



State of Wisconsin
Department of Public Instruction

Elizabeth Burmaster, State Superintendent

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Testimony to Legislative Council Study Committee
Building Wisconsin's Workforce

August 18, 2008

Thank you to Chairperson Strachota and members of this committee for your leadership and inviting me to speak this morning.

It is an honor to serve as your state superintendent and to provide testimony on this very important topic which will determine the future economic security of our state.

Working together, we can meet the future workforce needs in the critical areas of healthcare, skilled trades, agriculture, construction, advanced manufacturing, energy and bio-technology. Our education system can be the foundation for workforce development around these industry sectors and regional economic development.

The people of Wisconsin have long understood the importance of public education in a strong economy and have recognized the interdependence of strong PK-12 public schools, libraries, our technical college system, the UW System, our private and independent colleges, and healthy, productive communities.

The quality of life we have in Wisconsin and who we are today is a direct result of the investment made in us as children. Raising a family in Wisconsin has been built upon the promise of a public education that provided the opportunity to get ahead if you worked hard, did well in school, and were a responsible member of your community.

But, we are at a crossroads, and that promise will only stay alive for this generation of Wisconsin children and families if education truly prepares them for the knowledge-based economy of the 21st century. Education must be the foundation for any successful economic growth plan, and the immediate as well as long-term economic security of our state will be determined by our success in developing PK-16, business, and community partnerships that support and have a shared responsibility for education and workforce development.

Education at all levels, preschool to postgraduate; education of all types, public and private; education, plainly stated, simply works. Education works when we work in partnership with others to build our most cherished resource for the future, the next generation.

We are doing this around Wisconsin and we see pockets of excellence but we must do more. In just the past few months we announced:

- Partnership grants to 50 school districts for Mathematics and Science teachers professional development so our teachers can teach more relevant and rigorous content which directly applies to 21st century jobs.
- Science, Technology, Engineering and Mathematics grants to innovative programs in 27 school districts to promote best practices and cutting edge curriculum in STEM areas.
- Project Lead the Way engineering education program grants to 79 schools to empower young people to begin career pathways in engineering.
- Wisconsin, through the collaborative efforts of The Department of Public Instruction and the Wisconsin Technical College System, was accepted as one of the first five states in a national project that will be used to attract more girls, students of color, and students with disabilities to the fields of science, technology, engineering, and mathematics (STEM).
- We developed a blueprint to increase the rigor and relevancy of Wisconsin's Model Academic Standards in Mathematics and English/Language Arts at the high school level. This work through the national American Diploma Project and Partnership for 21st Century Skills continues with business and post-secondary representation to align what we expect students to know and be able to do in high school with what will be expected of them in the workforce and post-secondary education.
- We announced new science equivalency options for students in agriculture classes, and we will soon expand student options for science credit in technical education and Project Lead the Way courses. We hope to expand this equivalency option to business courses and mathematics credit.

As a state we have embraced the national Career Clusters & Pathways model for delivering contemporary career and technical education programming. I would like to share more about this important initiative. The Career Clusters model includes 16 broad career clusters and 79 pathways and aligns educational programming, both academic and technical skill training, around a common set of knowledge and skill statements that have been identified by industry leaders at the national level.

This model is part of a national effort to reform education by providing students with a pathway to careers and expanding opportunities to gain knowledge and skills necessary for success in today's 21st century. As you can see from the handout, there are career clusters and pathways to address all types of occupations. Highlighted in yellow are the clusters and pathways related specifically to the work of this committee.

I'd like to take a minute to just briefly share with you how this Career Pathway is played out for a student interested in Manufacturing. As you look at this sample Program of Study, you will see that this is the result of planning at Kenosha Unified School district and addresses the Manufacturing Production Process Development pathway for students at Lakeview Technology Academy.

As you look at the courses you will see that the first four columns include the academic courses that are recommended for this pathway. The next column includes the Career & Technical Education courses that are central to this pathway. There is also a column to outline other experiences that are helpful for students, including Career & Technical Student organization involvement, or workbased learning.

The final column lists sample occupations related to this pathway so students can see the relevance of their coursework and open their eyes to the numerous possibilities that exist for a career in this area.

This cluster and pathway model requires schools to:

- actively engage business partners and other stakeholders,
- utilize labor market information to determine educational programming and focus on communities' needs. Career and tech education programs must build relevancy for students and focus on workforce realities.
- integrate academic and career and technical education content; as you can see that science and mathematics are clearly important components in the Program of Study examples. and
- align secondary education with post-secondary education so that students can see the importance of their high school experiences and how it's connected to future education and employment opportunities. We are working closely with the technical colleges, both at the state and district levels, as we develop the programs of study and identify relevant course work for students.

In the example I just shared, you can see that the development of this pathway included Gateway Technical College and UW-Stout.

While this is a voluntary program, schools receiving federal Carl Perkins funds are required to use those funds to develop career pathways. Already, 370 of the school districts with high schools are engaged in incorporating career clusters in their career and technical education programs.

We provided a handout that outlines which Programs of Study school districts are currently developing. You will note the focus is reflective of the areas of particular interest to this Special Committee on Building Wisconsin's Workforce: Construction, Engineering and Technology, Production, and Manufacturing Production Process Development are in the top ten (10).

And the NGA Policy Academy Wisconsin Workgroup, led by Secretary Gassman, is examining how the Career Clusters could be used by school districts and Workforce Development Boards throughout the state to jointly develop the Education for Employment plans required under State Statute 121.02(1)(m) or as many school districts refer to it as Standard M: *Every school board shall provide access to an education for employment program approved by the state superintendent.*

Work-based learning is an important component of career and technical education and the implementation of a career pathway. Wisconsin's State Certified Cooperative Education Program is designed in partnership with business, industry labor representatives, and educators. The program integrates school-based and work-based learning with appropriate career development experiences.

The program is designed to provide paid work experience for junior and senior high school students which will contribute substantially to their educational and occupational development.

Students learn technical tasks and employability skills validated by business and industry representatives in cooperation with high school, technical college, and university instructors.

The student attends school part of the day and works part of the day. A teacher along with the business mentor supervises this arrangement in one of the following areas: Agriculture, Business, Family and Consumer Education, Health Sciences, Marketing and Technology education.

DPI currently administers 17 State Certified Coop Programs, including the Employability Skills and Youth Leadership skill certificate programs. Students involved in certified skills co-op receive high school credit for the work experience and the related school class and a certificate of proficiency in the technical area.

Youth apprenticeship programs are in schools across the state, and some high schools are implementing career academies. These academies offer academic rigor closely integrated with relevant experience in community businesses.

We are currently in the development stage of the Construction State Certified Cooperative Education Program and will pilot this program in six schools this fall. (Those school districts include Appleton, Burlington, Fond du Lac, Marshfield, Milwaukee Public Schools, and Sun Prairie). Some of you may have read the recent article in the Wisconsin State Journal which highlighted this program as a way to get young people involved in this career area.

We are excited about this business and education partnership. The Associated General Contractors (AGC) with the leadership of Bob Barker and Laura Cataldo, has played a critical role in moving this program forward.

As I mentioned, I am participating in the National Governor's Association Policy Academy on State Sector Strategies. Wisconsin is one of six states participating in this project and we are focused on aligning resources and policies to support regional solutions to employer and workforce needs.

We are well aware of the workforce challenges that we face and the urgency with which we must address these concerns in order to maintain our economic competitiveness.

Other members of the NGA Policy Academy include

Roberta Gassman, Secretary of DWD (Lead),
Nina Carlson, Policy Advisor, Governor's Office,
Joel Rogers, Director, Center on Wisconsin Strategy
Cheryl Welch, Executive Administrator, Fox Valley Workforce Development Board, Inc.
Jessica Stoller, Policy Advisor, WI Dept. of Commerce
Tim Sullivan, President & CEO, Bucyrus International, Inc.
Michael Lanser, President, Lakeshore Technical College
Phil Neuenfeldt, Secretary-Treasurer Wisconsin AFL-CIO
Robert Meyer, President, Wisconsin Indianhead Technical College

Our education system must emphasize career development. We all know the important role a school counselor can play in a student's decisions and future plans and goals. We also know that placing that responsibility on one individual cannot adequately address the complex needs of students' academic, personal/social and career needs.

To address this challenge, the Department has recently released the new Wisconsin Comprehensive School Counseling model which focuses on using all resources in the school and community. This model builds upon the important counselor/student relationship, and provides the framework to expand programming and foster conditions within schools to ensure academic, career, and personal development.

Through the counseling model, students take part in systematic standards-based classroom instruction to help them learn about career options, including examining the career clusters and pathways. The individualized learning plan is one specific element in this new counseling model where students can map out an academic plan that reflects their unique interests and learning goals and helps them see career opportunities.

So we have two new models — the career clusters and pathways model and the new school counseling model which align and support students in their academic and career development. Schools throughout Wisconsin must make use of these innovative models if we are going to see success.

Having a rigorous and relevant curriculum is critical to preparing our students for the 21st century. In March of 2007, the PK-16 education leaders convened Wisconsin's Business Summit on Education to identify key skills that today's students need to be successful in work, postsecondary education, and citizenship. The list generated by participants emphasized critical thinking, problem identification and solving, collaborative communication skills, people skills, personal responsibility, ethics, and nimbleness.

Wisconsin joined the American Diploma Project and the Partnership for 21st Century Skills and became the first state to use both organizations to evaluate the rigor and relevance of Wisconsin's Model Academic Standards in English language arts and mathematics. I convened design teams in English and mathematics as well as a leadership team to prepare a blueprint for revising our standards in those two areas.

We are now moving to develop rigorous common core standards that are internationally benchmarked to ensure that students have essential 21st century knowledge and the skills and experience to apply them. By aligning with the feedback from Wisconsin's business community and also with these national projects, we can ensure that our students are prepared to be successful in Wisconsin, as well as nationally and internationally.

To be successful today requires more than basic computing, reading and writing. The essential 21st century skill set includes civic literacy, global literacy, financial and economic literacy, health literacy, and media and technology literacy. These 21st century skills will be included by adding in our standards references to collaboration, applying knowledge in real-world situations,

using technology, expanding from traditional sources and resources to acquiring and analyzing those available via technology, and preparing students to work with people and perspectives from cultures other than their own.

To reach these goals, we are the first state in the country to develop personal financial literacy standards, are developing an entrepreneurship task force with DFI, and are supporting an increase in the teaching of world languages in elementary grades. An early start in studying languages provides a hard-wiring of native-like pronunciation and automatic language patterns, an invaluable and strong step in developing fluency in a new language. The number of Wisconsin districts offering elementary world language programs is growing, but the vast majority of Wisconsin's students still have no access to learning a language prior to seventh grade. International benchmarking clearly points out our inadequacy here and how we fall behind other countries.

We are in discussion with UW System, WAICU, and WTCS to identify the common expectations in English language arts and mathematics for admission to college-level, credit-bearing coursework. Part of this is to identify in our standards the content of mathematics preparation beyond what is required for high school graduation, but that would provide sufficient preparation for entering college credit-bearing coursework. All of these efforts and commitments will serve to build Wisconsin's economy and help to ensure the long-term vibrancy of our state's economic future.

This generation of students must graduate world ready for the 21st Century workforce. Their preparation must include these 21st century illiteracies: expanded use of technology, an understanding of global perspectives on issues, the ability to understand and communicate in at least one language in addition to English, a personal responsibility for health and economic well-being, and a commitment to civic improvement.

We must use the existing regional economic entities like Milwaukee 7 and New North to strengthen connections between employers and the myriad of education programs in their region. We are calling on school boards to examine labor market data in their district, CESA, and economic development region and use it to guide programs and career pathway opportunities. We must build the understanding of and commitment to the connection from education to work so that all students are engaged in decisions which will create an economically sustainable adulthood.

It is the strength of our state's commitment to public education that has fueled our state's economy from day one. It will be a renewal of that commitment that will help us move to a stronger competitive position in the new economy.