

BACKGROUND: MAKE IT PERSONAL
BY DESIGN

NextEd

TRANSFORMING CONNECTICUT'S EDUCATION SYSTEM

Continuous Improvement Plan from The Connecticut Association of Public School Superintendents

The CAPSS Educational Transformation Project

Project Partners

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DELL
H.A. Vance Foundation
Nellie Mae Education Foundation
The Connecticut State Department of Education
William Caspar Graustein Memorial Fund

The Core Group

A working group of CAPSS members, called The Core Group, developed the recommendations in this report. CAPSS is grateful to the Superintendents, RESC Executive Directors, Assistant Superintendents and University Professors who met over two years to develop the recommendations in this proposal.

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While acknowledging the support of the Project Partners and the work of The Core Group, the content of the report is the sole responsibility of the Connecticut Association of Public School Superintendents.

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MAKE IT PERSONAL By DESIGN

**A Chapter in the
Background Paper for the Report**

**NEXTED:
Transforming Connecticut's Education System**

**Developed By
Connecticut Association of Public School Superintendents
(CAPSS)**



November, 2011



Transforming Public Education in Connecticut

The Challenge of Creating a Learner-Centered School System

Purpose

Connecticut's public school superintendents believe that each child should come to school well fed, adequately clothed, and without fear. Every child should be inspired and challenged by a relevant and important curriculum that tackles real world problems. Every child should be taught by highly trained, professional educators in schools equipped with the technology necessary to enhance teaching and learning. Each child should graduate as a young adult, fully prepared to study at a high level, able to compete on the global stage, and committed to being a contributing member of our society.

Yet the current educational system is not working for all Connecticut students. It is not designed to meet the expectation of universal student success. A strong public school system is essential to maintaining our democratic heritage to create a climate of justice for all our citizens and contribute to the economic stability of our state. Our state must operate its schools understanding that the success of all of us is built on the success of each of us.

Tinkering with Connecticut's system of schooling will not help the state recapture its competitive advantage. The Connecticut Association of Public School Superintendents calls upon all of our citizens to enter into a spirited and thoughtful dialogue about what is required of a successful school in the 21st Century, what skills will be demanded of our graduates, and what accountability standards must be in place to make this educational transformation a reality.

With this call, it is necessary to revise our own vision of schooling and the social, economic, and political systems that support it. That cannot be done unless Connecticut decision-makers challenge the status quo, setting the cornerstone for a stronger, more equitable, and more vibrant Connecticut. The conversation will not be an easy one. But let us begin.

The Genesis of this Document

This report is the product of research, soul-searching, and debate among Connecticut's public school leaders, and their philanthropic and social service partners. We are grateful to Project Partners and their representatives including the H.A. Vance Foundation, The Nellie Mae Education Foundation, The William Caspar Graustein Memorial Fund, and Dell whose contributions clarified our thinking and strengthened our message. The Educational Transformation Group examined Connecticut's current educational practices, policies, and student results.

Connecticut's educational, political, and social structures present a maze of challenges that cannot be fixed with one single strategy. The current system of public education must evolve in order to meet the dynamic needs of our children. Poverty, ethnicity, neighborhood instability, and individual disability cause inequities that imperil our economic and social fabric as a state.

As we drafted this report, we worked to define our core values, fundamental beliefs, and shared commitments as Connecticut's educational stewards. In our conversations, we shared moments of great pride and equally great despair. We saw notable achievement and insightful decision-making as well as evidence of failure and short-sighted thinking. Throughout our study, the Educational Transformation Group heard from internationally-noted experts. Some provided an ominous glimpse of the future, others advised restructuring of our economic and political supports, still others argued for dissolving most existing educational structures. Many of those ideas earned a place in shaping this report.

We present this vision of an educational transformation to the citizens of Connecticut in the hope that it will provoke statewide conversations about the nature of schooling and what we should expect of our pre-K-16 system. Examining our system of schooling will not be easy. Yet the people of Connecticut will never undertake a more important task.

The Core Principles Supporting the Transformation of our Schools

- Our citizens deserve schools that are second to none.
- No child in Connecticut should be deprived of the opportunity to reach his/her potential due to circumstances of geography, financial inequity, quality of teachers or the school support system.
- Each child's advancement through school should be based upon the mastery of a clearly-defined and sequenced series of skills and a base of knowledge in all disciplines. Each child should have access to instructional technologies, thought-provoking academic activities, and extra-curricular programs that promote the development of a fully functioning adult capable of asking difficult questions and solving sophisticated problems.
- Each child in Connecticut should daily enter a school environment that is designed for and committed to meeting individual academic needs and interests, while also respecting individuality and ensuring personal safety.
- Each educator in Connecticut must be well-educated in a chosen field of study, highly trained in pedagogy, capable of adjusting instruction to meet the needs of every child, and subject to valid accountability standards.
- Those charged with the governance of education K-16, those elected in local communities, our state's legislators, and the executive branch must act with efficiency, harmony, and wisdom to make Connecticut's education second to none. There is no higher responsibility for our state's leaders than to provide a world-class school system.

Connecticut's citizens must challenge the status quo to bring about transformational changes in educational outcomes.

CORE BELIEFS STATEMENT

- The Connecticut Association of Public School Superintendents (CAPSS) holds to the following core beliefs.
- Every child is precious. Each child, regardless of any racial, ethnic, economic, physical, mental or cognitive condition, can and must learn to the same high standard
- Each child has sufficient ability to learn to high standards.
- There must be a strong, vibrant, and flexible public education system in order to meet the goal of every child learning to the same high standard.
- The public education system, as it is designed and functioning today, is not designed to achieve the goal of every child learning to high standards.
- Transformative change in public education cannot take place in isolation from the public.
- The family structure is vital to the growth of every child. It must be reinforced and fostered on an equitable and consistent basis.
- The public education system must integrate services to children and raise community expectations both for the education system and for the other systems that offer services to children and their families.
- In order to achieve the result of every child learning to high standards, the system of public education must be transformed.
- Effective leadership is essential for building the capacity for transformative change resulting, in every child learning to high standards.

Education Policy Direction

Policy making for education at federal and state levels are based on bureaucratic assumptions of hierarchy, centralized decision making, standardization, regulation, inspection. These characteristics are designed to limit unit and individual discretion, provide only one point or source of legitimacy, and depress creativity. The chief outcome of bureaucratic assumptions and thinking is stability, not change.

For local school administrators the model has produced ever increasing explicit formal legal and regulative constraints, less decision- making authority and flexibility, greater goal ambiguity and conflict about directions, more intensive external political influences, fewer incentive structures, and greater involvement of external authorities in the leadership of schools. Complicating the situation are the public organization constraints related to the lack of incentives for conserving resources and improving performance.

Virtually all the state and federal solutions of the “educational reform movement” have been bureaucratic: increase centralization, power and direction for the “top”; increase standardization through testing; increase regulations and mandates to limit school district and school discretion. None of this has resulted in any substantial improvement. The US is just as far behind or further behind the foreign competition as before the “reform movement” started. The agenda of expanding centralized controls, raising standards, top down change model, prescriptive policy, and incremental change has failed and will continue to fail.

Two major forces shaping organizations are the centralization of information due to technology and the decentralization of capability to the operational level. A balance of centralization and decentralization is needed to guide activity and encourage initiative and innovation. At government levels this means that activities should be directed more toward defining overall directions, providing capacity-building resources, and analyzing results using meaningful indicators. State Education Departments, for example, should be organized around “problems to be solved”, rather than regulative or narrow programmatic functions. Decentralized to the school district or school level should be responsibilities for the focus and content of the educational program, design of the instructional organization, determining staffing patterns, determination of expenditure priorities, and the development and evaluation of programs and priorities to address problems and priorities. The intent is to avoid separation of decision-making and implementation.

What is needed is the flexibility of operating units to invent, adapt and change to local conditions. If local schools are to be held accountable for outcomes they must have real authority for policymaking and implementing local decisions. Talking about holding schools accountable is useless until schools have the authority structures to be accountable.



DESIGN OF SCHOOLING

(Instructional Delivery Subsystem)

Rationale for Transformation

Schools today closely resemble those that were designed when our country moved from its agricultural to its industrial age. This is the essence of the problem that demands a transformation of our educational system. We are now in what many call the Age of Information, and this has led to significant change in most institutions. But not in education, Dr. John Wiles, author and educational consultant, has summarized this problem:

In most nations, the new communication technologies are forcing institutions to adapt by altering their form and function. In business, transportation, communications, agriculture, the military agencies, and health agencies, organizational and procedural change has been pervasive for over two decades. Schools, by contrast, have not been an active player in such adaptation and now find themselves in an undesirable condition of growing obsolescence (Wiles, 2011, p.1).

Schools today closely resemble those that were designed when our country moved from its agricultural to its industrial age.

In the Agricultural Age, children of many ages were taught in a one-room schoolhouse with one teacher, the school marm. Learning was focused on memorizing and working independently while the teacher was instructing other students. The home was where most learning occurred, and formal schooling had to be scheduled around the needs of the farm. This model worked because a minimal amount of “book learning” was all that was necessary for the vast majority of people. By the end of the Agricultural Age, only about 2% of children completed formal schooling; and, on average, children attended school for only 78 days each year (Snyder, 1993, pp. 27, 30). But that was enough formal education for most children to prepare them adequately for life as agricultural workers.

As we moved into our Industrial Age, the one-room school model no longer met the educational needs in a country which had changed dramatically. Large numbers of people moved from the farm to the city, and we needed an increasingly large workforce to do the rote, repetitive work of the factory. Schools rapidly became the source of preparation for that workforce. In an effort to protect children from working in the factories, compulsory schooling laws began to be enacted across the U.S.



To mass educate the large numbers of children, schooling was redesigned based on a one-size-fits-all model which is often described as “assembly line learning.” Instruction for all students occurred during the same defined period of time, and it was presented in a clearly established sequence. Students were expected to learn at the same rate; and if they needed more time, they were considered failures.

Then I began thinking of the “factory production schedule” which funneled hundreds or thousands of students into set courses within large mechanistic plants each day and each year, regardless of their individual attributes, strengths and weaknesses. Like an assembly line of manufactured articles, some students were “rejects” who couldn’t make the “quality control” grade, and they were thrown on the scrap pile or dropped out when the scrap pile loomed as their certain future (Smith, 2005, p. 1).

Schools in the Industrial Age were scheduled around the reality of the factory, shutting down in the summer when factories had vacations because of the heat. That remains the most common scheduling design today even though research has clearly established that “All young people experience learning losses when they do not engage in educational activities during the summer” (NSLA, 2009). There is little flexibility in most school years to allow students more time if they need it to achieve mastery. The exception is traditional summer schools which are usually perceived as a punishment rather than an opportunity.

In contrast to the “one size fits all” model of education, we have come to realize that if we are to provide equal opportunity to all students for achieving success, we need to

adapt education to the reality of varied learning styles such as those delineated by Howard Gardner (1983) in his pivotal work *Frames of Mind: The Theory of Multiple Intelligences*. In many ways, Gardner's work was the catalyst for educators' recent focus on differentiation of instruction and individualization of student learning.

Charles Schwann and Beatrice McGarvey (2011) have expanded on these ideas and predict that: "Mass Customization, made possible by today's transformational technologies, is the strong and disruptive trend with the power to transform education. Customizing, individualizing, and personalizing education to meet the learning needs of every learner is inevitable" (p. 19). However, the organizational structure of schools today, assigning students to grade levels based on their chronological ages rather than on mastery of learning standards, works against "Allowing all learners to progress at their optimum rate of learning (Schwann and McGarvey, 2011, p. 136).

We need to recognize that, "Students can learn anytime, anywhere, and receive instruction through a variety of modalities, facilitated by a diverse corps of learning professionals" (Stupski Foundation, 2011, p. 2). Online learning is a perfect example of this. In its *2011 Trends Update*, Project Tomorrow (2011) reported that in 2010, 30% of high school students and 19% of middle school students took an online class (p. 4). New Hampshire has already moved in this direction with its Extended Learning Opportunities which "allow students to gain knowledge and skills through learning that takes place outside of the traditional classroom. This can include – but is not limited to – independent study, private instruction, performing groups, internships, community service, apprenticeships, and online courses" (NH Extended Learning Opportunities, 2009).



Traditional schooling was based on the premise that "In the factory, the more time spent on work, the more production, so time spent at work became equated with productivity. The same in school. There was a tendency to equate learning with the amount of time a student spent in class." (Woodbury, 1991, p. 1). This resulted in graduation being based on the number of Carnegie units earned, with the Carnegie unit being defined as 130 hours spent in a classroom. "Seat time is what earns Carnegie units... Little consideration is given to the fact that some students could complete the course more quickly and others would benefit from having the content stretched over a longer time frame" (Maerof, 1993, p. 2).

However, the organizational structure of schools today, assigning students to grade levels based on their chronological ages rather than on mastery of learning standards, works against "Allowing all learners to progress at their optimum rate of learning. (Schwann and McGarvey)

School buildings in the Industrial Age looked like factories. They were then and even today often are "variations on rectangular boxes, rooms are smaller boxes" (Barron, 2010, p. 2). However, if we are to transform our schools to serve the Age of Information, "the larger student community takes precedent over the smaller one in a traditional, isolated classroom. Flexible spaces means the group size can change to support multiple learning modalities" (Jarraud, 2011, p.2). The design of school buildings will also need to serve children who are growing up in a technological world. "Students who come to school possessing hand-helds, PC tablets, flash-drives, iPods, and cell phones cannot reasonably be asked to sit in a small space for five hours a day..." (Wiles, 2011, p. 1). The American Architectural Foundation (2007), concluded that "In this new, media-rich environment...a school as we now know it may become just one of many educational hubs, as people increasingly use handheld devices to learn anytime and anywhere" (American Architectural Foundation, 2007, p. 5).

Clearly information technologies that have led to the Age of Information have already begun to disrupt the traditional mode of operation of all societal institutions, and that is certainly the case with education. A new design is necessary and inevitable.

Guiding Principles

- Mastery of learning objectives and not seat time (i.e., the amount of time spent in class) should be the major criterion for success in school.
- Children learn at differing rates and thus require differing amounts of time to achieve the same learning objectives.
- Significant learning can and does occur outside of school and outside of the school day and year.
- To meet the needs of and be appropriate for all students and all communities, we will need to develop multiple organizational models for schools.

Key Issues and Recommendations

Key Issue 1: American education continues to reflect “assembly-line learning” in which all children are expected to learn in the same way as well as at the same time and in the same amount of time. The length of the school year and school day limit the availability of school resources and inhibit individualization of learning.

Recommendation 1: Access to school resources should be available year-round and for an expanded period of time each day.

Recommendation 2: Flexible work schedules should be established to allow different teachers to work varying number of days in a school year and at varying times during the day.

Recommendation 3: The design of school buildings should allow for year-round instruction and flexible instructional groupings.

Recommendation 4: The school year should be flexible enough to allow students to have varying amounts of time to achieve proficiency of basic skills and mastery of key understandings before they move to the next level of learning.

Recommendation 5: Schools should accept learning experiences that take place outside of school as meeting school learning requirements

Key Issue 2: Success in school is more likely to be measured by time spent in school rather than by the amount a student has learned.

Recommendation 6: Students should be organized in schools primarily based on skill proficiency and mastery of key understandings.

Recommendation 7: Completion of schooling should be based on skill proficiency and mastery of key understandings rather than on a predefined number of years.

Recommendation 8: The Carnegie unit, which is based on time spent in class (i.e., year or semester), should be replaced by a system that is based on mastery of understanding and proficiency of skills.

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OTHER CHAPTERS in the NEXTED Report

Complex Problems
Raise the Bar
Make It Personal
Early Childhood
Boost Quality – Human Capital
Reform Leadership
Offer More Options and Choices
Retool Assessments and Accountability
Involve Students and Parents
Leverage Technology
Continue Transformation

The original report and the related Background Papers can be found and downloaded from the NEXTED web site.

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