



---

# MASTER PLAN FOR BASIC EDUCATION

---

November 2018

PENNSYLVANIA STATE BOARD OF EDUCATION  
333 MARKET STREET, 1<sup>ST</sup> FLOOR, HARRISBURG, PA 17126

## State Board of Education

November 2018

**Ms. Karen Farmer White** (Pittsburgh)  
Chair, State Board of Education

**Mr. Pedro Rivera**  
Secretary of Education & Chief  
Executive Officer of the Board

### Council of Basic Education

**Dr. James E. Barker** (Erie)  
Chairman, Council of Basic Education

Hon. Carol Aichele (Malvern)

Mr. Nathan Barrett (Scranton)

Senator John Eichelberger  
Majority Chair, Senate Education Committee

Mr. Donald Fey  
Senior Student Member

Mr. Kirk Hallett (Camp Hill)

Hon. Maureen Lally-Green (Mars)

Dr. Jeffrey Keeling (Hadley)

Representative James Roebuck  
Minority Chair, House Education Committee

Ms. Ashley Svec  
Junior Student Member

Dr. Lee Williams (Slippery Rock)

### Council of Higher Education

**Dr. Jonathan Peri** (Glen Mills)  
Chairman, Council of Higher Education

Mr. James R. Agras (Pittsburgh)

Dr. Jamie Bracey-Green (Philadelphia)

Dr. Nicole Carnicella (Bellefonte)

Ms. Caroline DeWitt  
Senior Student Member

Senator Andrew Dinniman  
Minority Chair, Senate Education Committee

Ms. Sandra Dungee Glenn (Philadelphia)

Dr. Pamela Gunter-Smith (York)

Representative David Hickernell  
Majority Chair, House Education Committee

Ms. Arynn Pratt  
Junior Student Member

Dr. George Drake  
PSPC Ex-officio Member

Ms. Karen Molchanow  
Executive Director

Ms. Stephanie Jones  
Administrative Assistant

*\*There are currently three vacancies on the State Board of Education*

**BACKGROUND**

The State Board of Education is charged by statute to develop and “adopt a master plan for basic education which shall be for the guidance of the Governor, the General Assembly, and all public school entities” {24 P.S. § 26-2603-B(i)}. The plan, which must be updated on a ten year cycle, is to consider and make recommendations in the following areas, and in any other areas which the board deems appropriate:

- (1) School program approval, evaluation and requirements;
- (2) School personnel training and assessment;
- (3) Student testing and assessment;
- (4) School governance and organization;
- (5) Curriculum materials development;
- (6) School finance;
- (7) School buildings and facilities;
- (8) Transportation;
- (9) Technical services and support services to local education agencies; and
- (10) Projected long-range needs of the public school system of this Commonwealth.

Through the articulation and promulgation of this master plan for basic education, the Board fulfills a core function of leading the discussion of the most critical issues facing education today. Apart from its regulatory responsibilities, the Board believes that it has a role in identifying the most pressing educational issues of the Commonwealth and in articulating possible solutions. Representing a broad spectrum of voices interested in advancing education, the Board shall not shirk from this responsibility.

While the core purpose of education has not changed, the environment in which our graduates must thrive has. At its most fundamental level, the purpose of education is to prepare our graduates to be competent and productive citizens. Our graduates must be knowledgeable and informed; able to analyze incomplete information and judge differing opinions in order to make the informed decisions necessary in a democracy. 21<sup>st</sup> century technology brings myriad sources of information and perspectives to our citizens, so our education system must prepare them to make sound judgements.

Another impact of 21<sup>st</sup> century technology is that our graduates now must succeed in a globally competitive environment. Due to advanced technology, rapid innovation, and short supply chains, our graduates must compete against workers and businesses on a worldwide basis. To succeed, our graduates must possess a baseline set of knowledge, skills and abilities immediately upon graduation to be able to excel in either post-secondary schooling or the workplace. Our graduates also must possess the attributes of adaptability, perseverance and receptivity to learning in order to continually refresh and improve their skills and to adapt to future changes in the workplace. This commitment to lifelong learning is essential in order for our citizens to provide for themselves and for their families throughout their working years.

Educators see the impact of advanced technology and innovation in their classrooms every day. Whereas students once watched a film *en masse*, today’s students can now view the film on their own devices, each able to pause or rewind to review missed concepts; each able to turn on closed captioning --- even closed captioning in another language --- to aid comprehension; and each able to access an online glossary to learn new terms. Whereas field trips once meant long bus rides, modern communication can allow for interactions with scientists in distant laboratories, with archeologists at remote digs, and even

with astronauts 200 miles above the Earth. Whereas student course choices once were limited by local capacity, students now can choose from an array of advanced courses, additional foreign languages, and even college courses. Yesterday's students prepared for life after graduation, while today's students produce award winning films, conduct scientifically rigorous research, and use advanced computer-aided design methods before graduation.

Technology and innovation also have impacted the process of teaching. Modern devices coupled with advanced software now allow teachers to see the performance of each, individual student in real-time. No longer must teachers wait for major exams or final projects to ascertain which students mastered which concepts. Advanced software programs provide the teacher with data not only on student mastery of individual standards, but also their understanding of the underlying concepts. This information allows for more timely and personalized interventions and for re-teaching to ensure achievement.

Our graduates' future workplace will include a diverse mix of people from different cultures and backgrounds, so we must prepare them with the skills to succeed in this environment. The movement of people from around the globe into the Commonwealth coupled with our own shifts in population have created diverse school communities. So, today's students must learn to work collaboratively, to deescalate interpersonal conflict, and to respect the differences in others to be productive in the future workplace.

The Board is mindful of the tough funding choices to be made at the state and local levels. However, we cannot let gains in graduation rates and increases in student achievement wither due to insufficient funding or inefficient spending. We must provide adequate funding and must have skilled administrators in every district and school that wring the most value out of every dollar. In this way, we will have teachers in every classroom that are equipped and empowered to reach and teach every student, every day.

The Board believes that the key components of high quality basic education which enable college, career and civic success are:

**The focus of our collective efforts in education must be on the student.** Every decision, act, and choice must have as its focus the best interests of every student. From the regulatory and legislative decisions at the state level to the curricular and program choices at the local level to the daily instructional selections of teachers, we all must strenuously pursue and foster the education of every individual so that they each possess the technical, interpersonal, and cognitive skills necessary to succeed.

**All individuals must be provided with the opportunity to achieve.** As the Board quoted in its last master plan, the Constitution of the Commonwealth calls for a "thorough and efficient" education system. This tenet reminds us that every student --- regardless of ability or circumstance --- is assured the opportunity for a comprehensive education and that our system of education must be of the highest caliber. To do less is to fail in our Constitutional duty and to beggar the future of this Commonwealth.

**School programs and practice are not static.** As the demands on our graduates increase, so too must our programs rise to prepare them. We must foster innovations in teaching that take advantage of new technologies and engaging instructional practices. We also must promote the practices that increase rigor and expand options for where, when, and how learning happens.

**Local control of education must be respected but not serve as an abdication of responsibility.** Our Commonwealth has a long and proud tradition of effective local control of education. State-level decisions must lay out the goals and standards of education, and must provide the adequate resources for the local level to achieve them. We cannot lay out a vision of high achievement without providing the means and mechanisms to achieve it.

**Deep and vigorous parent and community involvement in education is essential for continuous advancement.** The success of local control of education rests on the informed and active participation of parents, community members, and business leaders. This ensures an accountability of school performance to the resourcing and programmatic decisions; a connection upon which quality education is based.

## TOPICAL DISCUSSION AND CONCLUSIONS

A variety of formats could be employed to discuss the issues mentioned by the General Assembly. However, to ensure that all topics of interest to the General Assembly are addressed, the topical outline found in 24 P.S. § 26-2603-B(i) will be followed.

### **School program approval, evaluation, and requirements.**

The State Board of Education, through its regulations, establishes basic requirements for schools and their educational programs, the responsibilities of educators, and the academic standards and assessments. Our focus over the last decade has been to reinvigorate the Mathematics and English Language Arts academic standards and assessments so as to raise the rigor and expectations of what our students should know and be able to do. Our focus over the next decade shall be to update and improve the academic standards and assessments of other content areas, with priority placed on ensuring our Science and Technology and Environment and Ecology standards are relevant and rigorous. The Commonwealth should focus additional attention on invigorating school programs which empower every student to meet these rigorous expectations. Further, the Board recognizes that preparing students to be college and career ready requires attention beyond academic content to include 21<sup>st</sup> century life skills, civic participation, and interpersonal skills and that attention to these imperatives should not be diminished in updating the breadth of our academic standards.

While the Board cannot predict future trends in technology, educational practice, or workplace needs, the Board believes that innovative instructional practices and programs implemented at the local level will drive student achievement – especially the achievement of each and every individual. In delivering innovative instruction, all public school entities are encouraged to utilize evidence-based differentiated instruction aligned to meet individualized learner needs. Concomitant with the program emphasis must be a transparent reporting system that gathers and reports progress towards these goals. All educational stakeholders must understand what data is collected and how it will be reported so that suitable choices can be made at both the state and local levels.

### **Conclusions:**

**The Board supports innovative school programs that tailor or personalize instruction to meet the unique strengths and needs of individual students. As a commonwealth, we rely on the**

individual achievement of each of our citizens. We, therefore, must necessarily provide the learning environment to help each and every one of our citizens contribute to their individual and common good and we must create the conditions for personalized learning that meets the needs of each child as an individual.

The Board believes that all state entities involved in education must commit to creating the conditions and efficiencies that support a culture of innovation. The Board will lead this effort to implement the latest in effective strategies and programs by articulating high but achievable academic standards, by passing regulations and policies that foster exemplary school programs, and by encouraging other entities to expand their support of innovative educational programs.

The very start of individual achievement begins before the student enters school. Children who participate in high-quality pre-kindergarten programs perform better in school, graduate at higher rates, and earn more throughout their lives compared to their peers who do not have access to early learning programs. Yet, 61 percent of Pennsylvania children in families earning up to three times the federal poverty level (\$75,300 for a family of four) do not have access to state supported high-quality pre-k programs. The Board believes, therefore, that we must increase access to high quality Early Learning for every student and strongly urges the General Assembly and the Governor to act.

The Board commits to preparing all students for college and career success in a globally competitive environment. Inherent in this preparation is a commitment to and an attitude for lifelong learning to continually update one's skills and abilities. At the basic level of education, the Board encourages innovative programs and expanded access that blur the lines between secondary and post-secondary educational opportunities for students.

The Board encourages a transparent school performance reporting system that enables boards, educators and parents to make informed decisions about policy, program, funding, and access. This reporting system rests upon a longitudinal data system that collects only the key elements necessary for proper reporting and protects all personally identifiable data.

#### **School personnel training and assessment.**

As with any endeavor, the key to success is a highly effective and efficient workforce, and so it is with basic education. Rising student achievement rests on the shoulders of highly qualified and capable teachers, led by expert and effective administrators. This begins with the preparation, certification and accession of a diverse group of teachers who are able to transition easily and effectively into the classroom.

We must follow this with continued professional development and training to hone skills and improve practice. Furthermore, high quality professional development for teachers and administrators must support the teaching of more demanding content aligned to college, career, and civic readiness. Both preparation programs and continuing education opportunities must prepare educators to support our population of students with disabilities in successfully achieving state standards and the goals of their Individualized Education Plans and must prepare educators to be responsive to the cultural context of the students in their classrooms.

The assessment of individual educators must focus not on the elimination of individuals, but instead on identifying individual strengths and areas of improvement, which must drive an individualized, professional development program for growth and improvement.

**Conclusions:**

**The Board will continue to ensure that certification standards for teachers and principals support the teaching of more demanding content aligned to college- and career-readiness and to critical thinking skills for a diverse range of students.**

**The Board encourages the implementation of strong programs, policies, and incentives for the preparation, recruitment, and retention of the best and brightest educators, especially for disadvantaged schools; with strong emphasis on those that contribute to the diversification of the educator workforce.**

**The Board supports the establishment of high-quality, non-traditional programs, such as teacher and principal residencies, to engage qualified teachers for service in high-need and geographically underserved areas. Such models further can support the entry of mid-career professionals into the field of education.**

**The Board encourages innovative approaches to professional development to meet the unique strengths and individual needs of every educator.**

**The Board supports the exploration and trial of contemporary and innovative instructional practices that meet local needs and direction.**

**Student testing and assessment.**

In taking a systemic view of education, stakeholders at all levels of education deserve fair, accurate, and reliable assessments of student learning. Such assessments provide valuable and important feedback to the stakeholders. We must know the impact of improved programs and changed practice on student achievement. We must know the impact of funding allocations on student learning. We must know individual student readiness to move on to the next grade and on to secondary schooling or the workplace. We must know whether our efforts in total are providing the trained and capable workforce that we all seek. These are critical and long-lasting decisions which should not be made in the dark.

**Conclusions:**

**The Board applauds recent changes in testing time, but encourages continued consideration of further testing time reductions consistent with federal guidelines.**

**The Board will ensure that standards aligned assessments measure student learning, growth, depth of knowledge, and readiness for future learning. The Board encourages proper, fair, and thoughtful use of such assessment results.**

**The Board believes that, for some students, the National Occupational Competency Testing Institute (NOCTI) examination, the National Institute for Metalworking Skills (NIMS)**

**examination, or attainment of an industry-based competency certification provide suitable assessment alternatives for the high school graduation requirement.**

### **School governance and organization.**

With a long history of local governance and community-based school districts, Pennsylvania has a proud tradition of locally responsive public schools. While state and federal involvement in education may wax and wane over time, locally elected and accountable school directors guide the local public schools.

Charter schools are an important component of education and have served as valuable laboratories of innovation in some communities. Free of certain regulations and rules, these schools have created new organizations and practices. These lessons learned must be openly shared and discussed, with those leading to accelerated achievement and growth being appropriately incorporated into broader reform strategies. We also should be open to innovative structures and partnerships (with industry and post-secondary institutions) that offer improved services and rigorous, relevant instruction at lower cost. Such innovations that offer expanded opportunities for students to learn and pursue their passions should be explored.

#### **Conclusions:**

**The Board supports the implementation of the provisions of state and federal laws and regulations in effective and efficient ways that expand opportunities for all students to succeed.**

**The Board encourages the exploration and trial of innovative, cost effective governing approaches to consolidated services, joint schools, and Intermediate Unit consortiums.**

**The Board encourages periodic review of charter and cyber charter school laws and regulations to ensure these continue to meet the needs of all students.**

### **Curriculum materials development.**

High quality instruction and accelerated individual learning rest on quality curricular materials. Nowhere is the impact of advanced technology more visible than in modern learning materials. We do not debate the merits of using textbooks or chalkboards; neither should we not debate the use of advanced technology or online materials. Of equal importance is supplying our Career and Technical Education programs with access to up-to-date and cutting edge equipment. While the State Department of Education can and should articulate standards and criteria for evaluation, curricular selection decisions are best made at the local level, mindful of local standards and needs. The Department also should continue to offer exemplar, digital tools and resources for local choice and use.

The development and sharing of resources at the regional level, as well as purchasing through regional or consortiums, may offer cost savings while not sacrificing quality or accountability.

**Conclusions:**

**Advances in technology have yielded high quality digital and online curricular materials. The Board encourages exploration and trial of these materials to accelerate student growth and achievement and to fill gaps in course catalogs.**

**The Board encourages regional approaches and voluntary sharing of resources and model curriculum**

**School finance.**

There is perhaps no other issue in education that is so politically charged and difficult than that of school finance. While most of the debate has centered on the amount and distribution of funding, the Board believes that the debate must also include a discussion of the adequacy of funding. The combination of local, state, and federal funding must provide adequate support for the updated and improved school programs that enable every student to meet our rigorous expectations. State policy cannot disregard the importance of capacity to ensure successful implementation of its goals. This funding must be expertly and efficiently managed at both the state and local level. Lastly, state-level policies and regulations, must be stringently reviewed to remove extraneous, out-dated, and duplicative requirements.

**Conclusions:**

**The Board encourages a discussion of “adequacy” as it relates to school funding, followed by the provision of adequate resources for efficient management at state and local levels.**

**The Board encourages a periodic review of the costing-out study and an analysis of the suitability of the revised funding formula for possible update as economic conditions and demographic factors change.**

**The Board encourages a review of existing mandates and laws with a view towards relief as a cost savings measure at both the state and local levels.**

**School buildings and facilities.**

The 21<sup>st</sup> century is changing the notion of learning being limited to a single, physical location. Traditionally, teaching and learning occurred on Monday through Friday in a school building or facility. Today, however, students learn at their homes, at their workplace internships, and at college campuses. The Board believes that school buildings and facilities will remain the hub of learning in our communities. Therefore, such facilities should be maintained and constructed so as to provide a safe, healthy, and orderly environment that is conducive to a positive learning experience every day.

At the same time, however, the Board believes that discussions about the physical infrastructure of learning facilities also should include considerations about broadband internet connectivity. The opportunities provided by a robust internet connectivity can expand learning options and metaphorically break down the school walls. This connectivity also can offer options for creative scheduling that have

the potential for alleviating overcrowded schools. Furthermore, efficient, modern school administration relies on robust data and information transmitted over high speed wide area networks.

Modern school facilities with robust internet connectivity can become a community resource that offers additional learning options for evenings and weekends.

**Conclusions:**

**The Board will foster safe and secure school environments so that all students can learn.**

**The Board encourages the legislature and the Department of Education to articulate expected access and model standards for information technology infrastructure in schools as a necessary part of modern learning.**

**Transportation.**

Discussions surrounding the transportation of students continue to be lively on both the state and local levels. In some areas the demands on student transport are strained due to rapid growth and changes in family demographics. In other areas, the decline in population has hollowed out the communities leading to fewer students riding increasingly long routes. At the same time, transportation costs continue to increase due to increasing fuel and manpower costs. The Board will continue to follow these discussions closely and recommend action as needed.

**Conclusions:**

**The Board encourages a review of laws, regulations, and policies to foster safe, efficient, adequate, and equitable pupil transportation.**

**The Board encourages a periodic examination of the pupil transportation funding formula to determine if it is meeting local needs.**

**The Board encourages conversation among local education agencies about shared governance as it pertains to transportation and exploration of whether regional collaboration can elicit cost reductions and greater efficiencies.**

**Technical services and support services to local education agencies.**

The Board is unanimous in its belief that modern teaching and learning relies on advanced technology skillfully and creatively used by expert classroom teachers. To manage and remain current on the increasingly complex technology, the Board strongly encourages the consolidation of highly specialized support services at the regional intermediate unit. Such cooperative efforts will eliminate duplication and improve capability due to consolidation and specialization. With increases in the speed and reliability of wide area networks, we expect improved responsiveness and support.

The Board also believes that the Department of Education must be adequately staffed to support our local education agencies. While no one supports a bloated, inefficient bureaucracy, the Board believes that sustained personnel reductions have left the Department unable to provide responsive and accurate information, advice, and support in all areas. Such gaps are especially detrimental for local education agencies that are less well-staffed than others.

**Conclusions:**

**The Board encourage cooperative efforts at the regional level for effective and efficient support for high quality education.**

**The Board encourages the Department of Education to review its staffing levels to ensure it has the capacity to support the needs of the educational community throughout the Commonwealth. The General Assembly must act on this review by providing appropriate funding to ensure the Department has the necessary capacity to serve the needs of the educational community across the Commonwealth.**

**Projected long-range needs of the public school system of this Commonwealth.**

While there is no significant projected growth in Pennsylvania's population on the horizon, the Board is aware of significant population loss in some regions and migration to or net gain in others. During the 2010 to 2016 period, the Commonwealth's population grew at a meager 0.6%, well behind that of the nation at 4.5%. Over the same period, 44 of the Commonwealth's 67 counties experienced a drop in population, with 5 counties in the northern tier experiencing more than a 4% population decrease. Conversely, 4 counties in the southeast part of the Commonwealth experienced between 3.7% and 5.6% population growth. (Source: Pennsylvania State Data Center)

These population shifts are reflected in the student population as well. During the same 2010 to 2016 period, 59 of the 67 counties in the Commonwealth experienced a drop in their enrolled student populations. This is especially pronounced along our northern border, with 10 counties experiencing student population losses greater than 10%. Only 8 counties in the Commonwealth experienced positive growth in their student populations, and these were located in the southeast and southcentral areas. (Source: Pennsylvania Department of Education)

At the same time, our classroom student populations became more diverse. Over the 2010 to 2016 time period, there was a 5% growth in the number of students identified as needing special education services. Over the same period, the number of students identified as English Language Learners grew 19%. Our Asian, Hispanic, Hawaiian/Pacific Islander, and Multi-racial student populations grew at a double digit rate. (Source: Pennsylvania Department of Education)

The impact of these changes on education are clear. The declining student population in most counties results in fewer financial resources and underutilized classrooms and buildings. The few counties experiencing student population growth experience overcrowded classrooms and skyrocketing transportation costs as they struggle to quickly adjust. At the same time, the increasingly diverse and complex student populations present challenges for even the most experienced and capable of educators.

**Conclusions:**

**The Board will monitor demographic and population changes in the Commonwealth and will consider changes to education policy, structures, and funding to address these changes.**

The Board is aware of dramatic reductions in the number of teachers-in-preparation and the number of teachers applying for certification. This reduction makes it difficult to fill staff vacancies, and

is especially problematic for school districts with increasing numbers of minority students that are unable to hire minority staff. From 2000 to 2010, the Commonwealth had a 33% gain in its minority population, with 7 counties in the northeast corner experiencing a greater than 100% growth. (Source: Pennsylvania State Data Center) The lack of teachers will make it difficult for schools in these areas to have staffs that reflect the racial makeup of their changing student bodies.

**Conclusion:**

**The Board will monitor the declining teacher supply problem, which is especially problematic in certain regions and subject areas, and make timely recommendations to the legislature and the Department of Education.**

As noted throughout this plan, the Board believes that modern teaching relies on modern technology. The Board is cognizant of the differences in infrastructure and capabilities in school districts across the state. The Board is concerned that such differences will lead to “opportunity gaps” for some students that will have lasting ramifications for the individuals and their communities.

**Conclusion:**

**The Board encourages the Department of Education to monitor unequal investments in technology and infrastructure that could widen the college/career readiness gap for some students.**

**Other.**

Over the coming decade, the Board will examine its role as an independent body and voice on education matters for the Commonwealth and will make recommendations for appropriate legislative, regulatory, or procedural changes should they be deemed necessary.