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Feb. 21, 2011

The Honorable Steven L. Beshear Governor Commonwealth of Kentucky State Capitol, 700 Capitol Avenue Frankfort, Ky. 40601

Dear Governor Beshear:

The Governor's Task Force on Transforming Education in Kentucky has completed its study of Kentucky's education system.

Over the past 15 months, the Task Force met 10 times and hosted a statewide community forum where more than 1,500 Kentuckians shared their views on improving education in the Commonwealth. The group consulted state and national experts as they explored promising and proven practices in Kentucky districts and schools and successful initiatives across the country.

This report offers 35 recommendations that would serve as a blueprint for how schools throughout the Commonwealth can make prompt and significant gains in school readiness, student proficiency, the closing of persistent achievement gaps, graduation rates and college and career readiness and how elected leaders can develop a supportive state policy environment.

These recommendations build on Kentucky's history of innovative education initiatives, from the Kentucky Education Reform Act (KERA) in 1990 to Senate Bill 1 in 2009. The work of the Task Force and these recommendations set the stage for transforming our education system to meet the needs of students in the 21st century.

Respectfully Submitted,

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Executive Summary

In a move to re-energize the support of public schools that 20 years earlier sparked Kentucky to implement the nation's most comprehensive school reform, Gov. Steven L. Beshear created the Task Force on Transforming Education in Kentucky in October 2009. The goal of the task force was to create a unified vision of what schools in the Commonwealth need to offer in order to better serve students today and tomorrow.

Kentucky has a history of innovative education initiatives – from the Kentucky Education Reform Act (KERA) of 1990 to Senate Bill 1 of 2009. Over the past 20 years, improvements have been made under KERA to student, school and system performance, including the restructuring of primary schools, new standards and assessments, increased accountability, creation of school councils, and reductions in disparities in school funding.

In almost every legislative session since 1990 the legislature has changed some fundamental part of that reform act. KERA has never stopped evolving. The mission of improving student achievement has been an ongoing process.



Kentucky has made significant and measurable progress, but all the while the world has been dramatically changing. The fundamental foundation of knowledge and skills that one requires to function – and succeed – has expanded far beyond what we could have possibly imagined during the education reform effort of 1990.

The passage of Senate Bill 1 in 2009 set the stage for transforming our education system to meet the needs of 21st century students. It created a sense of urgency. In Kentucky, and across the country, there is an ever-increasing awareness of the need for our schools to prepare their students to meet the complex and constantly evolving demands of the new global economy and society.



Against this backdrop, Gov. Beshear directed the 34-member task force – composed of parents, teachers, superintendents, education advocates, lawmakers, and business and community leaders – to help develop new strategies to ensure Kentucky has the curriculum, teachers, standards, organization and structure in place to prepare children for the 21st century while reinvigorating public and business support for education in the Commonwealth.

Based on its charge by the Governor, the Task Force developed 35 recommendations that would serve as a blueprint for how schools throughout the Commonwealth can make prompt and significant gains in school readiness, student proficiency, the closing of persistent achievement gaps, graduation rates and college and career readiness and how elected leaders can develop a supportive state policy environment.

The keys to success lie beyond K-12 education. It is critical to ensure that the earliest learners – those birth to age 5 – come to school prepared for learning in a school setting and that college students not only enter college but also succeed.

The recommendations made in this report align with and support these values. In addition to initiatives already underway, the task force recommends the following priorities, as well as the complete recommendations found in the full report:

- Reorganize the Early Childhood Development Authority; create a system of support, including parent education, for students at all levels of kindergarten readiness; and create common school readiness standards and instruments.
- Include sufficient funding in the state budget to improve access to effective, high-quality preschool programs.
- Require, beginning in 2012-2013, collaboration among state-funded preschool, Head Start, and qualified child care programs in order to access state funding.
- Create family literacy programs dedicating new state resources to provide comprehensive family engagement in all schools, especially the Commonwealth's lowest achieving schools.
- Raise the compulsory school age, effective in 2016, from 16 to 18 with state-funded supports for students at risk of dropping out.
- Create an advisory council, the Advanced Credit Advisory Council, to recommend policies, legislation, and a comprehensive funding model for advanced secondary coursework, college credit during high school, and early graduation options for the 2012 General Assembly.
- Establish a steering committee to develop a comprehensive statewide plan for implementing a new model of secondary career and technical education with an emphasis on innovation, integration of core academics, 21st-century skills, project-based learning, and the establishment of full-time CTE programs, for implementation in the 2012 General Assembly.
- Implement policies to enhance and expand virtual and blended learning, including funding options to ensure equitable access to students across the Commonwealth.
- Include funding in the state budget to expand programs in Kentucky to recruit high-quality teacher candidates, including those who may enter through alternative certification routes.
- Ensure school districts incorporate a balance of technology-enhanced formative and summative assessments that measure student mastery of 21st-century skills.

Building on the past, the proposed recommendations are ambitious in design and substantial in scope. They will not be easy to implement, nor can all of them be implemented quickly. The task force recognizes the fiscal constraints the state has faced and continues to face. Despite these economic challenges, the task force believes there are opportunities that currently exist and has developed some recommendations which do not require new appropriations immediately.

Those recommendations that require legislation and appropriations in the state budget should be considered when future budgets are prepared. Early thoughts on potential costs of implementation are included in Appendix D of this report. The task force believes these actions will enable Kentucky to better prepare all of its students for 21st century success.

Introduction

The Challenge Before Us

Making a Difference for Students, Schools and Communities

Education is both the keystone of our students' futures and the most critical factor in the economic prosperity of our state. As Governor Steven L. Beshear said when he addressed the first meeting of this task force, "Creating a top-notch system of education is not only a moral obligation, but essential to the development of the human capital that will drive this state."

Over the past 20 years, Kentucky has made improvements to student, school and system performance, starting with the comprehensive reforms of the 1990s under the Kentucky Education Reform Act (KERA). These reforms, which included the restructuring of primary schools, new standards and assessments, increased accountability, creation of school councils and reductions in disparities in school funding, resulted from the Rose v. Council for Better Education, Inc.¹ decision of the Kentucky Supreme Court. The General Assembly and Governor embraced the challenge, and with the collaboration of educators, community leaders and experts from across the country, the ground was turned for new, higher expectations for public education in Kentucky.

National data shows that Kentucky has made important progress on academic measures. On the most recent National Assessment of Educational Progress (NAEP), Kentucky students scored ninth in the nation in fourth-grade reading, ninth in fourth-grade science, 16th in eighth-grade reading and 20th in fourth-grade writing. Kentucky students scored 22nd in eighth-grade science, 34th in eighth-grade math and 36th in eighth-grade writing.

"Creating a top-notch system of education is not only a moral obligation, but essential to the development of the human capital that will drive this state."

- Gov. Steve Beshear

The passage of Senate Bill 1 in 2009 set the stage for transforming our education system to meet the needs of 21st-century students. The legislation is already having an impact:

- P-12 and higher education have developed a unified strategy to reduce college remediation rates for high school graduates and to increase the college completion rates of students currently enrolled in remedial classes.
- The Kentucky Department of Education (KDE) and the Council on Postsecondary Education (CPE) are addressing the need for accelerated learning opportunities, secondary intervention programs, college- and career-readiness advising, and postsecondary college persistence and degree completion.
- New academic standards in all subject areas and all grade levels are being developed through consortia with other states and are aligned with college expectations.
- Teacher networks across the state are creating curricula to implement the new standards.
- A new statewide assessment system will be in place in 2012.
- The statewide school and district accountability model and the postsecondary accountability model will include measures of college- and career-readiness.

Senate Bill 1 created a sense of urgency. In Kentucky, and across the country, there is an ever-increasing awareness of the need for our schools to prepare their students to meet the complex and constantly evolving demands of the new global economy and society. This imperative for change is evidenced by calls to action from the White House and Congress to the state houses and our local schoolhouses. Elected officials, business and civic leaders, parents, educators and students understand that our schools must do a better job of producing learners who are equipped with 21st-century skills, including problem-solving, critical thinking, innovation, communications and technology.

For our future citizens to actively participate and thrive in our diverse, democratic society, Kentucky's education system must change to meet these demands. And we must create this change at a much faster pace.

Digging In

The Task Force's Work



The Transforming Education in Kentucky (TEK) task force was launched by Gov. Beshear in November 2009. As the Governor said, "Our world has changed dramatically since the reforms of 1990. We must now turn our focus to the future and again to our schools to ensure that our strategies and programs are designed to meet the challenges of the 21st century."

With eyes on the future, the work of the task force is firmly rooted in the history of reform and the high expectations expressed in statute by the legislature. The General Assembly has declared that schools shall develop their students' ability to:

- 1. Use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives;
- 2. Apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, and practical living studies to situations they will encounter throughout their lives;
- 3. Become self-sufficient individuals of good character exhibiting the qualities of altruism, citizenship, courtesy, hard work, honesty, human worth, justice, knowledge, patriotism, respect, responsibility, and self-discipline;
- 4. Become responsible members of a family, work group, or community, including demonstrating effectiveness in community service;
- 5. Think and solve problems in school situations and in a variety of situations they will encounter in life;
- 6. Connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources; and
- 7. Express their creative talents and interests in visual arts, music, dance, and dramatic arts. KRS 158.645

Gov. Beshear directed the task force to develop new strategies – building on the past while reinvigorating public and business support for P-12 education in the Commonwealth. The Governor offered several goals and guiding principles, and after hearing from more than 1,500 Kentuckians during community forums conducted during August 2010, the task force added one additional focus area* to the list:

- 1. Smoothing transitions from preschool to K-12
- 2. Improving parent, family and community involvement in their children's education*
- 3. Improving high school graduates' college- and career-readiness
- 4. Providing every student the opportunity to earn college credit while in high school
- 5. Combining rigorous academics and technical skills in career and technical schools
- 6. Making better use of technology to improve teaching and learning
- 7. Improving teacher recruitment and retention as well as the effectiveness of teachers and school leaders
- 8. Creating an assessment system that measures the 21st-century skills valued by employers

In monthly meetings throughout 2010, the task force looked at promising and proven practices in Kentucky districts and schools and successful initiatives across the country. The group examined data and research from Kentucky, the nation and the world and incorporated the findings of other initiatives currently underway in the state. See Appendix C for a complete list.

Although there are many good schools in Kentucky and practices that could be implemented across the state, there are no magic solutions. There are no quick fixes that will produce much higher achievement levels, close persistent learning gaps or smooth the transitions from early learning to kindergarten or from high school to postsecondary institutions. There are, however, actions that can make a measurable difference in the performance of our schools and the children they serve, and those actions form the basis for the task force's recommendations. Therefore, the task force is offering this blueprint for



how schools throughout the Commonwealth can make prompt and significant gains in school readiness, student proficiency, the closing of persistent achievement gaps, graduation rates and college- and career-readiness and how elected leaders can develop a supportive state policy environment.

The task force is confident that the actions recommended will break new ground by making the state's workforce more competitive in the nation and around the world, strengthening communities throughout the Commonwealth, putting Kentucky on the road to greater economic prosperity and ensuring students' future success.

Task Force Recommendations

Action Area 1: Expanding Pre-School Opportunities and Improving Transitions Between Pre-School and K-12



The foundation for skills needed to succeed in school, work and life is built early in a child's life.

At the August 2010 meeting, TEK members heard a presentation by members of the Governor's Task Force on Early Childhood Development and Education (ECDE), which was established in March 2009. The ECDE was asked to look at the following elements: a unified vision, a coherent system of state level management, and issues related to collaboration and coordination.

The TEK task force was asked to look at the next level and address the issues surrounding the transition from pre-school to kindergarten. Recommendations from the TEK members, therefore, include an endorsement of the recommendations of the ECDE task force as well as funding for preschool for an expanded population, funding for all-day kindergarten, and a program review to track cohorts of students through the primary grades.

Recommendation 1A:

As recommended by the Governor's Task Force on Early Childhood Development and Education, Kentucky's education policy leaders should reorganize the Early Childhood Development Authority, renaming it the Early Childhood Advisory Council; create a system of support for students at all levels of kindergarten readiness, including parent education and learning; and create common developmentally appropriate school readiness standards and instruments.

Children experience a variety of education and early care arrangements that influence their development. Since parents are the first teachers a child encounters, the quality and extent of parent-child interaction has a profound effect upon the development of that child. Parent literacy is an important part of this interaction. Head Start research findings confirm that children whose parents read to them every day had higher vocabulary scores than those whose parents read to them less frequently. In addition, children had more positive approaches to life when their parents read to them at least three times a week.²

According to Gina Adams of the Urban Institute, an increased interest in the quality of early child care and early education "is due to the growing and well-established body of research showing that the quality of the early care and education experiences matters for children's development, that it can support higher achievement and good outcomes, and that it may be of even greater importance for children who are most at risk of poor development outcomes."³ According to Adams, 12.4 million children younger than six, approximately 60 percent of all children in the United States, are regularly in the care of someone other than their parents.⁴ In Kentucky that number is 63 percent.

Kentucky has maintained a sharp focus on early childhood health care and education for two decades. In 1990, the Kentucky Preschool Program, created as a component of the Kentucky Education Reform Act, targeted four year olds at or below 130 percent of the federal poverty threshold and three- and four-year-old children with special needs.

In 1999, the Office of Early Childhood Development was established to develop a long-term early childhood strategy to meet the needs of Kentucky's youngest children and prepare them for success throughout their lives. In addition, then-Governor Paul Patton created the Governor's Early Childhood Task Force to assess the current state of early childhood development, identify the gaps and recommend a 20-year plan to strengthen the well-being of children and families across the Commonwealth.

Recommendations from that task force led to the passage of an early childhood initiative, KIDS (Kentucky Invests in Developing Success) NOW which focused on improving maternal and child health, enhancing early child care and education programs, rating child-care providers (STARS for KIDS NOW), and supporting families with young children. STARS for KIDS NOW is a voluntary quality rating system for licensed Type I and Type II child care centers and certified family child care homes that uses a scale of 1 through 4 STARS to identify levels of quality. All STAR levels surpass the minimum licensing requirements required of all programs. Currently, 196 of the 2,286 licensed centers are ranked at the highest levels of 3 or 4 four stars, while 46 of the 645 certified family child care homes are rated at that level.

In 2004, the Office of Early Childhood Development was transferred to the Kentucky Department of Education and renamed the Division of Early Childhood Development, thus providing a unified administrative body for the Kentucky Preschool Program, KIDS NOW, and the Head Start Collaboration Office. In 2005, the Kentucky Preschool Program regulations were amended to require all new pre-K teachers to hold a bachelor's degree and the Kentucky early childhood teaching certificate. In 2006 the preschool program continued to expand to cover all children at 150 percent of the federal poverty threshold.

Recommendation 1B:

State lawmakers should include sufficient funding in the state budget to improve access to and enrollment in effective, high-quality, statefunded preschool programs.

Kentucky's preschool education programs are available for all fouryear-olds whose family income is no more than 150 percent of poverty;



all three- and four-year-old children with developmental delays and disabilities, regardless of income; and other four-year-old children as placements are available based on district decisions. A recent report from the Pew Center on the States⁵ lists Kentucky as one of only 10 states that allocated fewer dollars to pre-kindergarten programs for the 2011 fiscal year. The \$2.6 million reduction means \$200 less per child is available to school districts this year.

Currently, there are approximately 23,000 children enrolled in preschool and 17,000 served by Head Start. Task force members advocate the inclusion of all three- and four-year-old children at 200 percent of the federal poverty threshold. This would potentially add 30,000 children to the system. In Kentucky, 23 percent of the children live in poverty.⁶

Recommendation 1C:

State education policy makers should require, beginning in 2011, collaboration among state-funded preschool, Head Start and qualified child-care programs in order to access state funding.

Early childhood education standards, much like our school standards, have been in place in Kentucky for over 10 years. They are widely recognized as valid and valuable, but they are not widely known or universally applied. To ensure alignment of the publicly funded system with federally funded and private providers, all programs should be required to use the standards that have been developed and are aligned to Kentucky's K-12 standards. This would ensure that students are provided with a cohesive educational experience. Standards have identified by age or developmental level the most critical skills and knowledge students should have. "Collaborations with community-based programs ultimately enable school administrators to expand access to and increase the quality of all programs, no matter where they are housed."



Recommendation 1D:

State lawmakers should provide full state funding for all-day kindergarten in all Kentucky schools.

There are numerous studies attesting to the importance of all-day kindergarten, especially for those children identified as being at-risk. The Educational Resource Information Center (ERIC) reviewed the research on all-day kindergarten.⁸ A number of studies concluded that children who attended all-day kindergarten scored higher on standardized tests and had fewer grade retentions than children who attended half-day kindergarten programs. Students enrolled in all-day kindergarten programs were found to have higher levels of first-grade readiness and overall greater progress in literacy, math and general learning skills.

Kentucky currently provides funding for half-day kindergarten. While 163 Kentucky school districts have elected to implement full-day kindergarten by redirecting resources that could be applied in other areas, there are still 11 districts that do not offer full-day kindergarten.

Recommendation 1E:

The Early Childhood Advisory Council (ECAC) should study and make recommendations about the appropriate starting age for kindergarten.

Currently, children whose fifth birthdays fall on or before October 1 are eligible to enroll in kindergarten. There is considerable debate as to the readiness of some of these children because they would enter kindergarten as four-year-olds. The task force recommends that the ECAC explore this issue and make a research-based recommendation as to the cut-off birth date for kindergarten eligibility.

Recommendation 1F:

KDE should adopt a program review that compares student cohort academic performance from kindergarten readiness through the end of third grade and include it in the statewide school accountability system.

In Kentucky, school readiness means that each child enters school ready to engage in and benefit from early learning experiences that best promote the child's success. In order to ensure that the progress made in the pre-kindergarten environment is sustained throughout the primary years, it is necessary to develop a mechanism for documenting the performance of these children in a cohort.

This recommendation suggests the use of a program review model that would not only measure academic success but also other non-academic factors contributing to the development of the whole child, such as physical, intellectual, social, and emotional development, including interpersonal, intrapersonal, and socialization skills. The program review model would provide a means to measure the effects of pre-kindergarten interventions.

Action Area 2: Improving Parent and Community Involvement in Education

The issue of parental and community involvement in education was brought up at each of the TEK Talk Community Forums in August 2010. Participants believe it is important to find creative ways to work with parents. Others said there was a need to facilitate parental understanding of what their children are experiencing in the classroom and parents' ability to teach their children to value education. All participants agreed that parents need to be seen as vital partners in any changes to improve their students' education. Some expressed a need to encourage parents to visit classrooms to help them reconnect to the educational process and articulate what they want children to learn.



Community involvement also emerged as an issue at the first meeting of the TEK in February 2010. A panel discussion at that meeting included a look at KERA. Support from the business community as well as the Prichard Committee was critical in getting reform passed. However, once KERA was enacted, many business people felt that their job was finished and that it was up to the educators to execute reform. Panelists agreed that the business community should have been more engaged in advocacy for reform after the legislation passed.

At one of the community forum venues, the comment was made that not only the business community but also the community at large must be informed about the education process in Kentucky. Another participant expressed the opinion that employers should engage their employees in the educational process in order to broaden community involvement.

Recommendation 2A:

KDE should work with schools, districts, community and parent groups to implement innovative, creative and non-traditional methods to engage parents as learners in their children's education. KDE should implement all recommendations contained in "The Missing Piece of the Proficiency Puzzle" report of the Commissioner's Parents Advisory Council.



The Commissioner's Parents Advisory Council (CPAC) was created to advise KDE on policy issues and to increase positive leadership of parents for improving public education. In June 2007, the CPAC published its recommendations for involving families and the community in improving student achievement. Titled *The Missing Piece of the Proficiency Puzzle*⁹, the report focused on six objectives:

- Relationship building: The school staff builds productive, personal relationships with parents of all their students.
- Communications: Two-way information in many forms flows regularly between school staff and parents about students' academic achievement and individual needs.
- Decision making: School staff encourages, supports and expects parents to be involved in school improvement decisions and to monitor and assist school improvement.
- Advocacy for each student: The school staff identifies and supports a parent or another adult
 who takes personal responsibility for understanding and speaking for each child's learning
 needs.
- Learning Opportunities: School staff ensures that families have multiple learning opportunities to understand how to support their children's learning.
- Community Partnerships: The school staff engages and partners with community members to plan and implement substantive work to improve student achievement.

The CPAC considers topics that are of interest to parents, especially ways that parents and communities can assist schools in raising the achievement level for all schools and every student. The task force supports CPAC's desire to move from family engagement to family learning and to find ways to provide incentives for this work at the local level.

Task force members also recognize that it is important to help families better understand the need for high school graduation, college and career readiness, and the new global economy so they encourage their children to not only stay in school but also to become lifelong learners. A valuable resource for this work is the Commonwealth Institute for Parent Leadership (CIPL) sponsored by the Prichard Committee for Academic Excellence. This program prepares parents to understand Kentucky's standards-based education system and become full partners with schools as they focus on student achievement.

Recommendation 2B:

Building on existing resources, KDE should work with schools, districts, community groups and adult education systems to implement a parent and family engagement strategy that involves parents in student learning to directly address the need to close the achievement gap for the Commonwealth's most at-risk children.

The National Assessment of Adult Literacy¹⁰ revealed that 93 million adults have basic or below basic literacy skills. Upon closer examination of this data, we find that approximately 30 million

of these 93 million adults are the parents, step-parents, grandparents, or guardians of children ages birth through eight years. This has major implications for both preK-12 and postsecondary education.

Researchers at the National Institutes of Health concluded that programs to boost the academic achievement of children from low-income neighborhoods would be more successful if they simultaneously provided literacy education to families.¹¹ The researchers based this conclusion on their finding that a mother's reading skill is the greatest determinant of her children's future academic success, outweighing other factors, such as neighborhood and family income.

In rural and urban communities across the nation, schools, school districts and community organizations are implementing family literacy programs for family engagement combined with learning. For example, the Springdale, Ark. school district has nine schools in which parents spend two hours a week in class with their children, learning literacy practices to use at home. In Louisville, the school district provides English language learner classes for parents and children during the school day and during the evening. Both parents and children show significant improvement in their reading scores.

Recommendation 2C:

State lawmakers should create family literacy programs dedicating new resources to providing comprehensive family engagement in all schools, especially the Commonwealth's lowest performing schools.

To truly address the achievement gaps that persist among different groups of students, policy makers must pay attention to the role of the family in the education of children. According to the National Center for Family Literacy, "the family literacy approach harnesses the strength of parent-child bonds to help those who are most at risk of failing economically, emotionally and socially. We build success by strengthening their confidence, increasing their ability and broadening their outlook. The results have an impact on a personal level as well as a national one." 12

An example would be establishing Parent Academies to guide parents in becoming their child's first and most important teacher. Fun and interactive activities bring parents and children together for learning. Schools, adult education programs, and community partners such as the local health department should be part of the design. These academies could focus on a range of parent knowledge, from child development to the new statewide academic standards, so that parents learn what their children will be expected to do and how they can build on their child's education at home. Helpful materials in print or electronic media can be distributed to supplement the academy events.



Action Area 3: Improving College and Career Readiness

By adopting the new Common Core State Standards, developed by a partnership of 48 states, two territories and the District of Columbia, Kentucky has agreed to align curricula and to develop instructional strategies, diagnostic tools and learning interventions to help all students master the more rigorous knowledge and skills demanded by this initiative.

Implementing this new set of academic standards will not be easy, and only time will tell whether the challenge is fully met. Support for the Common Core Standards continues to grow, however, driven in large part by the growing realization that to meet and exceed the demands of the 21st century's global economy, young people must be prepared to succeed in higher education and other postsecondary opportunities.



The March and April TEK meetings focused on secondary education and ways in which all students could be better prepared for college and careers. Presentations by the Partnership for 21st Century Skills, Gateway to College National Network, Commonwealth Middle College, and the National Center for Education and the Economy all pointed to the need for bold actions to improve students' readiness for college and careers. They reinforced task force members' understanding that this is both an education and an economic imperative for the Commonwealth of Kentucky. The presentations on new models of career and technical education at the July TEK meeting highlighted the value of project-based and career-focused instruction as an important element of the overall plan to improve readiness.

The skills gap between what the new economy requires and what our educational system is producing is large and growing. In fact, by the year 2020, 123 million American jobs will be in high-skill/high-pay occupations, from computer programming to bioengineering, but only 50 million Americans will be qualified to fill them.¹³

The projections for Kentucky are sobering. Kentucky ranks 33rd in terms of the proportion of its 2018 jobs that will require a bachelor's degree and is 16th in jobs for high school dropouts. By 2018, 54 percent of all jobs in Kentucky (1.1 million jobs) will require postsecondary training beyond high school. This is 9 percentage points below the national average of 63 percent. Kentucky ranks 48th in postsecondary education degree projections for 2018. Without a better educated workforce, the Commonwealth will not attract the high-tech jobs of the future, and the state's economy will suffer.

TEK members understand the importance of ensuring that all Kentucky students not only have access to a postsecondary education but are also fully prepared to be successful. Their recommendations reflect this fundamental belief.



Recommendation 3A:

CPE and KDE should fully implement the Unified Strategy for College and Career Readiness and develop policy and regulatory changes to ensure these strategies are in place in all school districts and postsecondary institutions.

The Unified Strategy for College and Career Readiness, ¹⁵ developed by KDE and CPE in 2010 to address the college preparedness problem, includes the following strategies: accelerated learning opportunities in secondary schools, secondary interventions for students not ready for college/career, college and career advising, making the senior year more academically effective, and supports for students to encourage persistence to college graduation.

Although task force members agreed that all students should complete high school ready for college or career, they acknowledge that the purpose of education goes further. It must include the skills necessary for civic competency: analytical skills needed to make informed and reasoned decisions about public issues; basic knowledge of governmental institutions; and participation in community affairs.

In the 21st century, being college- and career-ready means students are well rounded and can actively participate in a democratic society as informed citizens, critical thinkers and innovators. It is critical that the educational system engage and motivate each student to be prepared for meaningful work and citizenship. A comprehensive education system must place an emphasis on citizenship and civic engagement and value a liberal arts education that introduces students to the world of ideas and the arts and sciences. There is a need to enhance student involvement through expanded extracurricular activities.



Task force members believe that a single test score alone should not be the measure of collegeand career-readiness. All students graduating from high school should be held to the same high standards whether they intend to pursue a 2-year or 4-year college path or enter the workforce. There should be no need for remediation after graduation from high school in order to succeed in credit-bearing college courses. The task force believes it is imperative to accomplish the following:

- ensure the alignment of ACT expectations and Common Core expectations,
- establish a common definition of college and career readiness, and
- develop an external valid and reliable evaluation measure for determining college- and career-readiness

Any career readiness measure must meet the same rigorous level of evidence as a college readiness measure.

The Unified Strategy for College and Career Readiness provides the following definitions for college and career readiness:

College readiness is the level of preparation a first-time student needs in order to succeed in a credit-bearing course at a postsecondary institution. **Succeed** is defined as completing entry-level courses at a level of understanding and proficiency that prepares the student for subsequent courses.

Kentucky's systemwide standards of readiness guarantee students access to credit-bearing coursework without the need for developmental education or supplemental courses. Developmental education courses do not award credit for a degree.

Career readiness is the level of preparation a high school graduate needs in order to proceed to the next step in a chosen career, whether that is postsecondary coursework, industry certification, or entry into the workforce. According to the Association of Career and Technical Education (ACTE), career readiness includes core academic skills and the ability to apply those skills to concrete situations in order to function in the workplace and in routine daily activities; employability skills, such as critical thinking and responsibility, that are essential in any career area; and technical, job-specific skills related to a specific career pathway.

Recommendation 3B:

State lawmakers should raise the compulsory school age, effective 2016, from 16 to 18 with state-funded supports for students at risk of dropping out. An Early Warning System should be established that informs students, families and teachers as early as middle school about dropout risk factors and identifies alternative paths to graduation.

Dropouts are more likely than high school graduates to be unemployed, in poor health, living in poverty, on public assistance, and single parents of children who drop out of high school.

Dropouts were more than twice as likely as high school graduates to slip into poverty in a single year and three times more likely than college graduates to be unemployed in 2004.

Dropouts are more than eight times as likely to be in jail or in prison as high school graduates.

The average income for a high school dropout in 2005 was \$17,299, compared to \$26,933 for a high school graduate. (U.S. Census Bureau)



College graduates earn on average \$1 million more over a lifetime than do high school dropouts. If our dropout rate remains the same in the U.S. over the next 10 years, the result will be a loss to the nation of \$3 trillion. 16

TEK members believe that from the time a child first enters school, he or she must understand that failing to complete high school is not an option. Concern about dropouts should not begin at the high school level. Early warning systems in elementary and middle school should help focus efforts on helping all students find their path to graduation and beyond and make learning a part of their lifelong culture. These early warning systems provide students, parents and teachers with readily accessible data that can predict those students at risk of dropping out.

There are critical points or junctures in a student's career that indicate whether he or she is on the right path to eventual high school graduation. These include reading at grade-level by the fourth grade, student attendance, and course performance and credit accumulation in the ninth grade. These indicators need to be carefully monitored and action taken when the data indicate students in need. Waiting until high school is simply too late. Many students make their minds up about dropping out as early as middle school and simply stay in school until they are legally able to leave.



Beginning in sixth grade, the Individual Learning Plan (ILP) provides a mechanism for students to explore and plan for college and careers. The ILP should be more fully utilized in all middle and high schools to ensure that students are both engaged in planning and making consistent progress toward realizing their goals.

Kentucky is simply losing too many students. The entire educational landscape must shift to more personalized learning and providing more opportunities for students to move on when ready. TEK members recognize that students who might have dropped out at age 16 will need not only additional resources but also innovative learning environments. Many dropouts leave school because they are bored or the system does not engage them in learning and show them how to reach their goals. With innovation, some may opt to accelerate their high school studies and graduate early, others, may decide to take advantage of the high school learning opportunities until they are 18. The key elements here are successful high school completion and the supports needed to make that a reality for all Kentucky students.

Recommendation 3C:

In 2011, the Governor should create a cross-agency workgroup, including the cabinet secretaries for education and workforce development, health and family services, and justice, and the commissioner of education to develop stronger coordination of services for families and students and establish methods to coordinate the flow of information between service providers and schools through the Family Resource and Youth Service Centers (FRYSC) to improve student learning while maintaining student confidentiality.

The task force members believe that sharing information among professionals working with the student inside and outside of school can reduce barriers to learning. FRYSCs help academically at-risk students succeed in school by minimizing or eliminating non-cognitive barriers to learning.

FRYSCs are strengthened by community partnerships in their ability to provide vital programs, services and referrals to students and their families. These partnerships are critical in efforts on behalf of students to promote the following:

- early learning and successful transition to school,
- academic achievement and well-being, and
- graduation and transition into adult life.

Each center offers a unique blend of programs to serve the special needs of their student and family client populations.

Kentucky needs to build on this existing infrastructure and support system and strengthen collaboration at all levels of the system. Too much of the work and resources directed to families and students exists in silos within different agencies and departments, thus inhibiting effective use of resources and critical information sharing among all stakeholders. In a time of dwindling resources and growing needs, we must find innovative and cost-effective ways to maximize our resources and share knowledge on behalf of students and families.

Recommendation 3D:

School districts should explore and implement effective models to personalize learning for all Kentucky students.

Kentucky districts, with leadership and support from KDE, should identify successful models and initiatives, including an expanded use of technology, to improve student learning through more personalized and individualized instruction.



Kentucky is one of six states participating in the Partnership for Next Generation Learning with the Council of Chief State School Officers and the Stupski Foundation. One of the goals of this project is to create a personalized system of education that engages and motivates every student to be prepared for life, meaningful work and citizenship. Six model districts have agreed to pilot innovative education delivery models based on the needs of their respective schools.

At the 2010 Symposium "Innovate to Educate: System [Re]Design for Personalized Learning," participants, who included a contingent from Kentucky, concluded that "today's industrialage, assembly-line educational model – based on fixed time, place, curriculum and pace – is insufficient in today's society and knowledge-based economy. Our education system must be fundamentally reengineered from a mass production, teaching model to a student-centered, customized learning model to address both the diversity of students' backgrounds and needs as well as our higher expectations for all students." ¹⁷

Recommendation 3E:

The Kentucky Board of Education (KBE) should develop a long-term strategy for enhancing the teaching of world languages at all grade levels.

The Council of Chief State School Officers (CCSSO) states that "as global society evolves, the need to have both the language skills and better cultural understanding of the peoples and places of the world will be critical for American students."

Enhancing world languages at all grade levels responds to this need and to a national call by government and business to increase our language capacity for national security, economic competitiveness and domestic harmony. From the state perspective, graduating linguistically competent, college-ready students and preparing a workforce with world language communicative and intercultural skills would positively impact Kentucky's role in the global market.

Research suggests that learning a second language has additional benefits for students that go beyond the use of the language itself:¹⁸

- (academic) The skills acquired in learning a world language transfer across content areas and result in positive effects on learning in general and higher achievement in math and reading on basic skills and ACT tests.¹⁹
- (cognitive) According to recent neuroscience research, learning another language, particularly at an early age, significantly increases cognitive skills and mental flexibility for problem solving, creativity, working memory, sound discrimination and decoding.²⁰
- (socio-cultural) World language study gives children a unique insight into their own and other cultures, builds cultural competence, and increases tolerance of difference.²¹
- (economic) World language competency provides a competitive advantage in today's job market. States with high numbers of multi-linguals are also those with the strongest activity in international trade and foreign investment. Producing multi-lingual students reduces a state's expenses for retraining adults in career areas such as police, fire, agriculture, business and medicine, social work, and the courts.

What this suggests for Kentucky schools is a focus on functional world language competence, where students would be required to demonstrate a "basic user proficiency" in any language other than English at any time in their school career and maintain it through ILP until graduation.

Students could meet the requirement in elementary, middle, or high school through content-based immersion classes, rigorous elementary or after school programs, middle or high school courses, summer camps, Governor's Scholars programs, travel and study abroad, community-based heritage language schools, technology-blended or hybrid classes, etc.

Recognition certificates could be awarded at graduation for higher levels of proficiency. Focusing on attaining the proficiency level rather than meeting a seat time requirement will spur student motivation, school innovation, and community connections while helping students attain a much-needed 21st-century skill.



Recommendation 3F:

Local districts and schools should fully implement the recommendations and objectives of the Commissioner's Raising Achievement/Closing Gaps Council for addressing the achievement deficits of certain student groups including gender, race/ethnicity, disability and English language proficiency.

There is perhaps no more important work in Kentucky than closing persistent achievement gaps among and between groups of students. The future of our state and our nation requires that all children be educated to high standards, be prepared for success in life, and be able to participate actively in and contribute to our economy. Recent data from the 2008-2009 state report card illustrate these continued gaps.

- The proficiency gap in reading between males and females continues with girls outscoring boys by over 12 percentage points.
- The reading gap between African-American students and their white peers is over 20 percentage points, and that gap grows to 28 percentage points when compared to Asian students. Hispanic students trail their white and Asian counterparts by 11 and 17 percentage points respectively.
- The gaps grow even greater when comparisons are made with students with disabilities and Limited English Proficiency.
- Math gaps are even greater, with whites, African-Americans, and Hispanics trailing their Asian peers by 15 percentage points, 39 percentage points, and 24 percentage points respectively.

In addition, Michael Childress, then executive director of the Long Term Policy Research Center (LTPRC), told the task force members at their initial meeting in February 2010 that research shows narrowing the socio-economic achievement is one of the areas where Kentucky needs to make progress. According to Childress, "We need to clearly identify higher leverage, lower cost policy options – the revenue system has been losing its elasticity – we do not have the luxury of making bad decisions – narrowing the socio-economic achievement gap is a high leverage payoff. If we narrow it by half, we would go from 36th to 18th among states. If we narrow 60 percent we go to 10th. We want to be in the top 10."

The TEK task force supports the following recommendations, developed by the Commissioner's Raising Achievement/Closing Gaps Council:

- Provide information about the overall academic and social status of Kentucky schools and districts in a format that is useful and accessible to the general public.
- Ensure that all students, regardless of race, gender, ethnic background, disability, or socioeconomic status have access to a rigorous curriculum and get the support necessary to be successful in a rigorous curriculum.
- Create an environment of high expectations with administrators, teachers, and staff taking ownership for meeting the needs of all students.
- Create open, honest communication with all stakeholders about the work of the KDE, individual districts and schools.

Action Area 4: Providing Every Student the Opportunity to Earn College Credit in High School

Early college experiences take a variety of forms. In some instances, they involve the creation of "early college high schools" that offer up to two years of college credit while students simultaneously complete their high school course work. Typically, these schools are committed to serving students underrepresented in higher education and offer a broad range of student support services.

A report published by Jobs for the Future in 2009 stated, "Early college schools provide dual enrollment opportunities [high school and college] and comprehensive student supports to broader populations of students who are underrepresented in postsecondary education. The philosophy behind this approach is grounded in the expectation that most students have the intellectual ability to succeed in college.



"What many students do not have—particularly students whose parents did not go to college—is college expectations, meaningful college exposure, sufficient academic rigor in their K-12 classes, and the habits of mind required for college success. These claims are not extraordinary. In fact, all educational reform programs that seek to improve college readiness and success are grounded in the belief that larger numbers of students can succeed in college, given appropriate preparation, motivation, and support."

"What's particularly ambitious about the Early College High School Initiative is that it goes further to claim that most high school students—including students with average and below-average academic records—can succeed in college courses during their junior

or senior years of high school. This philosophy is built into the design of the schools, which supports broad populations of students in earning high school diplomas and up to two years of college credit (including an associate's degree) while in high school."²²

Recommendation 4A:

The Governor should appoint an advisory council, the Advanced Credit Advisory Council, to recommend policies, legislation and a comprehensive funding model for advanced secondary coursework, college credit during high school, and early

graduation options for the 2012 General Assembly.

To grow as productive citizens of the United States and the world, students must be prepared to transition to college and career and become successful life-long learners. All Kentucky K-12 educators must focus instruction on the same standards for student learning, but delivery methods and the ways students master those standards can, and should, vary greatly.

In the end, if public policy is structured to add more rigor without also strengthening a focus on purposeful learning (relevance), this could further exacerbate the dropout rate and achievement gaps that already exist.

Southern Regional Education Board



The Advanced Credit Advisory Council would explore policies related to the following: redefinition of teaching and learning time; exploration of how teachers are trained and compensated for adopting new teaching practices; performance-based, time-flexible assessment; equity in access to technology infrastructure; funding models that emphasize completion of high school; SEEK allocations; and others.

Several advanced credit models— International Baccalaureate, AdvanceKentucky, the Gatton Academy, and the Commonwealth Middle College—already exist within Kentucky. Other pilot programs are being considered, and the advisory council could help pave the way for innovation in Kentucky high schools.

Recommendation 4B:

CPE and its institutional partners should work together with KDE and local districts to create and fund scalable and sustainable early college programs for the 2012-13 school year.

Task force members believe it important to provide easier access to multiple delivery methods to improve student learning. An early college program creates an opportunity for a student enrolled in high school to take college credit-bearing courses either at the high school or on the college campus. In some instances students can earn an associate's degree and high school diploma at the same time.

This type of program allows those students who have demonstrated mastery of the high school curriculum in one or more subject areas to move forward with their education while within the public school system. This is especially important for those students who may be on the verge of dropping out because they do not feel challenged or do not believe their courses are leading toward a successful career.

KDE will be working with up to six pilot districts in 2011 to plan and implement an early college program. Task force members would like to see these pilot projects taken to scale within the next school year. TEK members support changes in attendance and funding regulations to permit students to take advantage of these early college programs.

Action Area 5: Combining Rigorous Academics and Technical Skills in Career and Technical Schools

Improved career and technical education is a critical component of Kentucky's college- and career-readiness initiative. High-quality career and technical education programs can attract and motivate students to complete high school and prepare them for a broad range of postsecondary options. Because of its historical ties with the technical programs now part of the Kentucky Community and Technical College System, career and technical education programs are a fertile source of dual-credit opportunities for high school students.

In July 2010, task force members met at the Elkhorn Crossing School in Georgetown, Kentucky. Members were given a first-hand look at a career and technical education (CTE) school which combines rigorous academics, 21st-century skills, and career and technical coursework. Elkhorn Crossing is a successful model the task force believes should be replicated and made available to students across the state.

A presentation on the current career and technical education system in Kentucky was made by Deborah Anderson, college and career readiness branch manager representing the Kentucky Department of Education, and John Marks, Office of Career and Technical Education executive director representing the Education and Workforce Development Cabinet. Gene Bottoms, senior vice president of the Southern Regional Education Board (SREB), provided a comprehensive look at career and technical education within the context of secondary education and provided extensive background material to help inform the work of the task force.

TEK members strongly believe in career and technical education and want to find ways to improve its effectiveness and efficiency. To do this, TEK members believe a number of conditions must be met and addressed to improve students' college- and career-readiness levels. These include:

- Providing students in every program of study with a rigorous academic core curriculum;
- Insisting on high-quality career/technical course sequences that blend academics and technical content through challenging authentic assignments;

 Equipping all students with 21st-century skills through high-quality career/technical programs;

- Expecting every student to strive to meet standards in academic and career-technical classrooms;
- Guaranteeing that students have the support needed to meet readiness standards for college and careertraining; and
- Connecting every student to an adult advisor or mentor who has the time and skills to provide guidance and support.²³



The commitment to improving career and technical education led to the following recommendations:

Recommendation 5A:

The secretary of the Education and Workforce Development Cabinet and the Commissioner of Education should establish a steering committee to develop a comprehensive statewide plan to implement a new model of secondary career and technical education with an emphasis on innovation and integration of core academics, 21st-century skills, project-based learning and the establishment of full-time career and technical education (CTE) programs, for implementation in the 2012 General Assembly. The plan should include a new delivery system that integrates and elevates the two offices in KDE and OCTE currently delivering CTE.

The steering committee should include the Southern Regional Education Board (SREB), other external partners representing local district CTE staff, Office of Career and Technical Education field staff, CPE, EPSB, KDE and workforce leaders.

According to SREB, high school career and technical studies are essential for achieving state goals for graduating more students and graduating them ready for work, advanced training, and college. They are best when joined with a college-ready academic core.

High-quality career and technical programs embed academic standards for reading, writing, mathematics and science into the curriculum and engage students in applying those skills to complete authentic assignments/projects. Furthermore, they are best when they are intellectually

demanding and when academic content is purposefully embedded into the curriculum. These programs are most effective when designed to prepare students for a double purpose — work and further study — and when the programs are held accountable for results.²⁴

To ensure that these qualities are present in a statewide program in Kentucky, it is important to combine the current two systems of delivery under one office for statewide equity, consistency

and a high standard level of fidelity to the goals. Embedding academics into career and technical education improves overall achievement.

Prior to 1988 all of secondary CTE, postsecondary CTE, adult education, and vocational rehabilitation were in KDE. In 1988, the legislature created the State Board for Adult Education, Vocational Education and Vocational Rehabilitation. In 1990.

"The contextualized learning that occurs through integration makes the connection between the academic content and the CTE content more explicit for students. Thus, their questions regarding "Why do I need to know this?" or "When will I use this?" are answered."

"Joining Forces for Student Success," Association for Career and Technical Education

the Cabinet for Workforce Development was created by the legislature and Adult Education, Vocational Rehabilitation, postsecondary CTE, and the 54 area technology centers were moved to this cabinet. The secondary CTE programs operated by school districts remained in the KDE.

In 1994, the Department for Adult and Technical Education was reorganized into two departments by executive order. In 1997, the Kentucky Community and Technical College System (KCTCS) was created and the postsecondary CTE programs and facilities were transferred and became the Technical College portion of KCTCS. In 2003, the State Board for Adult and Vocational Education was eliminated, and Adult Education was moved to CPE. In



2004, the Workforce Development Cabinet was merged into the Education Cabinet, and the Department for Technical Education (now only containing the 54 secondary ATCs) became the Office of Career and Technical Education (OCTE). In 2008, the Education Cabinet was renamed the Education and Workforce Development Cabinet (EWDC) to better reflect the equal emphasis placed on education and workforce development issues and progress.

The portion of secondary CTE that remained in KDE is currently in the Branch for College and Career Readiness under the Division of Program Standards in the Office of Next Generation Learners.

Merging EWDC and KDE systems of CTE will better utilize state and federal resources. This move will streamline and improve services to local school districts and will position the systems to create a unified strategic statewide plan that will serve all stakeholders. Gene Bottoms remarked to the TEK members "once you bring them together you must ensure CTE is at the table with the same voice and the same level of respect that the academic educators of the state have and the folks who manage school improvement."

A unified system will be able to focus on one clear mission for CTE that ensures academic rigor and support for those students who require additional interventions in order to master the curriculum. It will also provide a mechanism for bringing the poly-technical model to the schools and offer a different way of learning.

Sixty-seven percent of Kentucky high school students, roughly 142,404 pupils, are enrolled in career and technical education programs as of July 2010. Of those students, 121,429 are enrolled in programs operated by KDE, and 20,975 are enrolled in OCTE programs. CTE is provided at 219 high schools, 118 middle schools, and 44 locally-operated centers or departments. There are 54 Area Technology Centers operated by OCTE.

The transition from two career and technical systems to one will not be without difficulty and controversy. It is for this reason that the TEK members recommend the creation of a steering committee to help guide, inform and smooth the transition. This open and transparent process should include local, state and national experts with experience in improving career and technical education and in building effective delivery systems. The goal must be to develop a system that best meets the changing demands of the 21st-century workplace and keeps the learners and their needs at the center of this new system. There have been many moves to improve the system in Kentucky, but we must seize this opportunity to "get it right."

Recommendation 5B:

KDE and the Department of Workforce Investment should continue to work collaboratively to better join academics and career/technical education studies to realize the potential of career and technical education in improving high school achievement, graduation rates, and college and career readiness.

Task force members reviewed several reports concerning rigorous academics and career and technical education. The SREB report, The Next Generation of School Accountability,²⁵ stated, "Weak state policies that fail to set intellectually rigorous standards for CT programs are severely retarding their potential to help more students enter and succeed in college and career training. Done right, CT programs not only can engage students at risk of dropping out but can inspire all students to tackle and master more challenging courses."

Increasing graduation requirements and at the same time presenting students with curriculum that explicitly links academic content with real-world applications can keep them engaged and motivated. Students need an integrated model in which they can identify the real-world applicability of academic concepts. The collaboration between KDE and the Department of Workforce Investment will ensure that workforce training continues to be emphasized



and important industry partners are included in CTE planning. The advice of industry partners is critical to maintaining the standards for industry certifications.²⁶

Recommendation 5C:

The KBE should support innovative approaches, such as theme high schools and career academies, to support the integration of career, technical and academic programs and their further development in secondary schools.

The task force members agree that learning is more intense and meaningful when students can apply classroom-gathered knowledge to real-world problems. Active learning practices, such as those which are an integral part of project-based learning, have a significant impact on student performance. Students need to engage in projects that require sustained engagement and collaboration.

Career academies, theme high schools, and other innovative settings provide the opportunity to develop and deliver instruction that engages and motivates students while incorporating 21st-century skills. These innovative programs must be standards-based and produce real-world deliverables. Districts must have the freedom and resources to experiment with different models in order to ensure that all students are provided with learning environments that help them reach their full potential.

Action Area 6: Better Use of Technology to Improve Teaching and Learning

The members of the task force value a comprehensive system of technology-based student supports and interventions. Members recognize the importance of both virtual and classroom-based courses to facilitate personalized learning and provide greater access to limited subjects and courses.



A recent analysis by the U.S. Department of Education looked at studies comparing both online and blended learning environments to the face-to-face learning environment. In the studies focused on blended environments and face-to-face instruction, the report stated, "blended instruction has been more effective, providing a rationale for the effort required to design and implement blended approaches (U.S. Department of Education, 2009, p. xvii).

Students who took all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction. Instruction combining online and face-to-face elements is more effective compared to purely face-to-face instruction than did purely online instruction.²⁷

Since 2000, Kentucky has had an \$800,000 line item, with no increase over the years, in the budget for virtual learning. While other states were moving forward and committing additional resources to create robust on-line learning environments, Kentucky stagnated. The program in Kentucky simply has been unable to grow.

Resources for distance learning are also available through Kentucky Educational Television (KET), which has had a long and close relationship with KDE. Innovative courses developed through KET are available across the Commonwealth. A new vision for distance and online learning that takes into account current resources available through these entities is part of a larger vision for anytime, anywhere learning in Kentucky.

Recommendation 6A:

The KBE should develop and implement policy to enhance and expand the opportunities for virtual and blended learning, including dual-credit policies and funding options to ensure a robust online learning environment for Kentucky and adequate per-pupil funding for online courses that provides equity of access to students across the Commonwealth.

Task force members believe that the Commonwealth should not restrict itself to one model of funding for virtual learning. Any funding model must ensure equity of access for all students – not just those who can afford to pay. As reported by the SREB,²⁸ virtual schools are funded in most SREB states by annual legislative allotment.

Virtual schools have the same basic needs as traditional schools: teaching and technical staff and instructional support for students; stable funding to design ongoing learning environments for students, and stable funding to support technology and technology infrastructure. State virtual schools require flexible annual funding.

The future will demand people who can express themselves effectively with images, animation, sound, and video, solve real world problems that require processing and analysis of thousands of numbers, and evaluate information for accuracy, reliability, and validity, and organize information into valuable knowledge, yet students are not learning these skills in school.

Allison Powell, iNACOL Presentation to TEK August 2010

Although over 92 percent of Kentuckians live in areas served by high-speed internet, they cannot all afford access. It is important to conduct research to determine the actual numbers of children in Kentucky with no high-speed access and no computer at home and develop strategies for overcoming these barriers. This information could be included in the charge to the Advanced Credit Advisory Council.

Recommendation 6B:

KDE, EPSB, local districts, colleges of education and institutions of higher education should increase the use of technology in all classrooms and incorporate the use of technology in professional development and teacher preparation to ensure the effective use of technology to improve teacher and student learning at all levels.



TEK members believe every teacher should be prepared to teach using technology tools and virtual courses. Barriers to digital instruction must be eliminated in order to improve the quality of education while reducing costs. Teachers can serve students across the state from one location in the way in which today's students communicate and interact – virtually.

It is critical that educator preparation programs incorporate advanced technology skills into all coursework. Before they are in the classroom, teachers need to be trained to utilize technology for teaching and learning. Once in the classroom, teachers should be part of high-quality, facilitated, interactive online professional development training and communities of practice.

"Today's teachers have to learn to communicate in the language and style of their students. This doesn't mean changing the meaning of what is important, or of good thinking skills. But it does mean going faster, less step-by-step, more in parallel, with more random access, among other



things. Educators might ask 'But how do we teach logic in this fashion?' While it is not immediately clear, we do need to figure it out."²⁹

Students should be allowed to utilize the technology skills they acquire outside the classroom to enhance their learning environment in the classroom. Teachers must be prepared to meet the students in their world, because the workplace and postsecondary institutions will demand ever greater uses of technology.

Recommendation 6C:

The KBE should develop/adopt state standards for quality of online and blended courses by the end of the 2011-12 school year for implementation in the 2012-13 school year.

Quality online courses must adhere to high standards and must include clearly defined curriculum content. Effective online courses allow for interaction with the content in ways that attract student interest and facilitate learning.

The International Association for K-12 Online Learning (iNACOL)³⁰ outlines national standards for online courses in its publication *National Standards of Quality for Online Courses*,³¹ which can serve as a model for developing state standards. SREB also has produced a report, *Standards for Quality Online Courses*,³² which looks at what constitutes a quality online course and recognizes that the understanding of what it means to be an effective online teacher and how to design an online course has intensified over the last few years. Other resources are available to guide the process of developing state standards.

Professional development programs should be accessible to teachers at any time and should educate them on how to personalize learning, develop and teach virtual courses, and manage learning environments. Online professional development can be used as a way to help integrate curriculum across content areas.

Recommendation 6D:

The KBE should develop flexible policies by the 2011-12 school year that encourage innovation and allow students to meet course requirements through personalized, performance-based, anywhere/anytime learning.

The U.S. Department of Education defines personalization as "instruction that is paced to learning needs (i.e., individualized), tailored to learning preferences (i.e., differentiated), and tailored to the specific interests of different learners. In an environment that is fully personalized, the learning objectives and content as well as the method and pace may all vary."³³ Authentic personalization requires a key change in the education process from an institution/teacher-centered approach to a genuine, student-centered approach. Policies must be flexible enough to allow school districts to experiment with various types of delivery methods that require students to demonstrate mastery through performance-based assessments. Providing students with 24/7 access to learning opportunities is yet another step in the shift toward personalized learning.

Schools and districts need help and permission to think differently about subject mastery and performance-based learning. Adopted in the early 1900s, the old notion of Carnegie units and "seat time" should be abolished and replaced with more flexible approaches to measure learning and subject matter mastery. Kentucky regulations provide waivers to allow districts to experiment with these flexible approaches, but more guidance is needed from the department to effect this needed change.

Recommendation 6E:

Schools should use adaptive technology and universal design to improve learning for all students, including those with special needs.

Universal Design for Learning (UDL)³⁴ is a theoretical framework that guides the design of curricula that are flexible and supportive of all students' unique learning styles using integrated adaptive technologies. Using this framework, curricula can be designed to meet the learning needs of all students with methods, materials and assessments that are usable and beneficial for all.

The concept of UDL strives to anticipate the needs of individuals with disabilities and accommodate these needs from the



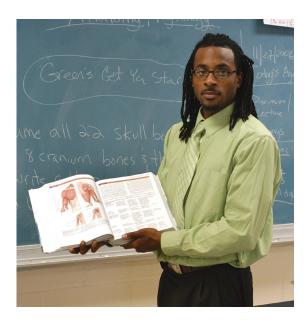
outset. Universally designed materials and instructional practices are then usable by individuals with disabilities and offer unforeseen benefits to all students. UDL in conjunction with adaptive technology emphasizes the importance of providing appropriate instruction targeting individual student needs.

Action Area 7: Improving Teacher Recruitment and Retention and Teacher & Leader Effectiveness

According to the Education Trust, "The caliber of teachers drives student success. Take two students who start at the same academic level, and in as few as three years, you could find them in far different places—based on how well they have been taught."³⁵

Effective teachers not only move their students forward, but they have also been shown to close achievement gaps. A critical element to moving a school from low achieving to high achieving is to raise overall outcomes and reduce performance variation across schools and across socioeconomic groups. The most effective way to do this is to ensure that all students have access to highly effective teachers and leaders.

Human capital is perhaps the single most important factor in education influencing student learning. A recent report by McKinsey & Company, *How the World's Most Improved School Systems Keep Getting Better*,³⁶ states that these exemplary school systems across the globe recognize the value of their teaching force.





Their strategies for ensuring that the best and brightest are recruited and retained in the teaching profession include improving the work environment and raising the level of esteem of the education profession. They seek to ensure that teacher salaries exceed the national gross domestic product (GDP) per capita, and they recruit top performing students into the teaching profession. Ongoing training and coaching are routine parts of a teacher's career path, and teachers increasingly take over the responsibility for improving each other's instructional practice.

The key ingredient to quality schooling, teachers are also the largest single budget item of schools. The TEK members believe that strong and effective teachers and leaders hold the key to unlocking the potential of all students to be successful in life. Their recommendations reflect this belief.

Recommendation 7A:

As recommended by the EPSB, teacher preparation programs should incorporate the following changes.

EPSB has been focusing on several issues related to teacher quality, including teacher preparation and master's programs in teacher leadership. The Committee to Review Admissions and Clinical Experiences (CRACE)³⁷ was established in 2010 by the EPSB to explore current best practices in the following areas: (1) the selection of high-quality candidates for the teaching profession and (2) the provision of high-quality clinical experiences for both traditional candidates and those seeking initial certification through an alternative route.

Based on its work, the committee has provided recommendations to the EPSB on ways to incorporate these best practices in all of Kentucky's accredited teacher preparation programs. The TEK members endorse the following actions:

- 1. Establish minimum admission requirements for teacher preparation programs that include assessment of rigorous, basic skills;
- 2. Immediately raise the minimum GPA for admission to teacher preparation programs from 2.5 to 2.75 and consider increasing to 3.0 within five years;
- 3. Require teacher preparation programs to increase the number of high-quality preteaching clinical experiences required of all new teacher candidates prior to student teaching;
- 4. Develop a standardized measurement aligned with the Teacher Performance Assessment (TPA) by which teacher candidates can demonstrate their ability to affect K-12 student learning during their student teaching;
- 5. Increase the number of teacher preparation programs that collaborate with other programs in higher education to encourage more native speakers of world languages to enter the teaching profession;
- 6. Require that high-quality mentoring be offered for alternative certification candidates entering the teaching profession;
- 7. Develop a certificate of endorsement for teachers who teach online and blended courses;
- 8. Explore the expansion of year-long pre-teaching clinical experiences such as SKY-Teach at Western Kentucky University and Teach Kentucky; and
- 9. Require districts to provide on-going ethics training for all staff.

Colleges of education must undergo a fundamental shift in the way they approach the preparation of tomorrow's educators. The role of the teacher is rapidly changing as we move toward personalized learning for every student. More real-world clinical experiences are as important to aspiring educators as they are to the students they will be teaching. Understanding blended learning and online delivery will be essential skills required of every teacher in the future, as will understanding assessments and the corresponding data they produce.

Admission standards must be set higher, and teacher education programs around the Commonwealth must actively recruit from the top tier of students as other countries do. The combination of additional training and revision of key policies will ensure that new teachers are well prepared for the classroom.

Recommendation 7B:

The state budget should include funding for the expansion of programs in Kentucky to recruit high-quality teacher candidates, including those who may enter through alternative certification routes.

As the role of teachers becomes increasingly diversified, it becomes even more important to provide multiple pathways for recruiting high-quality individuals to the teaching profession. TEK members agree that alternative certification programs need to be expanded and fully funded in order to increase the talent pipeline to address the critical shortage areas. Alternative programs address educational inequity and serve to expand the pool of well-educated, highly-motivated teachers by attracting subject matter experts who bring their work experience into the classroom.

Recommendation 7C:

The state budget should fully fund the Kentucky Teacher Internship Program (KTIP), and the EPSB should develop an expanded and more effective induction program that spans a two-year timeframe and provides more support for resource teachers.

Since 1985, KTIP has made significant contributions to the quality of teaching in Kentucky's

classrooms. The KTIP is a oneyear internship program required of all new teachers and out-of-state teachers with less than two years of successful teaching experience who are seeking initial certification in Kentucky. Upon successful completion, the intern receives credit for the one-year experience and retirement. The intern receives full benefits during the internship. Approximately 2,600-2,800 newly certified teachers begin their KTIP experience each year, but funding for KTIP has been inadequate for the past several years.



In 1993, Kentucky's EPSB adopted the New Teacher Standards (now the revised Kentucky Teacher Standards), defining what beginning teachers are expected to know and do. Subsequently, the EPSB redesigned KTIP, ensuring that the standards used enabled a seamless transition from teacher preparation through induction. Increased emphasis was given to helping new teachers move through a process of professional growth designed to enhance their ability to reflect on and analyze their teaching and to make the curricular and instructional adjustments necessary to ensure maximum student learning.

According to Stephen Fletcher, Michael Strong and Anthony Villar, in their study *An Investigation of the Effects of Variations in Mentor-Based Induction on the Performance of*

Students in California,³⁸ "New teacher support can have a positive effect on student achievement." This fact can provide great incentive for schools to develop a mentor program. The more support a teacher has from an experienced mentor, the more organized, well-planned, and well-prepared he or she will be. Mentors can provide new teachers with materials and ideas that improve lesson plans. They can also provide a wealth of knowledge to improve the preparation and implementation of those lesson plans through meetings and observations.



The EPSB administers funds for KTIP. From 2003 to 2010, the KTIP budget has been reduced by 31percent, significantly impacting its implementation. To accommodate the reductions, EPSB has taken the following measures to ensure that KTIP still provides support and evaluation of new teachers: reduced payments to resource teachers (i.e., mentors), limiting the number of interns served, not providing payment for substitute teachers for resource teachers, and reducing contracts with universities for beginning teacher committee training and service stipends. The reduced time of resource teachers from 50 hours to 40 hours has a direct negative impact on teacher interns.

Recommendation 7D:

The Executive Director of the EPSB, the Commissioner of Education, and the President of the Council on Postsecondary Education should convene a task force that includes local districts and public and independent universities to develop a coherent model for the development and consistent delivery of high-quality professional learning experiences for Kentucky educators. The task force should report to the legislature's Joint Committee on Education by November 2011, providing recommendations on (but not limited to) the following:

- 1. The development of an adequate and auditable funding stream that provides highquality professional learning experiences for every Kentucky educator based on his or her individual needs;
- 2. The development and support of a central web site where educators can access online asynchronous professional learning modules 24/7;
- 3. Expanded responsibility for educators to manage their own professional learning to improve the achievement of their students;
- 4. A centralized system to approve, track, and evaluate the effectiveness of professional learning in improving student performance; and
- 5. The expanded role of postsecondary institutions to partner with local districts on the custom design and delivery of high-quality professional learning experiences.

Gene Wilhoit, former Kentucky education commissioner and now executive director for the Council of Chief State School Officers, told task force members, "We need to redesign the education workforce. The current system of professional development needs a major reworking. It is the second largest resource allocation going into the system right now if you count federal, state and local resources. It is very loosely designed. It is unaccountable for results.

"We have to step back and think about what kind of a partnership exists between higher education and K-12 structures to redesign professional development for our educators. The greatest investment for education in the future is going to be in building the workforce capacity to deliver against these high standards.

"Teachers want to do this, but we don't have systems in place. It is going to have to be school centered, teacher centered. This will have to be done in individual work and in collaboration with local groups and across the country. It has to be fed by really rich resources that we don't now have but we have the capacity to produce." ³⁹

Recommendation 7E:

Kentucky schools should revise master schedules to ensure high-quality, job-embedded professional development, common planning time and other innovative solutions to improve student learning and the professionalism of teaching.

Master schedules must be rethought in order to allow for innovative approaches to education within the schools and to provide flexibility for teachers to plan, prepare and collaborate. Kentucky currently provides waiver opportunities for districts to pursue innovative scheduling options, but few avail themselves of these choices.

Changes in the way master schedules are designed would allow for the delivery of high-quality, job-embedded professional development that would translate directly into teaching practices in the classroom and help teachers succeed at improving student learning for all students. Effective job-embedded professional development results in learning that occurs as educators engage in their daily work activities, and flexible, innovative ways of arranging the school day are necessary for this to happen.

Teachers need time for collaboration and experimentation in order to enhance their own professional growth, which in turn benefits every student. Optimal teaching and learning conditions are critical to both teacher satisfaction and student learning.



Recommendation 7F:

Legislation should be enacted in 2012 to mandate the comprehensive teacher and leader growth and evaluation systems now being developed by the teacher and principal effectiveness steering committees.

Although historically efforts to improve teacher evaluation have not improved instruction or contributed to improving student learning, conditions now are right for substantive changes in teacher evaluation. KDE has a comprehensive plan to improve teacher and principal effectiveness based on performance.

The Teacher and Principal Effectiveness Steering Committees have been working since the summer of 2010 to craft a rigorous, transparent, and fair evaluation system that differentiates effectiveness



using multiple measures. Designed in collaboration with teachers and principals across the state, this system includes a review of similar work underway in other states. The work is expected to take two to three years to complete and implement and will be part of the new accountability system required by Senate Bill 1.

Teacher and principal evaluation instruments are being piloted in selected districts, and it is hoped that full implementation of the evaluation process can begin in additional districts with the 2011-12 school year. TEK members support this work and are confident this work will lead to better measures of teacher, principal and student performance.

Recommendation 7G:

Legislation should be enacted in 2012 to support initiatives to revise compensation, and provide resources and incentives to improve teacher effectiveness by recognizing differentiated roles and responsibilities.



The late Dr. Robert Sexton, longtime executive director of the Prichard Committee for Academic Excellence, told the task force members at their June meeting, "The human capital infrastructure is no good for attracting and keeping the kind of people we need if we're going to have higher expectations."

With national attention centered on whole system reform, the time is ripe for moving forward with innovative strategies to raise the bar in teaching. Kentucky's compensation system should ensure that we are identifying and rewarding our most effective educators.

Effective teaching is a central strategy for improving educational outcomes. Research has shown time and again that effective educators are critical to raising student achievement. Most initiatives that seek to improve the effectiveness of teachers target those already in the classroom but do not seek to upgrade the caliber of young people coming into the profession. We know we must do both

Task force members understand the need to change the way we recruit, train, prepare, advance, support and compensate teachers. They also understand the complexity of the issue and recognize that legislation addressing these issues will have to be based on best practice and current research.

There have been many studies of student achievement and the various teacher characteristics that influence student outcomes. In addition to providing increases in compensation for added



roles and responsibilities, such as taking on the role of teacher leader, it may be necessary to compensate teachers for expertise in hard-to-staff subject areas or expertise and experience in turning around low-performing schools if we are to attract and retain the talent needed to do this critical work.

Action Area 8: Creating an Assessment System that Measures 21st-Century Skills

As the state assessment and accountability system undergoes significant redesign in accordance with the requirements of Senate Bill 1, schools and districts must also rethink how they continuously measure student learning.

Recommendation 8A:

School districts should use a balance of technology-enhanced, formative and summative assessments that measure student mastery of 21st-century skills, including: critical thinking and problem solving, communication, collaboration, creativity and innovation.

Task force members believe that it is necessary to create a system which supports a balanced approach to assessment, including the use of high-quality standardized testing along with effective classroom formative and summative assessments that allow students to demonstrate their knowledge and skills in multiple ways. Kentucky is a partner state in the Partnership for 21st Century Skills, and KDE is working to incorporate 21st-century skills into the core academic standards for statewide assessment.

Formative assessment, or assessment for learning, promotes increases in achievement and informs teaching practices. These assessments occur as learning is still underway and are used to diagnose student needs, plan next steps in instruction, and offer students feedback they can use to improve the quality of their work and take responsibility for their learning.

Frequent, regular feedback ensures that each student receives the support needed to master the standards and be successful. It also provides valuable information to teachers on the effectiveness of their instruction, lesson plans and curriculum choices, and allows them to adjust accordingly based on this feedback. Summative assessments measure achievement or mastery of standards at a summative point in time, usually for reporting purposes and accountability. Both are necessary to inform student learning and shape instruction.

Today's students must acquire the skills needed to be successful in the 21st-century workplace: ability to work with others, problem-solving, public speaking, and maintaining a professional, positive attitude. An assessment system should include not only content knowledge but also work ethic and effort, collaboration skills, critical thinking, writing, project design and completion, and presentation skills.

Recommendation 8B:

The KDE, CPE and EPSB should work with education associations, districts, and teacher preparation programs to develop teacher and leader training in the use of formative assessments and assessment data.

Kentucky has begun to provide professional development in the use of formative assessments in conjunction with the roll-out of the new Common Core Academic Standards. Working with Rick Stiggins and the Assessment Training Institute, KDE has provided train the trainer sessions for over 800 educators across the state. Representatives from institutions of higher education have also taken part in these training sessions to help teacher candidates develop skills in this area, relying less on outside assessments and more on their professional knowledge.

Recommendation 8C:

The EPSB should investigate the creation of an Assessment for Learning endorsement which would focus on advanced assessment skills and knowledge.

As the assessment and accountability system evolves, schools will be better served by having assessment experts among their teaching staff to serve as mentors and coaches. In order to recognize this expertise, the task force is recommending that EPSB consider offering an endorsement for assessment, which would be similar to the technology endorsement.

This endorsement would require additional coursework and practical field experience beyond the requirements for the baccalaureate degree and teacher certification. TEK members believe that it is important for all in-coming teachers to be steeped in assessment literacy; therefore, this endorsement in no way implies that only certain individuals should be knowledgeable about assessment.



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Appendices

APPENDIX A

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APPENDIX C

Findings of Other Initiatives Incorporated into the TEK Report

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- Kentucky Department of Education/Council on Postsecondary Education Unified Strategy for College and Career Readiness (http://www.education.ky.gov/KDE/Instructional+Resources/ Secondary+and+Virtual+Learning/College+and+Career+Readiness+Unified+Plan.htm
- Commissioner's Raising Achievement and Closing Gaps Council (CRACGC) (http://www.education.ky.gov/kde/administrative+resources/commissioner+of+education/advisory+groups/commissioners+raising+achievement+-+closing+gaps+council.htm)

APPENDIX D

Cost Projections of the Recommendations of the Task Force on Transforming Education in Kentucky

Action Area 1: Expanding Pre-School Opportunities and Improving Transitions Between Pre-School and K-12

Action Area 1: Expanding Pre-School Opports		
As recommended by the Governor's Task Force on Early Childhood Development and Education, Kentucky's education policy leaders should reorganize the Early Childhood Development Authority, renaming it the Early Childhood Advisory Council (ECAC); create a system of support for students at all levels of kindergarten- readiness, including parent education and learning; and create common developmentally appropriate school readiness standards and instruments.	No No	Budget Implications
1B. State lawmakers should include sufficient funding in the state budget to improve access to and enrollment in effective, high-quality, state-funded preschool programs.	Yes	Current pre-school cost is \$72 million annually. Expansion would add an additional \$88 million annually to include 3 and 4 year olds up to 200% of federal poverty level
1C. State education policy makers should require, beginning in 2011, collaboration among state-funded preschool, Head Start, and qualified child care programs in order to access state funding.	No	
State lawmakers should provide full state funding for all-day Kindergarten for all Kentucky schools.	Yes Suggestion that districts that currently offer full-day kindergarten should use the new funding for alternative education. (They already receive 50% SEEK funding for kindergarten students)	\$124 million for 48,000 students (2010 figures). SEEK currently pays for ½ day.
1E. The ECAC should study and make recommendations about the appropriate starting age for children.	Yes	\$15 million to support an additional 4300 students who would be enrolled in pre-school and not kindergarten. SEEK savings under current formula of 50% for kindergarten students, for those 4300 students would be \$15.3 million resulting in net savings of \$300,000. This is a one-time cost estimate for the transition year.

1F.	The Kentucky Department of Education (KDE) should adopt a program review that compares student cohort academic performance from kindergarten readiness through the end of third grade. Include this program review of the primary program in the statewide school accountability system.	No ent and Community Involvemen	at in Education
Pocomn			
	mendations KDE should work with schools, districts,	Legislative Issue/Session No	Budget Implications
20.	and community and parent groups to implement innovative, creative and non-traditional methods to engage parents as learners in their children's education. KDE should implement all recommendations contained in "The Missing Piece of the Proficiency Puzzle" report of the Commissioner's Parent Advisory Council.		
2В.	Building on existing resources, the KDE should work with schools, districts, community groups and adult education systems to implement a parent and family engagement strategy that involves parents in student learning to directly address the need to close the achievement gap for the Commonwealth's most at-risk children.	No	
2C.	State lawmakers should create family literacy programs dedicating new resources to providing comprehensive family engagement in all schools, especially the Commonwealth's lowest performing schools.	Yes	Potential funding through federal parent support funds
	Action Area 3: Impro	oving College and Career Read	iness
Recomn	mendations	Legislative Issue/Session	Budget Implications
	The Council on Postsecondary Education (CPE) and the Kentucky Department of Education should fully implement the Unified Strategy for College and Career Readiness and develop policy and regulatory changes to ensure these strategies are in place in all school districts and postsecondary institutions.	Possible changes in statutes and regulations to allow for innovative pathways to graduation, etc. For 2012 session.	Realignment of resources at state and district level – no budget requests foreseen for 2012.

3B. State lawmakers should raise th	e Yes/2011 session	Cost would be offset as:
compulsory school age, effective from 16 to 18 with state-funded for students at risk of dropping and Early Warning System should be established that informs studen families, and teachers as early a school about drop out risk factor identifies alternative paths to gr	e 2016, supports out. An ts, s middle rs and	 Kentucky would experience a net benefit of \$205,418 over the lifetime of each additional high school graduate. Kentucky's citizens would benefit by approximately \$671,898 over the lifetime of each additional graduate in the form of increased earnings, economic growth, and cost avoidance. By decreasing the number of dropouts by just 10 percent, Kentucky would benefit by approximately \$452 million over the lifetimes of the additional graduates. Initial estimate of saving 6,000 potential dropouts (ages 16, 17, 18) would cost average of \$3800 (SEEK funding) per pupil. The proposed legislation would phase in the cost over a period of 5 years.
3C. In 2011, the Governor should cr cross-agency workgroup, includicabinet secretaries for education workforce development, health services, and justice, and the commissioner of education to distronger coordination of services families and students and to est methods to coordinate the flow information between service preand schools through the Family and Youth Service Centers (FRYS improve student learning, while maintaining student confidential	ing the in and and family evelop s for ablish of oviders Resource SC) to	
3D. School districts should explore a implement effective models to plearning for all Kentucky student	personalize	
3E. The Kentucky Board of Educatio should develop a long-term stra enhancing the teaching of world at all grade levels.	tegy for	

3F. Local districts and schools should fully implement the recommendations and objectives of the Commissioner's Raising Achievement/Closing Gaps Council for addressing the achievement deficits of certain student groups including gender, race/ethnicity, disability, and English language proficiency.	No	
Action Area 4: Provide Every Student	the Opportunity to Earn College	e Credit in High School
Recommendations	Legislative Issue/Session	Budget Implications
4A. The Governor should appoint an advisory council, the Advanced Credit Advisory Council, to recommend policies, legislation and a comprehensive funding model for advanced secondary coursework, college credit during high school, and early graduation options for the 2012 General Assembly.	No No	
4B. CPE and its institutional partners should work together with KDE and local districts to create and fund scalable and sustainable early college programs for the 2012-13 school year.	Yes/2012	Pilot projects will be used to make recommendations for implementing a statewide program for early college. Cost estimate is unavailable at this time.
Action Area 5: Combining Rigorous Acade	emics and Technical Skills in Car	eer and Technical Schools
Recommendations	Legislative Issue/Session	Budget Implications
5A. The Secretary of the Education and Workforce Development Cabinet and the Commissioner of Education should establish a steering committee to include the Southern Regional Education Board (SREB) and other external partners representing local district CTE staff, Office of Career and Technical Education (OCTE) field staff, CPE, EPSB and workforce leaders to develop a comprehensive statewide plan to implement secondary career & technical Education with an emphasis on innovation, integration of core academics, 21st-century skills, project-based learning, and the establishment of full-time CTE programs. The plan should include a new delivery system that integrates and elevates the two offices in KDE and OCTE currently delivering CTE.	No	

1	KDE and the Department of Workforce Investment should continue to work collaboratively to better join academics and career/technical education studies to realize the potential of career and technical education in improving high school achievement, graduation rates and college and career readiness.	No	
;	KBE should support innovative approaches, such as theme high schools and career academies, to support the integration of career, technical and academic programs and their further development in secondary schools.	No	
	Action Area 6: Better Use of To	echnology to Improve Teaching	and Learning
Recomm	endations	Legislative Issue/Session	Budget Implications
6A.	KBE should develop and implement policy to enhance and expand the opportunities for virtual and blended learning, including dual-credit policies and funding options to ensure a robust online learning environment for Kentucky and adequate per-pupil funding for online courses that provides equity of access to students across the Commonwealth.	Yes	\$3.68 million to create the necessary infrastructure, course development, data management system, personnel (15 positions, content experts), teachers, perpupil tuition. This estimate would place Kentucky back in the top 10 states supporting virtual learning/virtual schools.
6B.	KDE, EPSB, local districts, colleges of education, and institutions of higher education should increase the use of technology in all classrooms and incorporate the use of technology in professional development and teacher preparation to ensure the effective use of technology to improve teacher and student learning at all levels.	No	
6C.	KBE should develop/adopt state standards for quality of online and blended courses by the end of the 2011-12 school year for implementation in the 2012-13 school year.	No	
6D.	KBE should develop flexible policies by the 2011-12 school year that encourage innovation and allow students to meet course requirements through personalized, performance-based, anywhere/anytime learning.	No	

6E. Schools should use adaptive technology and universal design to improve learning for all students, including those with special needs.	No	
Action Area 7: Improving Teacher Recruit	ment and Retention and Teach	er & Leader Effectiveness
Recommendations	Legislative Issue/Session	Budget Implications
7A. As recommended by the EPSB, teacher	No	<u> </u>
preparation programs should incorporate		
the following changes:		
a. Establish minimum admission		
requirements for teacher preparation		
programs that include assessment of		
rigorous, basic skills;		
b. Immediately raise the minimum GPA		
for admission to teacher preparation		
programs from 2.5 to 2.75 and consider		
increasing to 3.0 within five years;		
c. Require teacher preparation programs		
to increase the number of high-quality		
pre-teaching clinical experiences		
required of all new teacher candidates prior to student teaching;		
d. Develop a standardized measurement		
aligned with the Teacher Performance		
Assessment (TPA) by which teacher		
candidates can demonstrate their		
ability to affect K-12 student learning		
during their student teaching;		
e. Increase the number of teacher		
preparation programs that collaborate		
with other programs in higher		
education to encourage more native		
speakers of world languages to enter		
the teaching profession;		
f. Require that high-quality mentoring be		
offered for alternative certification		
candidates entering the teaching		
profession;		
g. Develop a certificate of endorsement		
for teachers who teach online and		
blended courses; h. Explore the expansion of year-long pre-		
teaching clinical experiences such as		
SKY-Teach at WKU and Teach Kentucky:		
and		
i. Require districts to provide on-going		
ethics training for all staff.		

7B. The state budget should include funding for the expansion of programs in Kentucky to recruit high-quality teacher candidates, including those who may enter through alternative certification routes.	Yes	Teach for America estimated \$1 million to be paid for either through foundations or general fund request. \$3.2 million for initial three years and \$1.25 million thereafter to support recruitment and alternative certification programs.
7C. The state budget should fully fund the Kentucky Teacher Internship Program (KTIP) and recommend that the Educational Professional Standards Board develop an expanded and more effective induction program that spans a two-year timeframe and provides more support for resource teachers.	Yes	\$250,000 for development \$10.5 million to support a 2-year KTIP program
 7D. The Executive Director of the EPSB, the Commissioner of Education and the President of the CPE, should convene a task force that includes local districts and public and independent universities to develop a coherent model for the development and consistent delivery of high-quality professional learning experiences for Kentucky educators. The task force should report to the legislature's Joint Committee on Education by November of 2011, providing recommendations on (but not limited to) the following: 1. The development of an adequate and auditable funding stream that provides high-quality professional learning experiences for every Kentucky educator based on his or her individual needs; 2. The development and support of a central web site where educators can access online asynchronous professional learning modules 24/7; 3. Expanded responsibility for educators to manage their own professional learning to improve the achievement of their students; 4. A centralized system to approve, track and evaluate the effectiveness of professional learning in improving student performance; and 5. The expanded role of postsecondary institutions to partner with local districts on the custom design and delivery of high quality professional learning experiences 	No	

; ; ;	Kentucky schools should revise master schedules to ensure high-quality, job-embedded professional development, common planning time and other innovative solutions to improve student learning and the professionalism of teaching.	No	
	Legislation should be enacted in 2012 to mandate the comprehensive teacher and leader growth and evaluation systems now being developed by the teacher and principal effectiveness steering committees.	Yes/2012 or after the first field test has been completed on the evaluation system	Validation of instrument \$2 million
; ; ;	Legislation should be enacted in 2012 to support initiatives to revise compensation, and provide resources and incentives to improve teacher effectiveness by recognizing differentiated roles and responsibilities.	Yes/2012 or later	Unknown until some type of plan is put forth to address the teacher compensation issue.
-			
	Action Area 8: Creating an Assess		
	endations	Legislative Issue/Session	1 st -Century Skills Budget Implications
8A.	School districts should use a balance of technology-enhanced formative and summative assessments that measure student mastery of 21 st -century skills including the following: critical thinking and problem solving, communication, collaboration, creativity and innovation.		
8A.	School districts should use a balance of technology-enhanced formative and summative assessments that measure student mastery of 21 st -century skills including the following: critical thinking and problem solving, communication,	Legislative Issue/Session	

APPENDIX E

Governor's Task Force on Transforming Education in Kentucky Summary of Recommendations

Action Area 1: Expanding Pre-School Opportunities and Improving Transitions Between Pre-School and K-12

- 1A. As recommended by the Governor's Task Force on Early Childhood Development and Education, Kentucky's education policy leaders should reorganize the Early Childhood Development Authority, renaming it the Early Childhood Advisory Council (ECAC); create a system of support for students at all levels of kindergarten-readiness, including parent education and learning; and create common developmentally appropriate school readiness standards and instruments.
- 1B. State lawmakers should include sufficient funding in the state budget to improve access to and enrollment in effective, high-quality, state-funded preschool programs.
- 1C. State education policy makers should require, beginning in 2011, collaboration among state-funded preschool, Head Start and qualified child care programs in order to access state funding.
- 1D. State lawmakers should provide full state funding for all-day kindergarten for all Kentucky schools.
- 1E. The ECAC should study and make recommendations about the appropriate starting age for kindergarten.
- 1F. The Kentucky Department of Education (KDE) should adopt a program review that compares student cohort academic performance from kindergarten readiness through the end of third grade. Include this program review of the primary program in the statewide school accountability system.

Action Area 2: Improving Parent and Community Involvement in Education

- 2A. KDE should work with schools, districts, and community and parent groups to implement innovative, creative and non-traditional methods to engage parents as learners in their children's education. KDE should implement all recommendations contained in "The Missing Piece of the Proficiency Puzzle" report of the Commissioner's Parent Advisory Council.
- 2B. Building on existing resources, KDE should work with schools, districts, community groups and adult education systems to implement a parent and family engagement strategy that involves parents in student learning to directly address the need to close the achievement gap for the Commonwealth's most at-risk children.
- 2C. State lawmakers should create family literacy programs dedicating new resources to providing comprehensive family engagement in all schools, especially the Commonwealth's lowest performing schools.

Action Area 3: Improving College and Career Readiness

- 3A. The Council on Postsecondary Education (CPE) and KDE should fully implement the Unified Strategy for College and Career Readiness and develop policy and regulatory changes to ensure these strategies are in place in all school districts and postsecondary institutions.
- 3B. State lawmakers should raise the compulsory school age, effective 2016, from 16 to 18 with state-funded supports for students at risk of dropping out. An Early Warning System should be established that informs students, families, and teachers as early as middle school about drop out risk factors and identifies alternative paths to graduation.
- 3C. In 2011, the Governor should create a cross-agency workgroup, including the cabinet secretaries for education and workforce development, health and family services, and justice, and the commissioner of education to develop stronger coordination of services for families and students and to establish methods to coordinate the flow of information between service providers and schools through the Family Resource and Youth Service Centers (FRYSC) to improve student learning, while maintaining student confidentiality.
- 3D. School districts should explore and implement effective models to personalize learning for all Kentucky students.
- 3E. The Kentucky Board of Education (KBE) should develop a long-term strategy for enhancing the teaching of world languages at all grade levels.
- 3F. Local districts and schools should fully implement the recommendations and objectives of the Commissioner's Raising Achievement/Closing Gaps Council for addressing the achievement deficits of certain student groups including gender, race/ethnicity, disability and English language proficiency. The task force supports the following recommendations:
 - Provide information about the overall academic and social status of Kentucky schools and districts in a format that is useful and accessible to the general public.
 - Ensure that all students, regardless of race, gender, ethnic background, disability, or socioeconomic status have access to a rigorous curriculum and get the support necessary to be successful in a rigorous curriculum.
 - Create an environment of high expectations with administrators, teachers, and staff taking ownership for meeting the needs of all students.
 - Create open, honest communication with all stakeholders about the work of the KDE, individual districts and schools.

Action Area 4: Provide Every Student the Opportunity to Earn College Credit in High School

- 4A. The Governor should appoint an advisory council, the Advanced Credit Advisory Council, to recommend policies, legislation and a comprehensive funding model for advanced secondary coursework, college credit during high school, and early graduation options for the 2012 General Assembly.
- 4B. CPE and its institutional partners should work together with KDE and local districts to create and fund scalable and sustainable early college programs for the 2012-13 school year.

Action Area 5: Combining Rigorous Academics and Technical Skills in Career and Technical Schools

- 5A. The Secretary of the Education and Workforce Development Cabinet and the Commissioner of Education should establish a steering committee to include the Southern Regional Education Board (SREB) and other external partners representing local district CTE staff, Office of Career and Technical Education (OCTE) field staff, CPE, Educational Professional Standards Board (EPSB), KDE, and workforce leaders to develop a comprehensive statewide plan to implement secondary Career & Technical Education with an emphasis on innovation, integration of core academics, 21st-century skills, project-based learning, and the establishment of full-time CTE programs. The steering committee's plan should include a new delivery system that integrates and elevates the two offices in KDE and OCTE currently delivering CTE.
- 5B. KDE and the Department of Workforce Investment should continue to work collaboratively to better join academics and career/technical education studies to realize the potential of career and technical education in improving high school achievement, graduation rates and college and career readiness.
- 5C. KBE should support innovative approaches, such as theme high schools and career academies, to support the integration of career, technical and academic programs and their further development in secondary schools.

Action Area 6: Better Use of Technology to Improve Teaching and Learning

- 6A. KBE should develop and implement policy to enhance and expand the opportunities for virtual and blended learning, including dual-credit policies and funding options to ensure a robust online learning environment for Kentucky and adequate per-pupil funding for online courses that provides equity of access to students across the Commonwealth.
- 6B. KDE, EPSB, local districts, colleges of education, and institutions of higher education should increase the use of technology in all classrooms and incorporate the use of technology in professional development and teacher preparation to ensure the effective use of technology to improve teacher and student learning at all levels.
- 6C. KBE should develop/adopt state standards for quality of online and blended courses by the end of the 2011-12 school year for implementation in the 2012-13 school year.
- 6D. KBE should develop flexible policies by the 2011-12 school year that encourage innovation and allow students to meet course requirements through personalized, performance-based, anywhere/anytime learning.
- 6E. Schools should use adaptive technology and universal design to improve learning for all students, including those with special needs.

Action Area 7: Improving Teacher Recruitment and Retention and Teacher & Leader Effectiveness

- 7A. As recommended by EPSB, teacher preparation programs should incorporate the following changes:
 - 1. Establish minimum admission requirements for teacher preparation programs that include assessment of rigorous, basic skills;
 - 2. Immediately raise the minimum GPA for admission to teacher preparation programs from 2.5 to 2.75 and consider increasing to 3.0 within five years;
 - 3. Require teacher preparation programs to increase the number of high-quality pre-teaching clinical experiences required of all new teacher candidates prior to student teaching;
 - 4. Develop a standardized measurement aligned with the Teacher Performance Assessment (TPA) by which teacher candidates can demonstrate their ability to affect K-12 student learning during their student teaching;
 - 5. Increase the number of teacher preparation programs that collaborate with other programs in higher education to encourage more native speakers of world languages to enter the teaching profession;
 - 6. Require that high-quality mentoring be offered for alternative certification candidates entering the teaching profession;
 - 7. Develop a certificate of endorsement for teachers who teach online and blended courses;
 - 8. Explore the expansion of year-long pre-teaching clinical experiences such as SKY-Teach at WKU and Teach Kentucky: and
 - 9. Require districts to provide on-going ethics training for all staff.
- 7B. The state budget should include funding for the expansion of programs in Kentucky to recruit high-quality teacher candidates, including those who may enter through alternative certification routes.
- 7C. The state budget should fully fund the Kentucky Teacher Internship Program (KTIP), and the EPSB should develop an expanded and more effective induction program that spans a two-year timeframe and provides more support for resource teachers.
- 7D. The Executive Director of the EPSB, the Commissioner of Education and the President of the CPE, should convene a task force that includes local districts and public and independent universities to develop a coherent model for the development and consistent delivery of high-quality professional learning experiences for Kentucky educators.

The task force should report to the legislature's Joint Committee on Education by November of 2011, providing recommendations on (but not limited to) the following:

- 1. The development of an adequate and auditable funding stream that provides highquality professional learning experiences for every Kentucky educator based on his or her individual needs;
- 2. The development and support of a central web site where educators can access online asynchronous professional learning modules 24/7;
- 3. Expanded responsibility for educators to manage their own professional learning to improve the achievement of their students;
- 4. A centralized system to approve, track and evaluate the effectiveness of professional learning in improving student performance; and
- 5. The expanded role of postsecondary institutions to partner with local districts on the custom design and delivery of high quality professional learning experiences;
- 7E. Kentucky schools should revise master schedules to ensure high-quality, job-embedded professional development, common planning time and other innovative solutions to improve student learning and the professionalism of teaching.
- 7F. Legislation should be enacted in 2012 to mandate the comprehensive teacher and leader growth and evaluation systems now being developed by the teacher and principal effectiveness steering committees.
- 7G. Legislation should be enacted in 2012 to support initiatives to revise compensation, and provide resources and incentives to improve teacher effectiveness by recognizing differentiated roles and responsibilities.

Action Area 8: Creating an Assessment System that Measures 21st-Century Skills

- 8A. School districts should use a balance of technology-enhanced formative and summative assessments that measure student mastery of 21st-century skills including the following: critical thinking and problem solving, communication, collaboration, creativity, and innovation.
- 8B. KDE, CPE and EPSB should work with education associations, districts, and teacher preparation programs to develop teacher and leader training in the use of formative assessments and assessment data.
- 8C. EPSB should investigate the creation of an Assessment for Learning endorsement which would focus on advanced assessment skills and knowledge.

Contributors To This Report

Governor's Task Force on Transforming Education in Kentucky

Kentucky Education and Workforce Development Cabinet

Kentucky Department of Education

Kentucky Council on Postsecondary Education

Education Professional Standards Board

National Center for Family Literacy

Achieve, Inc.

Obtaining Report

This report can be accessed online at:

www.educationcabinet.ky.gov/tektaskforce/

General Questions

General questions about this report should be directed to (502) 564-3141.