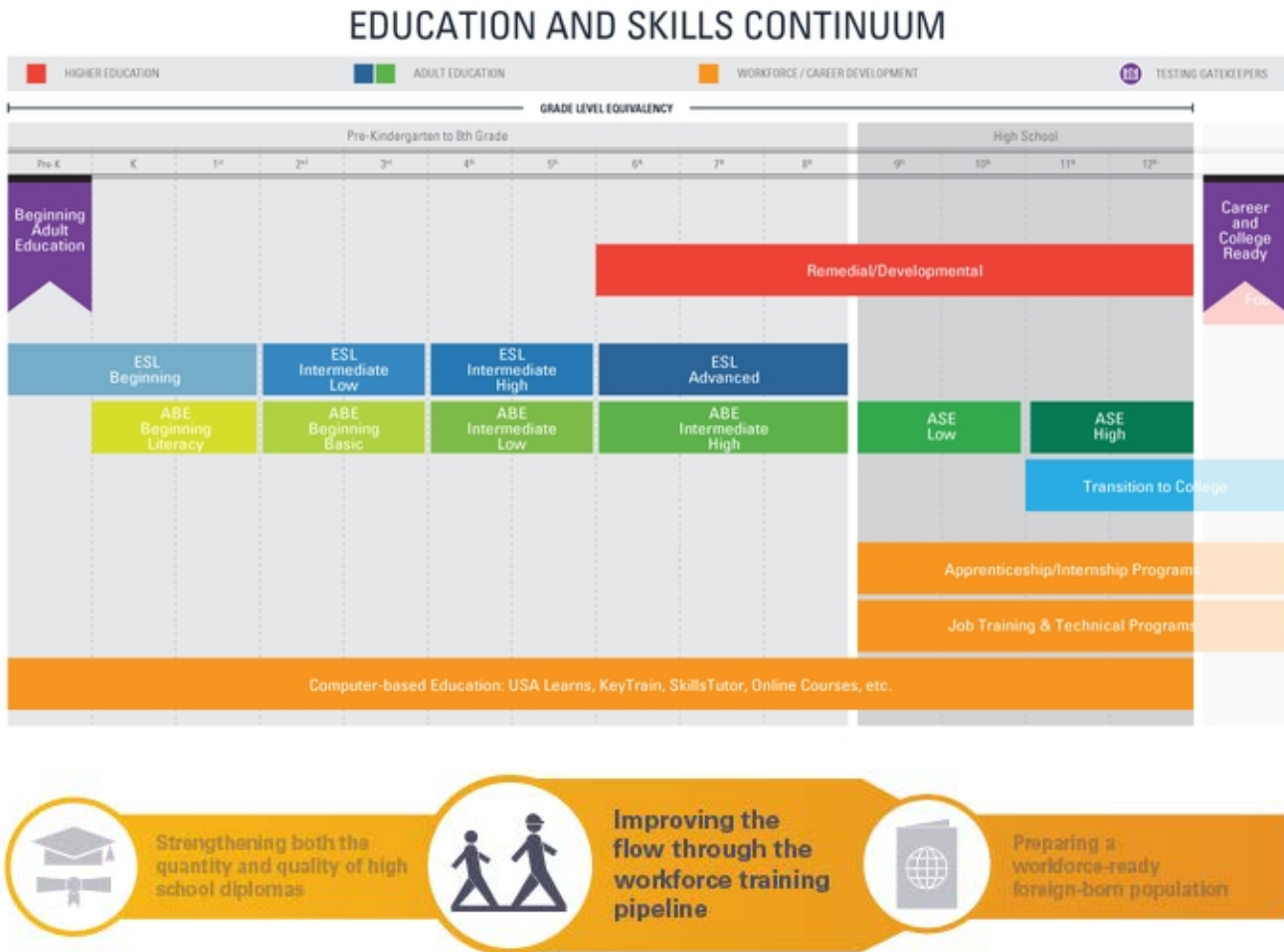
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Challenge 2: Improving the flow through the workforce-training pipeline



After the high school years have passed, unprepared adult learners must still acquire K-12 skills to bridge the distance from where they are to college- and career-ready.

The grade-level academic building blocks, skills, and requirements stay fairly constant no matter at what age students learn them. However, while we typically expect a child to acquire, for example, 5th-grade skills within one school year, an adult may need more or less time to obtain those skills.

Some adult learners find the grade-level blocks of skills and requirements reasonably easy to acquire. Many others are challenged not only by the skill-building itself, but also by concurrent family and work responsibilities.

Again, strengthening K-12 students' foundational building blocks would speed the flow along the academic continuum. As evidenced by the previous slide, just helping more RI young adults start their journey from a college- and career-ready point (rather than at a point lacking even basic skills) would likely improve degree attainment.

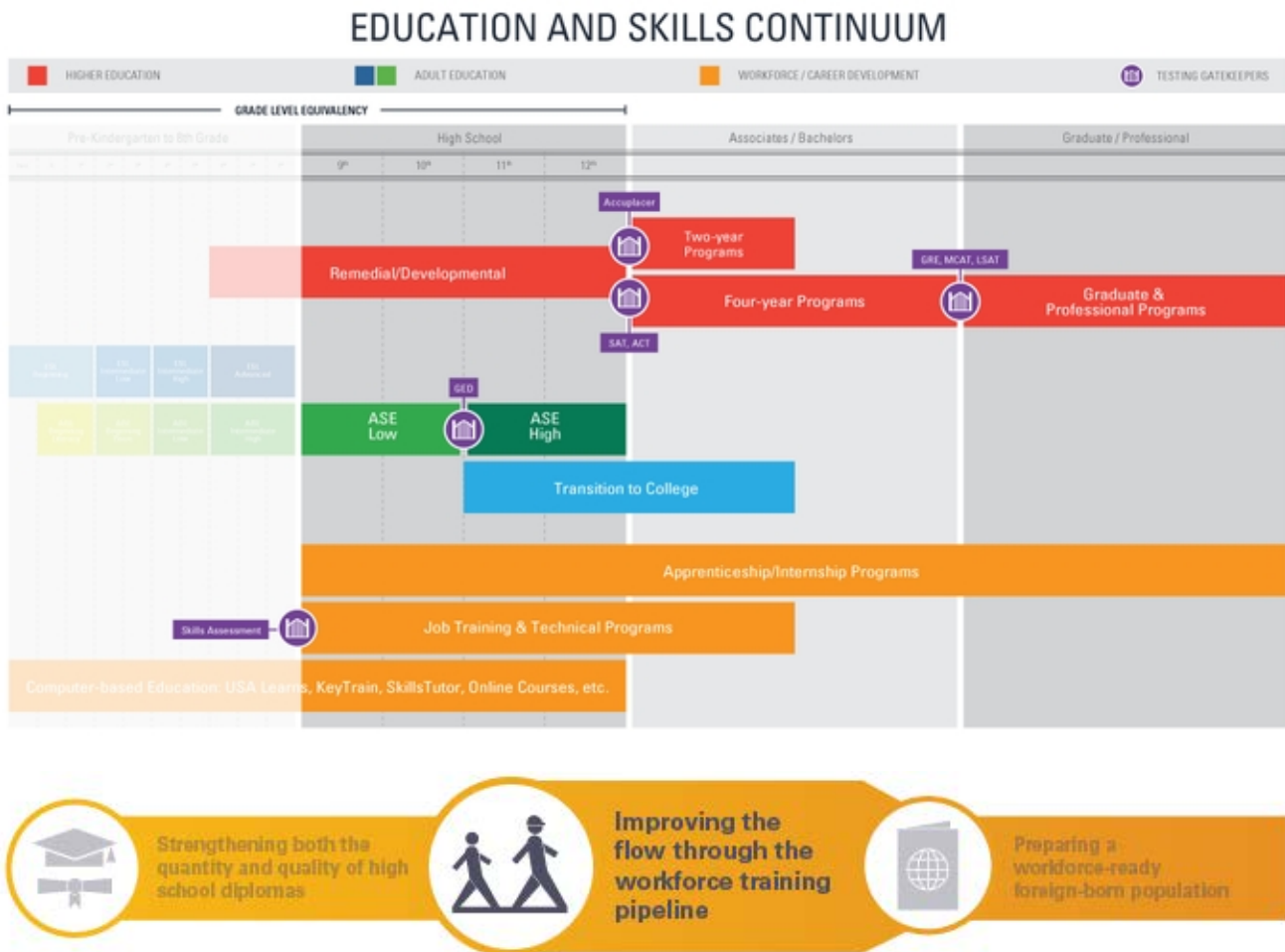
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Challenge 2 (Cont.): Tests become gatekeepers to further goals.



Adult learners, with or without a diploma, face assessments, or tests, that serve as "readiness" gatekeepers to post-secondary certificate training, workforce development programs, and college itself.

For example, the [Accuplacer](#), a test given to most incoming community college freshmen nationally, determines if students need "remedial," or K-12-level courses, which do not provide credits toward a degree. Adult Education uses [TABE](#) tests that

assess learners' K-12 proficiency and after coursework, their readiness to advance to the next appropriate level. Often requiring at least 9th-grade skills, industry-specific job-training programs screen students with a variety of tests to be assured their efforts will build on a foundation of skills. Advanced degree programs (master's, M.D.s, Ph.Ds, etc.) all have demanding entrance requirements designed to maximize the chances that students are prepared to persist to the completion of the degree.

Even most states' tests for drivers licenses require at least an 8th grade reading level. Because these tests promote or impede progress towards many adult goals, the ability to pass them matters.

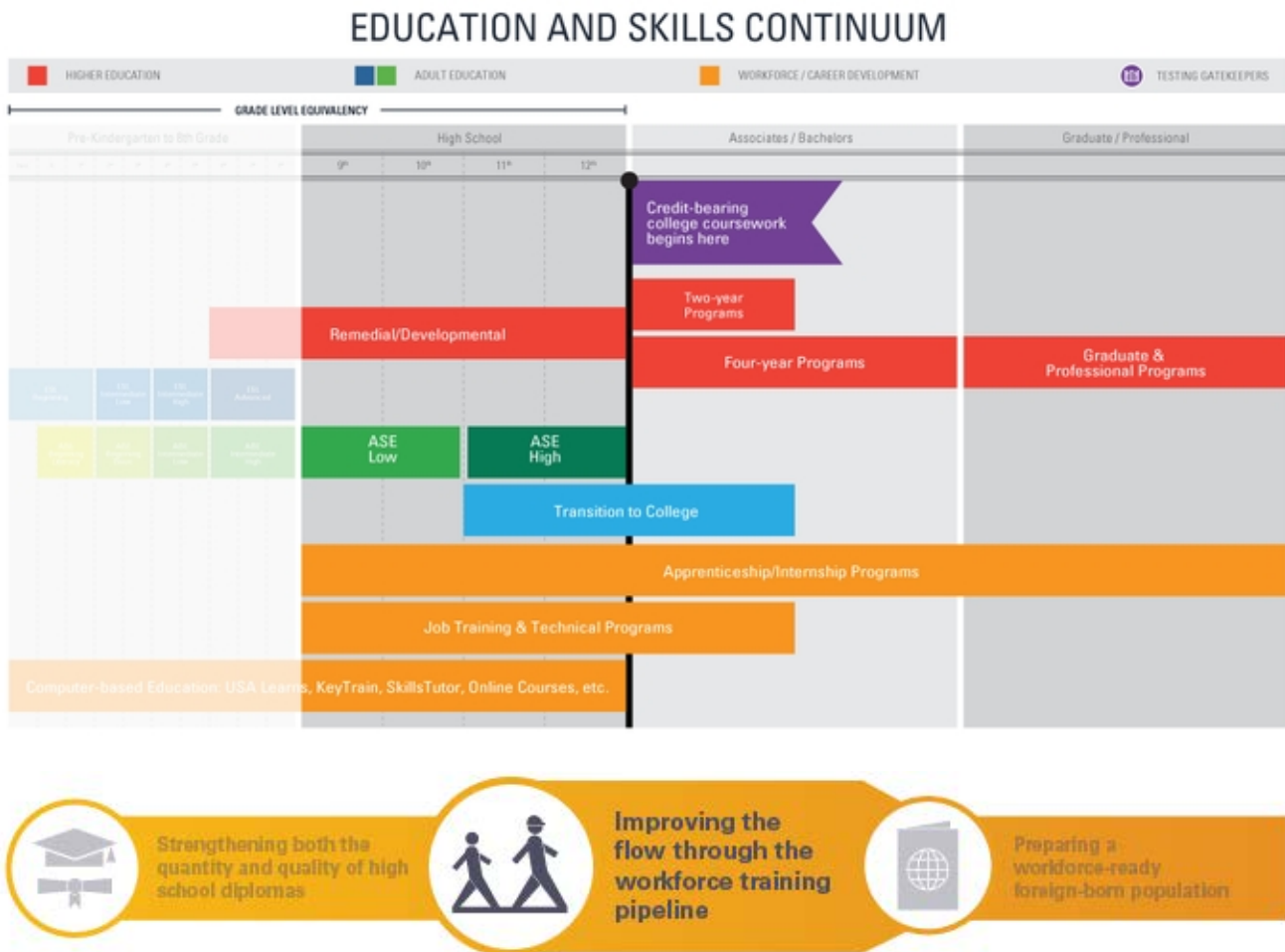
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Challenge 2 (Cont.): Improving the higher education pipeline



Unprepared adult learners who want a post-secondary degree can improve their K-12 skills either in higher education's non-credit-bearing "remedial" courses or in Adult Education classes.

Remedial Education: Earlier on slide 5 we saw that 74% of incoming CCRI students need at least one "remedial," or K-12-skills, course. These college-based courses cost the same in tuition as credit-bearing courses. While some financial aid is available,

often adult learners get frustrated with paying for courses that seem to get them no closer to a degree. [College-transition programs](#) have been found to help low-skilled adults persist in higher education, when available.

Adult Education: Alternatively, learners use the tuition-free Adult Education system to ramp up their academic readiness, again, when services are available. Years of budget cuts have reduced the availability of Adult Education services. Currently, at least 1,300 adults are on waiting lists. And that number represents only a fraction of the RI population who need to gain high-school skills and credentials to become viable in college or the workforce.

There is potential merit in each approach. Some data indicate that when remedial students are already familiar with the college environment, they transition to the demands of college-level work more easily than by jumping in from "outside," including the Adult Education system. But when colleges and college students spend time and resources preparing for credit-bearing "real" college, the efforts prolong degree completion and incur extra costs.

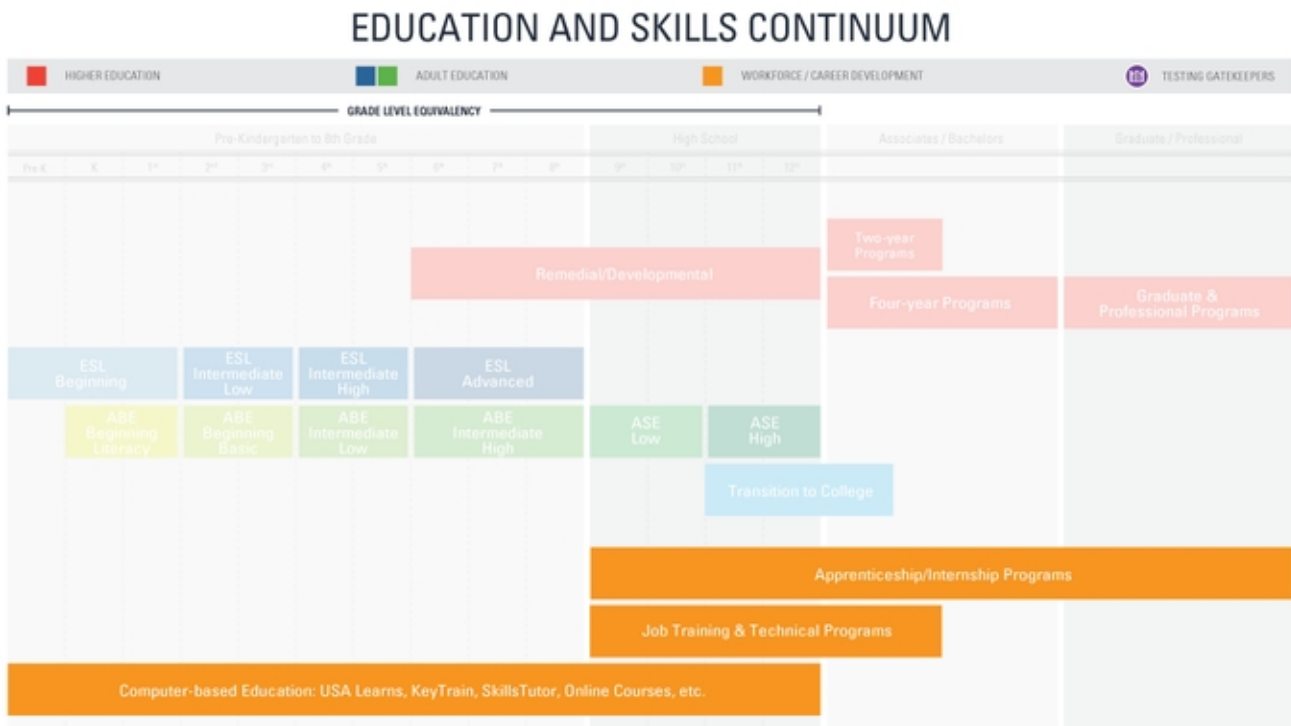
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Challenge 2 (Cont.): Improving the career-and-technical, job-skills pipeline



Workforce development programs typically require 9th-grade skills at a minimum. As an adult, mastering middle-school skills can take years.

Workforce development programs include: job training; career and technical certificates; apprenticeships; and internship opportunities. Apprenticeship programs include those offered by the trade unions. These programs are often a publicly-

subsidized investment in the participants, so they naturally look for those adult students most likely to persist, succeed, and land a job as soon as possible.

Online courses are a relatively recent addition to educational offerings. In "blended learning" classrooms teachers support computer-based learning, a technique that simultaneously helps adult learners acquire computer skills. While online courses without teacher support are effective primarily with self-directed learners, they do provide learners at every level more options to acquire necessary and/or desired skills.

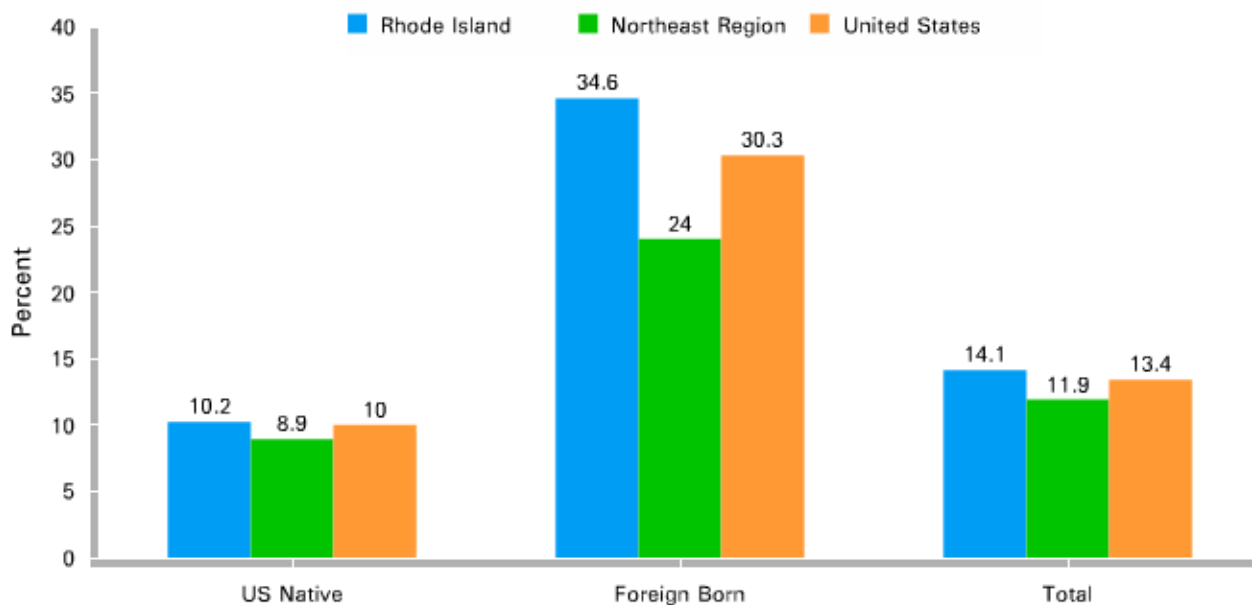
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Challenge 3: Preparing a workforce-ready foreign-born population

Percent of Population (Age 25+) With Less Than HS Diploma, 2013



Strengthening both the quantity and quality of high school diplomas



Improving the flow through the workforce training pipeline



Preparing a workforce-ready foreign-born population

As of 2013, Rhode Island's foreign-born population is about 138,000. Many come to RI with lower education levels than, say, the foreign-born tech workforce going to Massachusetts.

Nearly 35% of RI's foreign-born population over age 25 lacks a high-school diploma, which is higher than the national average and considerably higher than neighboring states.

[Evidence](#) has shown that hard-working, entrepreneurial ethics are often strong assets of the foreign-born workforce. But many foreign-born adults will need a running start through English-language learning before being able to engage in even basic education, never mind workforce development or college.

Data Note: *The "Northeast Region" includes New York, Pennsylvania, and the New England states. Data source: [US Census Bureau](#), American Community Survey 2009-2013 5-Year Estimates.*

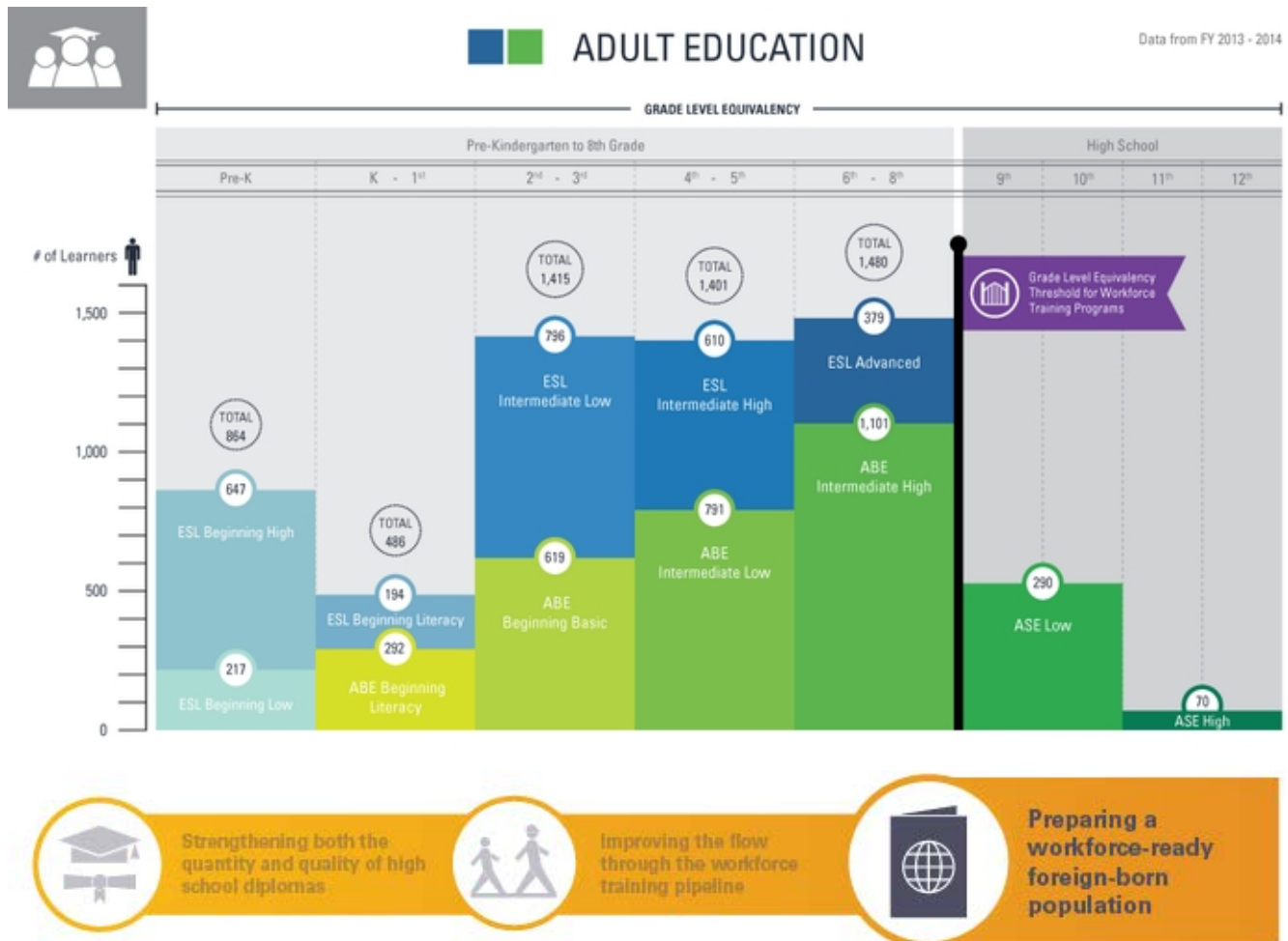
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Challenge 3 (Cont.): Jobs require functional English-language skills.



To arrive even at workforce-training readiness, some adult learners will have to traverse a considerable distance from Beginning ESL through many levels of Adult Education.

The graph above shows the distribution of the 5,000-plus adult learners who enrolled in RI's Adult Education programs in 2012-13. Most were working on English

proficiency or basic academic skills through the 8th-grade level. These learners were establishing a foundation that would allow them to qualify for workforce-training programs and/or a high school equivalency certificate, like the GED.

The Adult Education system offers an excellent curriculum to develop English-language skills and academic skills at all levels, from pre-K through 12th grade.

Data Source: RI Department of Education, CALIS database.

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General Conclusions:

To Challenge 1:

Maximizing the efficacy of the time students spend in K-12, acquiring the foundational academic building blocks, is a high-yield, cost-effective, and doable way to boost RI's overall educational attainment.

To Challenge 2:

Fully funding adult education would eliminate the long waiting list of people already motivated to improve their skills -- currently at 1,300 -- thereby boosting their attainment. The transitions-support programs offered by higher education, community-based organizations, and adult education also need to expand. RI adults need smoother and easier access to skill building.

To Challenge 3:

Making English-language learning more accessible to the new immigrant population would help leverage the economic assets they bring with them. Promoting dual-language schools, career-and-technical programs, and apprenticeships would help these learners enter the English-language workforce faster and at the same time, maintain and share their valuable native-language skills.

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Recommendations

Implement a three-pronged strategy that would:

1. Bolster solid skills at every grade level of the K-12 system;
2. Create strategies to avoid the dead end in college-level remedial education; and
3. Expand and support adult-education programming.

* Specifically for the K-12 system:

- Investigate successful ramp-up, catch-up programs so the RI public schools can become more adept at helping students who are not performing at grade level.
- Disseminate this Data Story's graph that lays out the map of academic building blocks in order to help students, counselors, administrators and families clearly understand the "distance" they'll have to go as adults, if they miss their K-12 opportunity as teenagers.
- Bring adult-education strategies, courses, and even teachers into the high schools for those students who are already over-aged and functioning at least 2 grade levels below average in any of the 4 GED subjects.
- Students who do not take the SAT or ACT should take the Accuplacer in high school so they know where they stand as to their remedial needs when they get to college or pursue a career pathway.

* Specifically for higher-education's remedial-education strategies:

- Consider increased referrals to, and funding for, alternatives like Adult Education for students at low academic skill levels who seek entry into the higher education system, whether they have a high school diploma or not, so they are not depleting their Pell Grant funding with non-credit remedial courses.
- Combine higher-level remedial education with a college credit-bearing course load to promote faster gains and degree completion.

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Recommendations

* Specifically for Adult Education:

- Given the challenge faced by adults with minimal academic skills to pass tests to enter workforce training programs, and given the Adult Education system's success at moving adults toward GED attainment, provide funding sufficient to eliminate the wait list of adults who have already signaled their readiness to take on the challenges of improving their skills.
- Build upon Rhode Island's existing services to immigrants by modelling other cities, like Pittsburgh, who welcome immigrants and help them realize their entrepreneurial potential by increasing ESL classes, translating foreign transcripts/degrees, and combining ESL with specific job training classes.

* For the K-12, adult, and higher-education systems:

- To ensure that the learning climate is not making circumstances worse for students, expand support services in the state's schools and colleges. Partner with social services and outside resources to help students overcome social, emotional and economic obstacles to persisting in school.

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APPENDIX

Educating for a Stronger Workforce

Data Sources



Rhode Island Department of Education
<http://www.ride.ri.gov/>

Related Terms

- **KEYWORDS**
 - Education
 - **Tags**
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