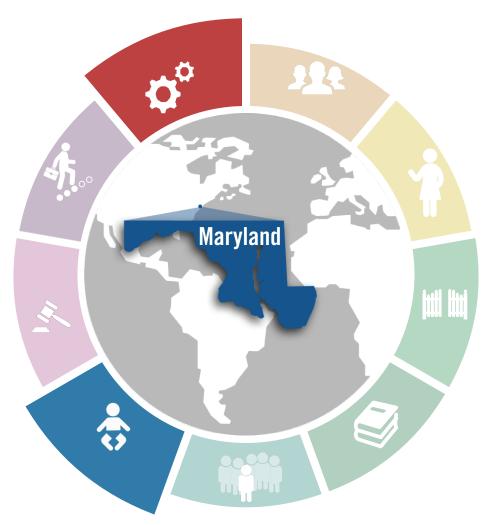
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# SUMMARY



# Building Blocks 1 & 7

Support for Students Before They Enter School Career and Technical Education and Training



#### **BUILDING BLOCK 1**

### PROVIDE STRONG SUPPORTS FOR CHILDREN AND THEIR FAMILIES BEFORE STUDENTS ARRIVE AT SCHOOL

#### **SUMMARY**

Maryland has been a national leader in early childhood education for many years. The state has, over the years, strengthened and expanded its system using a common quality rating system, with incentives for program improvement and upgrading of the workforce, that goes beyond what the benchmark states have done. It has also dramatically expanded early childhood programming for low-income children in the state and is one of only a few states that funds full-day kindergarten for all students.

But it is also true that Maryland is way behind the international top performers and lags behind the benchmark states in some key arenas. Below, we summarize the state of play and make some recommendations for improvement, focusing on affordable childcare for families, expanding the reach of supports and services for children aged 0-3 and their families, building the capacity of the early childhood education workforce and the on-going expansion, improvement and intensification of early childhood education programming for pre-kindergarten children.

#### 1. Supports for Children 0-3 and their Families

As you will see below, Maryland compares well to the other benchmark states, but all the states are far behind the countries and provinces that served as global benchmarks in this arena.

The international top performers provide a much higher level of financial supports to new families than Maryland or any U.S. state, with maternity and parental leaves of four months to over a year; universal access to maternal and child health services, often including home visiting; extensive, often universal, systems to provide parent education, infant/toddler education, developmental screenings and referrals to childcare and early childhood education to families with young children.

Some of the international top performers also have universal, very well-funded family allowances or other financial supports for families with young children, but they often provide that assistance at an even higher level for low-income families. The states have no family allowances of this kind.

Health care is free to everyone in Finland and Ontario. Singapore covers major medical expenses and all citizens and their employers are required to pay into a medical savings account for each worker. These two sources of funds pay for most health care costs, but if there are additional expenses that are not covered from these sources, the government subsidizes those costs for low-income families. Shanghai's policies are not yet as generous, but the province has a goal of universal insurance coverage by 2020.

U.S. states cover health insurance for low-income families and the elderly only through Medicaid. In the benchmark states, coverage thresholds for low-income families with children to be eligible for Medicaid are about \$49,000 in Massachusetts and \$47,000 in New Jersey, but both states cover children in families with incomes up to \$73,000 in Massachusetts and \$86,000 in New Jersey through the Children's Health Insurance Program (CHIP). New Hampshire and Maryland do not offer CHIP but instead use

Medicaid to cover all families with children with income levels up to about \$78,000. (All of these income thresholds are for families of four.)

U.S. states coordinate services at community and regional levels and offer supports for families with young children but they reach only a fraction of the target population; the international jurisdictions offer these services universally and their reach is much broader. Compared to the benchmark states, Maryland does more to coordinate services than does New Jersey or New Hampshire. Massachusetts has similar networks to Maryland.

Maryland does not provide support for young children and their families that is even remotely comparable to that provided by the leading countries we benchmarked, but the state has made a strong effort to provide comprehensive community support to low-income families. Judy Centers are an innovative model, using the public school as a community hub for connecting young children with available services in the community and focusing on readiness for school. There are Judy Centers at only 51 Title I schools, however, with hundreds of Title I schools in the state. Baltimore alone has more than 130. And as Judy Centers can only coordinate available services within the local community, they cannot provide services that might be needed but which are not available in the local community. Family Support Centers, smartly located in high-need communities, offer programming for families and their children along with coordination services. Their universal open-door policy, inviting all families regardless of income, is a promising approach as it removes the stigma of the center and introduces opportunities for often-isolated disadvantaged populations to learn alongside a diversity of families. But again, they only reach 8,000 families a year, only a very small fraction of families who need these services. Maryland should consider expanding the number of Family Support Centers.

#### 2. High-Quality Child Care

Data on enrollment in child care is hard to find, especially comparable data. The best comparable data we could find is related to capacity. Data on Maryland is similar to the other benchmark states, with capacity in licensed child care centers for about 60 percent of the 0-4 age cohort. The international jurisdictions have low numbers of children 0-1 in child care, as they have generous family leave policies and so at least one parent is at home. Shanghai and Ontario have shortages of spaces for the 0-2 age group, but they, along with the other two international jurisdictions, enroll about 60-70 percent of 3-year-olds in child care. Finland, the one jurisdiction with no shortages, considers child care a "right" and has adequate spaces for all children.

The cost of child care is highly subsidized for a broader range of families in Finland and Singapore. There are universal subsidies in Singapore, with additional supplements for families with incomes under US\$64,000. Finland subsidizes costs for families with incomes under US\$71,000 but keeps the full fee for families above that level low as well. Shanghai and Ontario, like the U.S. states, subsidize child care costs for low-income families only.

In the U.S., the three benchmark states subsidize child care for families with annual incomes at or below about \$60,000 (for a family of four), while Maryland is much lower at about \$31,000.

Maryland, like the benchmark states, pays child care workers relatively low salaries that are less than the average wage across the state, whereas the top performers we have data for pay their child care workers at least 60-70 percent of the average jurisdiction wage. Singapore has a career ladder for child care workers (called Educarers) with steps on the ladder that pay even higher wages.

Maryland, along with Massachusetts, has done significant work on using the QRIS system to improve quality throughout the system, with incentives for providers to improve their programs and develop their workers. The international jurisdictions generally have national standards and guidelines for child care that are overseen at a municipal level. National reviews of the system are done periodically with an aim of improving policy.

Maryland should consider making it easier for its families to access affordable child care. The price of quality child care in Maryland is a critical issue for many families. Child care makes employment possible for families, and families will turn to subadequate care for young children if they have no other options. Eligibility for subsidies, the level of subsidies and the availability of the subsidies are all issues being discussed in the legislature now, but their importance cannot be overstated. Maryland should, at a minimum, match the effort being made by the benchmark states.

#### 3. High-Quality Early Childhood Education

All the international top performers provide free or very low-cost preschool/kindergarten for 4- and 5-year-olds. Where it is half-day, subsidized wraparound services are provided and made accessible for all families. The top performers also provide extensive additional supports for children enrolled in preschool, including health and developmental screenings.

In the U.S., the benchmark states vary in what they provide. Maryland is notable in providing free, full day kindergarten for all 5-year-olds. The other benchmark states all provide half day kindergarten but leave it to local districts to decide whether to fund the other half day. The exception is New Jersey where they are required by a court order to provide free, full-day pre-K/kindergarten to all low-income 4- and 5-year-olds. Massachusetts, New Jersey and Maryland provide pre-K for low income 4-year-olds and have all made significant strides in expanding this coverage and extending the program to full-day.

Maryland has made much progress in expanding programming for low-income 3- and 4-year-olds, but there are still many children unable to access this programming in the state, both low-income and not. And many of the current publically funded programs for these children are still half-day, which is difficult for working families and a missed opportunity to provide more support for these children to prepare them for school. Additionally, the state should continue work to connect the education programs available to this population with the additional supports and services they and their families need to ensure they are ready for school and are likely to continue to succeed.

In Building Block 5, we recommended that Maryland create an educator career ladder with clearly defined requirements for each step and a progression of roles with increasing responsibility. The ladder would serve as a framework for professional development and performance appraisal. Tying early childhood education to the K-12 career ladder, as is done in Singapore and Shanghai, would by itself raise the profile of

early childhood educators and attract a more highly skilled pool of applicants. The state would, however, need to address the salary issue alongside any effort to raise requirements for early childhood educators, particularly those in community-based settings. It would also need to increase the level of state assistance for professional development for the existing workforce and tuition for workers to pursue higher degrees to increase their expertise.

The Family Support Center model provides support for child care professionals. Maryland should build on these existing supports so that all early childhood and care workers have access to mentorships and collaborative planning and learning opportunities, in much the same way the state is trying to do for K-12 teachers.

#### **QUESTIONS FOR MARYLAND**

Does Maryland want to:

- 1. Expand and intensify support services for all 0-3-year-olds and their families in the state?
- 2. Make high-quality child care more affordable for working families?
- 3. Raise the quality of the child care and early education workforce by creating a career ladder in education that includes these workers?
- 4. Expand and intensify education and support services for all 3-4-year-olds in the state? If the answer is yes, how and who should do this?

#### **BUILDING BLOCK 7**

### CREATE AN EFFECTIVE SYSTEM OF CAREER AND TECHNICAL EDUCATION AND TRAINING SUMMARY

Summarized below are the key features of the top performing systems, the gap between Maryland and the top performers and the policies that Maryland may wish to consider going forward to close that gap:

1. The top performers do not see CTE as the option for students who do poorly at academics. They see it as an option for students who do well at academics but who prefer a more applied form of education and who may want to start their careers without first obtaining a postsecondary education. Further, they see CTE as the route for all students who do not go on to postsecondary education, not just some of those who do not go on to a postsecondary education. This stance means that these countries set a high minimum goal for the academic achievement of all students, regardless of destination, typically to be achieved by most all students by the end of lower secondary school (that is, in American terms, by the end of the sophomore year). That level of educational achievement is captured in a qualification that all students are expected to get before moving on to upper secondary education. CTE (in these other countries, VET) does not begin until the 10th grade, after achieving this first qualification. Because it is done that way, designers of VET programs can assume that the students taking the courses they design have already achieved a high level of literacy in the basic skills.

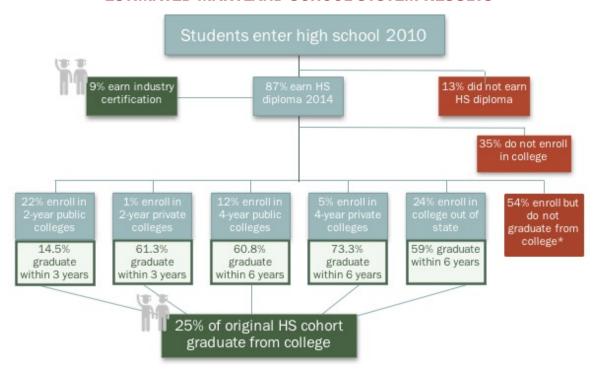
Maryland law requires CTE programs to lead to either an industry-recognized credential or to early college credit, which may appear to be much the same as the policies just described, but it is not. In practice, getting early college credit does not mean that the student is ready to succeed in a typical first year community college program, and getting credit for taking a 3-course sequence in CTE is not the same as meeting an industry standard for beginning a rewarding career. These standards are very far apart. Adopting a qualifications system comparable to those found in the top-performing countries would be a dramatic change for Maryland. While there are good reasons why the state may still want to grant a diploma on the current terms, a system like this would amount to creating a second diploma, certifying that the student was ready to undertake a serious program of either CTE or academic preparation at the upper secondary level. In American terms, this level of readiness would also certify that the student is ready to succeed in the first year of an open admissions postsecondary program in the state system. We recommend that the state consider creating a qualifications system designed in this way.

2. There is a very important difference between the goal for secondary school CTE in Maryland and the goal for secondary school VET in the top performing countries. In Maryland, we were told, the primary goal is to provide students with a chance to explore career options at no cost to the student. In the top performing countries, upper secondary school VET programs are designed to result in qualifications, which means that all high school students in the VET program are working toward an industry-recognized certificate that qualifies them for the first job in a career line. In the best systems, that qualification will also set the student on a path toward further education at the post-secondary level, which the student may pursue right

after high school or after being in the workforce for years. This difference in goals is fundamental. It explains why participation in CTE in the Maryland system means taking a series of three or more courses which probably will not result in an industry-recognized certification sufficient to qualify the holder to begin a career after right after high school or for a serious program of continued education at the postsecondary level. It is also obviously true that high school students who are neither in an academic track nor in a CTE program will leave without a qualification that will enable them to begin a rewarding career.

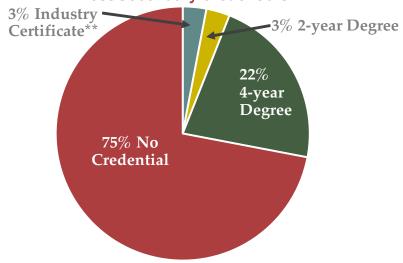
The consequence of Maryland's policy for Maryland students is on graphic display in the following chart. It provides an estimate of the percentage of students leaving high school with a diploma and/or industry certification, then tracks student enrollment and earned degrees at the post-secondary level. Ultimately, only approximately 28 percent of the cohort of students entering high school in 2010 greaduated from college. We recommend that Maryland consider redesigning its system so that all CTE programs are designed to result in industry-recognized qualifications certifying that students are ready to begin jobs leading to rewarding careers, and, at the same time, also certify that the students is ready to succeed in the first year of a Maryland community college program without remediation.

#### **ESTIMATED MARYLAND SCHOOL SYSTEM RESULTS**



\*Within 3 years for 2-year colleges and within 6 years for 4-year colleges.

### Estimate of the Percentage of Students Entering Maryland Schools That Earn Post-Secondary Credentials\*



\*Within 3 years for 2-year colleges and within 6 years for 4-year colleges.

\*\* Industry certificates granted from community colleges, four-year institutions, private career schools, and for-profit schools

- 3. To implement the preceding recommendation, Maryland would have to have a system of industry-recognized qualifications, with associated performance examinations, that covers the entire range of occupations not requiring a four-year college degree. We recommend that Maryland initiate a process intended to lead to the design and implementation of such a system, based on benchmarking the best such systems worldwide. We would recommend in particular looking closely at the Singaporean system for setting skill standards, because it is the only one we know of that is designed to set standards at the industry state-of-the art rather than industry average practice, which can make a big difference in the quality and preparedness of the trained workforce and in the competiveness of the Maryland economy.
- 4. The countries with the strongest CTE systems all have strong upper secondary VET systems that are closely aligned with their postsecondary VET systems.

  Massachusetts has one of the strongest upper secondary CTE systems we have seen. Maryland may want to look closely at the Massachusetts secondary CTE system as a benchmark for taking the next step with its CTE work at that level. In both Singapore and Switzerland, the next step in the VET system beyond the upper secondary level is the polytechnic system in Singapore and the applied universities in Switzerland. In the United States, of course, the next step is community college. But the academic level of our community colleges is equivalent to the high school level in Singapore and Switzerland and the level of technical preparation in our community colleges varies widely.

We recommend that Maryland assemble a Study Group: a team of postsecondary system leaders from both the community colleges and the four year universities, industry leaders, CTE leaders from the schools and state government, and members of the legislature to visit in both Singapore and Switzerland and to report back to the Maryland government and citizens with recommendations for creating a world-class system of career and technical education in Maryland that will enable the majority

- of Maryland's students to acquire the skills needed in the years ahead to earn a good living and adjust rapidly to the rapid changes certain to take place as evolving digital technologies eliminate a growing number of jobs, especially those available to students who lack the basic skills or, increasingly, to those who have only those skills.
- 5. While Maryland's CTE programs include in some cases the possibility of serving as an intern in organizations providing opportunities for work based learning, internships fall far short of true apprenticeships in providing the student/apprentice with the full range of opportunities to acquire all the skills needed to hit the ground running in highly technical jobs and many jobs requiring high initial levels of craft skills. Very few students in Maryland have access to apprenticeships that can be described in this way. Maryland should consider creating a system in the state, with regulated wages for apprentices, criteria for permitting firms to offer apprenticeships that are based on the criteria for earning the relevant qualifications, and the establishment by industry groups of industry associations that can offer the training that is required but individual firms cannot supply. We should note that Maryland has already set a target of getting 45 percent of high school students completing a CTE program, earning an industry-recognized credential or completing a youth apprenticeship program before graduation, but, as we pointed out above, completing a CTE program in most cases means nothing more than an opportunity to explore careers and does not necessarily involve acquiring the skills needed to begin a career in anything. There are very few apprenticeships available and very limited opportunities to get an industry-recognized credentials in occupations leading to rewarding careers, so this requirement, while laudable in theory, is not very consequential in practice. If Maryland decides to create a commission of the sort recommended in the preceding recommendation, it should be charged with proposing a design to accomplish the goals just described.

We recommend that Maryland join the Pathways to Prosperity project that originated at Harvard University and is now being supported by Jobs for the Future. The Pathways project was designed to assist states in designing and implementing world class CTE programs by people who are intimately familiar with the global benchmarks in CTE, including the Singapore and Swiss systems. We recommend that Maryland become an active member of the Pathways state coalition and use the Harvard/JFF team to advise on implementation of the previous recommendations.

#### **QUESTIONS FOR MARYLAND**

Does Maryland want to:

- 1. Benchmark the top performers in CTE, create goals for its CTE system comparable to the goals set by the top-performing countries and produce a detailed plan for matching the performance of the top performers?
- 2. Create a qualifications system that signals student readiness at the upper secondary level to greatly reduce the proportion of students failing to get any kind of qualification by the time they leave high school?
- 3. Create a set of skill standards and qualifications that represent state-of-the-art practice in industry comparable to those in Singapore?
- 4. Expand the youth apprenticeship system to give more students access to high-quality, industry-standard training in occupations leading to rewarding careers?
- 5. Get assistance from experts and the opportunity to interact with leading states in the Pathways to Prosperity project to design a world-class CTE program based on global benchmarks?