



Maryland's Education Industry

Report and Recommendations from the

Governor's Workforce Investment Board
Education Industry Initiative Steering Committee

June 2008



GOVERNOR'S WORKFORCE INVESTMENT BOARD

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About the Governor's Workforce Investment Board



Overview

The Governor's Workforce Investment Board (GWIB) is the Governor's chief policy-making body for workforce development. The GWIB is a business-led board of 45 members, 51% of whom represent the business community. Other members include cabinet secretaries, college presidents, the superintendent of schools, elected officials, non-profit agencies, the governor, and the lieutenant governor. The GWIB is responsible for developing strategies and policies to form a coordinated workforce system from a variety of education, employment and training programs. It brings together and focuses various workforce development partners and stakeholders on a single outcome; a properly prepared workforce that will meet the current and future demands of Maryland employers. The GWIB was established by the Federal Workforce Investment Act of 1998.

Vision

- Aligned business, workforce system and economic development interests in Maryland.
- A well-integrated, coordinated and collaborative system across agencies, institutions, governments and business.
- The preservation and expansion of Maryland's highly-educated workforce.
- Creation of opportunities for all Maryland residents to participate and succeed in the workforce. to employers across the state.

Goals

- Align the educational system (P through 20) with economic development and industry needs
- Increase the supply of skilled and trained workers to address worker shortages.
- Better connect the emerging workforce (youth) with the workplace.
- Provide opportunities for untapped workers (people with disabilities, ex-offenders, TANF recipients, immigrants, etc.) to realize their full potential

Education

- Creation of a P-20 Education Council
- Develop a Science, Technology, Engineering and Math (STEM) Agenda to prepare the future workforce for knowledge-based industries and the influx of STEM-related jobs associated with Base

Realignment and Closure (BRAC).

- Expand Career and Technology Education Programs
- Align Adult Education and English as a Second Language (ESOL) programs with existing workforce development programs
- Increase faculty capacity in critical shortage areas (particularly healthcare, education, STEM instruction, engineering, and BRAC-related occupations).
- Increase opportunities for "early access" from high school to college

Workforce Shortages

- Increase access to employment opportunities for historically untapped workers.
- Grow our own skilled workers and link them with Maryland businesses.
- Expand use of one stop system with employers.
- Create greater awareness of Maryland's one-stop workforce centers with employers .

Executive Summary

Maryland boasts a national reputation for its highly educated workforce. The nature of this workforce has enabled Maryland to maintain a healthy economy even during national economic downturns. Maryland's ability to remain competitive depends upon the acquisition, training and retention of an educated workforce. Yet, our State may soon face a competitive disadvantage due to critical workforce shortages in educational personnel including teachers, administrators, information technology and support staff. On an esoteric level, philosophies of education vary, and some individuals — educators included — may be uncomfortable with the notion of education as an “industry.” But on a practical level, there can be no doubt that education is an industry — a thriving and essential social and economic catalyst for the State of Maryland. According to the U.S. Department of Commerce's Bureau of Economic Analysis, Maryland's educational services sector had a gross domestic product (GDP) of \$3.2 billion in 2006. GDP, a measure of an industry's value added, is composed of three components: 1) compensation of employees; 2) taxes on production and imports less subsidies; and 3) gross operating surplus. The education industry accounts for nearly 9% of all jobs in Maryland. Jobs at elementary and secondary schools account for about two-thirds of the education sector's growing employment base. The sector's fastest growing areas are colleges, universities and professional schools. Employment in education occupations is expected to grow by 24% between 2004 and 2014 (MD DLLR). As an industry, education is an essential part of Maryland's vibrant economy and future well-being.

Challenges

The State faces a number of challenges. Many education stakeholders are familiar with the employment trends, and they struggle day to day with the impact of personnel shortages. Currently, there are serious teacher shortages across all educational disciplines and at most levels. Shortages are especially critical in science, technology, engineering and mathematics (STEM). The increasing demand for employees in these areas is hampered by a decreasing supply of workers. A substantial portion of the education workforce is eligible for retirement within the next five to ten years, and a pipeline of qualified replacements is a critical need.

Over the past several years, the Governor's Workforce Investment Board (GWIB) has provided research and support to identify workforce development needs across eleven different industries.

Representatives of each industry have met in Steering Committees to discuss employment needs, analyze surveys, and review and evaluate data from national, regional, state, and local agencies. The Education Industry Initiative Steering Committee, established in 2006, was charged with addressing the workforce development challenges of all education industry sectors — PreK-12, Community Colleges, Business/Technical/Trade Schools, and Four-Year Institutions (public and private).

Outcomes

Three important outcomes resulted from the Steering Committee's year-long meetings. A white paper titled **Maryland's Education Industry** was published in August 2007. The white paper identified three critical thematic areas that were common among all sectors — *Policy, Workforce, and Workplace*. Issues common to these sectors were identified, as well as issues critical to each specific sector (PreK-12, Community Colleges, Business/Technical/Trade Schools, and Four-Year Institutions). The white paper was widely distributed to education stakeholders across the State as required reading for the Education Industry Symposium — the second important outcome of the Steering Committee. The Symposium was held at Anne Arundel Community College on November 1, 2007 and attracted nearly 150 attendees. Sector-specific groups discussed the white paper and created recommendations and strategies for successfully attracting, training, and retaining education employees in Maryland. Recommendations focused on elevating the value and prestige of teaching as a profession, increasing professional development opportunities, enhancing incentives such as grants, tuition remission, and competitive salaries to increase attraction and retention rates, modernizing the centuries-old education delivery system, and ensuring a workplace environment to better address the professional needs of a diverse group of educators, administrators, support staff and students.

This comprehensive report represents the third major outcome of the Steering Committee. Symposium participants contributed meaningful recommendations and strategies, and the Steering Committee condensed and prioritized those discussion points into actionable items. This report serves to record the education industry's current self-evaluation and to provide a lesson plan for successfully addressing the industry's most critical workforce needs. The real work of creating a better future for Maryland's workforce requires immediate attention and long-term commitment.

Maryland's Education Industry White Paper

Presented August 2007



Governor's Workforce Investment Board, Education Industry Initiative Steering Committee

Governor's Workforce Investment Board

The mission of the Governor's Workforce Investment Board (GWIB) is to guide a nationally recognized workforce development system aligned with the economic and educational goals of the State of Maryland resulting in a qualified workforce available to employers in the State of Maryland.

To fulfill this mission, GWIB has moved to a focus on a demand-driven workforce development system. This approach engages high-level leaders from businesses, government, education and the community who work collaboratively through an industry initiative process to identify and document their industry's complex workforce demands and critical issues.

Introduction and History

The Maryland Governor's Workforce Investment Board (GWIB) created a process to address issues related to Maryland's dynamic economy and growing workforce development needs. Over the past several years, leaders in key industry sectors have met in industry-based steering committees to identify workforce development issues and to create and guide action strategies. One such committee formed specifically to address education sector issues is the Education Industry Initiative Steering Committee chaired by Towson University President Robert L. Caret. The goal of the Education Industry Initiative Steering Committee is to develop a pipeline of quality educators, administrators and support staff for Maryland's educational institutions by addressing the challenges of recruitment, training, and retention. The education sector is defined as those establishments that deliver instruction and training in a wide variety of subjects within diverse settings. This includes privately or publicly owned and operated establishments/institutions such as schools, colleges, universities, and training centers — the entire K-12 spectrum of educational providers. All component industries within this sector share a common process of employing teachers or instructors with subject matter expertise and teaching skills who deliver educational services. They also share a common problem: there is a critical shortage of teachers in both private and public sectors affecting institutions across the state.

The Committee is charged with addressing the challenges of all industry sectors and is composed of leaders who represent K-12, community colleges, business/technical/trade schools, public

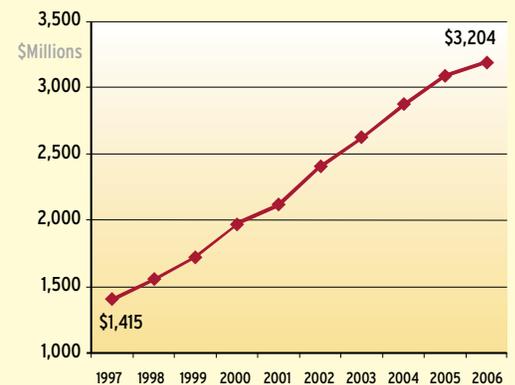
and private colleges and universities, state government, and educational commissions. The Committee is divided into three work groups — **K-12; Community Colleges and Business/Technical/Trade Schools;** and **Four-Year Institutions** — in order to address relevant issues more effectively. Each work group has documented specific high-demand occupations in their sector and has identified workforce issues related to hiring, training, and retaining quality candidates in those occupations. A major initiative for the Committee is to assemble key stakeholders in the education industry for an Education Symposium in November 2007. Strategies and solutions that emerge from the Symposium will guide the development of an action plan to recruit, train and retain highly qualified teachers, staff, and administrators in Maryland.

Industry Profile

Jobs in the education sector account for nearly 9% of Maryland's employment base.

From 2001-2005, nearly 11,500 jobs were created in education, with advances in elementary and secondary schools accounting for 55% of the overall growth. Geographically, Montgomery County accounted for 40% of the gains. Colleges, universities and professional schools expanded at the rate of 6.2%, adding nearly 3,300 jobs. Geographically, Baltimore City institutions accounted for 60% of the increase. The economic impact of education as an industry in Maryland was \$3.1 billion in 2005. (Source: MD Department of Labor, Licensing, and Regulation)

Maryland: Education's Gross Domestic Product by State



Source: Bureau of Economic Analysis, Regional Economic Accounts

Historical Employment in the Education Sector 2001 - 2005

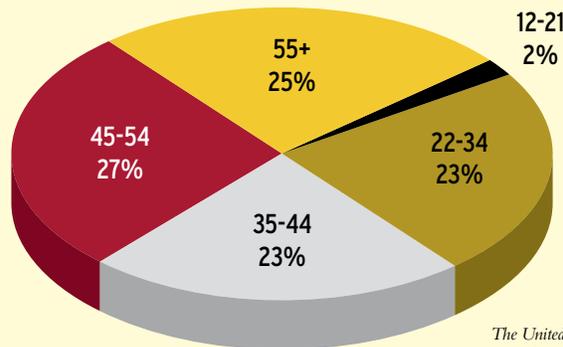
NAICS	Industry Description	Employment					
		2001	2002	2003	2004	2005	
	Education	209,242	216,607	218,438	217,602	220,723	
6111	Elementary & secondary schools	138,161	143,205	145,493	143,711	144,467	
6112	Junior colleges	15,085	15,846	15,733	15,999	16,684	
6113	Colleges, universities & professional schools	52,619	54,423	53,980	54,403	55,906	
6114	Business schools and computer & management training	1,588	1,337	1,293	1,417	1,562	
6115	Technical & trade schools	1,789	1,796	1,939	2,072	2,104	
	Change		2001-02	2002-03	2003-04	2004-05	
	Education Sector		Number	7,365	1,831	-836	3,12
	Employment Changes		Percent	3.5%	0.8%	-0.4%	1.4%

Source: Maryland Department of Labor, Licensing & Regulation

Current Workforce

The education industry is at risk of losing a substantial portion of its workforce to retirements in the coming years. Across all sectors, nearly one quarter of the existing workforce is over 55 years of age and an additional 27% are in the age cohort of 45-54. Clearly, it is necessary to create a pipeline of qualified teachers and administrators if 50% of the workforce will be eligible for retirement within five to ten years. Women dominate the workforce, accounting for nearly 70% of employees in the education sector. Seventy-five percent of elementary and secondary school employees are women. However, among the oldest (65+) and youngest (14-24) age cohorts, nearly half of the workers are men.

**Maryland Education Sector
Workforce Demographics: Age Distribution**



Source:
The United States
Bureau of the Census

Projected Growth of Education Occupations in Maryland

The Maryland Department of Labor, Licensing, & Regulation projects that employment in education occupations will grow by 24% between 2004 and 2014 in Maryland. Similarly, the United States Bureau of Labor Statistics has projected that total employment in the national Education Services industry will grow by 32% between 2004 and 2014.

Table: Occupational Projections and Wage Information for the 25 Largest Education Occupations in Maryland

Occupation	2004 Employment in Maryland*	Projected 2014 Employment in Maryland*	Total Annual Growth Rate*	Median Annual Annual Openings*	Earnings (2006)**
All education, training, and library occupations	153,315	189,835	2.4%	6,854	\$45,170
Elementary school teachers, except special education	25,695	31,935	2.4%	1,191	\$49,050
Teacher assistants	19,905	24,905	2.5%	885	\$23,950
Secondary school teachers, except special and vocational education	18,565	22,625	2.2%	929	\$52,100
Middle school teachers, except special and vocational education	11,255	13,380	1.9%	461	\$47,360
Teachers and instructors, all other	11,660	14,405	2.4%	418	\$49,850
Preschool teachers, except special education	6,645	9,045	3.6%	320	\$24,150
Instructional coordinators	4,915	6,210	2.6%	205	\$50,420
Health specialties teachers, postsecondary	3,735	4,545	2.2%	165	\$111,110
Special education teachers, preschool, kindergarten, and elementary school	5,090	6,925	3.6%	305	\$49,690
Librarians	3,485	3,800	0.9%	115	\$52,250
Postsecondary teachers, all other	4,920	6,160	2.5%	235	\$50,480
Self-enrichment education teachers	4,190	5,090	2.1%	142	\$31,920
Kindergarten teachers, except special education	3,525	4,555	2.9%	145	\$45,410
Library technicians	2,115	2,395	1.3%	106	\$33,280
Graduate teaching assistants	1,870	2,285	2.2%	84	\$35,900
Special education teachers, middle school	1,480	1,985	3.4%	86	\$53,060
Special education teachers, secondary school	1,365	1,755	2.9%	72	\$54,980
Technical/trade education teachers, secondary school	1,100	1,340	2.1%	55	\$52,760
Education, training, and library workers, all other	1,095	1,320	2.0%	39	\$26,930
Art, drama, and music teachers, postsecondary	1,480	1,820	2.3%	68	\$44,890
English language and literature teachers, postsecondary	1,290	1,585	2.3%	59	\$55,460
Adult literacy, remedial education, and GED teachers and instructors	1,080	1,355	2.5%	41	\$44,330
Education teachers, postsecondary	940	1,155	2.3%	43	\$59,270
Nursing instructors and teachers, postsecondary	1,150	1,425	2.4%	54	\$64,830
Computer science teachers, postsecondary	1,075	1,320	2.3%	49	\$54,280

*Data Source: 2004-2014 Occupational Projections for Maryland, Maryland Department of Labor, Licensing & Regulation

**Data Source: May 2006 Occupational Employment Statistics, United States Department of Labor
Analysis: Governor's Workforce Investment Board Staff

Critical Industry Issues

By engaging in a thorough SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), the three Education Industry Initiative work groups (**K-12; Community Colleges and Business/Technical/Trade Schools;** and **Four-Year Institutions**) identified the most pressing academic and administrative workforce issues related to their specific missions and populations. As expected, there were issues common to all sectors as well as industry-specific issues.

Critical Issues in Common: Policy, Workforce, and Workplace

- **Policy:** The industry faces an increasingly complex system of external accountability and compliance standards. Increasing federal and state mandated curriculum standards and high stakes accountability have become significant influences. There are high expectations for accountability and assessment measures that monitor the academic progress of students as well as the expertise and skills of teachers. Yet assessment and reporting models may vary by institution. Volatility and instability in federal, state, and local support challenge the development of adequate financial resources in a competitive market.

- **Workforce:** There is a general shortage of teachers at all levels and across all disciplines. Shortages are even more critical in specific academic disciplines such as science, technology, engineering and math. Compensation packages are not competitive with other industries or even within Maryland's education industry itself. Several different industries compete for a finite pool of qualified employees. Administrators and support staff often lack critical skills in technology and management. There is no process in place to ensure the availability of qualified teachers and administrators to fill future needs (pipeline). *(See table below: Comparison of Median Education Salaries)*

- **Workplace:** Increasingly high expectations from both internal and external sources, combined with the pace and complexity of technological change, contribute to the demands of the workplace. The diversity and number of stakeholders - who may have conflicting philosophies, needs, and expectations, and even languages- create additional challenges to developing continuity and commonly accepted standards.

Comparison of Median Education Salaries in Maryland and Neighboring Areas

Occupation	Maryland	Virginia	Delaware	Pennsylvania	Washington, D.C.
All education, training, and library occupations	\$45,170	\$42,830	\$46,200	\$44,900	\$49,750
Elementary school teachers, except special education	\$49,050	\$51,130	\$48,260	\$48,530	N/A
Teacher assistants	\$23,950	\$21,010	\$25,090	\$18,810	\$20,260
Secondary school teachers, except special and vocational education	\$52,100	\$51,170	\$52,400	\$48,270	N/A
Middle school teachers, except special and vocational education	\$47,360	\$47,040	\$47,220	\$51,300	N/A
Teachers and instructors, all other	\$49,850	\$26,230	\$52,570	\$35,770	\$34,690
Preschool teachers, except special education	\$24,150	\$22,090	\$24,190	\$20,350	\$27,480
Instructional coordinators	\$50,420	\$62,640	\$53,010	\$49,840	\$65,860
Health specialties teachers, postsecondary	\$111,110	\$71,930	\$62,710	\$80,400	\$80,970
Special education teachers, preschool, kindergarten, and elementary school	\$49,690	\$48,280	\$53,300	N/A	\$44,510
Librarians	\$52,250	\$54,420	\$56,040	\$49,180	\$59,440
Postsecondary teachers, all other	\$50,480	\$52,060	\$67,400	\$54,770	\$57,460
Self-enrichment education teachers	\$31,920	\$42,400	\$34,920	\$34,580	\$36,260
Kindergarten teachers, except special education	\$45,410	\$47,270	\$41,690	\$47,250	\$35,250
Library technicians	\$33,280	\$31,400	\$29,400	\$24,710	\$38,330
Graduate teaching assistants	\$35,900	N/A	N/A	\$25,690	\$30,860
Special education teachers, middle school	\$53,060	\$46,490	\$50,960	\$49,500	N/A
Special education teachers, secondary school	\$54,980	\$54,750	\$54,590	\$51,210	N/A
Technical/trade education teachers, secondary school	\$52,760	\$49,630	\$59,340	\$51,990	N/A
Education, training, and library workers, all other	\$26,930	\$58,550	\$33,840	\$32,970	\$28,930
Art, drama, and music teachers, postsecondary	\$44,890	\$49,860	\$55,610	\$50,800	\$62,770
English language and literature teachers, postsecondary	\$55,460	\$46,960	\$62,160	\$57,200	\$60,660
Adult literacy, remedial education, and GED teachers and instructors	\$44,330	\$46,420	\$45,960	\$41,330	\$28,680
Education teachers, postsecondary	\$59,270	\$54,410	\$54,710	\$55,760	\$47,890
Nursing instructors and teachers, postsecondary	\$64,830	\$56,600	N/A	\$57,890	N/A
Computer science teachers, postsecondary	\$54,280	\$68,970	\$72,210	\$67,510	\$48,790

Gray bold text = Median wage in selected area is lower than corresponding wage in Maryland

Black bold text = Median wage in selected area is higher than corresponding wage in Maryland

Data Source: May 2006 Occupational Employment Statistics, United States Department of Labor · Analysis: Governor's Workforce Investment Board Staff

Critical Sector Issues: Industry Impact and Identification of Issues

K-12:

Impact: K-12 education contributes to the state's ability to provide a qualified workforce by preparing students to enter higher education institutions or to enter the workforce directly. K-12 education is one of the largest employers in Maryland; in many subdivisions, the local school system is the largest employer in a county.

Issues: There is a growing teacher shortage in K-12 education. Over the past twelve years, Maryland has had to hire more than 40% of its teachers from out of state; the state is currently recruiting out of country to fill slots. Non-competitive compensation packages are driving many teachers, especially those in much-needed math, science and technology disciplines, to choose more highly paid careers in the private sector. As a result, there are critical shortages in math, science, special education, English as a second language, and career and technology education. Administrators at the K-12 level typically emerge from academic disciplines, so a lack of teachers also makes it difficult to identify and develop highly qualified principals and other advanced level administrators. Increasing federal and state governance (NCLB) mandated curriculum standards are significantly influencing K-12 education. The composition of the classroom has become more challenging with the inclusion of children with disabilities, language problems and cultural issues. The complexity and demands of rapid change in this sector are obvious, yet the delivery system for K-12 education has not altered in a century.

Community Colleges and Business/ Technical/Trade Schools:

Impact: Accessibility is a mission of community colleges and provides a gateway to higher education for Marylanders. Comprehensive course offerings, including workforce training and continuing education contribute to the state's business productivity. An estimated \$5.6 billion is pumped into the state's economy by community colleges. Business/technical/trade schools provide alternative career opportunities. Their programs are responsive to the changing needs of particular sectors within industries, and graduates enter the workforce with good wages and a career path.

Issues: Community colleges and business/technical/trade schools are preparing greater numbers of students to move into the local economy. Increasingly, students are choosing to attend community colleges or business/technical/trade schools full-time, straining the physical capacity of campuses as well as faculty resources. The sheer numbers of part-time and full-time students who make community college or business/technical/trade school an educational first choice create greater needs for faculty in critical areas such as allied health and nursing.

However, qualified teachers often seek jobs with higher salaries at local hospitals and health centers. In order to meet the needs of their local economies, community colleges must adopt and manage new technologies quickly. The time and training required to adapt to these real-world technological advances impedes the creation of a readily available pipeline for upper level college administrators (including presidents), data base managers and skilled craft employees.

Four-Year Institutions:

Impact: Colleges and universities are major workforce developers for the state and serve a distinctive purpose as research engines. Universities attract and retain talented individuals who contribute to the economy of Maryland, the nation, and the world. Maryland's colleges and universities are national leaders in research and development in homeland security and the bioscience industry.

Issues: Professional workers educated in science, technology, engineering, and math related disciplines (STEM) are critical to the role of the United States as a national and international power. Non-traditional foreign languages such as Arab, Russian, Chinese, and Korean are necessary in the global economy. Yet faculty positions in these critical areas are difficult to fill due to competition within the industry as well as from the private sector. Non-competitive compensation packages and faculty workload issues such as the percentage of teaching versus research and the role of part-time versus full-time instructors are major influences. In addition, it is difficult to hire upper level administrators in institutional advancement, grants administration, and information technology. Yet these outreach positions are essential for higher education's efforts to increase financial donations, grants, and contracts. These funds provide faculty incentives as well as scholarships for talented students.

Strategic Imperative

The Governor's Workforce Investment Board, Education Industry Initiative Steering Committee believes that it is imperative for key leaders and educational stakeholders to discuss the future of Maryland's education industry. It is time to develop creative strategies and solutions that will enhance the academic and career options for Maryland's citizens and ensure the vitality of Maryland's dynamic economy. To that end, an Education Symposium is planned for November 2007. The Symposium will serve as a forum for creative problem solving and will focus on the three key areas of Policy, Workforce, and Workplace. Maryland's decision-makers, key stakeholders, and education leaders must chart the course for the future of Maryland's education industry workforce.

Education Industry Initiative Report

Symposium Summary

Nearly 150 key education leaders and stakeholders met at Anne Arundel Community College on November 1, 2007 for an Education Industry Initiative Symposium. The Symposium was the culmination of a year-long series of meetings of the Governor's Workforce Investment Board (GWIB) Education Industry Initiative Steering Committee chaired by Towson University President, Robert L. Caret. The Steering Committee represents all sectors of education — Pre-K-12, business/trade/technical schools, community colleges, public and private four-year colleges and universities, government agencies and associations.

In preparation for the Symposium, the Steering Committee identified three categories of issues common to all education sectors — *Policy, Workforce and Workplace* — as well as issues specific to each sector. A report of the Steering Committee's preliminary work was distributed to education leaders and stakeholders for review prior to the November 2007 Symposium. (See *Maryland's Education Industry*, August 2007.) At the Symposium, participants were challenged to create solutions and strategies to address the education industry's toughest issues — attracting, training, and retaining a pipeline of qualified candidates to fill the critical shortages in teaching, administrative, and support staff. Symposium participants divided into two groups representing *Pre-K through Grade 12* and *Higher Education*. Each group validated their sector's top issues and challenges and brainstormed solutions and strategies.

Following the Symposium, the Education Industry Initiative Steering Committee reviewed and further condensed the issues into measurable priority action items. Each recommendation identifies strategies, baseline data and data source, and responsible officials or organizations.

Issues Refined

Initial discussions resulted in three categories of issues common to all education sectors. These categories — *Policy, Workforce, and Workplace* — focused the discussions and enabled discussants to drill down to a level of specificity necessary for meaningful remediation. After reviewing the Symposium reports, the Steering Committee was able to further condense the three categories of *Policy, Workforce, and Workplace* into one inclusive category — *Attract and Retain* — that encompasses nearly every critical component of the education workforce crisis.

Attract and Retain: The Core Issue

Nearly all issues related to maintaining a high quality education workforce in Maryland fall within the core context of *Attract and Retain*. As with most complex problems, a remedy that fails to address root causes merely defers rather than resolves the issues. The Steering Committee believes it is time to focus problem-solving efforts on real solutions. It is necessary — now — to create and nurture a pipeline of educators and administrators who are qualified and eager to address the educational needs of Maryland's citizenry.

Recommendations

Each recommendation is designed to be an actionable item that is both measurable and attributable. Recommendations should be adopted by the responsible agency and implemented in a timely manner. The Governor's Workforce Investment Board will work to insure that such adaptation occurs and will request updates on the progress of implementation and effectiveness of actions taken.

ISSUE: At all levels of the education industry, financial and career incentive programs are insufficient to attract and retain those interested in pursuing careers in teaching and administration, as well as several staff sectors including information technology. Recommendations 1 and 2 relate to the development of increased incentives.

RECOMMENDATION 1: Increase Financial Incentives

Strategies:

- 1) Provide competitive salaries and benefits for full-time and part-time faculty/teachers and administrative and support staff.
- 2) Provide pay differentials for those with skill sets and expertise in key areas of need.
- 3) Increase the number of loans, forgivable loans, and grants for tuition assistance in key areas of need.

Baseline Data: Compare Maryland's faculty/teacher and administrative/support staff salaries with those reported in national surveys. Compare the pay differential for those in key need areas to current salaries in Maryland. Conduct trend analyses of the number of loans, forgivable loans, and grants for tuition assistance in areas of critical need.

Data Source: Pre-K-12: Educational Research Service, National Survey of Salaries and Wages in Public Schools (<http://www.ers.org/>

surveyresearch/index.php) Community Colleges: College and University Professional Association for Human Resources (CUPA-HR) Salary Survey (www.cupahr.org) and the MACC databook. Four Year Colleges: American Association of University Professors (AAUP) Faculty Salary Survey (www.aaup.org; www.chronicle.com/stats/aaup); surveys by accrediting agencies, where appropriate

Responsibility: Maryland State Department of Education, Maryland Association of Community Colleges, University System of Maryland, Maryland Higher Education Commission, Local Education Agencies and the P-20 Leadership Council

**RECOMMENDATION 2:
Improve Career Incentives and Opportunities**

Strategies:

- 1) Raise and promote awareness of teaching as a valued and valuable profession.
- 2) Provide flexible career paths and timelines for career advancement.
- 3) Provide more flexible workload and financial support for career development.
- 4) Continue to utilize international teacher recruitment and exchange to respond to unmet needs.
- 5) Expand the use of retirees and second career seekers as teachers/faculty and professional staff.

Baseline Data: Conduct trend analyses to determine the number of students choosing teaching as a career path, the retention of teachers, and the number of second career individuals entering the teaching profession, especially in areas of critical need. Survey high school students regarding their interest in working in the K-12 sector.

Data Source: Number of students enrolling in and graduating from teacher education programs per Maryland Higher Education Commission data. International teacher employment data per the Maryland State Department of Education (MSDE). Maryland's State Retirement and Pension System data to determine the number of retire/re-hire candidates there are in the teaching workforce. Annual surveys conducted by MSDE and the Governor's Teaching and Learning Conditions Survey

Responsibility: Maryland State Department of Education, Maryland Association of Community Colleges, University System of Maryland, Maryland Higher Education Commission, Local Education Agencies and the P-20 Leadership Council

ISSUE: Teachers and administrators need more opportunities to expand their knowledge, learn new skills and approaches, and connect with other education professionals. Professional development opportunities provide visible evidence of an organization's investment in an employee's career, leading to greater retention of academic and administrative staff.

**RECOMMENDATION 3:
Increase Professional Development Options to Improve Retention**

Strategies:

- 1) Develop additional, more extensive, and ongoing mentoring and orientation programs for new employees.
- 2) Provide ongoing professional development programs for employees.
- 3) Provide in-service support programs in areas such as classroom management, diversity, and technology training.

Baseline Data: Conduct trend analysis of workforce retention and job satisfaction.

Data Source: Number of teachers and information technology professionals and other support staff who are retained in their career field each year. Annual survey conducted by MSDE, MHEC and the Governor's Teaching and Learning Conditions Survey

Responsibility: Maryland State Department of Education, Maryland Higher Education Commission, Local Education Agencies and the P-20 Leadership Council

ISSUE: The delivery of academic programs may not be readily identifiable or accessible to many populations. It is necessary to expand, simplify and streamline pathways to academic programs, teaching careers, and certification.

**RECOMMENDATION 4:
Increase Program Availability**

Strategies:

- 1) Increase access to academic programs in areas of critical need.
- 2) Increase and facilitate partnerships statewide to create more effective bridge programs, such as associate degrees to bachelor and advanced degrees.
- 3) Expand alternative pathways for teacher certification.

Baseline Data: Conduct trend analyses of alternative pathways, program availability, bridge programs and the number of students enrolling in and graduating from these programs.

Data Source: Data provided by MSDE, local school boards, MHEC, NCATE and other program assessment sources

Responsibility: Maryland State Department of Education, Maryland Higher Education Commission, Local Education Agencies and the P-20 Leadership Council

ISSUE: The education workplace has become more complex and challenging. Student learning styles, diversity, increased parental involvement, and issues of safety and security require more time and attention from teachers and administrators. The educational system needs to address these challenges in order to increase job satisfaction and retention. Retention suffers when employees are unable to focus on core job responsibilities.

**RECOMMENDATION 5:
Improve Workplace Environment**

Strategies:

- 1) Provide professional and paraprofessional staff in areas such as technology and disability services to support learning environments.
- 2) Develop and support professional learning communities.
- 3) Explore alternative calendar models.
- 4) Explore alternative instructional delivery systems such as online courses.
- 5) Create a culture of value and respect
- 6) Ensure a safe and civil classroom environment.

Baseline Data: Conduct an ongoing job satisfaction and workplace issues survey.

Data Source: Trend analysis of survey and employee retention data and the Governor's Teaching and Learning Conditions Survey

Responsibility: Maryland State Department of Education, Maryland Higher Education Commission, Local Education Agencies and the P-20 Leadership Council

Conclusion

The future of the education industry depends upon swift action by those who appreciate the significance of education as a social change agent, who understand the unique challenges of the teaching and learning environment, and who have the knowledge and expertise to create and monitor action plans focused on industry improvement. The Education Industry Initiative Steering Committee has been privileged to work with many of Maryland's education industry experts during the development of the Symposium and related reports. The Committee identified the education industry's top issues, brought together a diverse group of education experts to address the issues, and developed a summary report with a call to action. The mission of our Committee has been realized. But for education leaders in Maryland, the work has just begun. Implementation comes with some degree of urgency. It is imperative to begin now to secure Maryland's educational future. It is important to maintain Maryland's economic reputation as a state with a highly educated workforce. More importantly, it is incumbent upon our industry to address the educational and professional needs of the citizens we serve.

A Commitment to Maryland's Education Future

The Governor's Workforce Investment Board (GWIB) is committed to guiding a nationally recognized workforce development system that is aligned with the economic and educational goals of the State of Maryland. The overall goal is to create a qualified workforce available to employers in targeted industry sectors across the state. GWIB will provide encouragement, support, and resources to the individuals, agencies, and organizations responsible for implementing the recommendations in this report. GWIB will assess the status and progress of the initiatives annually and will request and maintain progress reports as needed. GWIB's collaboration with Maryland's education stakeholders will strengthen industry standards, promote best practices, and create a vital pipeline of qualified employees for the State's dynamic education industry.

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