A Vision for Public Education

Equity and Excellence

Georgia School Boards Association • Georgia School Superintendents Association

GSBA

About GSBA

Founded in 1951, the Georgia School Boards Association is a nonprofit educational membership organization created to ensure excellence in the governance of local school systems by providing leadership, advocacy, and services and by representing the collective resolve of Georgia's 180 elected boards of education. The association conducts conferences, workshops, and other meetings at which educational topics are discussed and ideas exchanged, and provides training programs and various other services to support local boards of education.

GEORGIA SCHOOL SUPERINTENDENTS ASSOCIATION

About GSSA

The Georgia School Superintendents Association (GSSA) believes that Georgia's public schools deserve the finest leadership available. Thus, its purpose is to enhance leadership at every level of public school administration with a particular focus on the chief executive of local school systems. GSSA provides professional development activities and programs for Georgia's local school superintendents, access for policymakers to accurate and credible information resources, and leadership training for those who aspire to the superintendency. GSSA's mission to serve as chief advocate for Georgia's public school children is supported by its goal to transform ideas into action helping schools become exciting places of learning that can make a difference in the lives of Georgia's future leaders.

Acknowledgments

The Georgia School Boards Association and the Georgia School Superintendents Association acknowledge all who have participated in the creation of this report. The boards of directors of the two associations, their executive directors, and the executive committee for the Vision Project are recognized for providing the financial support and oversight for the project. The planning team, research associates, facilitators, external reviewers, Mid-continent Research for Education and Learning (McREL), education associations, and friends of public education are commended for their significant contributions and constructive criticism, which have resulted in a vision that will provide direction for public education in our state as we seek to shape our future.

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1 Overview of the Vision Project

The Georgia School Boards Association and the Georgia School Superintendents Association in 2009 formed a joint venture to create a comprehensive and coherent vision for public education in the state of Georgia. The associations believe there is an urgent need to examine critically the components of the educational system for the purpose of establishing principles and offering recommendations which will transform the current system into one that is relevant for today's children and youth. Foremost, the system must ensure that the graduates of the public schools in the state of Georgia are prepared for life, post-secondary education, and the careers of their choice.

Public schools, local public school districts, and state public education systems are complex social systems which have the primary responsibility for the education of America's children and youth. These three entities must be effectively aligned to ensure an appropriate educational experience for all students served by the public education system. Effective structures and processes of these entities along with purposeful alignment of the roles and responsibilities with the others increase the likelihood that all students will achieve in school and will complete successfully the educational program provided for them. In addition to the alignment of the K–12 system at the school, district, and state levels, the K–12 system must be effectively aligned with early learning and post-secondary institutions.

> "The purpose of this document is to offer a series of recommendations that, taken in total, implemented effectively over our state, and supported by the citizens of the state and policymakers, will transform public education in Georgia.

While public education is clearly a constitutional responsibility of each state and in turn its local districts and schools, the federal government in recent years has become involved in the operation of the nation's public schools to a greater extent than at any other time since the era of school desegregation. Any undertaking to alter significantly the form, structure, delivery mechanism, or goals of public education cannot ignore the federal government's involvement and influence.

We recognize the difference between *optimizing* the current system (i.e., improving its operations without drastically altering any of its basic structures) and *transforming* it (i.e., rethinking the delivery of curriculum and instruction, allocation of resources, and perhaps, many long-held assumptions about when and where education is delivered and who delivers it). Christensen, Horn, and Johnson (2008) distinguish between sustaining innovations that make incremental improvements to goods and services and disruptive

innovations that completely transform an industry, sometimes in a relatively short period of time. A commonly cited example of a disruptive innovation is the personal computer, which in a period of years, transformed workplaces and led to the rise of new web-based businesses. Christensen et al. argue that existing organizations have great difficulty in undertaking disruptive innovations.

The purpose of this document is to offer a series of recommendations that, taken in total, implemented effectively over our state, and supported by the citizens of the state and policymakers, will transform public education in Georgia. The recommendations are the result of 18 months of intensive examination of public education in our state by a group of public school superintendents and local board of education members supported by experienced educators as facilitators, university and K–12 research associates, citizens of the state through nine community conversations, and public school students through conversations with the Planning Team. The 30 members of the planning team have accumulated over 300 years of experience as members of local boards of education or as superintendents of local school districts. We have engaged in extended dialogue among ourselves and with noted scholars and researchers, with practitioners from the classroom to the boardroom, and with citizens and students about the changes that need to be made to the current system of public schools to ensure an excellent educational experience for every public school student. Our recommendations appear in each section of this document.

The Vision for Public Education in Georgia

As we pursue the creation of a new vision for public education in Georgia, we know that asking the right questions is important. It is the right questions that guide us in our search for the right answers. Among the questions we have posed in the project design are these:

- How do we frame our work? In other words, what should the project design look like?
- What are the major educational system components that should be included?
- What are the guiding principles and key issues related to each system component?
- What are the current practices of promise?
- What recommendations, if enacted, will result in educational transformation that will ensure an equitable and excellent educational experience for every public school student?

We have sought answers to these important questions during the duration of this project.

Why Act, Why Now, Why Us?

The Georgia School Boards Association and the Georgia School Superintendents Association have developed positions each year for which we advocate, but we have not endeavored to create a comprehensive vision for public education nor enumerate the actions required at the federal, state, and local policy levels to improve significantly the educational opportunity for all. We believe it is time for us to be about this task.

Many commissions have been convened to offer prescriptions for improving public education in our state and nation and/or to provide alternatives in the marketplace for citizens to procure an education

for their children. The commissions convened in the past 30 years have typically been composed of a cross-section of luminaries who have been successful in their professional careers but who may or may not possess any expertise in creating a viable system of schools to ensure an appropriate educational opportunity for all children.

In many states, including Georgia, commissions have been established by governors to improve public education and to hold local schools and school districts accountable for student achievement. Typically, educators have had little voice in the crafting of commission recommendations or in influencing policies established through statutes or regulations. The same is true at the federal level. Local boards and superintendents have been limited to a compliance role in implementing programs and strategies that often are contrary to what we know is in the best interest of our children, our communities, our state, and our nation. Superintendents and local boards of education are often viewed as obstinate defenders of the status quo who are either unable or unwilling to engage in a comprehensive transformation.

Local boards of education and local school superintendents, through this joint venture of the associations representing them, have determined that now is an appropriate time to engage in the important work of creating a vision for public education in our state that will focus on the intellectual development of all students; that will prepare them to be contributing members of a democratic society; that will embrace world-class standards; and that will be enthusiastically supported by the citizens of our state.

We have enumerated below many of the reasons that we need to act and to act now, and why superintendents and local board of education members are the appropriate individuals to initiate an inclusive process of creating a new vision for public education.

Why Act and Why Now?

- To build trust and support for public education
- To ensure meaningful engagement of communities with their public schools
- To create a single vision to change the education culture in our state
- To provide a rewarding educational experience for all of Georgia's students
- To ensure that our students are competitive in a global economy
- To increase significantly the high school completion rate
- To decrease significantly the number of students requiring remediation when they enter post-secondary institutions
- To ensure appropriate curricula for a new generation of learners
- To make learning more rigorous, more relevant, and more real
- To connect with the digital generation
- To use technologies that are currently available and that are emerging
- To be more responsive to students' individual needs
- To address resource issues
- To do what we know should be done

Why Us?

- Local boards of education are constitutionally charged with the control and management of local school districts;
- We, as the primary educational leaders at the local level in Georgia, need to state unequivocally what we are for—not just what we are against;
- We have an obligation to provide leadership in each of our communities to ensure that every student has the opportunity for a high-quality educational experience; and
- Superintendents, members of local boards of education, the dedicated educators in local communities, parents, families, and students best understand the current state of public education in their communities and what needs to be done to improve public education.

For the above reasons, we have pursued this important work on behalf of our citizens.

Education Reform Initiatives

The Vision Project is best viewed in the context of other initiatives designed to improve the quality of schooling. Thus, brief overviews of the earlier work of some commissions and their reports are included in this section. Statutory reform initiatives are not included nor are changes emanating from case law.

The Committee of Ten (1892)

In 1892, the Committee of Ten was formed by the National Education Association. The committee, chaired by Charles W. Eliot, then president of Harvard University, and its nine conferences were composed of 90 members: 47 were employed in colleges or universities, 42 were employed in elementary or secondary schools, and one was a government official and a former university faculty member. All were career educators.

The Committee of Ten recommended that 12 years of public education be provided including four years of secondary education for the limited number of students who pursued secondary education at that time. The nine conferences established by the committee focused their attention on Latin; Greek; English; other modern languages; mathematics; physics, astronomy, and chemistry; natural history (biology, including botany, zoology, and physiology); history, civil government, and political economy; and geography (physical geography, geology, and meteorology). The nine conferences recommended the content and the amount of time that should be devoted to each of the intellectual disciplines. Thus, the recommended focus at that time was on the pursuit of knowledge and the training of the intellect; the goal was to standardize the secondary curriculum around the disciplines (National Education Association, 1893).

The Commission on the Reorganization of Secondary Education (1918)

The Commission on the Reorganization of Secondary Education was established by the National Education Association in 1918. The commission was composed almost exclusively of educators at the secondary and post-secondary levels. The commission stated that the main objectives of education are health, command of

fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and ethical character (National Education Association, 1918).

The recommendations of this second commission convened by the NEA represent a significant departure from those offered by the Committee of Ten. Mitchell (1981) referred to the seven cardinal principles as the seven deadly principles in his criticism of the work of the second commission. He saw the principles as a change in emphasis from the cognitive to the affective domain. Mitchell refers to the commission members as the Gang of Twenty-seven and maintains that their influence continues in every school in America today. Thus, we see in a span of 26 years a dramatic change in the perceived purpose of education. While both commissions were composed of those whose careers were in education, the conclusions they reached and the recommendations they made were very different.

A Nation at Risk (1983)

Some 65 years and many education reform initiatives after the work of the Commission on the Reorganization of Secondary Education, the U. S. Department of Education issued in 1983 the report of the National Commission on Excellence in Education, *A Nation at Risk*. The 18-member commission was composed of individuals from education, government, and the private sector. The commission offered 38 recommendations covering five major areas: content, standards and expectations, time, teaching, and leadership and fiscal support.

The "content" recommendation for secondary schools included four years of English; three years of mathematics; three years of science; three years of social studies; and one-half year of computer science. For college-bound students, two years of foreign language in high school were recommended. The "standards and expectations" recommendation called for schools, colleges, and universities to adopt more rigorous and measurable standards, and higher expectations for academic performance and student conduct. The "time" recommendation urged that significantly more time be devoted to learning the New Basics. The commission called for more effective use of the existing school day, a longer school day, or a longer school year. The recommendation on "teaching" consisted of seven parts, which included 1) better preparation of those intending to teach; 2) professionally competitive salaries; 3) 11-month contracts for teachers; 4) career ladders for teachers; 5) non-traditional entry into mathematics and science teaching positions; 6) incentives to attract individuals into teaching; and 7) involvement of master teachers in designing teacher preparation programs and in supervising beginning teachers. The "leadership and fiscal support" recommendation called for citizens to hold educators and elected officials responsible for providing the leadership necessary to achieve the reforms recommended. Citizens were urged to provide the fiscal support and stability required to bring about the reforms (The National Commission on Excellence in Education, 1983).

The commission did not contemplate that alternatives to public education were necessary to implement their recommendations but rather that the challenge to improve could be met by the existing educational institutions (elementary, secondary, and post-secondary) with the support of scholarly, scientific, and learned societies and with parents understanding the importance of superior educational attainment and their insistence that the schools provide every student with an opportunity for a meaningful educational experience.

America's Choice: High Skills or Low Wages! (1990)

The National Center on Education and the Economy's Commission on the Skills of the American Workforce issued a report in 1990 titled *America's Choice: High Skills or Low Wages!* The report stated that Americans are faced with a choice between high skills and low wages. The commission called for a strong general education for American workers. The report states that "America invests little in its front-line workforce. We do not expect much from them in school. We give them few job skills and little training. And we let them sink or swim when they try to get into the workforce" (p. 43). The report indicates that two factors preclude the production of a highly educated workforce: 1) the lack of a clear standard of achievement, and 2) few students who are highly motivated to work in school.

The commission concluded that the educational system was structured to support those who were preparing for college while providing little to support those who would enter the workforce upon leaving school. The commission determined that the majority of vocational courses were taken not by those who would subsequently enter the workforce but by those who would enter college after high school. The commission stated that the funding for education favored the children of the economically advantaged with the poor being subjected to an inferior educational opportunity resulting from lack of financial support. The report also stated that "as a society, we apparently do not expect a lot from students who do not plan to go to college" (p. 45).

The commission recommended that "a new educational performance standard be set for all students, to be met by age 16. This standard should be established nationally and benchmarked to the highest in the world" (p. 5). This recommendation assumed the development and implementation of a Certificate of Initial Mastery to be awarded upon the student's passing a series of performance-based assessments based on the new educational performance standard. The certificate would qualify the student to enter college, the workforce, or technical training. The commission concluded,

> America will not be able to choose a high productivity, high wage future unless it charts a sharp change of course. Our future depends on having highly skilled, highly motivated workers on the front line. That is not what our education system was designed to produce. (p. 48)

Tough Choices or Tough Times (2006)

In 2006, the National Center on Education and the Economy released the report of the second Commission on the Skills of the American Workforce. While the first commission focused on multiple issues relating to America's workforce and made only one recommendation relating to K–12 education, the second commission proposed a new system for education. As stated in the introduction to the revised edition, "The report was proposing not a new set of education policies or programs but was, in some sense, proposing a new 'constitution' for the education system itself, a new set of agreements on a different way to structure the entire enterprise" (p. xv).

The commission's recommendations were presented in the form of ten steps that were characterized as a system with its own integrity to be implemented in its entirety but in many different ways. The first seven recommendations relate to education below the post-secondary level.

> Step 1–Assume that we will do the job right the first time; Step 2–Make much more efficient use of the available resources; Step 3–Recruit from the top third of the high school graduates going on to college for the next generation of school teachers; Step 4–Develop standards, assessments, and curriculum that reflect today's needs and tomorrow's requirements; Step 5–Create high performance schools and districts everywhere—how the system should be governed, financed, organized, and managed; Step 6–Provide high-quality, universal early childhood education; and Step 7–Give strong support to the students who need it most. (pp. xxvi-xxxiv)

Over half of the report is a scenario describing how the recommendations might look from the vantage point of an observer in 2021.

Creating a New Vision for Public Education in Texas (2008)

The five initiatives cited above addressed educational issues which were national in scope and interest. In many states, including Georgia, commissions have been established by governors or others to improve public education in their states and to hold local schools and school districts accountable for student achievement. Typically, educators have had little voice in the crafting of state-level commission recommendations or in influencing policies established through statutes or regulations. An exception to this rule relating to the crafting of recommendations is a Texas initiative which was undertaken in 2006 and was completed in 2008 (Texas Association of School Administrators, 2008).

The Texas "visioning" initiative was undertaken by 35 local school superintendents who stated in the introduction to their work,

> We were … concerned that the principal architects of the present system are politicians, business leaders, and their policy advisers—not superintendents, not principals, not teachers, and not parents or school board members. Educators and parents have vital contributions to make and their insights and commitments should be utilized. (p. 1)

The Texas Visioning Institute identified six articles which the participants believed would "rescue schools from the bureaucratic stranglehold of over-regulation and the government-imposed and antiquated factory model that now forms their character" (p. 12). The six articles, each of which contained a statement of principle and supporting premises, were 1) The New Digital Learning Environment; 2) The New Learning Standards; 3) Assessments for Learning; 4) Accountability for Learning; 5) Organizational Transformation; and 6) A More Balanced and Reinvigorated State/Local Partnership. The undertaking in Texas provided the initial impetus for the visioning initiative undertaken by the Georgia School Boards Association and the Georgia School Superintendents Association.

Georgia's Vision Project Design

The design for the Vision Project was originally drafted by the project's design team, which is composed of five superintendents and five local board of education members who also serve as members of the planning team, along with the executive directors of the two sponsoring associations. The design team stated in its earliest meetings that the process would be inclusive with significant involvement of stakeholders, would be based on sound research where appropriate, and would be viewed from the perspective of the student. The design has subsequently been reviewed by a representative of Mid-continent Research for Education and Learning (McREL) and by the project facilitators. Finally, the planning team has reviewed and revised the project design. The elements of the project design are outlined below.

Education System Components

The Vision Project Planning Team adopted seven education system components which the team determined need to be addressed to create a new vision for public education in the state of Georgia. The planning team believes that the seven system components identified are sufficiently broad to encompass the work of the project. These are the seven system components:

- Early Learning and Student Success
- Teaching and Learning
- Teaching and Learning Resources
- Human and Organizational Capital
- Governance, Leadership, and Accountability
- Culture, Climate, and Organizational Efficacy
- Financial Resources

The planning team understands that in creating seven discrete education system components there is the inherent issue of potential redundancy and gaps. Redundancy may well be considered a positive attribute because important issues may be addressed in multiple places. A gaps analysis was a part of the work in an effort to ensure that important issues were not overlooked.

Format of Education System Component Reports

A prescribed format was used to ensure consistency across the seven reports, each of which focuses on one of the seven education system components. Thus, each section contains an introduction, guiding principles, key issues, current practices of promise, and recommendations.

- Each section begins with a description of the system component.
- Second, guiding principles for the system component are enumerated. A principle is defined as a fundamental, primary, or general law or truth from which others are derived. It is a statement of value that is unchanging over time. A transformational principle is defined as a principle, which, if embraced,

adopted as educational policy, and implemented effectively, will change the form, appearance, and structure of the educational entity in the area for which the principle is embraced.

- Third, the key issues relating to each education system component are identified. The key issues are derived from a review of the relevant research and literature including the work of nationally recognized scholars and researchers, and from the experience of the members of the planning team, the research associates, and the facilitators.
- Fourth, examples of current practices of promise are briefly described. Current practices of promise are those programs, activities, or strategies currently being implemented in states, districts, or schools over the nation for which a body of research or other evidence has demonstrated their effectiveness in certain environments and under certain conditions. It is generally accepted that particular practices have earned the label "best practice," but there is often disagreement over whether a given practice is "best" or "promising." For the purposes of this report, selected practices of which we are aware and that are believed to have merit are cited.
- Fifth, recommendations for moving forward are offered. The recommendations are derived from the guiding principles, key issues, and current practices of promise. The recommendations are not necessarily mutually exclusive, may be integrated for implementation, and are not listed in a priority order.

The 30-member planning team was organized into five work teams to develop the reports on Early Learning; Teaching and Learning; Human and Organizational Capital; Governance, Leadership, and Accountability; and Culture, Climate, and Organizational Efficacy. The two additional system components, Teaching and Learning Resources and Financial Resources, were drafted by selected individuals beyond the planning team with drafts submitted to the entire planning team for review and approval.

Engagement Beyond the Planning Team

Several support mechanisms have been provided for the work of the Vision Project Planning Team. A coordinator/facilitator was retained for the project and each of the sponsoring associations dedicated staff time to the project. Seven facilitators were retained to serve as task managers and to write the early drafts of the seven reports. The facilitators are experienced educators who have been recognized for their visionary leadership as superintendents or in other capacities and for their willingness to participate in this long-term undertaking. Visits to several public and private post-secondary institutions were made to solicit the services of university faculty to serve as research associates for the project. Over 30 faculty members at 12 colleges or universities agreed to serve as research associates and have participated actively in the project. In addition, K–12 educators have served as research associates under the auspices of the Professional Association of Georgia Educators.

Community conversations were conducted in nine geographical regions across the state for the purpose of seeking input from educators, parents, students, other citizens, civic and professional organizations, chambers of commerce, the business and professional community, parent-teacher associations and organizations, the faith community, local agencies, local elected officials, and other interested stakeholders. A strategy was developed to ensure that a representative cross-section of citizens participated in each of the

sessions. The goal was to ensure that every constituent group was appropriately represented at each session. Over 800 citizens of Georgia attended the community conversations.

The participants were asked to envision what public education in the state would look like in 2015 assuming the state had been recognized nationally as having an excellent system. Some 1,590 comments were recorded, transcribed, and sorted, first by the seven education system components and then by specific topics within each of the components. Participants were also asked to identify those aspects of public education they wished to preserve and those aspects they wished to see changed to ensure excellence. Some 534 comments were recorded relating to aspects to be preserved and 750 relating to proposed changes. Comments recorded at the nine sessions totaled 2,874. Many of the participants in the conversations expressed a desire that such conversations be conducted in their own communities on a regular basis so community members could be more meaningfully involved with their schools. A report of the community conversations is available online at www.visionforpubliced.org.

Four conversations were conducted by the planning team with secondary school students in four geographical regions of the state in urban and rural settings. The conversations were conducted for the purpose of hearing students' perspectives about the quality of their educational experiences and their recommendations for improving public education. Each of these two-hour conversations involved 10 to 20 students, 5 to 10 members of the planning team, and a variety of other interested individuals. Students were eager to participate in the conversations and were not reluctant to share their experiences or their views about ways in which public education may be transformed to meet the needs of today's and tomorrow's students. The conversations were of great value to the planning team in developing the final drafts of the reports. A report of the student conversations is available online at www.visionforpubliced.org.

The early drafts of the reports were reviewed by external reviewers who have extensive knowledge in one or more of the components addressed in the reports. Reviewers were familiar with the research, literature, and current practice in the system component for which they agreed to conduct a review. External reviewers were requested to read critically the report on the system component and to respond to a series of questions about coherence, accuracy of information, and consistency among guiding principles, key issues, and recommendations. In addition, members of our intended audience and educational policymakers reviewed the reports to determine whether the reports communicated effectively, included recommendations that were actionable, and made sense in the context of transforming public education in the state.

The pre-final project report was prepared by McREL, after which a quality assurance review was conducted by the planning team, the executive committee for the project, and the Boards of Directors of the Georgia School Boards Association and the Georgia School Superintendents Association, who then approved the report for final drafting and distribution.

Prior to adoption of the report, the design team and the planning team developed and adopted a proposed strategy for distribution of the final report. The purpose of the strategy is to communicate the work of the project to school districts, local communities, and local and state policymakers through a common language. The ultimate goal of the transformation strategy is to build a viable education culture in Georgia that compels the adoption of policies, programs, and practices that will truly transform public education in our state.

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2 Questions Guiding the Vision Project

The Vision Project Planning Team determined at the outset of this project that for the work to have value it must be accomplished in the context of the answers to a set of fundamental questions about public education. These questions are at the heart of our democratic society. The answers to them will determine the course we pursue in providing an educational experience for our citizens. These are the questions we must answer to guide our work:

- What is the purpose of public education?
- What are the goals of public education?
- What is our vision for public education?
- What is the value of public education?

Purpose of Public Education

As with many social issues, the purpose of public education has been debated vigorously over the years, and that debate is likely to continue unabated. "Purpose" is the answer to the question of why any organization exists. The authors of a 21st Century Schools paper state that the purpose of education is "to enable individuals to reach their full potential as human beings, individually and as members of a society" ("The Purpose of Education," n.d., p. 1). According to Schlechty (2009), the purpose of schools is ensuring that a uniform quality of instruction is accessible to all students. "The difficulty," he states, "is in defining quality of instruction" (p. 5). Senge (2006) distinguishes between vision and purpose saying ". . . vision is different from purpose. Purpose is similar to a direction, a general heading. Vision is a specific destination, a picture of a desired future. Purpose is abstract. Vision is concrete" (pp. 138–139). Senge argues that vision and purpose are inextricably linked; one without the other is of little value.

The planning team offers as its definition of the purpose of public education "the preparation of high school graduates for college, career, and life." We realize that these terms beg further explanation and offer our report for that purpose. We agree with Senge that purpose and vision are inextricably linked. We would add that purpose and vision are also linked inextricably with the goals of public education.

Goals of Public Education

Since the founding of America, policymakers and educators have undertaken articulation of the goals of public education. Rothstein, Jacobsen, and Wilder (2008) reviewed the outcome goal statements of several

of these efforts and have concluded that they generally focus on eight broad categories of outcome goals defining ". . . a range of knowledge, skills, and character traits that Americans have always wanted schools to develop in our youth." They concluded that "it is for outcomes in these eight categories that we should hold public schools . . . accountable" (p. 13).

1. *Basic academic knowledge and skills*: basic skills in reading, writing, and math, and knowledge of science and history.
2. *Critical thinking and problem solving*: the ability to analyze information, apply ideas to new situations, and develop knowledge using computers.
3. *Appreciation of the arts and literature*: participation in and appreciation of musical, visual, and performing arts as well as a love of literature.
4. *Preparation for skilled employment*: workplace qualification for students not pursuing college education.
5. *Social skills and work ethic*: communication skills, personal responsibility, and the ability to get along with others from varied backgrounds.
6. *Citizenship and community responsibility*: public ethics; knowledge of how government works; and participation by voting, volunteering, and becoming active in community life.
7. *Physical health*: good habits of exercise and nutrition.
8. *Emotional health*: self-confidence, respect for others, and the ability to resist peer pressure to engage in irresponsible personal behavior. (p. 14)

The planning team generally agrees that the ones stated by Rothstein et al. are, in fact, the major goals of public education. The real issue related to educational goals is the emphasis that is ultimately placed on each one of them as demonstrated by the resources (broadly defined) allocated to each of them. Throughout our country's history certain goals have been emphasized to the detriment of others. An extended discussion of goal distortion and the consequences it has for public education is contained in Rothstein and colleagues (2008).

Vision for Public Education

It is a common practice today for most public and private organizations to engage in a visioning activity as part of their short- and long-range planning. The framing of a vision has become a ritual for state educational agencies, local school districts, and schools as they undertake initiatives to improve the delivery of educational services. Typically, the visioning activity is part of a strategic planning process. The questions to be answered are these:

- What do we want our organization to look like at a given time in the future?
- What do we hope to become?
- What do we want to create?

> We believe that our envisioned future should include the assurance that every graduate of our public schools is prepared to be a contributing member of our American society. Our vision must have as its foundational premise the preparation of our students for college, career, and life.

Fullan (2008) states that we cannot hope with any degree of certainty to predict the future, but we can develop a theory to make sense of the real world and test it against that real world over time. We believe that the leadership of public education has an obligation to develop a theory—a vision—for the future of public education in a rapidly changing and unpredictable world. We can then work diligently to ensure that the future we envision is realized. We believe that our envisioned future should include the assurance that every graduate of our public schools is prepared to be a contributing member of our American society. Our vision must have as its foundational premise the preparation of our students for college, career, and life.

It is crucial for stakeholders in public education to have a shared vision. While shared visions emerge from individual visions, those individual visions must be refined and combined into a single, shared vision. The Vision Project Planning Team has sought and received input from educational professionals, citizens across the state, and students enrolled in our public schools. Our goal has been to create a vision statement that reflects the best thinking of those who have shared their personal visions. Those who are engaged in, believe in, and support public education have a greater need than ever before to share one vision and speak with one voice. Senge (2006) notes, "shared vision is vital for the learning organization because it provides the focus and energy for learning" (p. 192).

The National Council of the Churches of Christ (NCC) in the USA (2010, May 18) states in a letter to President Obama and Members of Congress that "it is time to guarantee for all children in the United States a comparable opportunity to learn that includes a quality early childhood education, highly qualified teachers, a curriculum that will prepare students for college, work and community, and equitable instructional resources" (p. 3). The statement of the NCC is consistent with the series of statements generated by the Vision Project Planning Team in its session on creating a vision for public education in Georgia. The NCC statement is also consistent with the input received from community and student conversations held by the Vision Project Planning Team over the state. We believe it is important to first state our vision in a single, concise, coherent, and compelling sentence and then to elaborate on that vision statement. Our vision is this:

Public education in Georgia will provide all children an equitable and excellent education that prepares them for college, career, and life.

This vision should challenge all who are engaged in public education to ensure that the educational experiences of our students add significant value to their preparation for college, career, and life. We offer, in support of our vision statement, a series of premises that are essential elements of an education system that is universally valued and respected as the best opportunity for peace and prosperity in our state, country, and world. Georgia's Public Schools

- provide for Georgia's youngest children learning opportunities that enhance their chances for success in their years of formal education;
- provide a curriculum that is rigorous, relevant, and real;
- ensure for every classroom a highly qualified and caring teacher;
- respond effectively and with a sense of urgency to the needs of all children, especially those most vulnerable to the perils of low achievement;
- provide an environment in which students are engaged in learning that is motivated by their natural curiosity and interests;
- through collaboration, innovation, and trust, ensure that all children are served in a culture of engaged learning;
- prepare students to compete and prosper in a global society;
- are universally supported and are recognized as an integral part of every community;
- flourish in a culture that regards education as an essential and valued element of a successful, modern, global society in which all citizens are life-long learners;
- ensure excellence and equity for the benefit of all citizens of Georgia;
- are characterized by safe, secure, orderly, and respectful environments; and
- understand that learning occurs beyond the walls of the schools and leverage that understanding to the benefit of the learner.

In the development of our vision for public education in Georgia, we must accept the reality that we as a nation and as a state are experiencing a sea change of discovery, innovation, and technological advances with change occurring at an exponential rate. If we can focus our attention on the immediate future, develop a coherent plan for transforming education in the short as well as the long term, and work diligently to use that transformation to affect significantly and positively the educational experiences of our children and youth, we will have made a significant contribution to the future of our state.

The Value of Public Education

From the founding of our country, great value has been placed on the education of all citizens with tax-supported public education being the vehicle to ensure equal educational opportunity for all. Public education allows individuals to ". . . receive an education which will enable them to think and act intelligently and purposefully in exercising and protecting the rights and responsibilities claimed by the Declaration of Independence, the Constitution, the American Dream" ("The Purpose of Education," n.d.). Glickman (2003) states that "the challenge of fully realizing democracy in twenty-first-century America depends heavily on the role that public education and schooling play in constructing democratic principles among students, the community, and larger society" (p. 301).

The public schools in Georgia educate more than 1.6 million students representing more than 90 percent of the school age children in the state. All children in our state have an equal opportunity to enroll in a public school wherever the student may happen to live. Public education ensures that all children are served, and equitable access to an educational opportunity is the right of all unless that right is forfeited by action of the individual. The opportunity exists for all school-age children to prepare for college, life, and career through enrolling in a public school. We cannot say truthfully that today all of our students are being equally or well served. With that acknowledgment, we cannot say that every child has the opportunity to be prepared equally for college, life, and career. It is the purpose of this visioning initiative to offer recommendations that will transform public education to ensure that all children have an excellent educational opportunity in schools staffed and led by high quality, dedicated, and caring professionals.

Promotion of Public Education in Georgia

Georgia's public schools have now experienced nine consecutive years of significant underfunding and have been required to operate in a negative environment of constant criticism particularly since the enactment of the No Child Left Behind Act (NCLB). The current system is driven by state and federal accountability based on compliance which dampens the enthusiasm for innovation and responsible risk taking. Despite all of the negative publicity in recent months and years, the public schools in our state are likely performing at the highest level in history while attempting to meet arbitrary goals established in the political arena. Local boards and superintendents are often limited to a compliance role in implementing programs and strategies that are contrary to what we know are best for students. The recommendations that are contained in this document are designed to move public education from a culture of compliance to a culture of innovation and creativity. The recommendation immediately below is offered as a first step toward developing a positive image for public education in our state.

Recommendation 2.1: Promote public education as the cornerstone of American democracy by publicizing student and school successes through all available media.

Elected officials, the State Department of Education, professional education organizations, schools and colleges of education, local school districts, individual schools, and other advocates for public education should begin immediately to publicize through all available media educational successes in the public schools of Georgia. The successes of local districts are often lost in favor of media stories about isolated mistakes, oversights, and wrongdoing. The constant goal should be transparency in reporting both accomplishments and failures, as requested by citizen input in the community conversations conducted by the Vision Project.

Final Thoughts

The Georgia School Boards Association and the Georgia School Superintendents Association have not previously endeavored to create a comprehensive vision for public education nor enumerate the actions required at the appropriate policy levels to improve significantly the educational opportunity for all. We believe the time has come for us to engage in the important work of creating the vision.

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3 Early Learning and Student Success

Introduction

This section discusses the first of seven educational system components to support a new vision for public education in the state of Georgia. This component focuses on supports that promote early learning for children birth to five years old and that foster later school success in the K–12 education system.

> The first five years of life are critical to a child's lifelong development. Young children's earliest experiences and environments set the stage for future development and success in school and life. Early experiences actually influence brain development, establishing the neural connections that provide the foundation for language, reasoning, problem solving, social skills, behavior, and emotional health. (Getting Ready, 2005, p. 1)

The social unit that children are born into—the family—has a significant influence on their growth and development. "Family" is broadly defined as a child's primary social network—an organized, durable network of kin (including parents, siblings, and other persons sharing common ancestry) and non-kin (unrelated individuals) who provide domestic needs of the children and assure their survival (Stack, 1996). This is the definition of "family" we use throughout this section, rather than the prevailing paradigm of two parents and their children.

"The first five years of life are critical to a child's lifelong development. Young children's earliest experiences and environments set the stage for future development and success in school and life.

> Families play a critical role in helping children get ready for school. Children from families that are economically secure and have healthy relationships are more likely to succeed in school. Infants and young children thrive when parents and families surround them with love and support and opportunities to learn and explore their world. (Getting Ready, 2005, pp. 1–2)

Families also play a key role in developing children's early literacy experiences. Family engagement in children's learning from birth through the school years is a key factor in fostering student success. To support family engagement, there must be a systemic focus on enhancing the literacy skills of families to meet current educational standards. Once families are engaged in children's learning, we must continue to sustain family engagement to support, monitor, and advocate for their children. We must develop the family's investment in their children's learning at all levels to align and reinforce not only what children learn but what families can do to support that learning.

> Children will not enter school ready to be successful unless families, school districts, and communities provide the environments and experiences that support the physical, social, emotional, language, literacy, and cognitive development of infants, toddlers, and preschool children.

Communities and organizations that serve them are key actors in helping prepare children for school success. When communities provide social support for families, learning opportunities for children, and services for families in need, everyone benefits. Communities that recognize the critical connections between the care and education of young children as key to supporting families can work together to build the foundation for a strong structural network of services and support. Many families needing or seeking assistance often face multiple, complex concerns and may require the services of more than one program. Communities that recognize this shared responsibility mobilize their resources to meet family needs efficiently and effectively. They unite citizens, families, faith communities, employers, schools, and service agencies in the creation and implementation of strategies to achieve better results for children and families in their communities.

Such mobilized communities usually take three actions: 1) focus efforts on achieving more positive outcomes for children, youth, and families; 2) fill gaps in education, health, family support, childcare, economic support (income, job training, transportation), and related human services; and 3) link services to bring more continuous and convenient help to families. The most successful initiatives use evidence-based programs and practices to address local needs and then sustain the collaborations over a period of time. Through these efforts, communities enhance the capacities of families to address their social, economic, health, spiritual, cultural, educational, and other developmental needs through building and strengthening individual capacities. Concurrently, the communities improve their service delivery structures and increase family access to services and social support networks (Center for the Study of Social Policy, 2006; Melaville, Blank, & Asayesh, 1993).

> School districts can improve the readiness of young children by making connections with local childcare providers and preschools and by creating policies and practices that ensure smooth transitions to kindergarten. Children entering kindergarten vary in their early experiences, skills, knowledge, language, culture, and family background. Schools must be ready to address the diverse needs of the children and families in their community and be committed to the success of every child.
>
> Children will not enter school ready to be successful unless families, school districts, and communities provide the environments and experiences that support the physical, social, emotional, language, literacy, and cognitive development of infants, toddlers, and preschool children. Efforts to improve school readiness are most effective when they embrace the rich cultural and language backgrounds of families and children. (Getting Ready, 2005, p. 2)

A coherent and comprehensive strategy for family, school, and community engagement is necessary for better outcomes for children.Our state must undertake a new and radically different approach to supporting young children and their families. To achieve our vision for Georgia, supports for early learning are an essential foundation for student success. Our state needs to

- ensure that families needing childcare can find nurturing, safe, high-quality, and affordable care;
- widely disseminate easy-to-use information and resources about young children's healthy development to all families; and
- work together in a more systematic and coordinated fashion to align our efforts toward reaching common goals.

The Early Learning and Student Success component is meant to inform and influence citizens, policymakers, practitioners, and funders on the importance of ensuring the healthy growth and development of children birth to five years old. This section will recommend transformative practices that schools, communities, policymakers, and stakeholders can use to address factors that contribute to and support early learning and development for these children and their families.

The Early Learning and Student Success component of the Vision Project is designed to bring together people and resources with proven programs and practices, to help create the early learning supports, services, and systems Georgia families need. These recommendations will inspire and activate a greater local, state, and federal priority for early learning initiatives that align early childhood and K–12 educational systems.

Guiding Principles

Four guiding principles underlie the recommendations in this section:

- Responsibility for children's readiness lies not with the children, but with the adults who care for them and the systems that support them.
- Child development occurs across equally important and interrelated domains—physical well-being and motor development, social and emotional development, approaches to learning, language development, and cognition and general knowledge.
- The family plays the most important role in a young child's life.
- The first five years of life are a critical developmental period.

These guiding principles underscore the important opportunities that exist to influence the healthy development of children in their early years. Public policies should seek to address these opportunities to provide all children—and their families—with a range of services and supports that promote children's well-being and development.

Key Issues

The key issues relating to early learning and student success are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers, from the experience of the members of the planning team, and from the project's research associates. The key issues are

- children's readiness for school,
- schools' readiness for children, and
- economic benefits of investments in early learning programs.

Children's Readiness for School

School readiness is a term used with increasing frequency to describe expectations of how children will fare upon entry to kindergarten. If oversimplified, school readiness can be interpreted to mean whether a child can demonstrate a narrow set of skills, such as naming letters of the alphabet and counting to 10. Yet, years of research into child development and early learning show that children's readiness for school is defined by several interrelated developmental domains. These domains—physical well-being and motor development, social and emotional development, approaches to learning, language development, cognition, and general knowledge—all are important because they build on one another and form the foundation of learning and social interaction (Kagan, 1992, 1994).

Characteristics of School Readiness

Children's readiness for school encompasses their

- curiosity and enthusiasm for learning,
- physical and mental health status,
- ability to communicate effectively,
- capacity to regulate emotions,
- ability to adjust to the kindergarten classroom environment, and
- ability to cooperate with their teachers and peers.

Children who are ready for school are those who, for example, play well with others, pay attention, respond positively to teachers' instructions, communicate well verbally, and are eager participants in classroom activities. In addition, stable relationships with parents and caring adults and safe, nurturing, and stimulating environments are all fundamental to school readiness (Kagan, Moore, & Bredekamp, 1995).

Responsibility for children's readiness for school lies not with children themselves, but with the adults who care for them and the systems that support them. Starting at the top, state agencies are responsible for making informed human services policy decisions, committing sufficient resources, and connecting programs and services to all children who need them. Across all early care and education arrangements for infants, toddlers, and preschoolers, state agencies have the responsibility for setting program standards for health, safety, staffing, and learning standards for what children should be encouraged to know, do, and experience. Furthermore, state agencies often determine professional development criteria and decide policies for compensation of early care and education professionals and program evaluation of the impact of services on child and family well-being (National Governors Association [NGA], 2010).

State agencies also play a role in promoting relationships with the higher education, early care, and education professional communities to improve the professional development and training system. In addition, they provide incentives and scholarships for early childhood professionals to seek higher credentials and training.

While high-quality early childhood education programs in Georgia are currently preparing educators to teach preschool, current programs do not provide credentials to those who administer home care programs. State agencies can bridge the gap between the Child Development Associate (CDA) credential and the university degree through certification, licensure, and additional degree programs that focus specifically on early learning from birth to age five.

Finally, state agencies can support parents by providing information on child development and quality care and education options, pursuing strategies to make high-quality care more affordable, and giving parents an equal voice in school readiness policy discussions (NGA, 2010). Local advocacy groups such as early learning coalitions can serve as the gathering point for family participation in school readiness policy development and implementation. The proposed annual statewide Early Learning Summit will serve as a key access site for disseminating information and connecting families and providers with increased opportunities to improve early learning at all levels.

Parents, families, and communities have a shared responsibility to engage in preparing children for school long before those children ever meet a teacher. Research confirms that parents and caregivers are the children's first teachers. The time between a child's birth and subsequent entry into a formal education program is a critical developmental period. Providing support for families and caregivers during the early years will build a strong foundation for school readiness and future student success.

Communities that provide opportunities to develop and support parents' literacy skills combined with access to high-quality childcare programs can play a key role in preparing children for school. Access to state regulated and licensed childcare programs with state approved curricula is a key support that communities can provide for families. Communities can also be an important conduit of information on best practices in literacy skills, wellness programs, and parenting strategies.

Across all systems that serve young children, including prekindergarten, childcare, foster care, early intervention, and maternal and child health, state agencies can improve cross-system collaboration and recognize the role each system plays in promoting school readiness for all children. State agencies can align eligibility guidelines, streamline in-take procedures, cross-train professionals in child development, and encourage cross-program referrals and joint outreach and information efforts to parents. State agencies can also integrate service delivery efforts, co-locate programs and partner with community organizations to provide comprehensive services. Finally, state agencies can bring together stakeholders including families, schools, and communities, to identify challenges, develop priorities, and implement solutions at the state and local levels (Kagan & Cohen, 1997; NGA, 2010).

Schools' Readiness for Children

The nature of children's development and learning dictates two important school responsibilities. Schools must be able to respond to a diverse range of abilities within any group of children. The curriculum and teaching in the early grades must provide meaningful contexts for children's learning rather than focusing primarily on isolated skills acquisition.

Responding to a Diverse Range of Abilities

Local school systems can provide leadership in communities by helping to coordinate comprehensive community services and family supports to children prior to school entry, which will serve to better prepare children for the expectations and requirements of the K–12 system. Decades of research have established that the well-being of children, youth, and families are affected by community conditions such as economics, residential stability, safety, social opportunities, and interpersonal relationships (Shonkoff & Phillips, 2005). These conditions are promoted, in large part, through the mobilization of community resources in support of families. These mobilized comprehensive community support services are designed to leverage the strengths and meet the identified needs of individuals and families. The coordination of income support, medical, dental, childcare, educational, and transportation services allow families to meet fundamental needs and focus on promoting the development of skills that help children get ready for school.

Local school systems must give consideration to the professional qualifications of teachers both before they enter the classroom and after they are on the job. Such professional qualifications are closely related to the overall quality of early learning programs. Precisely what constitutes optimal preparation among early childhood educators—both for supporting effective teaching for a diverse student population and for the establishment of salaries that can attract a stable, high-quality workforce—has been long debated (Ackerman, 2005).

Research indicates that higher levels of education and training can help improve teachers' interactions with children in ways that positively affect learning (Maxwell, Field, & Clifford, 2006). Studies suggest that skilled professionals can more effectively promote and support young children's cognitive, social, and emotional growth when they know how to capitalize on the period of critical early brain development before age five. Pre-kindergarten teachers who have earned bachelor's degrees and have additional, specialized training in early childhood education have generally been found to be more effective than those without these qualifications (Maxwell et al., 2006). In addition to improving the quality of teaching, stronger preparation requirements may help to professionalize the early childhood workforce. The resulting higher pay, in turn, would attract a better-quality workforce, reduce turnover, and provide greater incentives toward the ongoing improvement of practice (Cost, Quality, and Childcare Outcomes Study Team, 1995).

Providing a Meaningful Curriculum in the Early Grades

Because individual differences in development variations will always exist in the skills and abilities of any group of children entering school, schools and teachers must be able to respond to such variation by individualizing their curriculum and teaching practices. Making schools more responsive to the needs of individual learners will require a workforce of teachers and administrators who understand how children

Goal 1 Ready Schools

The Goal 1 Ready Schools Resource Group of the National Education Goals Panel (2000) identified ready schools as those that demonstrate a commitment to the success of every child, regardless of his or her prior experiences, family and economic circumstances, linguistic and cultural background, and natural abilities and interests. These schools adopt curriculum and instruction methods that are research-based and support high standards. Ready schools hire qualified teaching staff, provide ongoing professional development opportunities, and compensate staff at a high level. Moreover, these schools are responsive to individual children's needs, provide environments that are conducive to learning and exploration, and incorporate children with special needs in regular classrooms whenever possible. Ready schools also ensure that second-language learners receive an age-appropriate, culturally sensitive, and challenging curriculum. In addition, ready schools take responsibility for results, engage in demonstrated best practices, and revise practices that do not benefit children. These schools also serve children in their communities, connecting children and families to resources and services, and taking an active role in community activities. Finally, ready schools are supported by strong leadership from school administrators who provide instructional focus and coherence to the programs they oversee.

learn and develop. Educators must know how to plan and implement a developmentally appropriate curriculum that places greater emphasis on child-initiated, teacher-supported learning experiences than teacher lectures, small group as opposed to whole-group activities, integrated lessons as opposed to strict demarcations among subject areas, and active hands-on learning with a variety of materials and activities, as opposed to drill and practice of repetitive seatwork.

Rather than imposing rigid, lock-step distinctions between grades, schools may offer continuous progress for children through the primary grades recognizing that children's developmental timetables do not conform to the yearly calendar. Making the necessary changes will require new understanding and resources. In addition to ensuring that teachers of young children have specialized training in child development and early education, class size should be reduced and additional adults provided to ensure individualized instruction. Investments in classroom equipment and materials also are needed so that children have access to a wide array of materials and activities for hands-on learning.

Economic Benefits of Investments in Early Learning Programs

Early education programs have long been regarded as an important step in preparing children for primary school, and investing in the education of America's youngest learners has emerged as one of the most promising ways to help strengthen the future economic and fiscal position of our state and the nation. A significant challenge is to create the political will to provide the financial support required to establish viable early education programs across our state and nation. Greater coordination of the funding effort among federal, state, and local entities could result in more effective design and implementation of early childhood education initiatives.

Money invested today in high-quality, early education will help children develop the social, emotional, and academic foundations that will serve them throughout life. Additionally, widely accessible early childhood education programs will do more than prepare individual children for personal success: the economy will benefit from a better prepared workforce, increased employment opportunities, stronger growth, and rising standards of living; and society will benefit from less crime, enhanced schools, and children who are better prepared to participate in democratic processes (Barnett, 2004).

While preschool is an economic and educational priority, it is also part of a continuum of necessary childhood investments, beginning in the prenatal months and spanning the infant, toddler, and later school years that together will have the greatest impact on children's development and, ultimately, America's economic well-being. Remediation in the later school years, or through adult education and training programs, is often only moderately successful, and the direct costs of remediation, as well as the indirect costs of inadequate education, are huge.

High-quality preschool programs contribute to America's economic bottom line in three related, yet distinct, ways. First, the positive impact from these programs on students' lives increases the likelihood that these students will end up as net economic and social contributors to society. Second, governments can dedicate more of their resources to productive endeavors, rather than to remediation, incarceration, and welfare. Finally, sustained preschool investments are a cost-effective way to ensure a better educated workforce, boosting long-term economic growth (Barnett, 2006).

In the short term, providing access to high-quality early childhood education assures a more successful transition to primary school. The benefits of early education persist long after children enroll in kindergarten. Convincing evidence of the long-term benefits of preschool is now available from high-quality, rigorously evaluated early childhood education programs—most notably the High Scope/ Perry Preschool program, the Abecedarian program, and Chicago Child-Parent Centers—that enrolled economically disadvantaged children and followed them into their adult years. In brief, children who participate in high-quality preschool programs demonstrate higher academic achievement, are less likely to repeat a grade or require special education classes, and are more likely to graduate from high school and enroll in college. They are less likely to participate in criminal activity during their juvenile or adult years, or be victims of child maltreatment or neglect. As adults, former preschool students are less likely to be unemployed and more likely to have higher earnings than similar students who do not participate in preschool programs. Former preschool students are less likely to depend on public assistance, become teenage parents, or endanger their health by smoking (Washington & Andrews, 2010).

Current Practices of Promise

Current practices of promise are those programs, activities, or strategies currently being implemented in states, districts, or schools across the nation for which a body of research or other evidence has demonstrated their effectiveness in certain environments and under certain conditions. It is generally accepted that particular practices have earned the label "best practice," but there is often disagreement over whether a given practice is "best" or "promising." Throughout this report, we cite practices that are believed to have merit.

Much of the research that demonstrates the long-term benefits of children's participation in early childhood programs comes from rigorous studies of three comprehensive, high-quality, center-based programs (Barnett, 2008). While these demonstration programs were funded for a specific period of time

and designed to measure the impact of the intensity and duration of early care and education services on children's development, the basic components of these programs remain the foundation of current initiatives in many states. Brief descriptions of the three programs follow.

- The HighScope/Perry Preschool Program was a full-year, full-day program that targeted at-risk three-and-four-year olds. Teachers conducted weekly home visits, and the project used a curriculum designed to support self-regulated learning. The child-teacher ratios mirrored those of the Abecedarian Project, at less than 6:1.
- The Abecedarian Project was an intensive intervention that enrolled children in a full-day, full-year program from six months through kindergarten. Key characteristics of this project were the low child-teacher ratios (3:1 for infants, 6:1 for preschoolers); extensive family support services, including home visits from teachers; and the use of highly trained and certified professional staff.
- The Chicago Child-Parent and Expansion Program provided low-income children with a half-day preschool program, kindergarten, and follow through in the early elementary school years (Reynolds, Temple, Robertson, & Mann, 2002).

All three of these demonstration projects found significant, long-term benefits for children who attended the program. Unfortunately, because these programs were demonstration projects, there has been no sustained financial commitment to fund these projects, even though there were clear long-term benefits, including a reduction in grade retention and special education remediation and increased high school graduation rates. In addition, in later years these children were found to have lower rates of juvenile delinquency, more job stability and economic earnings, and reduced rates of drug use and mental health problems (Barnett, 2008; Nores, Belfield, Barnett, & Schweinhart, 2005).

In Georgia, several significant initiatives have been developed that are based on the promising results of the demonstration projects mentioned above. In Bibb County, citizens approved an education special purpose local option sales tax to provide capital improvements to support modern programmatic changes which supported best practices. One of the capital projects was Northwoods Academy, the Bibb County School District's early learning center for children between the ages of three and six. The academy serves general education and special needs children through an inclusive model. Services are delivered in partnership with district specialists and state and local human services personnel. Community partners, local business, and college and university students work together to develop good school habits that lead to success in life. The path to graduation and post-secondary options begins at birth, and Northwoods Academy provides students the opportunity to begin their school journey successfully in an environment that develops their social, emotional, and academic foundations.

The city of Decatur has implemented an early learning initiative that coordinates the work of educational and human services agencies to provide comprehensive and multi-year services to young children and families to better prepare the children for success in public school. Sheltering Arms' Early Education

and Family Centers has received numerous awards for its work in providing comprehensive, high-quality services for children birth to five years and their families. The program has been selected by the Annie E. Casey Foundation's Human Services Workforce Initiative as a best practices model for the retention and professional development of frontline human service workers and by the National Association of State Boards of Education, which has twice included Sheltering Arms in its studies of seven select national child development programs noted for innovative work and accomplishment.

Within the last decade, states have implemented research-based programs to support early learning in their local contexts. For example, The School Readiness Indicators Initiative, a three-year program from 2001–2004 with 17 participating states, "used child well-being indicators to improve school readiness and ensure early school success through systems building in states and local communities" (Getting Ready, 2005, pp. 10–11). Since 2004, participating states have continued the work begun through this initiative. For example, the Washington State Department of Early Learning has partnered with Thrive by Five Washington, the state's nonprofit public-private partnership for early learning. The organization's mission is to "mobilize public and private partners to advance development and learning of children from birth to age 5" ("About Thrive," n.d., p.1).

The Harlem Children's Zone (HCZ) is an example of comprehensive collaboration that is paying off with considerable success for children and their families in New York City's Harlem Neighborhood. It is a coordinated strategy for the entire community environment beginning with healthy births, safe neighborhoods, and quality learning. HCZ emphasizes accountability for successful outcomes in the areas of health, quality childcare and education, social services, supported and supportive families and more. It links the early years to ongoing academic achievement and personal development for each child. HCZ is a comprehensive strategy, focusing on the whole child, providing continuity of services and demanding robust evaluations to validate accountability and successful outcomes for children (Washington & Andrews, 2010).

HCZ demonstrates that coordinated comprehensive services can be achieved and result in measurable improvements. The two fundamental principles of the HCZ project can serve as important guidelines for work in Georgia communities: 1) support children in a sustained, comprehensive way, starting as early in their lives as possible; and 2) surround children with a critical mass of adults who understand what it takes to help children succeed ("The HCZ Project," n.d.).

FirstSchool is a pre-kindergarten through 3rd-grade initiative led by the Frank Porter Graham (FPG) Child Development Institute and the School of Education at the University of North Carolina-Chapel Hill (Ritchie, Maxwell, & Clifford, 2009). FPG has been engaged in research and outreach relating to the care and education of young children for more than forty years. The FirstSchool initiative is part of a national movement to improve the education and development of children. FirstSchool is in its infancy but shows great promise. Several school systems around the country, including Montgomery County, Maryland, have successfully implemented the FirstSchool model, which is designed to serve children from ages three through eight. The initiative is an effort to move away from the separate notions of early childhood education, K–12 education, and special education. A primary goal of the program is to rethink public

education for children three to eight years old in partnership with a broad community of people who care about young children. The program adopts an inquiry approach to change and espouses six values:

- Making schools ready for children, not making children ready for schools
- Committing to the success of each child
- Investing resources and time to bring about systemic change
- Exploring and strengthening equity in all aspects of schooling
- Creating positive, reciprocal relationships
- Integrating and uniting the best of early childhood, elementary, and special education for children in pre-kindergarten through 3rd grade (2009)

Recommendations for Moving Forward

The recommendations described here are derived from the guiding principles, key issues, and current practices of promise enumerated in the previous sections. The recommendations are not necessarily mutually exclusive and may be integrated for implementation.

Recommendation 3.1: Create through a statewide initiative an Early Learning Collaborative in each county of the state that includes all human services organizations.

The purpose of the Early Learning Collaboratives is to coordinate all services for children birth to five years old and their families in local communities to ensure that these children and their families receive the quality and quantity of services necessary to prepare them to be successful in school and life.

These Early Learning Collaboratives will draw upon the strengths of community-based organizations and serve as "community hubs." The collaboratives will work with parents, schools, community leaders, early learning centers, and the private sector to support early learning for children birth to five years old as a shared responsibility. These collaboratives will engage in the following activities:

- Engage local stakeholders in creating a county-wide early learning plan;
- Implement programs to enhance parenting skills and link families with social networks and needed resources;
- Improve children's school readiness skills using research-based developmental screenings and assessments;
- Establish school transition teams made up of childcare providers, school staff, family representatives, and community partners to develop transition plans and year-long strategies for rising pre-kindergarten and kindergarten students;
- Mobilize and support families to be leaders and to advocate for themselves and their children in their communities; and
- Build grassroots support to advocate for improvements in policy and systems that impact child outcomes.

While a statewide initiative to create an early learning collaborative in every county is the goal of this recommendation, any local agency or group of interested individuals might initiate the process.

Recommendation 3.2: Create public-private partnerships in local communities between local businesses and educational and human services organizations for the purpose of establishing early childhood initiatives that address healthy child and family development and economic benefits to the community.

The development of partnerships across public and private sectors is a critical element of any successful early care and education system. Such public-private partnerships would be led by education, government, and business leaders and would be committed to making sure all children have the opportunity to thrive by the time they are five.

These partnerships would bring together people, resources, and proven programs and practices in the form of Early Learning Coalitions to help create the early learning supports, services, and system Georgia families and children need.

The role of the Early Learning Coalition and the local leadership boards that will be created will be to encourage, support, and ultimately sustain ongoing public-private partnerships. To ensure sustainability, ongoing support and training via the Annual Early Learning Summit and university outreach in the form of academic degree programs must align with the Early Learning Coalition to provide the necessary components for success:

- Foster infrastructure development strategies in the local context;
- Facilitate consensus building and local collaboration;
- Support the design and implementation of policy, regulatory, and institutional reforms;
- Encourage capacity building in local communities; and
- Identify and disseminate best practices across public-private partnerships.

In local contexts, public-private partnerships may take many forms. For example, businesses that adopt state recommended early learning curricula for in-house childcare programs can become exemplars of transformative corporate practice by establishing high-quality childcare and preschool options in the workplace.

The quality of these partnerships, and of the leadership they create, is the basis of the change needed to improve the quality of learning and life for our youngest citizens. When quality partnerships and quality leadership are matched to innovations in learning, policies and practice improve.

Recommendation 3.3: Adopt a statewide public engagement initiative to ensure that high-quality early childhood education remains a top priority for the state.

Ongoing public engagement efforts throughout the year will include local Early Learning Coalition meetings, workshops, and outreach efforts in the form of mobile clinics and neighborhood events and

an annual summit on early care and education. The annual summit may be a joint initiative sponsored by the Governor's Office for Children and Families, the Department of Education, United Way, the Georgia Chamber of Commerce, and professional early childhood organizations such as the Georgia Association on Young Children, the Georgia Child Care Association, and the Georgia Head Start Association.

Additional outreach and public engagement efforts may include a blog, other social media such as Facebook and Twitter, radio spots, billboards, and television public service announcements. Another way to utilize the public-private partnership model is to partner with television networks to provide regular early learning-focused programming content features for news shows that would be aired by local affiliates throughout the state.

Recommendation 3.4: Provide an opportunity for all children from birth to five years old to participate in high-quality, full-year, full-day educational experiences that are designed to promote all aspects of a child's development, from cognitive to social and emotional development in the home or in the care of a licensed public or private care provider.

A rigorous body of research demonstrates the long-term social and economic benefits of children's participation in a high-quality, comprehensive early care and education program from birth to kindergarten entry. The following variables increase the likelihood that children have received the necessary supports to enter public school ready for success in school and in life: small class sizes, degreed and/or credentialed teachers, extensive opportunities for meaningful parent involvement, and family support activities that focus on strengthening parenting skills and promoting economic self-sufficiency.

Supports for early learning and student success also translate into providing resources for families to prepare children for future educational success during the years prior to formal schooling. Support mechanisms such as the Early Learning Coalitions and Annual Early Learning Summit provide key access points for disseminating essential information and best practices to all families.

Recommendation 3.5: Adopt a pre-kindergarten through grade 3 integrated education model for all children ages four through eight.

Research indicates that pre-kindergarten through 3rd-grade elementary school reform has the potential to increase academic achievement and well being for all children ages four through eight. What children experience as they move from pre-kindergarten programs to kindergarten, and then through grades one, two, and three—the "Pre-Kindergarten Continuum"—is based on program standards that respect children's developmental requirements and capacity to learn at each level of the Pre-Kindergarten Continuum. By moving away from distinct divisions among pre-kindergarten, kindergarten, and grades one through three curriculum and teacher preparation and moving toward an integrated pre-kindergarten–3rd-grade educational delivery model, the developmental focus of pre-kindergarten education can be blended with the subject matter focus of grades kindergarten through three. Aligning program standards, blending curriculum, and designing instruction and assessment both within and across grades pre-kindergarten through 3rd grade will result in a developmentally appropriate and academically rigorous educational experience for all children ages four through eight.

Recommendation 3.6: Ensure adequate financial support for the implementation of viable programs for all young children.

While virtually everyone agrees that the first months and years of a child's life are critical to later development, and although numerous organizations advocate on behalf of young children, there are few examples of statewide coordinated efforts to support viable programs in the country. The family has the first responsibility for a newborn. The reality today, however, is that many families are either unprepared or unwilling to provide the support required for the child's healthy growth and development. Thus, state agencies have assumed certain responsibilities for selected aspects of child development. These efforts historically have not received the level of coordination and support required for them to be effective.

A significant impediment in designing and implementing childcare and early childhood education initiatives is the lack of political will to coordinate the funding of these initiatives and to fund them adequately. This has been a reality in Georgia and, to a varying extent, in much of the United States. In New Jersey, a more substantial commitment of resources to preschool educational programs was brought about after being ordered by the state supreme court. Suit was brought on behalf of poor and depressed school districts in the state to provide, among other things, high-quality preschool to all three-and four-year-old children. The Court ordered the state to provide universal, well-planned and high-quality preschool education for this age group. In a subsequent order by the Court, a strategy emphasizing instructional improvement supported by intensive professional development was approved. Additional funding was provided and student progress improved dramatically (Darling-Hammond, 2010).

Georgia has not made a commitment to fund a comprehensive early childhood education program for all children. A state commitment along with existing federal grant programs could be combined with local revenue sources to initiate services to prepare our youngest children for success in their later school years. Two major federal sources of funds for early childhood initiatives are the Child Care and Development Fund (CCDF) and the Temporary Assistance to Needy Families (TANF) block grant. States also may use the Social Services Block Grant (Title XX), IDEA funds, and Title I funds including funding from the U. S. Department of Health and Human Services' Head Start Program. The section of this report that addresses financial resources examines in greater depth other potential sources of funding for early learning.

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4 Teaching and Learning

Introduction

This section, one of seven on educational system components to support a new vision for public education in Georgia, focuses on the core business of the public education system. What we teach, what we expect students to learn, and how we assess the academic progress of students are our essential questions.

Teaching and learning is the mission of public education and, therefore, must be the central focus of a transformational process. The future of education in Georgia will demand curricula, assessments, and instruction that reflect advances in technology, the exponential growth of knowledge, and the type of student that has emerged from a culture of instant gratification and constant stimulation.

The methods by which students learn will continue to change rapidly. Less emphasis will be placed on the number of hours students sit in a seat and much more weight on what students actually remember, understand, apply, analyze, evaluate, and create. Advances in technology, including some that we cannot yet imagine, will continue to play a part in Georgia's future educational transformation. Efforts to provide students with access to a variety of hardware and software applications that mimic the ones that they use in their everyday lives will become line items on school budgets. Classroom teachers will continue to use technology for communicating and working with other teachers to write curriculum, develop assessments and lessons, track student progress, and participate in professional learning activities. As more technology solutions become available and teachers become more skilled at using them, education in Georgia will become less tied to the traditional classroom. Students will increasingly have open and continuous access to a variety of learning environments. They will be able to access traditional and non-traditional school classes at home, at work-study sites, and in other off-site settings.

“The future of education in Georgia will demand curricula, assessments, and instruction that reflect advances in technology, the exponential growth of knowledge, and the type of student that has emerged from a culture of instant gratification and constant stimulation.

None of these changes will be successfully realized without well-trained teachers. As Georgia's educational environments change, high-quality, job-embedded and ongoing professional learning must become a priority for all Georgia educators. Although there may still be a place for workshops, conferences, and seminars in a school district's professional learning plan, the real work of implementing change occurs at the school level and within the classroom. Teachers and leaders must be supported in collaborative groups and with

coaching as they continue learning and refining all aspects of their craft. Teachers must have the capacity to develop curriculum and assessments for the students whom they teach that match the contexts in which they teach them. Educational leaders, too, must be supported as they develop their ability to lead effectively by working in teams, continually analyzing pertinent data, and facilitating instructional effectiveness. This kind of deep learning takes time. For example, because a school focused on increasing descriptive teacher feedback to students two years ago does not mean that all teachers are currently fully operational. As Sharratt and Fullan (2009) point out, sustained improvement requires "enormous focused and sustained attention to small sets of key factors that are essential to success" (p. 12).

Learning communities support deep conversations about teaching and learning. They are places where teachers can study the research, develop action research projects, and, perhaps most importantly, take advantage of opportunities to share their own effective practices. Teachers typically join learning communities within their school while leaders work in learning communities with colleagues in other schools.

A system of coaching supports the professional growth of all members of the school community. Well trained instructional and leadership coaches work with individuals and groups to give feedback and suggestions as they acquire and maintain the skills targeted by the school, whether they be differentiated instruction, formative assessment, or leading effective meetings.

Despite such changes, three indispensable teaching and learning factors remain in the forefront of research and academic discussions. These factors—curriculum, assessment, and instruction—are interwoven and have an expected and natural link to each other. In this report, curriculum, assessment, and instruction are discussed in separate sections with the understanding that each factor is logically and inextricably linked to the other two.

Curriculum

Robust and challenging curricula are the bedrock of all that happens in schools. It is vital that schools and school districts take the time to work on developing and continually improving the curriculum. Knowledge is expanding at such a rapid pace that students can no longer leave high school, or even college, knowing all that they will need to know to be successful. Instead, students need a flexible, challenging, and meaningful curriculum that will engage them in learning how to acquire, organize, analyze, and use knowledge to solve problems. Curriculum should add meaning to students' lives by providing them with insight into and control over their experiences. Students must be engaged with the curriculum in ways that prepare them to use knowledge and skills to understand and to act purposively in the world.

A quality curriculum needs to address three complementary goals. First, Georgia's curriculum needs to be sufficiently connected to the real world that it provides the experiences necessary to create meaning for all of our students. Second, curriculum needs to be integrated so that students can make connections between and among the different but related experiences they have in school. Third, curriculum should be sufficiently balanced, broad, comprehensive, and flexible to enable all students unimpeded access to their academic and vocational goals and preparation for success in life after school.

Curriculum has been described as the "what" of education (Elmore & Sykes, 1992) or the sum total of planned and unplanned educational experiences. The standards movement that began in the 1990s pulled the terms "content standards" and "performance standards" to the forefront where content standards refer to the written documents describing what is to be taught and performance standards refer to the level at which students should learn the material to show mastery. The Georgia Department of Education adopted a broad definition that describes curriculum as "a system for managing and facilitating student achievement and learning based upon consensus-driven content and performance standards" (Georgia Department of Education, 2007, p. 5). Georgia adopted the Common Core State Standards in English language arts and mathematics in 2010 and previously developed the Georgia Performance Standards in these and other subject areas. It is essential that schools take these documents and breathe life into them by enabling teachers to collaborate on the development of challenging and engaging courses, units, and lessons.

Despite the cry for curriculum basics and essentials, there is still considerable support from educators and the general public for a curriculum that provides students with open access to the fine arts, physical education, multiple foreign languages, and vocational subjects. Comments from the nine community conversations strongly supported maintaining or expanding opportunities in these areas.

Assessment

The real purpose of student assessment must be to increase student achievement and success. Assessment must inform the instructional process by providing teachers, students, and parents with information on where students are in attaining specific skills and knowledge. A sound educational structure includes a balanced assessment system because there is no single method that accurately assesses student progress. Such a balanced variety of formative assessment methods is necessary to get an accurate picture of student achievement. Changing the way we view and use assessments can change radically the way education is delivered. Systematic implementation of performance assessment, as implemented in high-achieving countries and some states, will provide the key to transforming education (Darling-Hammond, 2010).

Instruction

The previous discussion illustrates how the roles and responsibilities of teachers are changing as we move to an educational system where

- students are engaged in learning how to acquire, organize, analyze, and use knowledge to solve problems;
- learning may take place in multiple sites at multiple times during the day and week; and
- students are assessed in multiple ways over time.

To manage such flexible learning environments, teachers must develop their ability to provide experiences that engage students in applying their knowledge and skills to real-world tasks. In addition, teachers must support students' learning by requiring them to develop hypotheses, investigate possibilities, and use reasoning and proof to determine whether their ideas are correct. No longer will the teacher be the sole authority for imparting a set body of knowledge; students must be active participants in their own learning.

Teachers must collaborate with their peers within their own school, across the district, and with peers in other districts to ensure that there are common understandings of curriculum goals and acceptable standards of performance. However, teachers also must be able to work independently to analyze the performance levels and instructional needs of the students in their classes to select instructional strategies and adjust instruction. Successful teachers will deliver and manage lessons live and online and be able to use technology to communicate with students and parents.

While many studies show the positive impact of effective teachers and effective teaching on student success, defining "effectiveness" is somewhat problematic. The recent trend has been to measure teacher effectiveness by students' ability to learn low-level information as measured by a narrow set of multiple-choice questions (Darling-Hammond & Adamson, 2010). The relevance of the instructional research findings are inextricably tied to the curriculum and assessment factors discussed above. We cannot know which strategies are most effective in reaching goals until curriculum goals and the assessments that will be used to measure them are clearly defined. It is clear, however, that students learn best in environments that have a consistent framework for learning.

Effective instructional frameworks include providing clearly defined curriculum goals and assessment methods that match the needs of all learners and the experiences learners have in school. Schools can no longer try to teach for the "average" child but must ensure that all students reach their potential. Teachers must know their content and their students well enough to select learning opportunities that match differences based on a variety of factors including background, cognitive ability, experience, and interest.

Guiding Principles

Ten principles underlie the recommendations in this section:

- High levels of learning are attainable for all students.
- People learn differently and at different rates.
- Motivated and engaged learners derive more from their learning than do passive learners.
- Students are more successful when they have a measure of ownership in their learning.
- High-quality, job-embedded professional development for teachers and leaders supports the teaching-learning process.
- The quality of teaching and leadership makes a significant impact on student learning.
- Strong curriculum is broad, balanced, continually improved, rooted in the real world, and based on a common set of learning expectations.
- A system of balanced assessments is an integral component of effective teaching.
- Clear, high, and attainable learning expectations are essential for student success.
- The integration of technology into educational practices is essential for student engagement.

> All students need to experience a curriculum that provides a clear connection between successful school completion and subsequent success and satisfaction in life.

Key Issues

The key issues relating to curriculum, assessment, and instruction are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers and from the experience of the members of the planning team and the research associates.

Curriculum

Schools that thrive and flourish are those that have something to offer, and that something is a challenging, engaging curriculum developed by local teachers to meet the specific needs of their students and the community. Schools that cannot meet the needs of their stakeholders will lose students and become increasingly less viable.

Connection to the Real World and the Lives of the Students

All students need to experience a curriculum that provides a clear connection between successful school completion and subsequent success and satisfaction in life. Experiences must enhance the students' self-efficacy, thereby increasing their educational and career expectations (Hackett & Betz, 1981). Curriculum content must not be treated in isolation from the world outside the school, but as intellectual capital that will empower students to encounter and be successful in that world. Teachers must engage students in authentic tasks that require the application of their growing knowledge and skills (Ravitch, 2010). Today's students will be faced with legal and medical choices and ethical dilemmas that will far outstrip any we have seen to date. Such an increasingly complex and interrelated world requires a broad curriculum that enables students to use knowledge and insight from the social sciences, humanities, sciences, mathematics, fine arts, performing arts, and the technical occupations to tackle the tasks and challenges that await them.

In the future, it will be important for school districts to increase flexibility in curriculum choices, formats, and access. It is likely that our schools will become even more culturally diverse than they are currently and that the demand for a broader range of courses based on interests and the expansion of knowledge will continue to grow. It is also likely that the demand for online courses, particularly at the high school level, will continue to grow.

Connectivity Across Disciplines

Georgia learning environments must be organized so that students can make connections between and among the subjects they study and between their school experience and their life outside of school. Students learn better when what they study in one class complements what they study in another class, and when they see a real connection between the school curriculum and their lives (Wraga, 2009). A connected curriculum provides students with educational experiences that build on one another, recognizes the reality that all experiences are connected, and prepares students as future citizens able to make decisions about social issues that transcend conventional subject divisions (Tanner & Tanner, 2007).

Preparation for Life, Citizenship, Post-Secondary Options, College, and Work

A balanced, broad, and comprehensive curriculum provides all students with the opportunity to pursue their academic, fine arts, foreign language, and vocational goals, whatever they may be. Moreover, preparation for citizenship in a democratic society—the historic function of education in the United States—must animate the entire school curriculum. All limits on student access to the curriculum must be removed to offer students multiple entry points and opportunities to develop their skills and pursue their goals. Students who demonstrate an interest in a particular subject area need to be provided the opportunities necessary to fulfill those interests with open access to 24/7 learning environments. This may mean that the college-bound student interested in physics is allowed to participate in cooperative or online courses or the student who wishes to pursue a career in welding is trained to gain certification at a mastery level. In all cases, our goal needs to be the provision of opportunities for all students to achieve at the highest level possible. Virtual learning will be useful in achieving this goal, as will relationship building with local community businesses and other resources.

Assessment

An effective instructional program measures student achievement at the micro level of skills and knowledge and at the macro level of application of big ideas. According to Chappuis, Stiggins, Arter, & Chappuis, (2005), two important elements of a balanced assessment system are carefully defined achievement expectations and a variety of dependable sources of evidence.

Use of Assessments to Guide Instruction

A distinction must be made between assessments used for tracking individual student achievement and those used for assessing the accountability of schools, districts, and states (A Broader, Bolder Approach to Education, 2009). Although there will always be a need for schools to assign summative end of course or year grades, the main focus of assessment in schools must be on formative assessments.

Formative assessment, or assessment *for* learning, includes the quizzes, tests, essays, and projects that occur on a regular basis in the classroom and are most useful in helping teachers and students improve academic performance (Guskey, 2003). Formative assessment is most effective when it is separate from a grading system, provides immediate feedback specific to a task, and contains suggestions for improvement (Black & Wiliam, 1998).

Providing written or oral commentary on student work has become a mainstay of successful standards-based classrooms and assessment *for* learning. The critical examination of student work extends the curriculum review sessions by increasing teacher ability to evaluate how well students are doing in meeting learning targets and identifying the kinds of resources they need to continue to improve. Effective commentary includes something that was done well, something that could be improved, and a suggestion or resource that would help students improve their performance. Descriptive feedback is an essential component of formative assessment (Shepard, 2000; Stiggins, 2004).

Implementing a system of assessment *for* learning includes more than using formative assessment to adjust instruction. A key difference is the inclusion of students as active participants in the assessment process. Students use assessment information to increase their learning by working collaboratively with teachers and peers. They create criteria, give and receive specific feedback, set goals, and collect evidence of their learning (Davies, Herbst, & Reynolds, 2008). Students who receive quality feedback on their work are more motivated to achieve complex tasks so that the assessment process itself becomes education (Bingham, Holbrook, & Myers, 2010). Students must be active participants in the formative assessment process, but for that to happen they have to be taught how to self-assess and how to participate in peer-assessment (Black and Wiliam, 1998).

Variety of Student Assessment Methods

Countries that have made great strides in increasing student achievement use multiple assessment tools over multiple occasions to measure student progress. These countries also employ performance assessments that have the potential for giving clear information on students' reasoning processes as well as their level of competence on specific learning goals (Darling-Hammond, & Adamson, 2010). Research in the United States also has shown that collecting and analyzing data from multiple sources over time increases teachers' understanding of student abilities and aptitudes. Teachers must become skilled at using multiple measures, instruments, and processes to assess student work continually and as it happens (Valencia, 2010). Open-ended constructive response items that support problem solving and critical thinking and are related to real-life situations should predominate.

Assessment Literacy for Educators and Stakeholders

A transformation of assessment practices will inevitably lead to dramatic changes in grading and report cards. While teachers may give students feedback during the learning process using marks, comments, letter grades, or other symbols, these do not necessarily go into the grade book as part of a student's final grade. The examination of student work against standards and over time is another important aspect of formative assessment that must not be overlooked. In a standards or performance-based climate, the final grade should be based on the students' ability to master the material after they have had the time and opportunity they need to learn, whether that be a unit, quarter, semester, or year (Davies et al., 2008).

Such attributes as effort, attitude, and attendance should be separated from the assessment of a standard. The development of standards-based report cards should come at the end rather than at the beginning of this process since the assessments designed should drive reporting rather than the report card driving assessment design. Because grading and grade reporting are clearly emotional and high-stakes issues for students and parents, transforming this aspect of schooling needs to proceed carefully with the full involvement of parents and students.

Instruction

Learning occurs in the classroom through activities designed by the teacher. Classrooms, and by extension student learning, will be transformed when all teachers are skilled at structuring lessons that are engaging

and meaningful. Getting to that point requires that teachers and leaders understand and embrace systemic processes that will support teachers as they learn how to study, implement, and assess best instructional practices.

Roles and Responsibilities of Teachers, Leaders, and Students

The roles and responsibilities of all educators have expanded greatly over the last few decades with the explosion of knowledge and the demand for graduates who have a skill set that includes the ability to problem solve and work cooperatively. Rather than being the source of all wisdom, teachers have to be facilitators of learning without giving up their responsibility to direct learning and manage the environment. School leaders have to be lead learners and lead facilitators, without giving up their responsibilities to manage day-to-day operations. Collaboration and coaching are the hallmarks of the new work for teachers and school leaders.

Problem Solving

Whether we call it problem solving, critical thinking, or deep inquiry, it is clear that the students of today and tomorrow must be able to use their judgment to determine how to gather, evaluate, and interpret data to draw conclusions and plan solutions. Students must become adept at identifying similarities and differences, summarizing, generating, and testing hypotheses. They must have the ability to work collectively to solve problems. Adults are seldom asked for specific facts; instead, they are faced with complex problems that require the ability to think through multiple steps to reach a sensible conclusion or course of action. It only makes sense, then, that students have opportunities to learn at high levels of thinking throughout their school careers.

Individualized and Differentiated to Meet Student Needs

Because classrooms are more diverse than ever before in terms of student experiences, interests, cognitive ability, readiness, and ethnic diversity, it is essential that teachers are able to differentiate the learning environment to meet the needs of all students. Differentiated instruction can be considered "responsive" as opposed to "one-size fits all" teaching and as such is better suited to the needs of students in the 21st century than the traditional, standardized approach to instruction. It requires teachers to maximize student success by proactively planning for variety in what students will learn, how they will learn it, and how they can demonstrate what they have learned (Tomlinson, 2003). This planned and deliberate learning is based on the use of efficient assessment results and effective interventions.

Current Practices of Promise

There are no silver bullets when it comes to good teaching, only thoughtful decisions and hard work. Success depends on people and strategies, not programs. There are several excellent instructional approaches available to schools and districts, such as Learning Focused Schools, America's Choice, Advancement Via Individual Determination (AVID), and the Coalition of Essential Schools that offer a systematic approach to instructional improvement. The Georgia Department of Education and the Georgia Leadership Institute for School Improvement (GLISI) both offer training to administrators and teacher leaders.

> There are no silver bullets when it comes to good teaching, only thoughtful decisions and hard work.

Student success, however, does not rest on the purchase of a program but on the careful selection and deep implementation of appropriate strategies. It is critical that we build the capacity of school leaders and teachers to understand curriculum, assessment, and instructional strategies and how to use those strategies to support a systemic approach to school improvement. To build this capacity, Georgia must make a commitment to provide high-quality professional learning at the school level, often within the classroom, through collaboration and coaching.

Curriculum

The exponential growth of knowledge and the changing needs of the work world are having a dramatic effect on our view of the curriculum schools should teach. What will students need beyond the mastery of literacy, numeracy, and computer skills to compete in the workplace? If our current structure is still in place, a child entering kindergarten in 2011 will enter college in 2024 and the workforce in 2028. While we cannot know for sure what skills, knowledge, and abilities will be needed, we can make some educated guesses.

Students will need to

- work in teams to solve problems and generate innovations,
- collaborate with team members in other parts of the world who speak different languages, and
- adapt to ever-changing technology.

Students exposed to a strong, well-developed curriculum will be able to master these skills and be successful in their chosen field as well as become contributing members of a strong society. Following are six characteristics of such a curriculum.

1. An effective curriculum is based on a broad statewide or national core of goals and objectives.

   In July 2010, Georgia adopted the Common Core State Standards (CCSS) in English language arts and mathematics developed by the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO). The CCSS offer a framework of learning goals that are further defined by the Georgia Performance Standards (GPS). "They [CCSS] do not, indeed cannot, enumerate all or even most of the content that students should learn. The standards must, therefore, be complemented by a well-developed, content-rich curriculum" (Common Core State Standards Initiative, 2010).

2. An effective curriculum is clearly defined at the individual district level by teams of teachers.

   Although the CCSS and the GPS form the basis for curriculum, effective schools use teams of teachers, led by school and district instructional leaders, to work collaboratively to reach a common understanding of the learning targets students should master and the level at which they should master them. They work on their curricula constantly to improve the quality of units and lessons.

Collaborating on curriculum development takes time and effort. School or district leaders must be willing to develop their own knowledge and skills. They must also use focus groups, advisory councils, surveys, and pulse checks to gain input from students, parents, and the business community on the kinds of curriculum they want to see in schools.

Effective principals and other school leaders take the time to develop a school culture that promotes continuous growth and supports teachers through the change process. The actual work of developing curriculum can be lengthy and arduous. It cannot be done on the fly or in afterschool sessions when teachers are tired. School leaders must acknowledge that curriculum development is a job that is never finished, and they must allow multiple and overlapping groups of teachers the ability to work on it gradually and consistently.

Effective schools hold monthly or quarterly reviews of curriculum to examine student work against set targets to define acceptable levels of proficiency and identify areas where the curriculum needs to be strengthened. For example, such study might reveal that some topics need to be taught at a higher level, a greater variety of products needs to be offered to students, or that the instructional strategies do not support the learning targets. Some schools even choose to use the study of curriculum as a problem-solving exercise for a learning community. Teachers need time, probably several years, to become truly proficient at this iterative process. The process is essential since the merit of a curriculum can only be measured by student learning.

This method of curriculum development is successful as long as there are strong channels of two-way communication and the process is integrated with professional learning communities and other instructional initiatives. It will not be meaningful work if done at the compliance level and without a way to embed it into the instructional life of the school.

Effective schools generally start by mapping out the whole curriculum at a rather high granular level to identify large gaps or overlaps among grades or subjects. As the process continues, however, teacher groups work at increasingly smaller granular levels to fine tune the curriculum. For example, a school may start by looking at the K–12 math curriculum, move into a closer examination of the algebra strand, and follow this with a comparison of student work against standards.

3. An effective curriculum is aligned vertically and horizontally.

Effective schools understand that, once developed, the curriculum must be reviewed annually. This process has traditionally been termed curriculum articulation although recent literature uses the term alignment. Horizontal alignment assures continuity among classes in the same grade and vertical alignment improves the coherence of information from one grade to the next. There are many educational authors today, most notably Heidi Hayes Jacobs, Grant Wiggins, and Jay McTighe, who offer suggestions for developing and mapping challenging curriculum. The particular approach a school takes is less important than following a defined process while being committed to continuous curriculum improvement. All approaches involve, at a minimum, teachers working within their grade and with the

grade above and below them to ensure that there is a natural progression of content and that there are no gaps and minimal overlaps. These curriculum review sessions must be planned, placed on the calendar, and treated with respect by leaders and teachers.

4. An effective curriculum is connected to the life of the student and society.

   Students today "power up" when they wake up in the morning and "power down" when they get to school. The traditional school structure is becoming increasingly meaningless to a generation used to accessing information instantly through their cell phones, laptops, and other high-tech devices. In an era when it is increasingly important that all students graduate from high school, it is essential that students find the curriculum meaningful and engaging.

   Effective schools are dynamic organizations that are sufficiently agile to adjust to new concepts and changing student needs. They find ways to make students partners in their own education so that they can help guide the selection, development, and refining of challenging curriculum. They also develop meaningful partnerships with the business community and higher education to take advantage of dual enrollment and apprenticeship options. They structure schedules that allow students access to online classes that expand their knowledge base or meet their time needs.

5. An effective curriculum is integrated across subject areas.

   Integration can take many forms from merely making links between learning targets to full integration of subjects. In the early grades, where classrooms are self-contained, effective teachers link across the subjects that they teach. Subject area teachers in higher grades, however, have to make a conscious effort to work with other teachers to align their curriculum. This is most easily achieved by having teachers work in cross-subject teams to match and blend topics and assignments. An extension of this is to identify a set of overarching concepts, such as "conflict" or "transition" that are used as themes to tie together separate subject matters during a quarter or semester.

   A fully integrated approach to teaching involves drawing on knowledge from a variety of subjects without labeling them as such. Teachers select a theme, such as the environment, or a concept such as revolution, and explore it by pulling on information from a multitude of disciplines. The inability of a school to fully integrate curriculum does not mean, however, that teachers cannot forge links and create overlaps of learning that help students understand complex relationships. School schedules can support this work, for example, by ensuring that students take American Literature and American History at the same time.

6. An effective curriculum supports problem solving and critical thinking.

   Many states, including Georgia, have developed strong statewide curriculum documents. The value of curriculum, however, depends heavily on its interpretation and implementation by district curriculum developers and teachers (Common Core State Standards Initiative, 2010). In effective schools, teachers

do not focus only on meeting state assessment standards but on ensuring that units and lessons are constructed in such a way as to challenge students to think deeply about important issues. There is value in using a systematic approach like Understanding by Design, developed by Grant Wiggins and Jay McTighe (2005) to define, align, connect, and integrate curriculum topics as long as schools follow up with best practices in assessment and instruction to ensure effective delivery.

Assessment

Schools intent on transforming their assessment program can use a district change process to educate stakeholders about assessment and grading (Davies et al., 2008). This approach requires district-level commitment of resources including professional learning for leaders and teachers and time for creating assessment tools. Districts will have to take the time to ensure that this effort is linked to other curriculum or instructional initiatives. It is a three- to five-year process that requires all schools in the district to commit to focus on assessment for learning (Davies et al., 2008).

If a key assessment issue is to ensure that assessments guide the instructional process, then it follows that assessments must be fully integrated into the teaching-learning process. Effective schools and districts develop a system of assessments that is balanced and supported by technology. Effective assessments are ongoing, embedded in classroom practice, and measure the student's performance against defined curriculum objectives. The effective assessment practices described in this section focus on the teaching-learning process within the classroom and yet, when most people think of assessments, their minds jump immediately to the state and national tests that are used to judge schools. This would lead us to the conclusion that we need to promote assessment literacy for educators, parents, and the public.

Formative Assessments

Formative assessments are those that teachers use when delivering instruction to gauge understanding and progress towards learning goals. They include "right-now' assessments such as finger, whiteboard, or card responses, or the use of electronic clickers or probing questioning to gain immediate feedback that can be used to adjust the lesson in progress. Some authors include more formal interim assessments, sometimes known as benchmarks or predictors, in the formative assessment process. Interim assessments, used at six or nine-week intervals, check how well students can integrate larger pieces of the curriculum or apply what they have learned to new situations. Data gathered from interim assessments are used to inform instructional practices, revise curriculum, and to facilitate flexible grouping for remediation and enrichment activities.

While right-now assessments tend to be teacher-specific and based on teacher style, interim assessments are common across the grade or department. In either case, they must be directly related to the defined curriculum objectives and this is most easily facilitated when they are developed at the same time as the curriculum is defined or revised by teams of teachers working collaboratively.

Current literature indicates that high-quality professional development will be needed to bridge the gap between what teachers know about formative assessment and what they need to know to maximize student learning (Englert, Apthorp, & Seebaum, 2009). Similarly, school and district leaders need additional

professional development in learning how to lead assessment practices (Edwards, Turner, & Mokhtari, 2008). Schools should begin to develop teacher assessment proficiency by giving teachers time to work in collaborative groups within and among schools to develop cooperatively common assessments and appropriate instructional responses (Lachat & Smith, 2005).

There is evidence that communities in Georgia would support the development of a wider range of formative assessments. In the nine community conversations held around the state, many comments on assessment referred to formative assessment as something that people wanted to see more fully implemented.

Performance Assessment

Performance assessments allow students to construct or perform an original response rather than simply recognizing a potentially right answer out of a list provided and measure students' cognitive thinking and reasoning skills and their ability to apply knowledge to solve realistic, meaningful problems. "They provide strong information for diagnostic purposes to help teachers decide how to continue instruction. They reveal more about students' processing skills and problem solving approaches, as well as their competence in particular areas, than do multiple-choice responses" (Darling-Hammond & Adamson, 2010, p. 32). Because the very nature of ongoing performance assessments is to assess growth toward a learning goal, best practice indicates that they should not be used for grading purposes. While marks, letter grades, or commentary are appropriate, they should be used as communication tools between teacher and student as opposed to elements of a summative grade.

Human behavior, including learning, is too complex to reduce to a single indicator. High-achieving countries such as Singapore, Hong Kong, Japan, England, and some Australian states are using a combination of assessments, including performance assessments, to great effect (Ravitch, 2010). Performance assessments can be challenging to implement because they take more time and expertise to create and to score.

Balanced Assessment System

Although a picture may be worth a thousand words, one snapshot is not as valuable as a whole photo album. Current best practice indicates that schools should use a variety of assessments over time to track student progress and measure learning. This mix should include formal and informal assessments and there should be a good mix of paper-and-pencil, oral responses, projects, and performances. Questioning should be probing and should enable students to link and apply learning. Carefully designed checklists and rubrics should be used to design the work and to assess progress. Teachers should be trained to examine student work and use thoughtful teacher commentary.

Effective schools collect evidence over time that measures student progress from a variety of sources that can be used throughout the teaching-learning process to inform students of their progress and to inform the teacher of how to adjust instruction. Teachers must match the type of assessment to the type of learning target and the instructional experience. For example, while a multiple-choice quiz might be appropriate to evaluate students' knowledge of multiplication facts, it would not assess their ability to solve

multiple-step problems. There must be enough high-quality assessments to match the learning targets and sample student learning over time.

Assessment Literacy

A full understanding of assessment is limited by the confusion surrounding assessment terminology. For example, the meaning of the terms "assessment" and "evaluation" are not universally agreed upon and the same is true of "grades" and "marks." The professional literature describes assessments as formative, summative, performance, benchmark, predictor, *for* learning, *of* learning, or diagnostic without clearly accepted definitions of what each one means. School districts that have spent time defining assessment terminology have increased their ability to align the work of teachers across grades and schools.

Student Involvement

A theme that runs through the previous sections is that of involving students in their own learning. The change of focus from *teaching* to *learning* is not accidental. Traditionally, students have been passive participants in the school where most of the hard work is done by teachers. In effective schools, the student becomes an active participant in the process. Student involvement can take many forms. Many schools have successfully taught students to self- and peer-assess their work. Others require students to present portfolios of their work as part of a culminating project or in defense of a final grade. Student-led conferences are also a very effective way of involving parents in the assessment process and simultaneously improving their assessment literacy.

There is a wide range of strategies for increasing student involvement. Effective teachers know how to involve students in setting their own criteria for learning through the production of checklists and rubrics. Even elementary students can evaluate their own work and that of their peers. Students are held responsible for selecting the pieces of their work that they want to highlight in their portfolios and student led conferences become an effective way to involve parents in the assessment process.

Technology Support

A well-developed and balanced assessment system produces such a large volume of data on each student that it becomes difficult for teachers to see patterns of growth and identify gaps in learning. This issue is complicated by the fact that the student data come from different sources and are based on different measurement systems. Effective schools and districts have found ways to harness one of the many available technology solutions to collect a variety of data from unrelated sources in one location and give a balanced picture of individual students or groups. Whether called data mines or warehouses, these tools are extremely valuable in linking demographic and achievement data to assist schools in identifying complex patterns that can inform school improvement strategies.

Instructional management programs support student achievement by giving teachers the ability to easily access, analyze, and communicate assessment data to each other, to students, and to parents. The student profiles generated by management systems form the basis of collaborative discussions and internal school research on effective practices.

Instruction

To a large degree, the activities that engage students in the classroom reflect teachers' collaboration and other behind-the-scenes work on developing curricula and a system of balanced assessments. In addition, effective teachers engage all learners and ensure universal success by acquiring a wide repertoire of instructional strategies from which they can select in a mix and match process that we sometimes refer to as differentiation. Schools that have adopted systemic processes for implementing a strong curriculum, balanced assessments, and a flexible instructional program are experiencing sustainable success in raising student achievement and increasing the graduation rate.

The five practices that follow suggest ways of enabling all teachers to reach the deep levels of instructional expertise that will be needed to transform Georgia's classrooms.

1. Structures that support collaboration and instructional design.

   Effective schools establish policies and procedures that bring all staff into the improvement process by cascading information and sharing leadership. Two main strands of this new work are collaboration and coaching.

   All teachers do not automatically know how to collaborate with each other, so effective leaders create the expectation that meaningful collaboration takes place by providing supportive training and protocols. Professional Learning Communities have become powerful tools for collaboration that lead to the consistent and pervasive use of effective instructional strategies throughout a school (Murphy & Lick, 2000; DuFour, DuFour, & Eaker, 2008). School leaders intentionally create a collaborative culture that supports effective learning communities and coaching, for example, by scheduling common planning time. When common planning time is not an option, teachers meet before or after school which becomes an additional and often unpopular burden. School leaders have to take the time to organize learning communities and then train teachers how to function within a learning community. They establish norms and protocols and monitor the progress of each learning community.

   Individual coaching has been shown to be a vital component of raising staff performance (Fournies, 2000). Successful schools use a balance of administrator and peer coaching to increase teachers' repertoires of effective instructional strategies. Providing people with a coach who has no supervisory authority avoids many of the conflicts teachers and principals often encounter when they are working on improving instructional effectiveness. The coach is able to build a one-on-one rapport with teachers and create environments where teachers feel safe in implementing and practicing new strategies. Coaches are trained to break complex strategies down into their components and to give neutral feedback to teachers while they are practicing and mastering them. To maximize their success, schools deploy instructional coaches in key areas and clearly specify the goals and purposes of their work. Concrete activities are mapped in concert with the teachers or leaders being coached in a detailed implementation plan.

2. Structures that support teacher development of high-quality instructional units.

   High-quality units are structured around higher order questioning, differentiate the learning for individual students or groups of students, and include methods for monitoring the progress of students as they advance through the unit or course. Creating units and courses that are challenging, worthwhile, and engaging, however, is a time-consuming and difficult job. Effective schools find creative ways to provide teachers with time to collaborate during the school year including common planning time and half-day or whole-day professional learning days. Teachers use collaborative planning time to build courses, units, and lessons that engage students in meaningful work that reflects the core competencies described in the standards they are teaching. By working collaboratively, teachers share knowledge, skills, and workloads to create units that are of higher quality than individual teachers could produce on their own. In addition to improving the quality of units, collaboration is an equity issue since it helps to ensure that all children are exposed to the same quality curriculum.

3. Differentiated instruction.

   It is incumbent on schools to ensure that all of their students leave school with the skills they need to be successful. To do that, schools ensure that instruction is differentiated to meet the needs of a diverse student population. A differentiated classroom is one in which teaching and learning is approached in a variety of ways to ensure that all students are successful. Best practice suggests that differentiation should occur in the content of lessons, in the processes or instructional strategies used, and with a variety of assessment practices. Differentiation is not a synonym for remediation, even though it is sometimes viewed as something that is done once a student has failed. Effective school leaders and instructional coaches carefully and consistently present differentiation as a best practice for planning instruction, rather than as something to be done after the students have failed.

   Flexible groups are a mainstay of differentiated classrooms. Effective teachers move students in and out of groups frequently in response to the demands of specific instructional strategies, student preference, or the learning topic. It is important that students do not always stay in the same group.

   Schools that dedicate themselves to deep differentiation understand that it will be a multi-year process. A good place to start with differentiation is ensuring that school leaders are clear about what it entails and what a differentiated classroom would look like. District and school leaders need time to read, study, and collaborate with each other to define their expectations and codify them in a way that is clear but not overwhelming. Some schools use tracking and implementation records to chart which strategies have been used and the results. Some school districts build into their curriculum review process a step that analyzes each unit to ensure that teachers have planned to teach the major concepts at least three ways and have included strategies that are likely to appeal to a variety of learning styles, interests, and abilities.

4. Project and problem-based learning.

   Effective teachers at all grade levels can help students increase their problem-solving ability by teaching them to formulate or test hypotheses and predict or confirm outcomes using real world examples that

integrate content across subject areas. Some schools are moving to a project-based learning approach where students work alone or in groups and use technology and inquiry to produce a product, presentation, or performance. Students normally have great control over the topic and the result (Thomas, 2000). Problem-based learning is similar in that students work alone or in groups but differs in that they are usually tasked with solving a problem defined by the teacher (Stepien & Gallagher, 1993). While both of these approaches are considered best practices, they require intense teacher training and organizational support to be effective.

5. Technology integration.

   Up-to-date technology is an essential part of instruction. It is unreasonable to expect students to remain engaged in learning from outdated textbooks when they can access information in real-time through their phones and laptops. Although equipping schools with whiteboards is a step in the right direction, best practice indicates that the whiteboard should be a portal to access learning, and not a place only for flip chart lessons. The Best Practices of Technology Integration in Michigan website (www.remc11.k12.mi.us/bstpract/) offers a number of best practices for K–12 educators.

   Classroom technology opens up a real-world curriculum for students. It is an equalizer for economically disadvantaged students because it enables them to experience places and events to which they would not usually have access. Effective teachers can integrate technology in ways that allow them to differentiate and personalize instruction to meet different learning styles, abilities, and interests. Technology allows schools to offer courses virtually.

   In effective schools, instructional technology focuses on student learning and is as ubiquitous in the classroom as textbooks and encyclopedias once were. A student-centered approach to technology is consistent with the personalized, individualized, and student involvement goals of the new approach to teaching, learning, and assessment promoted in this document. Merely introducing more technology into the classroom without a simultaneous change in pedagogy will not transform the teaching-learning process. For this change to occur, teachers and students gain proficiency in a side-by-side learning environment. Pedagogical changes become less laborious with the use of technological tools from the real world of students even if teachers are not as familiar with the tools (Prensky, 2010).

Recommendations for Moving Forward

Most, if not all, of the recommendations offered here for consideration are not new. Neither are they transformational when taken on their own. When put together and implemented consistently and pervasively in every classroom, in every school, and in every district in Georgia, however, these recommendations have the ability to transform public education.

Recommendation 4.1: Create collaborative learning communities and implement expert coaching in all schools.

Significant time, energy, and effort are required to build the individual and collective capacity of teachers and leaders to implement effective strategies in a deep and meaningful way. Teachers and leaders must

be provided with multiple opportunities over time to study, learn, and be coached as they acquire and practice new skills. Coaching, mentoring, and collaborating in professional learning communities are proven strategies that provide these kinds of job-embedded learning opportunities.

The implementation of learning communities and a system of coaching and mentoring in a collaborative environment offer multiple benefits to schools. They enable schools to select and maintain a focus on specific targets for study and growth. They foster collaboration and esprit de corps and portray the school as a learning environment where everybody, students and staff, are life-long learners. The most important benefit of this kind of professional learning is that it supports incremental but sustainable increases in student achievement.

Recommendation 4.2: Integrate fully a variety of technologies to support student learning and facilitate assessment.

The advancements in technology provide a dynamic platform for implementing and integrating best practices in curriculum, instruction, and assessment. Technology can be an important instructional and management tool if schools and school districts develop a sustainable system to purchase, support, and continually update their technology tools.

Instructional Technology

For a district to implement technology *for* learning it must provide the same kind of intensive professional learning required in all the transformational options described in this section. More than any of the other options, the integration of technology requires a cultural change in an organization. School districts have had a significant infusion of technology over the last decade without any discernible change in instruction as the result of it. Digital immigrants are teaching digital natives and our current instructional framework does not make the divide easily bridged (Prensky, 2010). Changing the instructional framework of curriculum, assessment, and instruction alongside integration of technology provides the dynamic necessary for a meaningful instructional breakthrough.

Instructional Management

All schools and school districts need an assessment management system that they can use to integrate a variety of academic and non-academic data to inform instructional decisions. A large number of assessment management systems are available with similar overall capabilities but with different options. The International Society of Technology Education (ISTE) provides a platform and process for identifying and evaluating such programs.

Recommendation 4.3: Develop challenging and dynamic curricula that are sufficiently flexible to meet the diverse needs of students and to support higher order thinking.

Robust and challenging curricula are the bedrock of all that happens in schools. It is vital that schools and school districts take the time to work on developing and continually improving the curriculum. It is

appropriate that Georgia has adopted the Common Core State Standards in English language arts and mathematics and has developed the Georgia Performance Standards in these and other subject areas. It is essential that schools take these documents and breathe life into them by enabling teachers to collaborate on the development of challenging and engaging courses, units, and lessons. School districts need to ensure that principals and instructional leaders at the district level have time to learn and develop the expertise they need to lead the process before it is rolled out to schools. Schools should hold monthly or quarterly reviews of curriculum to examine student work against set targets to define acceptable levels of proficiency and identify areas where the curriculum needs to be strengthened.

In addition to the regular monthly meetings, schools must schedule annual or semi-annual cross-grade sessions to ensure horizontal and vertical alignment. Although the most productive model is to involve all teachers, schools can accomplish this task by releasing one or two teachers from each grade or department to work on the alignment and act as conduits of information to and from their peers.

Recommendation 4.4: Develop a comprehensive and balanced system of assessments that is useful in guiding the work of teachers and students.

Creating and implementing balanced assessment systems that emphasize assessment *for* learning strategies holds more transformational power than any other option we could propose. Furthermore, to maximize the usefulness of data provided by assessments, teachers, school leaders, and parents must increase their level of assessment literacy.

Balanced Assessment

A strong and balanced assessment system is the link that binds a challenging curriculum and an engaging instructional program together to form a successful school experience for students. Involving, rather than informing, is a key concept in the process of transforming a traditional system to a balanced assessment system. In effective schools, teachers are given time during the school year and in the summer to develop learning goals and acceptable achievement targets based on a clear and shared understanding of the curriculum and its performance standards.

Assessment *for* Learning

Ultimately, an assessment *for* learning mindset must become the norm for a district that wishes to use this vehicle to transform its schools. Teachers must be given time for a careful analysis of student work that enables them to develop clear and common expectations for student performance. Teachers need training in how to develop formative assessments and to provide helpful commentary to students. They must also be given time to practice these skills in collaborative groups of peer teachers.

Assessment Literacy

Teachers, school leaders, students, and parents all need to become more informed about what assessments do and do not mean. Teachers and school leaders must be trained to build, use, and interpret assessments. Students must be trained in peer and self-assessment practices. Boards of education must become familiar

with and literate in assessment, assisting district leaders in setting criteria around strategic goals, collecting evidence of system growth, and giving specific feedback relative to results. Parents must receive information on how to interpret the assessment data they receive about their children.

Recommendation 4.5: Ensure that all teachers understand and use differentiated strategies effectively in the instruction and assessment of students.

Teachers and leaders must receive training that enables them to develop a clear understanding of what differentiation entails and how to use flexible groups to structure differentiated activities. In addition, they must have time on the job to practice implementation and to collaborate on evaluating the success of the implementation. Finally, the ability of teachers to differentiate requires that classrooms be supplied with a generous range and number of resources including manipulatives and technology.

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5 Teaching and Learning Resources

Introduction

This section, one of seven describing educational system components to support a new vision for public education in Georgia, focuses on non-human resources that support public education in general and teaching and learning in particular. While this section addresses resources other than technology, it is technology that dominates most conversations related to improving the educational experience for children and youth. This was the case in the Vision Project community conversations.

When asked to describe schools in 2015, participants in community conversations generated 193 comments on teaching and learning resources to support public education. The comments represented over 12 percent of the total recorded. Eighty-seven comments advocated the widespread use of technology by students and teachers in the classroom for instructional purposes. Many comments pointed to the value of students having technology available to them at all times, in and out of school. Thirty comments focused on textbooks, mostly projecting the replacement of physical textbooks with electronically transmitted curriculum resources. The community conversations and follow-up conversations with high school students throughout the state influenced the development of this educational system component.

A perfect storm is brewing in education since the advent of the digital age and a time of tremendous change is upon us (Reigeluth, Banathy, & Olsen 1993). The confluence of difficult economic times and questions of educational significance and relevance are erupting into a chaotic environment of disruption and change. The educated person of today and tomorrow must know how to access and evaluate rather than read and regurgitate. Information age economics and market considerations are combining forces to generate radical rethinking and redesigning of this thing called "school."

"The confluence of difficult economic times and questions of educational significance and relevance are erupting into a chaotic environment of disruption and change.

Equipping Every Learner for the 21st Century, a 2008 report from the Centre for Strategic Education, Cisco, and McKinsey & Company, offers a perspective on the evolution of education to consider as we seek to transform public education. Using the parlance of educational technology, Education 1.0 represents education as it was practiced for most of the 20th century: problematic access, uneven quality, variable practices and standards, and limited performance management. The 1990s marked the beginning of the Education 2.0 phase, which was represented by educators crafting policies aimed at professionalizing

processes, setting standards, and upgrading capabilities. The emphasis of Education 2.0 was on reforming the existing paradigms rather than transforming them. As Education 3.0 emerges, educators now have the opportunity to develop and implement a transformative template for learning.

The journey into this uncertain world is being planned as we are traveling down the road. The purpose of this section is to provide a beginning point of reference for some of the teaching and learning resources needed to facilitate positive innovation. We begin by identifying and describing four drivers for change.

First, the implementation of appropriate educational delivery models must include a wide variety of options and choices. Choices range from the current fixed school day and year schedule with students in daily attendance at school to models that include part- or full-day emersion in technology-rich environments. Included in these models are variations, such as students enrolled in hybrid environments that include part-time in traditional classes and part-time online utilizing a curriculum that has been customized to an individual learning plan. This customized instruction can be effectively carried to a point where students no longer attend school at any physical site; rather, they receive a complete online curriculum they can access at any time and wherever they may be.

The second driver is the need to provide students with greater access to technology in the classroom and to help teachers better integrate those resources into their everyday practice. The pace of technology integration in our society and lives has been growing at an exponential rate and schools have not kept pace with the changes. Additionally, our students face increasing competition for jobs in a global marketplace. For our students to be competitive, they need greater access to technology as a learning tool. Learning new technologies and adapting instruction to take advantage of new technologies is largely dependent on the classroom teacher. Thus, teachers must have time, resources, and professional learning opportunities to meet the challenges and realize the potential of true technology integration.

The third driver impacting today's educational environment is the need for better warehousing and use of data in decision making. We live in a world driven by data at a time that demands accountability for all aspects of public life. Education is not exempt from this intrusive world of numbers. Educators currently accumulate significant amounts of data relating to various aspects of the educational enterprise. Large quantities of student data often are not translated into actionable information. Education wallows in a sea of data, but remains in a wasteland of useful and usable information. Educators work in a world in which gigabytes of information are collected and warehoused, but to date, there is no effective method of maximizing the use of this collected information to inform the decision-making process, despite the expenditure of many millions of dollars.

The fourth driver is the need for schools to be more connected to the communities they serve. There is a need to find ways of making schools a more vital and vibrant part of the community. The elimination of dual or overlapping services, the need to reduce cost of healthcare, child care, and social service delivery can provide the impetus for better community support. Schools can become the site for health care delivery, recreational activities, and other community activities. School siting, school size, multi-functional school use, and safety are functions of this building of relationships between the school and the community.

Change is inescapable, and it forces us from our comfort zones, but the facts are straightforward—either we accept, plan, adopt, and adapt, or we'll be left wondering what happened and where we lost out.

Guiding Principles

Five guiding principles underlie the recommendations in this section:

- Learning is a function of accessibility to information and the ability to make judgments about the quality of the information.
- Learning is enhanced when the learning environment is flexible and adaptable.
- Technology enhances engagement in the learning process.
- Relevant and accurate information is essential for good decisions.
- People need a combination of real and virtual places for learning and sharing.

Key Issues

The key issues relating to teaching and learning resources are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers and from the experience of the members of the planning team and the research associates.

Implementation of Appropriate Learning Delivery Models

The school district of the future will need the flexibility to deploy educational services quickly and reliably as students' needs change. New delivery models for learning will provide a flexible pool of virtual courses that can be deployed across the district with relative ease. As virtual courses are delivered in various locations across school districts, management of the virtual infrastructure becomes a crucial factor to ensure that the infrastructure is highly reliable. Effective use of a viable learning management system can assist school districts in minimizing facility needs, which may result in the reduction of deployment and operational costs.

Education is experiencing significant changes in the way instruction is delivered. The progressive steps can be characterized as moving from the traditional school day and year in a physical facility, through online learning as part of a blended delivery model, to total virtual learning.

Traditional Fixed Day and Year Schedule

The majority of schools in the United States continue today to follow the same basic model that was established more than 100 years ago. These schools continue to operate under an agrarian calendar with the school year beginning sometime in early fall and ending in mid-spring with an extended summer break. The school day for students is typically six hours and the school year is generally 180 days. With few exceptions, most school districts have only recently begun to experiment with different models of time usage. Several school districts in Georgia have recently modified their school day and year, not necessarily as a strategy to improve the delivery of education, but to accommodate reductions in educational funding. The Georgia Board of Education has made rule changes to allow greater flexibility in the school calendar so school districts may better navigate the troubled economic waters.

Schools have also begun to investigate strategies to better utilize time and to provide a more substantive education through the use of schools-within-schools, career academies, and a host of other variations around the common theme of making education more relevant. Some of these initiatives have focused significantly on delivery of these programs virtually.

Blended (Hybrid) Model

Blended learning is the process of combining face-to-face classroom instruction with instruction delivered over the Internet. A variety of digital resources, including learning management systems, blogs, wikis, and podcasts, may be utilized to extend the classroom learning experience and expand the learning space. The combination of online learning with face-to-face instruction provides teachers the flexibility to work with students one-on-one. Students are engaged in an individualized learning environment in which they assume significant responsibility for their own learning. Students may be responsible for their own pace often within the parameters of established course completion dates. The instructional approach focuses on mastery of content as opposed to a pre-determined seat time requirement.

Virtual School Model

The delivery system for the virtual school model assumes the delivery of all instruction online. Virtualization is made possible in large part as the result of increased access to broadband Internet connections and is a rapidly evolving phenomenon. The virtualization of school, with the use of online learning, can achieve results not otherwise possible. Virtualization can result in the pooling of resources from several physical entities to form a virtual learning environment that can function as independent schools or independently of schools.

Integration of Technology into the Classroom Through Access to Adequate Resources, Effective Infrastructure, and Proven Pedagogical Techniques

Digital technology has evolved from a position of novelty to one of necessity. The resources and infrastructure required to meet the needs of the current generation of learners are very different from those required in the past. The current generation of the worldwide Web, or Web 2.0, demands that the individual classroom become interactive. While a significant part of the problem is lack of equitable funding across schools and inadequate broadband availability, traditional instructional practices are not keeping pace with the needs or expectations of today's students. For legal and technical reasons, many school districts restrict access to many Web 2.0 resources while at the same time students are accessing the Internet via computers, gaming consoles, and smart phones outside of the instructional day. For many years, a major topic in the educational literature has been uneven access to technology based on family income. A recent study by the Pew Research Center's Internet and American Life Center (Brustein, 2010) indicates that the digital divide may be going away and that all of our students, regardless of income level, may soon have access to the Internet via technologies, such as smart phones. Earlier work by researchers, such as Stables (1997), indicates that, when done appropriately, age is not a significant factor when it comes to the introduction of technology to students.

In addition to the gap between what students experience in and out of school, the demands of the global marketplace require that students have a basic knowledge of current technologies, and that they are able to use these technologies in new and creative ways. The lack of exposure to technologies in meaningful ways in our schools is putting our students at significant risk of being unable to "keep up" in today's, much less tomorrow's, global economy. While it would be nice to think that we have been "holding our own" in providing our students with greater access to technologies, the opposite has, in fact, been taking place. In addition to the recent "great recession" of 2008 and the resulting fiscal cutbacks, a focus on paper-based standardized testing and the resulting pedagogical practices have dissuaded many educators from seeking new and innovative ways to incorporate technology into their everyday instructional practice (Fletcher, 2006).

A recent article in *Wired* magazine (Anderson & Wolff, 2010) proclaimed "The Web is Dead." This was a reference to the fact that rather than content being delivered through traditional Web pages or even Web 2.0 technologies such as blogs and wikis, Internet-based content will soon be accessed primarily through applications delivered on devices such as smartphones and iPads™. The sale of electronic books (eBooks) escalated from 25 million the first quarter of 2009 to 90 million the first quarter of 2010 (International Digital Publishing Forum, 2010). Combine these developments with recent Georgia legislation supporting the use of eBooks in the classroom ("Definition of textbook," 2010), and the need for the statewide adoption of eTextbooks becomes apparent.

It must be cautioned, however, that we should not just replace traditional textbooks with traditional textbooks delivered electronically. Devices such as Apple's iPad are capable of delivering a wide range of interactive multimedia content on a device that is about the same size and weight as a traditional textbook. In addition to text, sound, and movies, these devices can use technologies such as the Internet, databases, and the global positioning system to deliver interactive content that can turn students from passive learners into active participants in the classroom whether it be brick and mortar or virtual.

Well-designed software for these devices could also assist teachers and the entire education community in overcoming the current lack of real-time formative assessment data that would be more meaningful to classroom practice than is the current system of annual assessments. For example, if the appropriate electronic standards and supports were adopted, teachers could contribute to an "edApp" store where other teachers could select learning activities for their students. These activities could result in more meaningful instruction, could be designed to meet state standards, and could provide real-time assessment data indicating how well students are mastering the content that they need to learn.

We have long known that students learn in different ways and at different rates. Today's current educational system does not always respond to these facts. As our economy has to respond more rapidly to the challenges of the 21st century, our educational system must also be able to respond to the individual needs of our students. Much as the medical profession uses information technologies to help doctors make highly skilled, individualized decisions about patient care, so too can educators respond to the individualized educational needs of students through the use of Internet-based technologies.

With the development of new technologies, it is important not to forget the teacher in the teaching-learning process. Stables (1997) notes that new technologies are frequently introduced into schools with little thought about the supports needed to fully implement those technologies. Teachers must find time in an increasingly busy schedule to learn a new technology and how to implement it in the classroom. This implies that teachers not only need technical support when the technology breaks, they need time to learn the technology, and they need training on the best instructional practices for integrating the technology into the classroom. This requires not only additional personnel to provide just-in-time technical and instructional support, but possibly the development of a certification program that can provide teachers with the skills they need to meet the new instructional challenges of the 21st century classroom.

Development and Implementation of a Comprehensive Administrative Information (Longitudinal Data) System to Ensure Real-Time Access to Essential Data

Current efforts to develop comprehensive data collection and management systems, if successful, will facilitate more effective use of accumulated data to improve student learning. Combining data collection systems with resources such as eBooks, laptops, digital white boards and courseware on demand will allow the delivery of customizable learning experiences to each student to best meet their educational needs. School districts over our state and nation have for several years been attempting, with limited success, to implement a comprehensive administrative information system that will yield critical data needed to make better decisions about virtually every component of public education.

Understanding and using data about school and student performance is critical to improving schools, yet schools have rarely, until recently, used significant data in decision making. The need for better decision making in our nation's schools has grown in tandem with the rise in standards-based reform and performance accountability systems ("Data driven decision making in K–12 schools," 2005).

Tracking individual student data, school and school district performance data, accumulated state data, and data contained in a national database is a task of great magnitude. As Margaret Spellings, former secretary of education, observed,

> Information is the key to holding schools accountable for improved performance every year among every student group. Data are our best management tool. If we know the contours of the problem, and who is affected, we can put forward a solution. ("Data driven decision making in K–12 schools," 2005)

No such comprehensive system exists today for the nation and, after years of effort, Georgia does not have a comprehensive system that can accumulate all the data that are needed to support educational decisions.

The creation of a comprehensive data warehousing solution would address several problems, including the inability to

- track system budgets to determine effectiveness of expenditure patterns;
- support instruction and assessment beyond annual criterion-referenced test data at most grade levels;
- provide data at the depth and frequency necessary to make meaningful and timely decisions about instructional practice;

- connect the professional development of teachers with the impact on student instruction;
- make available reports of formative assessments administered throughout the year (current reports, while available for state tests at the individual, school, and district levels by sub-groups, reflect a single measure of assessment given at a single time annually—a "snapshot," not a series of ongoing assessments);
- communicate district-to-district, district-to-state, state-to-district, and state-to-state (getting data on transferring students in a mobile nation is difficult at best); and
- facilitate effective communication to stakeholders inside and outside the education system and among various agencies such as post-secondary education, vocational rehabilitation, and others.

Too often, data collection systems such as the one being proposed here are seen as "stand alone" systems that at best manage the financial and other administrative processes in the school district and at worst serve as a meaningless repository of data. When data are used for formative instructional decision making, they suddenly become meaningful. The data collection system can serve as the means to allow the teacher to customize learning for each student, much as a health care professional can customize patient care. It can also be used to identify specific strategies for helping teachers, administrators, and schools become more successful by identifying specific areas of weakness, rather than just imposing a wholesale grade of A or F which does little to improve educational practice.

One of the great inhibitors to designing and implementing such a system has been the cost. The training to use such a system, if it were available, would also be a major investment. Two additional considerations are security and user-friendliness, if the system is to be effective and accepted by the public.

Development of Sustainable Relationships Among Public Education, Community, Educational, and Other Agencies

Schools can serve to unify communities in ways no other institution can. Throughout our nation's history, schools have been at the center of our efforts to ensure the fair and equitable treatment of all our citizens. It is this notion that underlies the belief that our schools can continue to unite, preserve, and protect our communities and our nation. It is evident that changes to instructional processes are needed to actively engage students in learning. It is equally apparent that technology will continue to alter and enhance the delivery of learning opportunities to students; however, there remains a need for school buildings. We must work to ensure the facilities we construct, renovate, and maintain reflect the values and needs of the community each school serves. The four key issues regarding the cultivation of greater school and community connectivity are school siting, school size, school as a multi-use facility, and school safety.

School Siting

School siting is an issue at the very heart of improving community connectivity. In recent times, sustaining communities has not been a paramount concern in selecting sites for new school construction, consolidating smaller schools into larger schools, or abandoning older schools for newer schools. The primary factors in these decisions have been cost and efficiency. These factors are firmly entrenched in current facility funding formulas. Such policies often result in schools being located outside of core communities where land is less expensive and more available (National Governors Association [NGA] Center for Best Practices, 2007). The

consequences of these decisions on communities can be damaging and costly. Most importantly, locating schools away from populations discourages active community engagement. There are also increased costs associated with providing improved infrastructure to support the needs of the school and surrounding development (NGA, 2007).

School Size

School size is another concept that should be reflective of community values and needs. As previously noted, school facility funding mechanisms have resulted in the construction of larger schools and the consolidation of smaller neighborhood schools into larger schools. In recent years, smaller schools have been linked to increased academic success, greater social satisfaction, diminished violence and behavior problems, higher attendance, fewer dropouts, increased extracurricular participation, more personalized teaching, and greater achievement for poor and minority students (Rothstein, 2001; Gregory, 2000; Sheldon, 2001). Smaller schools also provide more opportunities for parental and community involvement (Sheldon, 2001). Of course, such findings are related to a broad range of factors. There are several concerns associated with smaller schools, such as cost and more limited course offerings (Sheldon, 2001); however, there is sufficient evidence to suggest that such decisions should accurately reflect community ideals and that increased flexibility in facility funding is warranted and desirable.

School as a Multi-Use Facility

Schools located within a community are better suited to serve as multi-use public facilities. Sharing school facilities by establishing partnerships with other community service providers reduces costs by eliminating the need for multiple buildings such as athletic facilities, libraries, performing arts spaces, playgrounds, and meeting facilities (Tanner & Lackney, 2006). School partnerships might include community health, recreation, and education organizations. Such utilization of facilities ensures schools are an integral part of the community.

School Safety

Finally, no discussion of increased school and community connectivity would be complete without including the topic of school safety. Each of the previously mentioned concepts is linked to and is an integral part of school safety. Locating schools within communities provides greater opportunity for increased parental and community involvement which is likely to have a positive impact on school safety. Community schools are also more accessible by walking or biking and may have a long-term positive health benefit to our nation's children while decreasing traffic and pollution. Multi-use facilities and school partnerships with other service organizations serve to keep students actively engaged in their community and out of trouble after the school day ends. Research has linked smaller school size to decreased incidences of violence and disruptive behavior and maintaining safe learning environments (Rothstein, 2001; Schneider, 2002). School safety does not begin and end with the school bell; it is a community responsibility and must be built on a culture of respect and interwoven into our daily routines and activities.

These four issues—school siting, school size, school as a multi-use facility, and school safety—are not new or revolutionary; however, the concepts collectively do signal a transition in the way we think about schools.

It is a transition from our deeply rooted perception of what a school is to a concept of what schools must become: community learning centers. This transition is a foundational part of ensuring accessibility to relevant, meaningful, and engaging educational opportunities. These community learning centers can be structured to support the ongoing educational needs of students and the community. These community learning centers will provide a symbolic identity to communities (Tanner & Lackney, 2006). Accordingly, decisions to build, renovate, or close schools must be made through an inclusive and holistic approach. Such decisions must include community stakeholders and, as previously noted, be reflective of community needs and values and not limited to current policy criteria.

Current Practices of Promise

Following are four practices related to "Teaching and Learning Resources." They are categorized as 1) Service Delivery Models, 2) Integration of Technology into the Classroom, 3) Comprehensive Administrative Information Systems, and 4) School and Community.

Service Delivery Models

The Adams 50 School District in Colorado

The Adams 50 School District in Colorado in 2008 embraced the Re-inventing Schools Coalition (RISC) philosophy and model for one of its elementary schools and has subsequently extended the model to its middle and high schools. The RISC approach differs from a traditional approach by embracing these ideas:

- Movement based on performance
- Controlled chaos
- Driven by a shared vision
- 100% student engagement
- Global curriculum
- Self, peers, business leaders, and teachers judging students' work (RISC Approach to Schooling, 2010)

The model calls for the personalization of instruction with students of varying ages working together to learn skills. The grouping for instruction and other strategies replace the current grade level system of schooling with a standards-based model that is competency based (Wolf, 2010).

The Georgia Virtual School

The Georgia Virtual School (www.gavirtualschool.org), sponsored and provided by the Georgia Department of Education, serves students currently enrolled in public schools, home schools, or hospital/homebound services. For the 2010–2011 school year, only secondary school courses are available virtually. The courses include advanced placement in several disciplines, career and technical education, world languages, mathematics, language arts, social studies, science, health and physical education, and test preparation. Typically, a teacher is given access to a "course shell" that includes professional development, technical support, student help desk, and an online content and mentoring component. Teachers can enroll students

in an online course to work both inside and outside the classroom, or they can use a learning management system to bring online content into the classroom. Professional development includes training on the learning management system as well as coaching on how to effectively use online content in the classroom. Training is typically provided online and at physical locations across the state where teachers are grouped geographically, which begins the networking process among teachers in an area.

The Forsyth County, Georgia, School District's iAchieve Virtual Academy

The Forsyth County, Georgia, School District's iAchieve Virtual Academy is for students in grades 6–12. iAchieve is a full-time, completely online, fully virtual offering. The program offers students the opportunity to engage in a digital learning environment to achieve their individual potential through innovative, flexible, socially connected, and student-focused education. iAchieve is a mastery-based, self-paced curriculum consisting of content from Aventa Learning, a national digital content provider and developer, and teacher developed learning objectives. iAchieve is delivered via the Angel Learning Management System. The iAchieve Virtual Academy features online commons areas where students can find a safe and comfortable place to create social networks, establish clubs, and generally enjoy a more relaxed discussion with their peers (Consortium for School Network [COSN] Intiative, 2010).

Forsyth suggests that students of iAchieve Virtual Academy have the following learner characteristics:

- Exhibit self-motivation and maturity
- Possess reading and writing skills at or above current grade level
- Are willing to ask teachers for assistance
- Manage time in an organized manner
- Are comfortable with required technology
- Possess realistic online learning expectations (COSN, 2010)

Career academies are often implemented as "schools within a school." In many instances, logistical difficulties are encountered due to the limited resources in one school. Virtualization, however, can pool resources from several physical entities to form numerous virtual academies that can function as independent schools or programs. This same method can be used for other programs like Advanced Placement (AP) classes, credit recovery, and other programs limited only by the ingenuity of educators.

Integration of Technology into the Classroom

Since the early 1980s, computers have been available to schools. Early examples of computers used by schools include Apple II, Commodore 64, and Radio Shack TRS80. The trend toward increased access to technology in the schools is best evidenced by several initiatives to get laptops into the hands of most, if not all, students in targeted schools. In Noblesville, Indiana, the schools are using laptop computers to save the district paper and money (Reason, 2009). The Greene County School District in eastern North Carolina implemented a rigorous project-based curriculum with computers in 2002. Students were given laptops and were expected to participate in intensive group research projects. The most notable change in

student outcomes was a significant increase in the rate of students going to college ("Increasing student achievement," 2010).

Technology integration, however, does not relate exclusively to laptops. Students at King Middle School in Portland, Maine, have created a multimedia-based CD-ROM about Maine's endangered species. Principal Mike McCarthy, a National Principal of the Year in 1997, believes that giving all students—not just those at the top of the class—the highest quality and most challenging education makes the difference at their school. McCarthy states,

> I've heard people describe what a Gifted and Talented classroom would look like. It should include field experiences. It should include technology. It should include independent work. It should include work that's in-depth. That's basically what our school is. Everyone has access to that kind of learning. (Curtis, 2010)

The Michigan Association of School Boards recently announced Belding Middle School of Belding, Michigan, as a recipient of the 2010 "Michigan's Best" award for its innovative use of technology in the classroom, including smartpads, smartboards, and smartpens, which have proven to increase student participation in classroom instruction. These systems use a small device much like a remote control to allow students to send information to a computer which can then be displayed on an LCD projector (Armbruster, 2010).

Several districts in Georgia are also doing more to increase technology integration in the classroom. Educators in Georgia's Forsyth County Schools recently piloted classroom response systems much like those being used in Michigan to create a more participatory and active learning environment in the classroom (PR Newswire, 2010).

While integration of technology into the classroom has been ongoing and should continue, access to the Internet can be problematic for students and teachers. An innovative use of the Internet is being implemented in Vail, Arizona, where students endure hours of downtime on the school bus due to long distances between home and school. Recently, the district decided to try a novel approach to Internet access by making it available to students who ride on the bus. This allows students to spend their time productively while in transit to and from school. This is a perfect example of how two initiatives (Vail also is issuing laptops to all of its students) can be combined to increase educational opportunities for students. The students have dubbed their school bus the "Internet Bus" (Dillon, 2010).

Access to technology is only one part of the equation of technology integration into the classroom. Successful technology integration also has to involve effective pedagogical practice such as that being demonstrated in Maine and North Carolina. One example of a district that is purposefully working with teachers to help them better integrate technology into their classroom practice is the Waylands Public Schools which have engaged in a comprehensive program to help teachers better integrate technology into the classroom through the *its-learning* program (PR Newswire, 2010). This program not only trains teachers on the *its-learning* instructional system, but it also gives the teacher instructional strategies for integrating the system into classroom practice.

While laptops with Internet access have been a leading edge innovation in the schools, the recent development of e-Readers such as the Kindle® and the iPad from Apple promise to bring about a significant shift in the way schools think about technology integration. These devices eliminate the need for printed textbooks by delivering the content on a computerized device about the size of a small book. In addition to displaying text, these devices can also become interactive and, with the Internet, can allow a student to interact wirelessly with other students in and outside the classroom. An early example of the use of e-Readers is at Clearwater High School where students are receiving Kindles to replace their textbooks (Green & Johnson, 2010). Researchers Anderson, Anderson, Davis, Linnell, Prince, & Razmov (2007) have worked with tablet-like computers to demonstrate how these devices can be used for more than just electronic textbooks. In their study, they implemented a tablet system in a senior level course in Algorithms. A series of educational activities were developed and implemented along with the hardware, which was provided to the students as a part of the study. The system was positively received by the students and student motivation was high while using the system.

Comprehensive Administrative Information (Longitudinal Data) Systems

In a report on the state of educational data systems, Palaich, Good, and Van der Ploeg (2004) list several states that have started comprehensive data collection initiatives. In their exploration of these systems, they cite accountability reporting requirements and the allocation of increasingly limited resources as two reasons to develop a comprehensive data collection system. Studies such as those conducted by Carnoy and Loeb (2002) find that those school districts which use effective data collection systems generally have higher student achievement. There are several challenges to the development of such systems, including the scale of the systems which often outstrip the capacity of the state to design and implement them, the lack of technical expertise among many elected officials, and the lack of resources among technology professionals to create the political coalitions necessary to create such systems (Palaich et al., 2004).

These limitations notwithstanding, since the enactment of No Child Left Behind, several initiatives have been started with the goal of making education data sharing easier and more transparent. Two examples of these initiatives include the Schools Interoperability Framework (SIF Implementation Specification, 2010), and the Common Object Request Broker Architecture (CORBA) (Object Management Group, 2004).

Leaders in high-performing schools, districts, and states stay abreast of technological advances and integrate the applications into governance and leadership and, increasingly, leaders in high-performing schools, districts, and states use seamless comprehensive data management systems to aid data-informed decisions and to communicate the rationale for those decisions to stakeholders, which fosters transparency.

States such as Maryland and Wisconsin have started the process of developing comprehensive data collection and management systems (Maryland State Department of Education; Wisconsin Department of Public Instruction, 2010). Australia's educational data management system emphasizes the capacity to gather and share data on a range of indicators as a critical best practice and is also related to the transparency necessary for accountability. A recent study about Australia's system noted several instances

of networking of schools through eGovernance and concluded that economies that are building a capacity for eGovernance are moving toward 'good' or 'best' practice. Networking of schools, districts, government agencies, and citizens are a part of this electronic capacity that was cited as best utilized currently in the United States. The Georgia School Boards Association's eBOARDsolutions is one technology application currently used in numerous local systems in Georgia and in various states around the country.

Forsyth County Schools, in Georgia, offers a scalable system that has the advantages of ease of use, convenience, and other state-of-the-art features. With close to 35,000 students and 4,000 employees in 35 schools, Forsyth County Schools is a fast-growth system that has developed a culture which supports the use of the three stages of data-driven decision making: collection, analysis, and action to support student achievement. The system is "data-driven" with formal collection, management, and analysis of data being used to increase student academic performance as well as staff training and development opportunities. Forsyth utilizes a centralized data management office which houses all student and operational records, the student registration center, and communications capability for communicating with stakeholders through various electronic tools.

The Forsyth County Schools special data collection and analysis tool called the R4 Dashboard ("Rigor + Relevance + Relationships = Results") is the first system of its kind in Georgia. The system uses real-time data shown in "gauges similar to those found on the dashboard of an automobile." With the implementation of the R4 Dashboard, data collected from every department within the school district is readily available to all staff and the community through the system's website (www.forsyth.k12.ga.us). Regarding the data tool, Superintendent L. C. (Buster) Evans observed,

> Balanced scorecard data from strategic planning is typically static in nature—like a printed document. By providing trend and current data and information in graphic form online, we increase the clarity of our message. Many corporations use such a tool but only highly technological school systems are even considering them. (Consortium for School Network Initiative, n.d., p.1)

The R4Dashboard describes specific types of data that help educators, administrators, and policymakers make better decisions about student learning:

- Student learning—describes the results of the educational system in terms of standardized test results, grade point averages, standards assessments, and authentic assessments.
- School processes—defines what teachers are doing to get the results they are getting. School processes include programs, instructional strategies, and classroom practices.
- Demographic data—provides descriptive information about the school community, such as enrollment, attendance, grade level, ethnicity, gender, and native language. (Consortium for School Network Initiative, n.d., p.1)

To change the results schools are getting, teachers and school personnel must begin to "document" these processes and align them with the results they are getting to understand what to change to get different results and to share their successes with others.

In moving forward with the development of a comprehensive data collection system, some best practices to consider were developed by Agee & Yang (2009) regarding the implementation of technology for governmental management. Among these are the following:

- Establish clear guidelines for managing technology (governance).
- Manage the impact of computer networking (how technology is used).
- Develop a technology plan.
- Investigate the impact of technology investment (long-term viability).
- Identify other costs of technology investment (furnishings, etc.).
- Identify technology funding sources that guarantee equity.

School and Community

As previously stated, four key concepts seem inextricably linked to cultivating greater school and community connectivity. These concepts include school siting, school size, schools as multi-use facilities, and school safety. In the following, promising practices for these concepts will be examined in an effort to better articulate what must be done to ensure that schools become community learning centers, which reflect the needs and values of the communities they serve.

A report issued by the Center for Cities in Schools in 2008 suggests,

> From a smart growth, regional equity and healthy communities perspective, the trends in inequitable spending and the disinvestment in existing schools and communities are troubling because these actions have helped increase neighborhood decline and segregation in older urban areas and helped fuel the rapid, lower-density growth seen on the fringes of most metropolitan areas in the country. (Vincent & Filardo, p. 23)

This type of information seems to warrant a careful review of the school siting decision-making process.

In 2005, The Oregon Transportation and Growth Management Program published *Planning for School and Liveable Communities: The Oregon School Siting Handbook*. The publication resulted from a year-long evaluation conducted by the University of Oregon in 2004. The study included an extensive review of the literature, investigations of school siting practices in eight school districts, collection of survey data from school superintendents, and information gathered at a school siting forum. The following four school siting guiding principles emerged from the study.

1. "**School siting decisions benefit the entire community**: Well-coordinated school facility planning and comprehensive community planning increase the likelihood that taxpayer dollars will be used efficiently; that school facility and community planning will support, rather than work against, each other; and that community facilities can be jointly purchased, developed, maintained, and used."

2. "**The school site takes full advantage of existing resources**: School sites close to existing infrastructure reduce the need for new facilities. In short, by making good use of existing resources, schools can reduce their physical and financial impact on the community and the environment."
3. "**The school site is easily and safely accessible by walking, biking, and transit**: An important aspect of livable communities is the option to safely walk, bike, and use transit to key destinations. A well-sited school gives school children more transportation options."
4. "**The school site is a community focal point**: Through good siting decisions, schools become more than places to educate students; they serve as community focal points and neighborhood anchors." (Community Planning Workshop, 2005, pp. 4–5)

These guiding principles help to frame discussions and decisions about school siting. Such guiding principles are an important part of effective collaboration. The study firmly establishes the need for school leaders to collaborate with a wide range of stakeholders, particularly local government representatives, when selecting school sites. As the Oregon School Siting Handbook suggests, "School districts and local governments depend on each other. A growing community places greater demands on the school system, thereby creating a need for more or expanded schools. Likewise, a new school often stimulates significant traffic as well as residential development near the school site. Thus, the actions of one entity affect the interests of the other. It is imperative school districts and local jurisdictions work together to site schools" and to ensure schools and communities are connected in meaningful and vibrant ways (Community Planning Workshop, 2005, p. 2).

Witch Hazel Elementary in Hillsboro, Oregon, is a product of the type of collaborative planning just described (Community Planning Workshop, 2005). As a result of the Witch Hazel Village Community Plan developed by the City of Hillsboro, the school district purchased 20 acres of property in the heart of a proposed residential development project designed for five-thousand new residents. The site of the school "is centrally located and adjacent to the site of a future civic plaza" and "neighborhood walkways will connect the schools to the community" (Community Planning Workshop, 2005, p.11).

The Center for Community Preservation and Planning in Covington, Georgia, has embarked upon similar community development planning efforts which include school and public infrastructure siting. The Center's Leadership Collaborative includes representatives from the county's Board of Commissioners, Water and Sewerage Authority, Board of Education, and cities located within the county. Following the development of an extensive community development plan which was adopted by all participating agencies, a workgroup was formed to develop infrastructure siting principles, guidelines, and strategies aimed at maximizing available resources and ensuring smart growth and development. While the infrastructure siting workgroup is still in its infancy, it does represent the type of collaboration critical for effective school siting.

It is difficult, perhaps impossible, to engage in collaborative discussions about school siting without mentioning school enrollment size. An issue brief released in 2007 by The National Governors Association Center for Best Practices stated, "With the expansion of suburbs, policymakers and local officials began to favor consolidating children from smaller schools into larger schools as population growth and new patterns of development emerged over the past 60 years" (NGA Center for Best Practices, 2007, p. 1). These new

"larger schools were supposed to be more cost-efficient" and were typically "located on the outskirts of the community, where land was less expensive and more readily available" (NGA, 2007, p. 1). This larger-school model has been increasingly questioned by those who suggest a link between smaller schools and increased student achievement and greater school safety. There is a significant amount of research surrounding this issue. Meta-analyses of the research do indicate a link between school enrollment size and student achievement (Hattie, 2009). The optimal enrollment size of a school depends on a wide range of factors—too many to adequately define here; however, decisions about school enrollment size should be based on the available research and on the values and needs of the communities in which the schools exist.

In Bend, Oregon, the Bend-LaPine School District developed a school development guide that advocated the construction of smaller schools. The plan stated,

> Smaller schools should be easier to site because there are more sites to select from, and they encourage walking and biking to school if they are well-sited, may increase after-hours use of the facilities, and require fewer off-site development costs (sewer, water, sidewalk, and road construction). (Community Planning Workshop, 2005, p. 13)

In 2004, the school district opened Ensworth Elementary School. The school has a student enrollment of 300; 250 students can walk or bike to school. In Roseburg, Oregon, increased student enrollment at Roseburg High School required the community to choose between building an additional new high school and expanding the existing high school. Following "an extensive public involvement campaign that included focus groups, community workshops, and a telephone survey, the majority of the community decided it wanted one high school" (Community Planning Workshop, 2005, p. 16). The desire to have one high school football team was cited by some in the community as a primary factor in the decision-making process. Nevertheless, the school district opened a renovated campus in 2004 with a student enrollment of 2,100 students. As evidenced in the preceding, the values of the community should, just as relevant research, play a significant role in determining school enrollment size.

Collaboration among school districts, the community, and other agencies is also critical in the establishment of multiple-use school facilities. Co-locating a number of services within a school or at a school site can minimize the duplication of services and required infrastructure. From a client perspective, co-located services provide a one-stop shop of accessible public and voluntary services. Such facilities also provide for greater community participation in the life of both the school and community. Sheldon (2001) reports the following from research:

> Communities make use of multiple-use facilities, regardless of type, when those facilities are made available. Shared use makes more resources available to more community members. Shared use reduces both initial construction costs and recurring taxpayer costs. Shared use improves relationships between community members and the school. (p. 22)

Collaboration between the city and the school district in Lincoln, California, has produced a number of positive results. The two entities originally worked together to increase park space in the city. According

to the International City/County Management Association (2008), sites were selected with "sufficient and suitable land for parks" (p. 21). Once established, "School and park facilities are then shared through a master joint-use agreement, which states that the city will share park facilities with the schools during the day and schools will share their facilities with the community outside of school hours" (p. 22). This collaboration is facilitated by a joint committee which includes "the city manager, the school superintendent, the assistant school superintendent for business, the city finance director, two school board members, and two city council members" (p. 22). Further collaboration between the two agencies has led to the opening of a combined city hall and school district headquarters building and a joint-use public library. The library is being built in conjunction with the local community college and will serve the general public, school district students, and college students. The work done in this community serves as an exemplar of what can be accomplished when community leaders and public agencies collaborate.

In summary, collaboration among a variety of stakeholders is important in making decisions relative to school siting, school enrollment size, and co-locating services at schools or on school sites. Schools serve as community anchors. Accordingly, decisions about whether to renovate existing schools or build new schools warrant and deserve community input. Locating schools near where students live is important both in terms of student success and health. The kind of collaboration and community involvement described in the foregoing ultimately makes our schools safer for students. Schools, through the collaboration and shared vision of community stakeholders, can become places to learn, gather, and unite a community.

Recommendations for Moving Forward

The recommendations described for Teaching and Learning Resources are derived from the guiding principles, key issues, and current practices of promise discussed earlier in this section. The recommendations are not necessarily mutually exclusive and may be integrated for implementation.

Recommendation 5.1: Examine currently adopted and proposed alternative models for the delivery of educational services for the purpose of determining their effectiveness in terms of student learning, needed resources, and feasibility for adoption/adaptation by school districts over the state.

Collins & Halverson (2009) state, "schools as we know them will not disappear anytime soon" (p. 66). We know, however, that some aspects of schools are changing, particularly students' opportunities for learning. As electronic devices enhance the opportunity to learn, schools are beginning to reinvent themselves to embrace the new technology. Almost all school districts in Georgia confirm that they offer online courses to their students. The examples cited in the section on current practices of promise are reflective of the movement away from the traditional school to a blended delivery model and, in the case of some schools, to total virtualization.

We believe there is a need today to critically examine the current proposed alternatives to the traditional school model. This evolution in teaching and learning should be examined at the state level in the context of what is occurring in schools over the nation and around the world. A statewide committee should be formed

to carry out this recommendation. The committee might be convened by the Georgia Board of Education, the Alliance of Education Agency Heads, the governor, or others. It should be composed of a cross section of stakeholders who are knowledgeable about teaching and learning and about emerging technologies and their value. The examination should be systematic and ongoing.

In the course of the work, the committee should address, but not be limited to, the following issues:

- Current school calendar requirements
- Awarding of units of credit based on seat time
- Division of schools into grade levels and promotion to the next grade based on students' scores on a single assessment
- Organization of schools into elementary, middle, and high
- Performance and content standards adopted by each model
- Methodology used to measure student learning
- Accountability mechanisms associated with each model
- Internet filtering requirements imposed by schools and other governmental agencies

Beginning immediately, the State Board of Education and the Georgia General Assembly should allow maximum flexibility to local school districts engaged in or desiring to initiate a blended delivery model or a totally virtual one. These districts must have already demonstrated that they have the capacity to effectively manage alternative options for delivery of instruction. The current opportunities provided through charters or the Investing in Educational Excellence legislation might be sufficient to enable some districts to implement their alternative delivery model.

The state should consider funding of innovative initiatives that would be evaluated over an extended time to determine their effectiveness. The caution here is that sufficient time (at least five years) should be allowed to judge the quality of the initiative.

Recommendation 5. 2: Ensure full technology integration into the classroom by providing access to adequate resources, equitable infrastructure, and professional learning opportunities for teachers.

To stay competitive in today's global marketplace, students need to have access to an educational environment rich in technological innovations. There are many obstacles to creating this type of environment including lack of adequate funding for technology in the classroom, infrastructure to support the technology, and support for teachers who lack the expertise and time to fully implement technology in the classroom. To support this recommendation we propose the following actions:

- Increase funding for current technologies, such as interactive white boards, classroom computers, and Internet access so that every student has more equitable access to technology in the classroom.

- Establish a statewide task force to recommend ways to improve Internet access in the schools that allow students and teachers greater and more flexible access to Internet resources while ensuring the safety of the student.
- Provide additional professional development opportunities for teachers in the use of technology resources. These opportunities should go beyond specific information about how to use the technology (i.e., training); instead, providing teachers opportunities to learn how to effectively integrate technology into instruction. Examples include, but should not be limited to, release time to learn the technologies, support personnel to help support the technologies, credit for attending technology-related workshops, and a state-endorsed certification in the area of classroom technology integration.
- Set a goal for the state of Georgia that every student has access to a device that will replace the traditional classroom textbook. The device can serve as an e-reader and laptop computer. Along with the device, a comprehensive set of interactive educational materials should be developed that can provide rich, interactive educational experience for the student while providing real-time formative assessment data for the teacher.

Recommendation 5. 3: Develop, implement, and maintain a comprehensive, statewide, longitudinal data system.

A comprehensive, statewide longitudinal data system is needed to help state-level policymakers, educators, and others make informed decisions about all aspects of the educational system in the state. This information is needed by teachers to make informed decisions about individual student instruction in real time, not just at the end of the school year. Real-time information would also help the teacher develop better and timelier instructional strategies for each student. For the administrator, such a system is needed to allow acquisition, analysis, and use of data on all facets of the operation of public schooling and should be a priority. The use of data enhances decision making at every level, from pre-school through the university levels, as well as from the classroom to the capitol. A viable longitudinal data system enables policymakers at all levels to make informed policy decisions and reliable predictions, and initiate appropriate interventions regarding every component of the public education enterprise, pre-school through graduation.

Developing such a system is a daunting task requiring a significant investment on the part of the state. A task force composed of policymakers, educators, and information technology professionals (from both the public and private sectors) should be convened to perform the task of developing the comprehensive, statewide, longitudinal data system recommended here. We propose the following to ensure the development of a data system that will inform decisions at all levels.

The system should be

- modular in nature (core modules, such as financial and student assessment, could be developed first, and additional modules, such as inventory and online report cards, could be developed subsequently on an as-needed basis);

- based on an agreed upon set of open, non-proprietary standards (by first establishing and adopting these standards, modules could be developed and improved independently and by various entities);
- guided by clear established guidelines that ensure both transparent access to and confidentiality of data, such as student records; and
- designed to allow for access by agencies, such as vocational rehabilitation and higher education, so students in Georgia schools are better served by these agencies.

Recommendation 5.4: Develop local protocols for collaboration among local school systems, other educational entities, public service agencies, business and industry, and the community served in decisions related to school siting, school safety, and the co-location of community services.

The purpose of this recommendation is to encourage local governmental agencies to develop a protocol to provide a framework for collaboration with each other and with the community they serve to make decisions that have long-term impact on the citizens of the community. This recommendation is consistent with a major thesis of this document that community members should be meaningfully engaged with the public school district serving their community. The location of schools within residential areas makes schools more accessible to students and parents. When schools are located in residential areas, it is likely the community will assume greater ownership of the school and will assist school officials in ensuring that students are in a safe environment; in addition, school facilities are less likely to be vandalized or to suffer loss through theft. The co-location of services increases the potential for client-centered services in the areas of education, health and social services, and the establishment of early childhood learning centers.

Local boards of education should also engage the community in determining the optimum enrollment for schools when constructing new facilities or considering enlarging existing schools. While some research favors smaller over larger schools at all levels, size should be a function of what is acceptable to the community, what is in the best interest of the students, and what the community and the state are willing to pay for.

All communities want a great school for their children, and communities deserve an opportunity to engage in the quest for greatness.

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6 Human and Organizational Capital

Introduction

This section, one of seven on educational system components to support a new vision for public education in the state of Georgia, focuses on human and organizational capital.

No matter how modern the facility, how savvy the technology, or how abundant the teaching supplies, the expertise of the teachers and leaders has the greatest impact on the quality and extent of student learning. How the school and district are structured and the processes that are embraced to support teaching and learning can significantly affect the performance of teachers and students.

Understanding that human capital plays a pivotal role in education leads us to questions regarding

- the identification and recruitment of viable candidates for teacher and leader preparation programs;
- the provision of effective preparation programs for teachers and leaders;
- effective strategies for employing, developing, and retaining personnel;
- measurement of performance and compensation of personnel; and
- organizational structures and processes that effectively support educational programs and that maximize the use of human capital.

We use the term "human capital" to refer to the people who work directly with students in the schools or in support of those who work directly with students and to the knowledge and skills used by those people in their work. In this section, we focus our discussion on teachers and on school and school district leaders. The term "organizational capital" refers to the structures and processes of schools and school districts within which the teachers, leaders, and support personnel work.

"No matter how modern the facility, how savvy the technology, or how abundant the teaching supplies, the expertise of the teachers and leaders has the greatest impact on the quality and extent of student learning.

Currently, individuals in Georgia who decide to become teachers do so primarily as a matter of individual choice and not in response to any formal recruitment process. Informal efforts to recruit teacher candidates may play some role, but there is no well-defined, widespread structure in place to solicit individuals to become candidates for teacher preparation. Leaders most often come from the ranks of teachers. Individual

school districts should play a significant role in the identification and recruitment of leader candidates, but most often do not proactively develop a viable succession plan.

Teacher candidates typically receive the formal preparation for the work they will do by completing requirements for a bachelor's degree at a college or university. Extensive study of some content area or areas is usually a major component of this preparation. The study of pedagogy, child psychology, and learning theory is also usually included, as is engagement in some type of practical (field) experiences. Much of the preparation of leaders (administrators) is now being done on the job in local school districts. Due primarily to certification requirements, candidates for leadership positions also will be involved in formal course work at colleges or universities, often acquiring master's or specialist's degrees.

A professional certificate is required for a candidate to become a teacher or leader. The entity in Georgia with legal authority to award professional certificates is the Professional Standards Commission. The requirements for earning certificates deal primarily with degrees earned and course work completed at approved colleges and universities; however, alternate routes to meet certification requirements have become available to some extent in recent years.

The employment of teachers who have completed their preparation programs and obtained professional certificates is done on a district by district basis. Specifically, local boards of education in Georgia have the legal authority to hire personnel upon the recommendation of the superintendent of schools. The selection and recruitment of good teachers and leaders is generally regarded as a high priority goal for school districts. The provision of effective induction experiences for teachers and leaders who are new to the profession and/or the district is also generally recognized to be an important task. Teachers and leaders are usually engaged throughout their careers in ongoing learning activities aimed at increasing professional competence. Such activities may be provided by the school district, by colleges and universities, or by Regional Educational Services Agencies.

Teacher and leader performance is typically evaluated on a periodic basis by immediate supervisors using instruments that are developed either at the local or state level, and such evaluations are typically based on observation. Initiatives are currently underway in many local school districts and in several states to include measures of student performance in the evaluation of teachers and leaders. The extent to which the evaluation of teachers should be based on measures of student achievement has been a high profile issue for some time. The provisions of the No Child Left Behind Act have unquestionably exerted significant influence in this regard.

Teacher compensation in Georgia is driven primarily by a state salary schedule that is written into law and that is subject to change on an annual basis by action of the State Board of Education based on funds appropriated by the Georgia General Assembly. Many local school districts voluntarily add a supplement to the state salary, with the amounts of such supplements varying across districts. The state salary schedule is two-dimensional with the salary for a given teacher being defined by his or her training (expressed in terms of degree or certificate) and experience (expressed in terms of years of service). The compensation of educational leaders is more often than not related in significant measure to the teacher salary schedule, but

there is more variation across districts than is the case for teachers. A current national trend uses measures of student performance as a component of determining the compensation of teachers and leaders. Considerable discussion also continues about differentiating pay based on responsibility, assignment to hard-to-staff schools, or on market conditions (i.e., higher pay for positions for which there is a shortage of teacher candidates).

Within all schools and school districts are various structures and processes that exert influence on and/or control over the work that is done by teachers and leaders. School board policies, the roles and relationships of district-level administrative and support personnel, student discipline codes, and the arrangement of schools by grade levels are examples of such structures and processes. Any discussion of human capital in the public school setting must take place in the context of the organizational capital factors that help create the environment within which the instructional process takes place. The section of this document that discusses the system component "culture and climate" also addresses this point, albeit from a different perspective.

Guiding Principles

Six guiding principles underlie the recommendations in this section:

- Effective teaching enhances student learning.
- Selection and preparation of teacher candidates and ongoing support of teachers affect the quality of teaching.
- Compensation is an essential element in recruiting high-quality teachers.
- Effective feedback and supports through ongoing performance evaluation are essential to retaining high-quality teachers.
- Motivation is a major determinant of performance.
- Organizational structures and processes at the school and district levels affect learning.

Key Issues

The key issues relating to human and organizational capital are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers and from the experience of the members of the planning team and the research associates.

The quality of a student's public school experience is significantly influenced by the quality and performance of the people who are employed to teach and those who provide direct and indirect support in our schools. Students motivated to learn, teachers who are competent and caring, and school leaders who organize effectively and set high standards for themselves and others are the key ingredients of a successful educational experience for students. Five key issues relating to human and organizational capital are addressed in this document.

Identification and Recruitment of Talented Candidates for Teacher and Leader Preparation Programs

The first issue, that of identifying and recruiting talented candidates for entry into teacher and leader preparation programs, represents a critical starting point in ensuring that schools have competent and caring teachers in all classrooms and effective leaders in all schools. A premise deemed valid by most who are engaged in public education today is that the quality of an education system cannot exceed the quality of its teachers (Fullan, 2008). The importance of teaching is supported not only by anecdotal evidence but also by considerable research from the past few decades as exemplified by the following. "The available evidence suggests that the main driver of the variation in student learning at school is the quality of the teachers" (McKinsey & Company, 2007, p. 12). Developing and implementing an effective strategy to address this issue is central to the goal of providing highly competent teachers and leaders for our schools.

Provision of Effective Preparation Programs for Teachers and Leaders

A second issue is that initial preparation and in-service professional development experiences have great impact on the degree to which teachers are ultimately successful in ensuring learning by students. Having good candidates enter the profession is important, but preparing and giving them continuing learning support is also important. Those who provide such experiences must recognize that the measure of their success will ultimately be the degree to which students succeed.

Currently, the Georgia Professional Standards Commission approves all preparation programs that lead to teacher and leader certification in our state. Delivery of these programs is primarily the purview of colleges and universities. While colleges and universities provide leader preparation programs leading to certification, current leaders, particularly superintendents and principals, also play a critical role in the development of future leaders.

It has long been recognized that prospective teachers need knowledge and understanding of the content they will teach, the instructional strategies they should use, and the different ways in which children learn. This issue now rises to a new level of challenge and importance as a result of the greatly accelerated rate of change both in the demands placed on students as they exit secondary education and in the characteristics of young learners. The skills needed today for the high school graduate to succeed as a citizen, a learner, and a worker are different, in kind and in degree, from those needed even a decade ago (Wagner, 2008). Young learners exchange information and ideas today in fundamentally different ways (e.g., digitally) from previous generations. The rate of change in the creation and availability of information is exponential. The need to change teacher and leader preparation programs to take these new factors into account is evident and was supported by comments made by participants in the community conversations conducted as part of this project.

Effective Strategies for Employing, Developing, and Retaining Personnel

Third, local school districts have the responsibility for employment, development, and retention of personnel, all of which are critical in the prospective teacher's transition from college into the work place. College and university programs have not traditionally been designed to prepare prospective teachers for the

variety of situations they will encounter as they actually begin their work in schools, thus, school districts must provide effective induction experiences for their new teachers. School districts should design and implement ongoing learning experiences for teachers to ensure that they are able to respond to the needs of their students now and as those needs continue to change over time (Zepeda, 2008). These activities should be consistent with what we know about how students learn in and out of school. School districts should also provide school and district leaders with appropriate learning opportunities to ensure effective implementation of strategies that result in learning at a high level for all students. The value of professional development was underscored in the community conversations conducted across the state in conjunction with this project. Research demonstrates that many teachers decide to leave the profession after their first few years (Ingersoll, 2003). This loss of human capital is costly to school districts monetarily and in its deleterious effect on student learning. A major challenge for school districts is to develop and implement viable strategies for retaining those teachers who have demonstrated effectiveness in the classroom.

Measurement of Performance and Compensation of Personnel

A fourth issue is the determination of how best to measure the performance and set the compensation of teachers and leaders. A trend currently gaining popularity is to use measures of student performance in the evaluation of teachers and leaders, and as a component of determining their compensation (Dillon, 2010). Underlying the issues of performance evaluation and compensation is an array of questions about how to measure student achievement—questions that are not new but are critical nonetheless (Baker et al., 2010). Among the most perplexing questions is how to measure learning that goes deeper than recall of information or direct applications in familiar circumstances without requiring tests that cost so much money or take so much time to administer and score as to be impractical. Any discussion of compensation of teachers must also include the two factors that are the basis for the majority of salary schedules currently used in public education in Georgia; namely, training and experience. Clearly, the possibility of differentiating pay based on responsibility, assignment to hard-to-staff schools, or on market conditions must be considered. Compensation for leadership positions is subject to the same issues and questions, perhaps with an even more perplexing set of complications.

While extrinsic motivation derived from compensation and performance evaluation may influence performance, intrinsic motivation derived from perceived success by the individual and a shared perception or belief held by a group that they can make a difference through such collective efficacy is also a critical component (Waters & Cameron, 2007).

Pink (2009) asserts that the best ". . . strategy is to get compensation right—and then get it out of sight. Effective organizations compensate people in amounts and in ways that allow individuals to mostly forget about compensation and instead focus on the work itself" (p. 129). Pink holds that compensation should be both internally and externally fair and that performance metrics should be wide-ranging, relevant, and hard to game.

Organizational Structures and Processes that Effectively Support Educational Programs and that Maximize the Use of Human Capital

Finally, having teachers and leaders with the requisite knowledge, skills, and the will to perform is a necessary but not sufficient condition for the realization of the vision being sought here. For teachers

and leaders to function effectively in maximizing student learning, the rules, procedures, and norms of the school and district must not inhibit but rather must facilitate their work. A major challenge is to create an environment within which teachers and leaders can work cooperatively to support student learning. No matter how well teachers and leaders are prepared, inducted, and developed, and no matter how well evaluation and compensation practices are constructed and implemented, teachers and leaders may not be able to function as effectively as they must if schools and school districts are not structured and processes are not in place to support their work. Examples of such processes are those that focus on ensuring collaborative goal setting, establishing non-negotiable goals for achievement and instruction, creating board alignment with and support of district goals, and allocating resources to support the goals for achievement and instruction (Marzano & Waters, 2009).

Current Practices of Promise

Current practices of promise in the area of Human and Organizational Capital are those programs, activities, or strategies being implemented across the nation for which a body of research or other evidence has demonstrated their effectiveness in certain environments and under certain conditions. Cited in this section are practices that we know about and that are believed to have merit.

Identification and Recruitment

A program to identify and recruit candidates for careers in teaching is currently provided in Georgia by The Future Educators Association of Georgia (FEA of GA), a joint program of the Professional Association of Georgia Educators Foundation and Phi Delta Kappa. FEA of GA sponsors extracurricular clubs in Georgia middle and high schools. These clubs are designed to encourage middle and high school students to consider becoming teachers by providing opportunities for them to explore careers in education. Further information about FEA of GA is available at www.pagefoundation.org.

A notable teacher recruitment program in another state is the North Carolina Teaching Fellows Program. Established in 1986, the program provides scholarships of $6,500 per year for four years to 500 North Carolina high school seniors. A student who accepts the scholarship must agree to teach for four years following graduation from college in one of North Carolina's public schools or in a United States Government school in North Carolina. Failure to provide the required service obligates the scholarship recipient to repay the state at ten percent interest. Further information about the North Carolina Teaching Fellows Program is available at www.teachingfellows.org.

An alternative route for securing teachers for public school classrooms is the Teach for America (TFA) program, which recruits outstanding recent college graduates from all backgrounds and career interests to commit to teach for two years in urban and rural schools (see www.teachforamerica.org). The program began in 1990 and this year has 4,500 incoming corps members. Darling-Hammond (2010) has this to say about the findings from two recent studies:

> Students of Teach for America alumni who became certified after a couple of years of teaching had larger than average gains in mathematics. However, this represented a small minority of these recruits, as

> more than 80% of the TFA entrants … had left the profession by year 4, as compared to about one-third of traditional entrants. Since less effective teachers tend to leave sooner, it is likely that these findings are both because the better teachers stayed and they had gained in effectiveness as they completed their training and gained experience. (p. 47)

Preparation Programs for Teachers and Leaders

The National Council for Accreditation of Teacher Education (NCATE) has developed standards for the operation of Professional Development Schools (PDSs), formed through partnerships between professional education schools and P–12 schools. NCATE specifies a four-fold mission for PDS partnerships: 1) the preparation of new teachers, 2) faculty development, 3) inquiry aimed at the improvement of practice, and 4) enhanced student achievement. Professional Development Schools are intended, according to NCATE, to provide teacher candidates and in-service faculty with the same kind of clinical preparation received by medical students and interns in teaching hospitals. An example of a PDS in Georgia is J. J. Harris Elementary School in Clarke County, opened in August of 2009 in partnership with the College of Education at the University of Georgia.

Another example of an effort to provide clinical experiences for teacher candidates is an internship model developed by the Department of Curriculum and Instruction at the University of West Georgia, in cooperation with the Coweta County School District. The interns in this program are West Georgia students working to earn a degree in early childhood education. The school district actually hires the interns at a reduced salary (equal to about half the entry-level salary of a fully certified teacher) to serve as the teachers for regular classes in the school. Two interns are paired to work under the mentoring and guidance of a veteran teacher. One of the interns becomes the teacher of the classes that would have otherwise been taught by the mentor teacher. The school must have a vacant position to provide the classes to be taught by the second intern. The Coweta County School District obtained permission from the Professional Standards Commission and the Georgia Department of Education for the interns to serve as full-time teachers.

Development of Professional Staff

The Georgia Leadership Institute for School Improvement (GLISI) conducts a program for aspiring teacher leaders and developing assistant principals and leaders. The Rising Stars Collaboratives Program provides customized, localized instruction and guidance to support mastery of priority leadership skills and the opportunity to practice critical leadership tasks on the job—with coaching, feedback, and support. To date, 567 developing and aspiring leaders have been trained for transition to new leadership responsibilities in schools through GLISI's Rising Stars program.

Performance Evaluation and Compensation

Several states and school districts across the country have been experimenting with pay for performance or, more broadly, differentiated compensation plans over the past several years. Teacher compensation is a "front burner" issue for educational policymakers in many states today. Several states and local school districts have implemented compensation plans which are designed to base teacher pay and that of other

employees on performance or to provide bonuses for high performance. In the following paragraphs, we describe eight such plans (one that is national in scope, three that are statewide plans, and four that are individual district plans), offered with the following caveat: Owing to the array of questions regarding how to measure student achievement that underlie the issues of performance evaluation and compensation (as discussed under "Key Issues" in this section), no specific recommendation will be made to adopt any of the particular plans described. Our goal here is to provide an awareness of the current state of affairs regarding the implementation of pay for performance plans across the nation.

1. One of the most pervasive programs is the Teacher Advancement Program (TAP). The Milken Family Foundation created the Teacher Advancement Program to attract, retain, develop, and motivate talented people for the teaching profession. TAP, operated by the National Institute for Excellence in Teaching (NIET), is based on four elements. The first is multiple career paths, with teachers able to receive increased compensation as they move up through a variety of positions (career teacher, master teacher, mentor teacher). The second element is ongoing, applied professional development, with time provided during the regular school day for teachers to meet, learn, plan, mentor, and share to improve the quality of instruction. The third element is instructionally focused accountability, whereby teachers are held accountable for meeting the *TAP Teaching Skills, Knowledge,* and *Responsibility Standards,* as well as for the academic growth of their students. The fourth element is performance-based compensation, with teachers paid according to their roles and responsibilities, their performance in the classroom, and the performance of their students. As of November 2008 NIET was participating in implementation of TAP in 220 schools, 20 of which were high schools. The program is designed primarily for grades K–8.

2. The Minnesota Legislature enacted Quality Compensation for Teachers (Q Comp) in July 2005. The Q Comp program is based on the Teacher Advancement Program and has five components: career ladders or career advancement options; job-embedded or integrated professional development; performance pay; teacher evaluations/observations; alternative salary schedules. The alternative salary schedules include provisions that reward teachers for developing and using skills required for achieving high performance standards, that provide school-based awards for meeting or exceeding student performance goals, and that provide higher salaries for teachers in license shortage areas or hard-to-staff schools. Districts, schools, and charter schools must apply to participate in Q Comp.

3. The Texas Legislature in 2006 enacted into law two programs aimed at rewarding school personnel who positively impact student achievement. The Texas Educator Excellence Grant (TEEG) is available to individual schools (regular and charter) that rank within the top half of campuses enrolling high percentages of educationally disadvantaged students and either receive an exemplary or recognized accountability rating, or rank within the top-quartile of performance in comparable improvement in mathematics, reading, or both. The program provides awards to classroom teachers and requires that no less than 75 percent of grant allocation must be used to award classroom teachers (individuals or groups of teachers) who positively impact student achievement.

4. The other program enacted by the Texas Legislature, the District Awards for Teacher Excellence (D.A.T.E.) program, was implemented in 2008–2009. The purpose of D.A.T.E. is to allow school

districts to create or continue a system of awards for educators demonstrating success in improving student achievement. The grant program allows districts the opportunity to create a local award plan or to implement TAP. District-level planning committees establish goals for their district award plans that are consistent with and motivated by their district strategic plan. Once district goals have been determined, district-level planning committees elect to implement TAP or create an awards plan that is either district-wide or for select participating campuses.

5. The Professional Compensation System for Teachers (ProComp) is a nine-year bargained agreement between the Denver Classroom Teachers Association (DCTA) and Denver Public Schools (DPS) that is designed to link teacher compensation more directly with the mission and goals of DPS and DCTA. Under the provisions of ProComp, teachers, in addition to receiving salary increases every three years for satisfactory evaluations, can earn compensation for acquiring and demonstrating knowledge and skills by completing annual professional development units or through earning additional graduate degrees and national certificates. Teachers may be reimbursed up to $1,000 annually or $4,000 lifetime for tuition and repayment of student loans. Teachers are also rewarded for the academic growth of their students. They can earn compensation for meeting annual objectives, for exceeding growth goals, and for working in a school judged distinguished based on academic gains and other factors. Additionally, teachers can earn bonuses for serving in hard-to-staff schools and for filling hard to staff positions—assignments which historically have shortages of qualified applicants.

6. The Nashville City School District recently concluded a three-year experiment with their Project on Incentives in Teaching (POINT). In this project, middle school mathematics teachers who volunteered to participate could receive awards of up to $15,000 per year based on their students' progress on the state's standardized test (Koppich, 2010).

7. The School-Wide Bonus Program of the New York City School District provided opportunities for teachers in grades 3–8 in 200 of the city's lowest performing schools to earn bonus dollars based on student scores on the state's standardized test. This is a group performance program, with schools that meet system-determined student achievement targets getting $3,000 per teacher annually (Koppich, 2010).

8. Austin, Texas, has a program called REACH, which has three ways for teachers to earn incentive money. Recruitment and retention bonuses are paid for choosing assignments in high-needs schools. Individual performance bonuses are paid to teachers who set and achieve measurable student learning goals linked to improving student achievement. School performance bonuses are group bonuses for schools where student achievement growth, as measured by the state test, exceeds growth in comparable schools (Koppich, 2010).

Of additional note is the Georgia General Assembly's enactment of legislation to provide compensation adjustments for mathematics and science classroom teachers, but to date funding has not been provided for the program. Governor Sonny Perdue has proposed legislation that would provide for teacher compensation to be based, at least in part, on student performance on standardized tests and the annual performance evaluation of teachers.

With regard to the evaluation of teachers and leaders, the Georgia Department of Education has recently developed an evaluation process titled CLASS Keys and Leader Keys. The acronym CLASS represents "Classroom Analysis of State Standards." There are five strands in the instrument: 1) curriculum and planning, 2) standards-based instruction, 3) assessment of student learning, 4) professionalism, and 5) student achievement. The last strand includes measures based on student test scores.

Organizational Structures and Processes

Senge (2006) states, "The organizations that will truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization" (p. 4). He identifies four disciplines that are necessary elements of systems thinking: 1) shared vision, 2) mental models, 3) team learning, and 4) personal mastery. Systems thinking provides a discipline for seeing wholes, a framework for seeing interrelationships rather than things, a framework for seeing patterns of change rather than static snapshots, a set of general principles, a set of specific tools and techniques, and a sensibility for the subtle interconnectedness that gives living systems their unique character. Schlechty (2009), building on the work of Senge, underscores his point: ". . . we need schools that give a central place to creativity and imagination and enforce standards of excellence through shared commitments, collegial reinforcement, and collaborative agendas rather than through bureaucratically managed external control, extrinsic rewards, and threats of punishment" (p. 21).

Bellamy, Crawford, Marshall, & Coulter (2005) have characterized high-reliability organizations as having clear goals and constant monitoring of the extent to which goals are being met, an understanding of the necessary conditions under which these goals are met, and immediate corrective action when goals are not being met. These authors cite electric power grids, commercial aircraft maintenance, air traffic control systems, and nuclear power plants as examples of such organizations. Electric power grids, for example, have clear goals regarding the amount of electric power to be produced, they continually monitor the amount actually being produced, and they take immediate action when the power output falls below the required level.

Marzano and Waters (2009) argue that in light of the challenge to ensure that no student fails, schools and school districts must strive to become high-reliability organizations. Clearly, electric power grids and schools are fundamentally different, and the argument that schools and school districts cannot reach the same level with regard to high-reliability status as power grids is a compelling one. Nevertheless, the challenges currently facing schools in this country make just as compelling an argument that high-reliability is a concept worthy of serious consideration by all school districts.

Recommendations for Moving Forward

The following recommendations are derived from the key issues, guiding principles, and current practices of promise discussed earlier in this section. They are not necessarily mutually exclusive and may be integrated for implementation.

Recommendation 6.1: Create a statewide initiative to identify and recruit talented candidates into teacher preparation programs.

Local school districts stand at both ends of the pipeline through which new teachers enter the profession, providing the high school graduates who are candidates to enter preparation programs and the employment for college graduates who are ready to begin teaching. Many other entities, such as the Georgia Board of Education, the Georgia Department of Education, the Professional Standards Commission, and the several professional associations in the state have an interest in and responsibility for this issue. Development of the best possible strategies to achieve the goal of this recommendation will require the cooperative effort of all. Such strategies might include activities, such as those provided by FEA of GA clubs, to encourage middle and high school students to consider careers in teaching and college scholarships, like those awarded by the North Carolina Teaching Fellows Program, that can be repaid with teaching service following graduation.

Recommendation 6.2: Conduct a review of teacher and leader preparation programs for the purpose of identifying and implementing effective program components and strategies designed to better prepare individuals for the teaching profession.

Representatives of schools and colleges of education, local school districts, the Georgia Board of Regents, the Georgia Board of Education, the Southern Association of Colleges and Schools, other state agencies such as the Professional Standards Commission, and professional associations should be convened to conduct a thorough review of teacher preparation programs to determine the most effective components and strategies for preparing individuals for the teaching profession. These components and strategies might include the following:

- Providing teacher candidates with clinical preparation similar to that received by medical students and interns in teaching hospitals, as exemplified by the Professional Development Schools program described in this section
- Preparing teacher candidates to use formative assessment as a tool for modifying instruction
- Ensuring that teacher candidates are able to lead their students to use technology as a fundamental learning tool in the classroom
- Preparing teachers to serve as facilitators of learning while establishing high learning expectations for all students.

Recommendation 6.3: Provide comprehensive recruitment, induction, and retention strategies for all local school districts.

Local school districts should have in place coherent and comprehensive strategies for employing and retaining individuals with the greatest capacity for each position in the school district. School districts, teacher preparation institutions, and the Georgia Department of Education should enter into partnerships to ensure a viable induction strategy for all teachers.

Recommendation 6.4: Pilot teacher and leader compensation programs to evaluate the effectiveness and viability of selected compensation scenarios.

Representatives of local school districts, the Georgia Board of Education, and other appropriate agencies and associations may be convened to consider pilot programs that would be initiated at the state level to provide viable alternatives to the current practice of using training and experience as the only factors in determining salaries for teachers.

In addition, individual school districts may establish pilot programs under provisions of the IE^2 Law that allow waivers of the state salary schedule requirements in O.C.G.A. §20-2-212. The establishment of any pilot program should take into account the possibility of differentiating pay based on a variety of factors, including performance appraisals, performance responsibilities, assignment to hard-to-staff schools and sparsely populated areas, and critical shortage areas (e.g., mathematics or science). Provision of adequate and sustainable funding must also be considered.

Recommendation 6.5: Examine organizational structures and processes to ensure support of student learning and provide for distribution of leader responsibilities at all levels within the district.

To create an environment within which teachers and leaders can work most effectively to support student learning a school district should consider the extent to which it is a high-reliability organization with the characteristics described earlier in this section. The district should also examine whether it has in place leadership activities such as collaborative goal setting, establishing non-negotiable goals for achievement and instruction, creating board alignment with and support of district goals, and allocating resources to support the goals for achievement and instruction that provide support for student learning (Marzano & Waters, 2009).

Organizations that learn and remain effective over time are those that develop and rely on many leaders at all levels of the organization working in concert to achieve the goals of the organization (Fullan, 2008). Leadership responsibilities should be assumed by formal and informal leaders throughout the organization who will utilize their collective capacity to maximize organizational efficacy in ensuring that all students learn at a high level. Strategies should be developed and implemented that encourage and support the distribution of leader responsibilities throughout the school district.

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7 Governance, Leadership, and Accountability

Introduction

This section, one of seven educational system components to support a new vision for public education in the state of Georgia, focuses on the governance structure, leadership, and accountability in public education.

Education is a complex enterprise. Public schools are educational institutions with a governance structure that is little understood by most, difficult to describe, and relatively unchanged at the state and local levels for many years. For the purposes of this section, governance is defined as "those entities that establish statutes, policies, and rules for the conduct of public education in the state of Georgia or which may affect the state educational system." At each of the levels—federal, state, and local—various governing entities have the authority to enhance educational programs that schools and school districts provide, or they can create conditions that preclude the delivery of an adequate education for every child.

The primary governing structures at the national level are the President and Congress acting through the "general welfare" provision in Article I, Section 8, of the U. S. Constitution and through the U. S. Department of Education. The rapidly expanding role of the U.S. Department of Education is significantly affecting the governance landscape. At the state level in Georgia, both the governor and the Georgia General Assembly play a pivotal role in establishing education policy. The state board of education members, appointed by the governor, have rulemaking authority and local boards of education are charged constitutionally with the control and management of local school districts. In addition, a plethora of bureaus, agencies, departments, and offices exercise influence over various aspects of the public education enterprise. We will examine the research on public education governance and review the roles, relationships, and responsibilities at each level in an attempt to identify those strategies that result in high student achievement.

Effective leadership is generally accepted as an essential component of effective schools and districts. Throughout this section, we use the term "leadership" to refer to the actions of those in formally elected or appointed leadership positions. Leadership and governance are not mutually exclusive. Public education flourishes when those in governance and leadership positions understand their specific roles and carry out their responsibilities diligently and effectively.

Every child enrolled in our public schools should be assured an educational opportunity and experience that prepares her for college, career, and life. Critical components needed to make this assurance include quality and alignment of leadership at the state and local levels with support from the national level. The narrative that follows focuses on quality and alignment of educational leadership. In addition, accountability, a multi-dimensional concept, is examined.

Widespread agreement exists today that public schools should be held accountable for "effectively spending the funds with which they've been entrusted" (Rothstein, Jacobsen, & Wilder, 2008). There is not, however, agreement on how to best accomplish this. Three forms of accountability are described by Ladd (2007): school-based or administrative accountability, which uses measures of student achievement generally determined by test scores as currently required under the No Child Left Behind Act; political accountability, which holds policymakers accountable through the political process; and market-based accountability, which makes schools accountable to parents or families. The concept of holding schools accountable for student achievement is relatively new, having experienced a meteoric rise during recent years. Student achievement, as measured by a variety of assessment instruments, is clearly the accountability choice today among governmental agencies that have authority over public schools to provide or withhold funds for education programs.

Opinions vary widely regarding how much authority over schools should reside at each level of governance. Some would prefer national control of what is learned and how it is measured for accountability purposes. Others prefer total local control with trust placed in the hands of local educators and with no external accountability. Still others take an approach in between, approving of national guidance in broad measures with details left to the local level. The first question, then, is this: *Who* has authority over what in the public education arena? An additional concern is the delineation of responsibilities at each level of governance and those who lead at those levels. Thus, the second question is this: Who is responsible for the success of public schools? A third important question then follows: How should each level relate to the others for the most successful delivery of education to children? A basic question relating to accountability is "to what problem is school accountability the proposed policy solution?" (Ladd, 2007).

The metrics and diagnostics used to measure, monitor, and evaluate the academic success of students are important considerations in any accountability system. An undertaking of such magnitude requires policymakers to employ electronic data systems. The Teaching and Learning Resources section of this document examines how such systems can serve students, communities, local schools, and state and national agencies in tracking where students, schools, school districts, states, and the nation stand in the quest for a nation of educated, creative, and productive citizens.

Guiding Principles

Six guiding principles underlie the recommendations in this section:

- Effective educational governance requires a strategic vision.
- Children and society benefit from effective educational governance.
- Public education is an essential factor in a democratic society, in quality of life, and in economic development.
- Good governance requires effective leaders operating with integrity, ethical behavior, and good intent.
- People are accountable for their actions and outcomes.
- Relevant and accurate information is essential for good decisions.

Key Issues

The key issues relating to governance, leadership, and accountability are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers and from the experience of the members of the planning team and the research associates.

Alignment and Organization of the Governance Structure to Achieve Greater Governmental Efficacy

The roles and responsibilities at the national, state, and local levels are not always clear cut and may lead to confusion regarding who is actually in charge of the education of children. According to Epstein (2004),

> If one were to sketch an organizational chart of the American elementary and secondary education systems . . . one would discover that there is no such line of responsibility. Instead one would find something closer to a spider's web that has grown increasingly tangled in recent years—a web in which it is difficult, if not impossible, to figure out whether anyone is in charge. (p. 1)

The Tenth Amendment of the U. S. Constitution left to the individual states all powers not delegated to the United States by the Constitution. Thus, the provision of education to its citizens became the responsibility of each state. The U. S. Supreme Court, in two decisions (*United States v. Butler,* 1936; *Steward Machine Company v. Davis,* 1937), gave a broad interpretation to the "general welfare clause;" subsequently, Congress was able to use federal tax dollars as an incentive for states to take certain actions to be eligible for the funds appropriated. Several actions by Congress, and, in turn, by the U.S. Department of Education have provided the impetus for the most recent federal effort to improve the nation's education system through the No Child Left Behind Act.

The states are constitutionally responsible for education within their boundaries. Georgia's constitution states, "The provision of an adequate public education for the citizens shall be a primary obligation of the State of Georgia" (Ga. Const. art. VIII § 1). The Quality Basic Education Act (QBE) states that the Georgia General Assembly's education responsibilities are to provide "all children and youth in Georgia with access to a quality program which supports their development of essential competencies…" and to provide "an equitable public education finance structure which ensures that every student has an opportunity for a quality basic education regardless of where the student lives, and ensures that all Georgians pay their fair share of this finance" (Ga. Code Ann. § 20-2-131, 2010). The governor exercises considerable influence over legislation that is passed by the General Assembly and influences the funding of education through budgetary recommendations and vetoes.

Each Georgia governor for at least the past 30 years has stated that education was his top priority. The comprehensive Quality Basic Education Act was unanimously adopted by the Georgia General Assembly in 1985. Since that time, each governor has convened various commissions and has proposed legislation to put his own stamp on education in Georgia. The most recent was the Investing in Educational Excellence Act (IE^2), which requires a contractual relationship between local boards and the state board by 2013, through which local boards of education adopt measurable goals in exchange for flexibility regarding state

laws and policies. Local boards may choose to maintain the status quo but must hold public hearings to do so. Charter school systems are exempt from the IE^2 requirements but are required to establish goals and measures of accountability.

Individual legislators have also brought to the legislative table their interpretations of the best ways to improve education. As a result, amendments to QBE and other laws have been enacted that impact the content and delivery of education in Georgia, including recent legislation that allows "start-up" (not currently existing) charter schools, "conversion" charter schools (current public schools that desire charter status), and vouchers for children with special needs to attend private institutions. Most charter schools are created through approval by a local board of education and state board affirmation. Charter schools also can be established without the approval of a local board of education by taking advantage of a law that established the State Charter Schools Commission to review and recommend charter status for applicants. The State Board of Education can block the granting of commission charters only with a two-thirds majority vote. All charter schools are public schools no matter which process creates them. Parents may also educate their children at home with little interference from the state. Home school parents are required to report attendance to their local school district and to test their children periodically on a nationally normed test.

Experience and knowledge in the education field are clearly critical to success. No one can expect the president, 50 governors, 50 chief state school officers, and thousands of legislators, local board members, and superintendents all to be education experts. Given the tangled web of education governance, a lack of unity of purpose frequently leads to confusion and conflict.

A recurring theme in the research we surveyed for this study is the importance of collaboration between and among the leaders who govern the schools at each level (Goodman, Fulbright, & Zimmerman, 1997; Senge, Cambron-McCabe, Lucas, Smith, Dutton & Kleiner, 2000; Smoley, 2008). Educational leaders do not universally project a strong commitment to the public education of the children of America. Some are committed to all of the children and some to certain groups of children. National, state, and local governance agencies function in an environment in which the lines of authority and responsibility are unclear.

A High Level of Learning Ensured for All Students as the Central Role of Educational Leadership at All Levels

Rooney (2010) states, "Leaders define reality. What they say is important becomes important" (p. 88). When leaders devote the majority of their time to issues that are unrelated to student learning, student learning suffers. Today, leaders are required to devote an inordinate number of hours to issues that do not relate directly to the education of students. It is difficult for leaders to plan and implement effectively when they are addressing crises in educational funding, personnel issues, or open records inquiries. Waters and Cameron (2007) note, "At no time in recent memory has the need for effective and inspired leadership been more pressing than it is today. With increasing expectations in society and in the workplace for knowledgeable, skilled, responsible citizens, the pressure on schools intensifies" (p. 60).

Creation of Environments of Shared Leadership from the Classroom to the Boardroom to the State House

Successful leaders recruit good people and encourage them to contribute. President Lincoln said in his 1862 address to Congress regarding slavery, "we can succeed only in concert. It is not 'can *any* of us *imagine* better'; but 'can we *all do* better'" (cited in Miller, 2002, p. 224). Though slavery is not the issue here, the concept of not just imagining better, but doing better is paramount. The adage, "two heads are better than one," holds true in the school house, in the board room, and in the state house; and it will take all of us working together to improve public education.

Collaboration is an important component of leadership but need not imply decision by committee. When teachers have input in decisions that impact them and their students, they are more likely to support the decisions and less likely to "torpedo" them. Many decisions are appropriate at a level closest to the work; nevertheless, everyone does not need or want to participate in all decisions. Leaders have to know which ones need input and which ones need decisive and unilateral action.

Boards of education make the best decisions with informed advice from the superintendent; superintendents make the best recommendations with informed advice from leaders within the district and the classrooms. Achieving that balanced team takes time and requires excellent communication skills, but it is worth the investment.

Legislators seldom consult with educational leaders regarding their proposed legislation to improve education, and the legislation drafted is frequently based on personal perceptions or a concern of a very few vocal constituents. When legislators take the time to consult educators for an understanding of the legislative impact, both intended and unintended, better educational laws are passed.

Assurance of the Best Possible Succession of Leaders at Each Level

Continuity of effective leadership over time is an important consideration for schools and school districts. When changes in leadership positions occur, organizational effectiveness may be disrupted. New leaders often bring new ideas of how the school or district should operate, and changes frequently take place in rapid succession. Confusion can result, and the stability of the district can be endangered. An organization can minimize instability if it has in place a coherent and comprehensive plan for leader succession. A major component of a viable plan is the identification of individuals within the organization who have potential for growth and ensuring they are provided professional development opportunities that will prepare them for higher level leadership positions.

Leader succession plans typically include anticipated retirement dates for those in leadership positions. Early determination of retirement plans for organizational leaders allows the school district to identify successors within the organization or to actively recruit individuals outside the organization.

Fullan (2008) holds that "another way to love your employees is to select them well and then invest in their continuous development" (p. 57). Continuous development can be aimed at preparing employees to

> Determining who is accountable to whom, for what, and for what purposes are questions that must be answered to assign responsibilities for accountability properly across the levels of government.

assume greater job responsibility. Investing in the development of potential leaders at all levels within the organization is a commonly accepted strategy for ensuring continued effectiveness of the organization. If a school or district is not providing an educational program that is acceptable to its community, it may require new leadership to change the focus and ignite greater support. Once new leadership is in place identifying and preparing future leaders to embrace the new direction is critical.

Autonomy Granted to Educational Leaders Within the Context of the Larger System and Its Accountability

Waters and Cameron (2007) refer repeatedly to the need for principals to challenge the status quo. "By fulfilling the *Change Agent* responsibility, the principal focuses directly on the change process by actively challenging the status quo, modeling a comfort level with leading change with uncertain outcomes, and systematically considering new and better ways of doing things" (p. 35). Waters and Cameron outline levels of change that are easy to do within the current order of the school district and those that are more difficult and require a building of trust among all the stakeholders in "purposeful communities."

Once leaders at every level are recognized and acknowledged as having worthy contributions to make in inspiring, directing, and supporting those they serve, the logical next step is to grant them the autonomy to act on what they know. Dr. Mark Wilson, the National Association of Secondary School Principals' High School Principal of the Year for 2009, often credits the success of his award-winning high school to the fact that he was given "the freedom to act" (Riddle, 2009, p.31). He recognizes that his actions must be consistent with school district policies and the required accountability measures, but his autonomy within the school frees him to work with his teachers to make good things happen for young adults every day.

Because of the plethora of federal, state and local laws, rules, and regulations relating to accountability, many leaders at each level are reluctant to grant autonomy to those at a lower level, perhaps out of fear that such autonomy might tarnish their reputations and that of the organization. Trust is essential to the initial granting of autonomy, and accountability is the factor that reinforces that trust based on demonstrated success.

Implementation of an Accountability Model That Results in Proper Alignment with Responsibilities at All Levels of Education

Rothstein and colleagues (2008) contend this:

> In education, 'accountability'… requires schools and other public institutions that prepare our youth to pursue the goals established by the people and their representatives through democratic processes, and to achieve these goals to the extent possible by using the most effective strategies available. (p. 1)

In spite of general agreement that accountability is necessary to ensure that students are not only receiving excellent instruction but that they are absorbing and retaining knowledge and skills for future use, there is

disagreement about how to determine that accountability. High-stakes multiple choice tests tend to narrow the curriculum; fail to measure skills like problem solving, team work, and collaboration that are so needed in a global economy; increase student stress; and lower teacher morale (Ladd, 2007).

Determining who is accountable to whom, for what, and for what purposes are questions that must be answered to assign responsibilities for accountability properly across the levels of government. Finding the best vehicle to measure and report the success of efforts to educate students is difficult. The effort could be costly in the short term, but, if the result is significant improvement in the quality of the education experience of all students, there could be a significant return on investment.

Current Practices of Promise

In this section, we cite practices in the area of Governance, Leadership, and Accountability that are believed to have merit.

Governance

A study reported by Caldwell (2005) and conducted by the Asia-Pacific Economic Cooperation (APEC) that involved APEC countries (including the United States) and the Organization for Economic Cooperation and Development (OECD) to determine best practices in education governance revealed the following in light of global achievement:

- A balance of centralization and decentralization is most important for maximizing student achievement.
- Collaboration and cooperation through networking is far more productive than competition in education.

As an extension of the concepts of collaboration and cooperation advocated in the APEC study, anecdotal evidence exists that local boards that collaborate with other governmental agencies and offices appear to succeed at higher rates of student achievement. For example, many systems have memoranda of understanding with parks and recreation departments to share facilities for instruction and recreation. Chambers of Commerce facilitate internships and apprenticeships. City and county governments provide utility services at reduced rates or eliminate connection fees, and their public safety officers frequently participate in safety programs at the schools.

Family Connections and collaborative organizations in Georgia work with schools to channel needed services to children and their families, and other agencies use school facilities to promote and provide their services on site. Any and all uses and expansions of these types of governmental agreements and cooperative efforts benefit children's readiness to learn, opportunities to learn, and motivation to learn. Linked to these activities is the school's commitment to before school, after school, children enrichment, and evening adult training options. The collaboration of multiple agencies to make decisions that are in the best interest of children and are based on educational expertise was mentioned frequently at community conversations conducted as a component of this Vision Project. Statewide policymakers who consult local school district boards of education and leaders to craft education-related legislation and policy see legislation that produces improvements in shorter periods of time. In like manner, the state board and local boards of

education make the most progress with the least amount of resistance when the boards use advisory teams to study issues and counsel them on decisions so that multiple perspectives can be taken into consideration when forming policies and guidelines.

From the Schooling for Tomorrow project conducted by OECD in 2003 and reported by Caldwell (2005), the networking projects in England were cited as a best practice. The project embraced the following concepts:

- Schools working together on common problems
- Schools and care agencies sharing information on vulnerable children
- Schools, colleges, and universities developing and sharing materials
- Community learning for families and adults, linked by the Internet to education hubs such as schools and colleges

For the networking ideas to flourish, the project concludes that government must create new systems capable of continuously reconfiguring themselves, interactively linking the different layers and functions of governance, and not searching for a static blueprint that predefines their relative weight.

A statement from the United Nations Educational, Scientific and Cultural Organization (UNESCO), that was a part of the APEC/OECD study (Caldwell, 2005), asserts that at all levels, "…sustainable development will best be promoted where governance structures enable transparency, full expression of opinion, free debate, and broad input into policy formulation" (p. 12). The community conversations indicated that input and advice from stakeholders enhance decisions regarding governance and operations of schools at every level. In reality, many schools indicate that parent and community participation in school councils is frequently lacking to the point that it is difficult to get a quorum at meetings; however, in those schools where active parental participation in decision making at some level is commonplace, there is higher parental commitment to the school.

Goodman, Fulbright, and Zimmerman (1997) identified seven strategies for improving school governance in school districts:

- Redefinition of student achievement to include a broad array of educational goals;
- Strong, unified leadership and governance body at the school district level with the overriding goal of quality education for all children;
- New state laws on district governance to support the unified school board/superintendent leadership team;
- Mobilizing communities and staff to focus on high student achievement;
- A new approach to preparing and training school boards and superintendents that will support their coming together as unified leadership teams;
- Public consciousness raising for high student achievement; and
- Establishment of a National Center for Board/Superintendent Leadership for advocating and implementing the strategies and for carrying out supportive research for continuous improvement.

Leadership

Effective leadership is a critical element in the success of any organization, and it is no different for schools, school districts, or state education systems. Public sector leadership may well be more complex than in the corporate world. Public sector leaders including educational leaders, to be successful, must build broad-based stakeholder support for the organization's goals prior to initiating change. Coalition building is a necessary element of educational leadership.

Marzano, Waters, & McNulty (2005) conducted a meta-analysis of 69 research studies on school leadership and identified 21 categories of behaviors of school principals that had a positive correlation with student achievement. The authors referred to these categories of behaviors as responsibilities, provided a detailed description of each, and determined which responsibilities were associated with first-order change (sustaining innovation) and which were associated with second-order change (disruptive innovation). Managing first-order change, according to the authors, requires that the school leader give priority to the responsibilities of

- Optimizer
- Affirmation
- Ideals/beliefs
- Situational awareness
- Visibility
- Relationships
- Communication
- Culture
- Input

Managing second-order change requires that the school leader give priority to these responsibilities: knowledge of curriculum, instruction, and assessment; optimizer; intellectual stimulation; change agent; monitoring/evaluating; flexibility; and ideals/beliefs.

Marzano & Waters (2009) identified five school district-level responsibilities that have a measurable effect on student achievement: "1) enduring collaborative goal setting, 2) establishing non-negotiable goals for achievement and instruction, 3) creating board alignment with and support of district goals, 4) monitoring achievement and instruction goals, and 5) allocating resources to support the goals for achievement and instruction" (p. 12).

Public sector leaders including educational leaders, to be successful, must build broad-based stakeholder support for the organization's goals prior to initiating change.

Portin, Schneider, DeArmond, & Gundlach (2003) interviewed principals, vice-principals, and teachers in four cities in four states and reached five major conclusions about effective principals:

- The core of the job is diagnosing the school's particular needs and deciding how to meet them;
- Leadership is needed in seven areas: instructional, cultural, managerial, human resources, strategic, external development, and micro-political matters;
- Leadership must happen, but principals do not have to provide it alone;
- The school's governance structure affects the ways key leadership functions are performed; and
- Principals learn by doing and acquire skills on the job.

Peer coaching and/or mentoring of school and district leadership to enhance learning on the job is offered by professional leadership organizations in Georgia and other states as well as schools and colleges of education. Several coaching models are in use in Georgia. One is based on the Corporate Coach University model and is used by the Georgia School Superintendents Association on a voluntary basis with superintendents in their first three years of service. That same model is used by the Georgia Association of Secondary School Principals for middle and high school principals in their first three years, or if they need assistance dealing with specific challenges. The Georgia Leadership Institute for School Improvement also provides a coaching model for beginning administrators that is widely used.

Accountability

Rothstein and colleagues (2008) contend that the federal government needs to get out of the business of monitoring student achievement at the school or student level. The authors see the national job as one of recommending achievement goals and providing resources to pursue those goals for all children. The authors believe that it is the states' responsibility to develop testing and inspection systems to ensure accountability of schools and other institutions of youth development (such as early learning agencies). They recommend returning to the original National Assessment of Educational Progress (NAEP) insights that included assessment of broader areas of achievement than just literacy and numeracy. They also recommend developing inspection systems similar to those used in England and other nations.

Knowledge is Power Program (KIPP) Schools, as well as many public schools, implement strategies to maximize parental accountability through engagement, such as requesting parents to sign parental engagement contracts. The community conversations conducted by this project echo the need for greater parental involvement and responsibility for the achievement of their children.

Accountability that includes appropriate school-wide performance awards such as rewards, recognitions, and/or bonuses provides incentives for teachers to collaborate and drive the entire school forward, as happened with the original Pay for Performance Program and Schools of Excellence programs in Georgia.

Individual competition among teachers leads to secrecy regarding use of successful methods and even sabotage of other educators to advance the individual's personal interests over those of the children.

“Accountability models, whether for students, parents, teachers, leaders, schools, districts, or states, are most effective when they are comprehensive, based on authentic measures, are continuously monitored and evaluated, and are refined as needed, based on evidence.

Publishing and releasing annual reports that are easily understood, accessible, transparent, meaningful, and widely distributed in several forms (electronic, print, etc.) contribute to the public's clear understanding of the merits and weaknesses of the schools, especially when the report includes focused areas of improvement for the coming year.

Student performance as measured by authentic assessments, coursework, and outcomes provide for the student a realistic analysis of his/her current standing related to the outcomes required for promotion, graduation, and attainment of personal goals beyond secondary education. The best examples of methods to provide this accountability include electronic portfolios, presentations, and other authentic assessment measures.

Financial accountability is always important. In times of fiscal constraint, systems that have been good stewards of their financial resources and whose citizens have been willing to support the system financially at a high level are better able to continue to provide the means for their students to receive the best possible education.

Accountability models, whether for students, parents, teachers, leaders, schools, districts, or states, are most effective when they are comprehensive, based on authentic measures, are continuously monitored and evaluated, and are refined as needed, based on evidence. Accountability is most effective when leaders at all levels develop a support plan to provide assistance for student groups, individual students, teachers, schools, or the district based on identified areas.

Recommendations for Moving Forward

The following recommendations are derived from the guiding principles, key issues, and current practices of promise described earlier in this section. Recommendations are not necessarily mutually exclusive and may be integrated for implementation.

Recommendation 7.1: Conduct a comprehensive review and revision of Title 20 of the O.C.G.A. and other education-related provisions of law to support the vision and to repeal obsolete and overly specific provisions.

Many years of additions and revisions to the code has resulted in obsolete, conflicting, and ignored provisions. One major part of Title 20, the Quality Basic Education law, has been revised to the point that it no longer represents the initial intent of the education review commission that developed it in the early 1980s. This report recommends actions in several sections that would require revisions to the law, so it follows logically that it is time to take a careful look at the entire code to simplify, focus, and update it. Participation in this revision process by governmental leaders, educators, parents, and the general citizenry could help to restore faith in public schooling in Georgia and point to a future of shared goals for educating our children.

Recommendation 7.2: Change the method of selection of the state superintendent of schools.

The state superintendent of schools is elected on a partisan ballot by the registered voters of the state for a four-year term of office. This method limits the candidate pool to those willing to disrupt their careers and devote considerable time, energy, and effort to campaign for the office, raise funds, and travel over the state to increase name recognition and to communicate their positions on educational issues. Serving as state superintendent is a career choice unlike that of individuals who seek political office for a period of time while still engaging in their career beyond politics.

The Commissioner of the Technical College System of Georgia, the Chancellor of the Board of Regents, and the Commissioner of Bright from the Start all are appointed positions. The State School Superintendent should be selected in a like manner on the basis of experience and qualifications to hold the office. The superintendent should not be selected on ability to curry the favor of the electorate at a given point in time. A Constitutional amendment is required to enact the recommended change in the method of selection.

Recommendation 7.3: Change the method of selection of members to the state board of education to non-partisan election of one member from each congressional district for a term of office of even-numbered years by persons in each congressional district qualified to vote for members of the General Assembly.

Election of members to the state board of education from congressional districts would ensure that citizens in the district have direct representation of their positions at the state level; however, it may reduce the number of individuals who are willing to serve because of the time, energy, and resources required to conduct a campaign and get elected to the position. Election of state board of education members by the registered voters would be consistent with the manner in which local board of education members are currently selected.

Recommendation 7.4: Change the method of selection of members of local boards of education from a choice between partisan and non-partisan elections to non-partisan elections only.

Non-partisan elections may attract candidates whose primary interest is not in gaining an entry point into the world of elective politics; rather, it may attract candidates who have a genuine interest in public education and in the students served by the public education system. The work of local boards of education will be improved, and engagement with the entire community is more likely when members of local boards do not feel compelled to espouse political party agendas when their boards address important issues.

Recommendation 7.5: Conduct a thorough review of the pre-school to grade 12 public education functions currently performed by multiple state and regional agencies for the purpose of recommending a more effective and efficient education delivery system in Georgia in the context of a single shared vision.

A primary goal of such a review should be to reduce the number of agencies with jurisdiction over components of the education enterprise and to whom local school districts of the state must answer. In

recent years, several state agencies have been created and others have undergone changes in purpose, all as separate parts of the governance structure of public education in the state. Among these agencies are the Governor's Office of Student Achievement, the Professional Standards Commission, Bright from the Start: Georgia Department of Early Care and Learning, the State Charter Schools Commission, the public library system, and several others. When many agency heads and staff speak on behalf of public education, the message often becomes contradictory, even garbled. Without a shared vision to guide the work of state and regional agencies, it is not likely that organizational efficacy will be maximized or that leadership at all levels will be aligned to ensure a highly reliable delivery system for public education in the state. The consolidation of agencies would result in a more efficient use of state resources, and services could be delivered in a clearer, timelier manner.

Recommendation 7.6: Develop and implement strategies to ensure that all local school districts in Georgia benefit from transformational and improved operational practices and high-quality, effective, and efficient delivery of educational services regardless of size, population sparsity or density, geographic remoteness, or wealth to support public education in their communities.

The Georgia public school system is composed of 180 school districts. The largest district has an enrollment of 158,329 students and the smallest has 225 students. Seventy-three have fewer than 3,000 students and 15 have more than 25,000 students. Many of the smaller districts are located in rural areas and are composed of small schools that are great distances apart. Most of the largest districts serve urban areas with dense student populations. A significant disparity in wealth to support public education exists among the local districts. The quality of the educational experience for students across the state is highly variable. That variability has resulted in the inability of poor and urban districts to attract and retain excellent educators on a consistent basis, the frequent inability to provide resources for the delivery of a quality education equal to that available in other districts, and the inability to tap a sufficiently wide base of strong leadership to serve on local boards of education. It is time to explore all available options to move toward the equitable, effective, and efficient delivery of instruction to all students in Georgia, regardless of where they reside.

Collaboration and networking promote the spread of successful practices. Collaborative partnerships within school districts and across school district boundaries will increase significantly the likelihood that urgent, intractable, and important educational issues can be addressed efficiently and effectively. This collaboration and networking initiative may include shared governance, shared leadership, shared professional development, structured learning communities, delivery of educational services, and the acquisition of resources, all of which would support increased learning for all students.

Local school districts could benefit from a broader base of shared services available from the Regional Educational Service Agencies (RESAs). For example, RESAs, if supported with appropriate funding, could consolidate functions for member school districts in financial services, data services, human resource services, and other areas. Local districts in each RESA could collaborate to request the services they desire in the delivery of education in a more efficient and cost effective manner than the current practice of duplicating those services in individual local systems.

Recommendation 7.7: Establish and maintain high-reliability organizations through development of local school district leadership teams.

Virtually everyone agrees that good leadership is critical to the success of any organization. Many school districts, however, have not placed significant emphasis on the development and perpetuation of an effective leadership team. Professional learning for leaders is often available only on an ad hoc basis and at the choosing of the individual who wishes to participate. Some people hold the perception that anything outside the classroom does not add value to the education of the students, but time and time again it is the strength of a leader that takes educational organizations to new heights. Often, individuals with leader qualities are not given an opportunity to be part of an effective leadership team. Leader succession is sometimes haphazard, and far too often changes in top leadership positions result in organizational dysfunction as policies and priorities change overnight. A top priority for boards of education and superintendents is to ensure that leadership manifests itself at all levels of the organization (Fullan, 2008). Cultivation and continuity of quality leadership necessitates that school boards and superintendents focus on developing many leaders within the organization rather than depending on a single individual to provide the leadership required for success.

Recommendation 7.8: Develop and adopt a comprehensive statewide accountability system based on clearly established goals for public education.

Current accountability in Georgia rests almost exclusively with the mandates of No Child Left Behind, which is more about reading and mathematics and graduation rates than about educating a student to become a well-rounded citizen. The goals of a new accountability system must include basic academic knowledge and skills in all subject areas; critical thinking and problem solving; appreciation of arts and literature; preparation for skilled employment; social skills and work ethic; citizenship and community responsibility; physical health; and emotional health (Rothstein, Jacobsen, & Wilder, 2008). The resulting accountability system should measure public school success in its broadest terms and be based on established educational goals that are comprehensive in scope and are appropriately weighted when judging the success of schools and school districts.

Determinations should be made about the commitment of school districts in devoting resources, including time, to each of the goals. The commitment should include demonstration of good governance practices, continuing education, and self-evaluation by the local school board-superintendent leadership team.

Success reaches far beyond student performance on standardized multiple-choice assessments. While standardized test data may well be a part of accountability metrics, they should be only a part. Snap-shot accountability is not sufficient to make comprehensive accountability judgments about whether schools are investing wisely in student learning. Comments made at community conversations are consistent with Rothstein's proposal to return to the broader evaluations included in the original NAEP examination. The conversation participants objected to one paper-and-pencil exam as an exclusive measure of achievement. Participants called for less emphasis on No Child Left Behind's Adequate Yearly Progress requirements and for more emphasis on a broad range of learning opportunities for all students.

The state accountability system should allow for and encourage the development of local school district accountability systems which take into account, not just the district's accountability to the state, but also the district's accountability to the community it serves, the community's responsibility to its schools, parental responsibility to their children, and student accountability.

Recommendation 7.9: Develop and implement at the local school district level an accountability system based on local district educational goals that are aligned with state educational goals and state accountability system, and which include clearly defined measures of school district, school, and student success.

Local school district leaders generally accept the premise that they are accountable to the state for judicious allocation of resources to ensure an appropriate educational opportunity for all students enrolled in the district. They also understand that the responsibility of the Georgia Department of Education is to ensure that local school districts meet the accountability requirements imposed by the state. Local leaders also understand that their primary accountability is to the students who are enrolled in the public schools, the parents of those students, and the community served by the district.

Through meaningful community engagement with the school district, a viable accountability framework should be established to fulfill the requirements of the state's broad accountability system and to specify who is accountable to whom and for what in the education of the children and youth who attend the public schools. By allowing local districts to participate in the design of an accountability system personalized to each district's needs, a sense of awareness, commitment, and ownership could result throughout the system and the community. All stakeholders must assume a measure of responsibility for the success of the local school district and the community in educating all students at a high level; participants in the community conversations indicated that frequent public forums in local school districts are both desirable and trust-building.

Recommendation 7.10: Develop and implement a comprehensive state procedure for periodic accountability evaluation of local school district performance.

An emerging trend in evaluating the performance of local school districts and schools for accountability purposes is the inspectorate model. This model formalizes the accreditation process through the use of full-time professionals instead of volunteers who conduct a comprehensive review of the performance of a school or district in the context of the goals established by the state and/or the local district. These reviews should not be required annually except in instances where local school districts have been determined to be underperforming. Serious consideration should be given to this concept to move beyond total reliance on a single annual student assessment to determine the success of local schools and districts.

Performance appraisals should be designed that are appropriate, consistent, and fair, whether they are for individual students, teachers, schools, districts, educational leaders at all levels, or public officials. Educators should be active participants in the development of performance appraisals that are clearly tied to job retention, perhaps with the use of state models. Participants in community conversations endorsed this concept.

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8 Culture, Climate, and Organizational Efficacy

Introduction

This section, one of seven on educational system components to support a new vision for public education in the state of Georgia, focuses on the culture, climate, and efficacy of educational organizations. It is generally accepted that a relationship exists between the effectiveness of schools and school districts and the culture and climate therein. In addition to internal environmental factors, schools and districts must interact with and respond to their external environments. When examining a school or district's culture and climate, it's important to be aware of and to prepare for schools and districts becoming culturally competent in serving an increasingly diverse student population.

This component of the vision for public education in Georgia identifies and describes the dimensions of culture and climate that are essential for Georgia's educational system to achieve a high level of organizational efficacy. In addition, we examine cause and effect relationships in this section.

The culture and climate of an organization provide the framework for those who work for the organization and interact each day with it. Though the two terms, culture and climate, are often used synonymously and they share similar characteristics, they express two separate concepts. If an organization's culture can be thought of as its personality, climate can be thought of as the organization's attitude (Gruenert, 2008).

Culture, as it relates to organizations, is simplistically defined as "the way things are done around here" (Bower, 1966). Owens and Valesky (2007) describe it as a learned pattern of unconscious thought, reflected and reinforced by behavior that shapes the experiences of people in an organization. Regardless of the specific terms used to define culture, it is evident that organizations usually have clearly distinguishable identities which are manifested in organizational members' patterns of behavior, values, and beliefs (Deal & Peterson, 1999). Schools and school districts, like other organizations, are recognized as having distinctive cultures. While the work of all schools and school districts is very similar, most have a sense that certain characteristics and traits make their schools and school districts unique, or at least different, from others.

If culture is thought of as how things are done in an organization, climate can be viewed as the way individuals associated with the organization feel about the way things are done. In its early use, the term climate denoted the ethos or spirit of an organization. More recently, climate is thought to represent the attitude of an organization (Gruenert, 2008). The notion of satisfaction is often closely associated with the concept of organizational climate. Further, there is an assumed relationship between individuals' level of satisfaction and their level of performance.

> While the work of all schools and school districts is very similar, most have a sense that certain characteristics and traits make their schools and school districts unique, or at least different, from others.

Organizational efficacy is the capacity or ability of an organization to produce a desired result or intended effect. The cultures and climates of schools and school districts are often taken for granted or overlooked when considering organizational efficacy. Thus, a question to ask is whether a culture-performance or climate-performance link exists in education. The effective schools research of the late 1970s and early 1980s shows that the most effective schools had cultures and climates that were purposeful and conducive to learning (Levine & Lezotte, 1990). In a study of British schools, Rutter and his colleagues (1979) found that the underlying norms, values, and traditions of a school contributed to student achievement gains. The concepts of culture and climate should also be considered when contemplating changes in organizational structures and when introducing improvement initiatives. Schools' and school districts' cultures and climates will often determine how initiatives are received and whether they will be successful.

The culture and climate of schools and school districts provide a sense of meaning for those internal members of the organization as well as those external to the organization (Deal & Peterson, 1999). Groups that are considered internal members of educational organizations include school board members, district- and school-level administrators, faculty, staff, and students. External stakeholders include parents; community leaders; the business community; civic organizations; the faith-based community; local, state, and federal elected officials; government and social agencies; and retirees. All external stakeholders may be viewed as partners with educational organizations. For partnerships to be successful, a reciprocal relationship must exist. To achieve a high level of organizational efficacy, the same effort and intentionality must apply to shaping culture and climate internally as it does to linking educational organizations to external stakeholders.

Another factor that must be considered in relation to the culture, climate, and efficacy of educational organizations is the students these organizations serve. The student population served in many schools in our country is rapidly becoming much more diverse. The Southern Education Foundation (2010) reports the 15 southern states that comprise the South represent the first and only region in the nation's history ever to have a majority of low-income students and a majority of students of color enrolled in public schools. Some individuals associated with educational organizations view increasing diversity as a problem rather than an opportunity (Howard, 2007). When educational organizations and the communities in which they exist become increasingly diverse, the way things have always been done may no longer yield the desired or expected results. Racial, cultural, and economic differences are real and they make a difference in education outcomes (Howard, 2007). Schools and school districts must help faculty and staff build their cultural competence and cultural proficiency in order to meet the educational needs of a diverse student population. Cultural competence can be defined as the "ability to form authentic and effective relationships across differences" (p. 17). Cultural proficiency is a way of being that enables both individuals and organizations to respond effectively to people who differ from them (Lindsey, Robins, & Terrell, 2003).

All organizations have a culture and a climate. A proactive approach to making them both as positive as possible will provide Georgia's educational system the greatest opportunity to achieve a high level of organizational efficacy.

Guiding Principles

Nine principles underlie the recommendations in this section:

- Trust, collegiality, and teamwork strengthen collective efforts.
- Organizational culture is an important determinant of climate and is a distinguishing factor between effective and ineffective schools and districts.
- Effective leadership is crucial to creating organizational climates that are conducive to learning.
- A healthy culture is devoid of blame and fosters engagement of all stakeholders in finding solutions to challenges.
- Organizational change and improvement occur only when individuals within organizations make needed changes.
- Innovation and purposeful change in organizations are necessary to achieve sustainable competitiveness.
- Highly reliable organizations are consistent in holding high expectations for all members.
- High-performing organizations recognize, appreciate, and address cultural differences; strength can be derived from the rich diversity of our public schools.
- Safety, order, and respect are necessary conditions for teaching and learning to occur.

Key Issues

The key issues relating to culture, climate, and organizational efficacy are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers and from the experience of the members of the planning team and research associates.

Culture and Climate Play a Critical Role in Effecting Organizational Change

When students, parents, educators, community members, and others walk into schools or district offices, they immediately begin forming judgments about the culture and climate of those organizations. Educational leaders should be keenly aware of how others perceive the culture and climate of their organizations, but school climate is not regularly evaluated with measures developed in a scientifically sound manner that comprehensively assesses all of the dimensions that shape individuals' school experiences (National School Climate Council & National Center for Learning and Citizenship at Education Commission of the States, 2007). Accurately assessing and determining the culture and climate of educational organizations is a starting point that is a vital component of continuous improvement. Educational leaders should be familiar with the instruments available and their use in assessing organizational culture and climate. Schools and school districts should routinely evaluate their culture and climate, recognizing employee, student, parent, and community "voices."

In addition, school leaders should utilize the data from these evaluations to determine and implement culture and climate improvement efforts. They first must be familiar with the characteristics of culture and climate which positively contribute to organizational efficacy. Once they have accurately assessed the culture and climate of their organizations and compared the findings to those characteristics optimal for organizational efficacy, educational leaders must be proficient in implementing change strategies.

It's About People More Than Programs

Educational leaders must pay attention to the development of people in organizations rather than focusing primarily on organizational structures and programs as the solution to the many challenges their organizations face. Over the past several years, there has been a strong desire to identify a single program to remedy each of the many challenges faced by educational organizations. There must be a paradigm shift by leaders of educational organizations to resist the urge to continue searching for a "quick fix" and begin building human capital within their organizations. Educational organizations become more effective as the people within them grow and develop personally and professionally over time so that they become increasingly effective not only in their individual work but as participants in helping to accomplish the mission and goals of the organizations (Owens & Valesky, 2007).

Change Is Challenging

Educational leaders must have the skills to determine the readiness level of individuals in education organizations to engage in change. In implementing school reform initiatives, continuous improvement plans, or any other type of change, leaders must consider the complex culture and climate of their organizations, the challenges associated with past reform efforts, and the well-documented resistance to change that is inherent in most organizations (Bain, 2007). The culture and climate of educational organizations will be a significant determining factor in how improvement initiatives introduced into those organizations are received and implemented.

Educational leaders must also be cognizant of and skilled in how to manage the uncertainty in organizations created by the implementation of change initiatives. The degree of turmoil is proportional to the level or significance of the change being implemented. Some changes are simply modifications or improvements to components that are already in place. These changes will typically cause minimal disruptions. Other changes, however, require that components or entire organizations be fundamentally reconfigured. Changes of this level or magnitude will create significant disruption and disorder. For changes of this level, leaders must be persistent in their shepherding of the changes since organizations have a tendency to retreat to their old ways. Also, school leaders should help all individuals associated with schools and school districts understand that disruption is a positive force (Christensen, Horn, & Johnson, 2008). Though change is challenging, time-consuming, and might be highly disruptive and traumatic for many individuals in an organization, if managed properly, it can lead to more effective performance and improved outcomes.

> There must be a paradigm shift by leaders of educational organizations to resist the urge to continue searching for a "quick fix" and begin building human capital within their organizations.

Educational Organizations Are Extensions of Their Communities

Educators must clearly understand that schools and school districts do not exist in isolation. Community engagement and support are critical to school and district success. Research indicates that increasing parent and community involvement in education can lead to increases in student achievement (Gordon & Louis, 2009). Therefore, external stakeholders' satisfaction and engagement with and support of educational organizations must be accurately and routinely assessed. Once educational leaders have a clear understanding of their communities' engagement in and support of schools and school districts, they must be intentional about developing positive relations with external stakeholders. Often, external stakeholders struggle with how to be most productively and meaningfully involved in education. Educators must assume the responsibility for offering multiple suggestions and opportunities and providing the necessary direction for productive involvement.

Our Country, State, Communities, and Schools Are Becoming More Diverse

Issues around educating a more diverse student population continue to challenge schools and school districts even as our country is growing in its diversity every day. Student achievement data demonstrate that significant achievement gaps remain among subgroups of students. Do changing demographics in our schools mean that we should rethink U.S. public education? Wadsworth and Remaley (2007) suggest that educational leaders and policymakers should not necessarily redesign education to suit changing demographics. "Instead, we need to ensure once and for all that every child attends a school with strong academic programs, qualified and motivated teachers, and a respectful and nurturing environment" (p. 23). Americans have always viewed education as the route to financial stability and a quality life, and changing demographics have not changed that expectation (2007). A survey by Public Agenda (Immerwahr, 2004) confirms that students and parents from diverse economic and cultural backgrounds share the same dreams, value education, and look to school as the key to preparing young people for their futures.

Safe and Secure Learning Environments Are Essential

Educational organizations must provide environments that meet the physical and psychological safety needs of all stakeholders. Safety in schools is about creating stable environments where students and staff feel secure, welcome, and able to focus on learning. Schooling should be viewed as a positive experience with emphasis placed on student learning and self-regulation rather than simply rule enforcement. Gregory, Skiba, and Noguera (2010) believe that safe and orderly schools are the most essential element for efficient and effective academic programs.

In addition to the physical environment, there must exist in educational organizations an environment that fosters and encourages innovation, creativity, and responsible risk taking. As educational organizations prepare students for the 21st century who can compete internationally, educators will have to think

differently about some of the learning experiences. Technology continues to transform many aspects of the education environment. An environment which encourages and supports educators' experimentation with and use of technology will be necessary to begin closing the digital divide that may exist between many educators and their students.

Current Practices of Promise

Current practices of promise in the area of culture, climate, and organizational efficacy are those programs, activities, or strategies currently being implemented for which a body of research or other evidence has demonstrated their effectiveness. In this section, we discuss practices of which we are aware that are believed to have merit.

Transforming School Culture

Rock Island/Milan District 41, Rock Island, Illinois

Rick Loy began as principal at Thomas Jefferson Elementary School during the 1999–2000 school year. He was the fifth new principal in seven years and replaced a fired principal. The school was in very bad shape in terms of staff morale, and the level of respect from the students and parents was just not there. Student behavior was a challenge. During the spring of 2000, the school improvement team decided that changing the school's culture would be a top priority. A team of teachers and Loy worked with a state consultant on a plan to transform the way the school operated and functioned. The system included a list of the "Five Skills for Life" (truth, trust, respect, responsibility, and active listening). Student behavior and test scores improved. There were 207 student discipline referrals in the 1999–2000 school year; the number of referrals declined to 68 in 2001–2002. Also, scores on the reading section of the Iowa Test of Basic Skills improved. In 1999–2000 the number of students scoring in the top quartile exceeded the number scoring in the bottom quartile by 30. In 2001–2002, the number scoring in the top quartile exceeded the number in the bottom quartile by 82. Loy attributed these changes to the culture change of the school ("Transforming School Culture," 2003).

Public Engagement Drives Success

San José Unified School District, San José, California

Ten years ago, mistrust was high between the San José Unified School District and its urban constituency. The reverse is true today, an era characterized by improved student performance, greater public involvement, and widespread community support. The school district attributes this to the board of education-driven Public Engagement Model. The program was developed to increase parent and community participation and understanding within the school district. Successful components in the San José model include redesigning communications across the district, yearly community conversations, and annual climate surveys of parents, teachers, and students. The program provides a clear message that communication, school culture, and climate are critical components in supporting high expectations for students, parents, staff, and community.

Survey results indicate increases in parent, student, and staff satisfaction over the past decade, and they show improving a school's climate improves student achievement ("Public Engagement," 2006).

School Culture Triage Survey

Burns Elementary School, Daviess County Public Schools, Owensboro, Kentucky

Dr. Amy Melton-Shutt made school culture a priority when she became principal of Drakesboro Elementary School. As part of the emphasis on culture, the staff had celebrations, such as Friday assemblies to celebrate reading, and recognized staff members. Dr. Melton-Shutt used the Center for School Culture Triage Survey to determine if a relationship existed between survey scores and scores on Kentucky's Commonwealth Accountability Testing System (CATS). She surveyed the staff in her school and the staff in 66 other schools. In every case, the higher the school culture score, the better the school was ranked; the lower the survey score, the lower the school's ranking (Delisio, 2006).

Middletown's Discipline and Safety Committee

Middletown City Schools, Middletown, Ohio

At the recommendation of the Discipline and Safety Committee, the Middletown City School District administers a climate survey to its students each year. A two-page, 55-item survey developed by Dr. Keith King assesses students' perceived school connectedness and attitudes toward their school's climate. Data and information from the surveys are particularly interesting because the information comes directly from the individuals who are the main focus of school safety efforts. Surveys are administered each year as a means to continue monitoring students' perceptions regarding school climate and as a means of getting feedback about safety measures that are implemented during the school year. Findings from the surveys are beneficial in determining areas of improvement and areas needing further attention. School climate and students' perceived connectedness to the school have been shown in several research studies to be leading protective factors against students' involvement in alcohol, tobacco, and marijuana use; violence; suicide; and early sexual behavior (see www.middletowncityschools.com).

Mason County School Home Visit Initiative

Mason County Schools, Maysville, Kentucky

The Home Visit Initiative calls for every student in kindergarten through 12th grade to receive a home visit by his or her teacher. The program began with the 2004–05 school year when a small group of teachers analyzed what needed to occur for teachers to make quality connections with students. The answer was simple—you can't convince students that you care until you show them that you do. Teachers must know who their students are and where they come from. Also, teachers need the support of parents. Staff, administrators, and the community are excited by the preliminary results: teachers report having a better understanding for students in poverty; students are making smoother transitions when they move from school to school; parents are being more supportive; discipline reports have decreased by 40 percent; and parent and community volunteer hours have increased significantly ("Opening Doors," 2010).

Learning After School

Lincoln Public Schools, Lincoln, Nebraska

The Lincoln Community Learning Centers project provides children additional learning opportunities and enrichment through afterschool programs. The program was started in 2001 by a school board that views education as a community-wide responsibility. Its many components are founded on shared governance and collaborations. The program began in part to help close the district's achievement gap among subgroups of students. The program brings community partners, neighborhoods, and families together, all focused on helping children succeed academically, socially, and physically. Serving on the project are school board members, the superintendent, mayor, publisher of the local newspaper, and others who view education as a major player in the economic development of the city. The partnerships within the Lincoln Community Learning Centers project broaden public discussion, increase accountability, and strengthen connections among parents, schools, and the community ("Learning After School," 2006).

Montgomery County Diversity Forum

Montgomery County Public Schools, Christiansburg, Virginia

In 1996, the Montgomery County School Board commissioned a study to look at racial equity in discipline at its secondary schools. The results led the school superintendent, board chairman, and local NAACP president to create the Montgomery County Diversity Forum, which promotes racial and cultural understanding and identifies professional development opportunities for staff. The Diversity Forum is composed of school administrators, teachers, parents, school board members, NAACP representatives, and local churches. The group moved quickly from reflecting on issues of discipline to considering broader concerns related to diversity. Work of the Diversity Forum has resulted in positive differences in student discipline data, communication, and the willingness of staff and the community to discuss tough questions with each other in an open and honest fashion ("Diversity Dialogue," 2004).

Recommendations for Moving Forward

The following recommendations are derived from the key issues, guiding principles, and current practices of promise described earlier in this section. The recommendations are not necessarily mutually exclusive and may be integrated for implementation. There are presumed benefits and costs associated with each of the recommendations provided.

Recommendation 8.1: Make each school and district an inviting place to be for students, parents, staff, and the larger community.

Individuals associated with schools and educational organizations should be very intentional about creating cultures and climates that make the education experience more exciting, satisfying, and enriching for everyone involved. In order to create this type of inviting and productive environment, those associated with educational organizations might review the principles of Invitational Education®:

> Invitational Education, a theory of practice, maintains that every person and everything in and around schools and other organizations adds to, or subtracts from, the process of being a beneficial presence in the lives of human beings. Ideally, the factors of people, places, policies, programs, and processes should be so intentionally inviting as to create a world in which each individual is cordially summoned to develop intellectually, socially, physically, psychologically, and spiritually. ("Welcome to IAIE," n.d., p. 1)

Recommendation 8.2: Establish each school as the center or hub of the community in which it exists.

Educators should be intentional about raising the profiles of their schools and districts within their communities. One means of achieving this is through the development of partnerships. In addition to attracting more positive attention to the schools, there is general agreement and educational research to support the benefits of partnerships among schools, families, and communities as a means for promoting student achievement (Hands, 2005). Often, the onus for the establishment of school-community partnerships falls to the school, yet many educators do not intuitively know how to go about the process of developing effective school-community partnerships (Davies, 2002). Developing effective, sustainable school-community partnerships is not an easy task given the diverse and complex nature of the partners and the amount of time and energy required. School personnel should ensure that partners have a clear vision and understanding of the benefits of the partnership. Also, effective partnerships are based on a reciprocal relationship in which schools not only receive benefits, but they provide useful services or resources to their community partners. As the number and quality of school-community partnerships grow, schools should see positive effects on their students, and the schools will likely take on a more prominent role and position within their communities.

Recommendation 8.3: Determine stakeholder perceptions of schools and school districts.

A positive organizational culture and climate contribute to productive working and learning conditions and enhance student outcomes. Positive cultures and climates are largely a result of the leadership in organizations and do not occur naturally or without much effort and attention. For leadership to determine what actions are needed to improve organizational environments, culture and climate should be accurately assessed rather than estimated or assumed.

Organizational culture and climate can be assessed with the use of standardized, commercially produced survey instruments or with individualized, self-generated surveys. Organizational leaders should consider the advantages and disadvantages of each type of survey instrument and determine which option best meets their needs. Once the survey instrument is determined, it should be utilized for multiple years. This allows organizational leaders to establish baseline data, evaluate programs designed to address specific elements, assess for signs of change, and determine how organizational culture and climate are perceived by new members of the organization. The results of culture and climate surveys should be shared in an appropriate manner with all school/district stakeholders.

In addition to the information and data derived from culture and climate surveys, much rich information about schools and school districts can be gained by inviting and engaging stakeholders in community conversations. Community conversations provide stakeholders opportunities to visit their schools and become involved in meaningful dialogue about education. Community conversations also can have a contagious effect of stimulating others to become involved and to speak up.

Recommendation 8.4: Develop a culture and climate that fosters innovation and responsible risk taking.

Organizations cannot be both exemplary and cautious. Educational organizations should establish as part of their cultures an expectation of continuous improvement. In order for organizations to thrive, they must develop a bias toward innovation. Most organizations are wired to protect the status quo. Individuals in organizations might have the expectation or belief that by doing their work in the same manner, it will somehow magically net different results. Though innovative strategies should always address an identified need and be based on sound research, there are always risks associated with implementation of anything new. Individuals should clearly understand the risks involved with the implementation of any innovation and believe that the potential benefits significantly outweigh the risks. In order for change or innovations in organizations to be successful, attention must be given to people, processes, and structures (Jurrow, 1999). As part of the change process, all innovations need sufficient time and attention to ensure they are implemented with fidelity and to determine their effectiveness.

Recommendation 8.5: Develop school and district cultures that are sensitive and responsive to the cultural, racial, ethnic, and socio-economic make-up of the communities they serve.

Many schools have experienced a rapid growth in racial and ethnic diversity over the past decade. Schools are likely to continue the trend of becoming even more culturally, racially, ethnically, and socio-economically diverse. An increasing body of research demonstrates the importance of schools and districts addressing the unique needs of culturally diverse students and their families (Bazron, Osher, & Fleishman, 2005). If cultural disconnects exist in schools, they often lead to poor self-concepts, discipline problems, and poor academic outcomes for ethnic minority students (Bazron et al., 2005).

Classroom instruction should become more congruent with the cultural value systems of a diverse student population. Gay (2002) defines culturally responsive education as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning more relevant and effective for them" (in Bazron et al., 2005, p. 83). Ethnographic studies have demonstrated that utilizing these instructional practices can strengthen student connectedness with schools, reduce behavior problems, and enhance learning (Kalyanpur, 2003). In addition, schools and districts must help many of their minority parents develop the skills required to negotiate the education system and acquire the knowledge of the norms of behavior that govern schools (Briscoe, Smith, & McClain, 2003).

Recommendation 8.6: Develop safe, orderly, supportive learning environments built on respect and encouragement where all individuals believe they can make a positive difference.

Schools that lack order and consistency and have no established routines or procedures are frustrating and discouraging for staff because they have little time to focus on quality academic instruction. When teachers are required to spend an inordinate amount of time and energy on student discipline and classroom management, it is likely to be reflected in lower student achievement. Many traditional approaches to achieving safe and orderly learning environments might be characterized as reactive, punitive, and exclusionary. Schools that emphasize a more proactive, positive approach to creating safe and orderly environments explicitly and consistently teach and model for students the expectations for appropriate behavior (McCloud, 2005). When students have a clear understanding of what is expected of them, most students will at least try to meet those expectations. In civil learning environments, all individuals treat one another with respect and provide encouragement. The time spent developing safe, orderly, supportive learning environments will likely result in greater satisfaction by all school stakeholders and, more important, improved student achievement.

Recommendation 8.7: Get to know and be willing to truly listen to the students in our schools.

Relationships are critical. We must develop and foster caring and trusting relationships with students. When the adults in schools are committed to truly getting to know their students as individuals, students will recognize that the adults value their interests, cultures, and life experiences (Wolk, 2003). Getting to know students and their passions individually provides greater opportunity for teachers to connect curriculum to students' lives and interests. How teachers teach and their intentionality to make the content relevant to their students is integral in the development of healthy relationships. The school setting also provides the adults in the building opportunities to talk with students about topics not directly curriculum related. Conversations about hobbies, recreational activities, travel, and other interests encourage student-teacher relationships based on mutual caring and common bonds.

The 2009 High School Survey of Student Engagement provides some insight into the connection between student engagement and student achievement. One pervasive theme among the student responses to a survey question is that students feel their ideas do not matter and that nobody in school listens to them (Yazzie-Mintz, 2010). As has often been said, people do not care how much you know until they know how much you care. Caring and trusting relationships between students and the adults in schools are critical in encouraging and promoting meaningful learning. These relationships can begin by truly listening to the students in our schools.

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9 Financial Resources

Introduction

This section, one of seven on educational system components to support a new vision for public education in the state of Georgia, focuses on financial resources.

The recommendations offered in this document share one objective: initiating transformational enhancements in providing public education in Georgia. The goal of these enhancements is a learning experience for all children and youth that maximizes their opportunity to acquire skills for leading fulfilling and productive lives as citizens in their communities, state, and nation. To the extent that we are falling short of realizing this goal at present, it is imperative that any consideration of financial resources to support public education focus on strategies with the greatest potential for accomplishing the goal of the Vision Project.

An examination of financial resources requires a two-fold inquiry. We must first consider the extent to which existing public education programs and services are of such fundamental importance that they should continue to be offered to all Georgia children and youth. If a thorough review of the costs associated with ongoing public education determines insufficient financial resources are committed to these essential programs and services, then part of the search for potential resources should address identified deficiencies in current levels of funding.

The second area of inquiry focuses on securing financial resources to support the cost of specific new initiatives recommended by the Vision Project. These include recommendations that either have not been implemented in Georgia or have been attempted on a limited basis in some schools and districts, but are deemed to be practices of such promise that they should be made available statewide.

The first of the two areas of inquiry described above, while of critical importance, is not the primary focus of this section because it is an undertaking that is beyond the scope of the Vision Project's investigation. A quarter century has passed since a detailed study resulted in the enactment of the K–12 education program and its associated funding formulas that are (in increasingly unrecognizable form) still the basis for state support of public education in Georgia. Although a review of the costs associated with the components of the Quality Basic Education (QBE) Act was to have been performed on a periodic basis, no such analysis has ever resulted in the implementation of more than minor, isolated adjustments to QBE funding. Instead, changes have been piecemeal, often dictated by budget constraints, and never the result of a thorough study of appropriate changes in the provision of public education or the funding to support it.

Such a detailed study of existing QBE costs is, therefore, overdue. However, it must be more than a simple update of the cost components to take inflation into account. It must reflect the same transformational objectives that are the Vision Project's purpose and provide answers to these questions:

- Are there societal or technological changes that render elements of the 1985 QBE law obsolete?
- Are there practices embedded in the QBE funding plan that are inefficient and need to be modified or replaced?
- Are there personnel positions funded by the QBE Act that need to be increased or decreased?
- Most importantly, can every existing cost component be defended as contributing to a successful public school experience for Georgia's students in a way that justifies the expenditure of public funds?

Advocates for strengthened financial support of public schools have often cited the requirement of the Georgia Constitution that "the provision of an adequate public education for the citizens shall be a primary obligation of the State of Georgia" (Ga. Const. art. VIII, § 1.). No consensus has ever existed—and it could be argued that none is possible—on what constitutes an "adequate public education." From one perspective, "adequate" means the amount of funds needed to fulfill the provisions of existing law, updated to cover the increased costs of providing the programs and services since they were first implemented. Another viewpoint suggests that "adequate" is whatever level of funding is appropriated by the Georgia General Assembly and signed into law by the governor. Those who are unconvinced of the need for additional financial support of public schools contend that advocates for increased financial support are interested only in throwing more money at education while maintaining the status quo in every other respect.

The Vision Project's identification of needed financial resources takes a direction that avoids succumbing to the criticisms of time-worn attempts to define adequacy. It adopts neither a legalistic framework for determining what is adequate nor a declaration of what is currently needed to fund a formula or package of existing programs, personnel, and services. Rather, we ask whether an expense is essential in furthering the goal of enabling all children and youth to achieve success in their public education experience. Further, we seek to identify the most fiscally efficient and effective means of accomplishing that goal as it pertains to each recommendation.

To the extent that recommendations of the Vision Project require new financial resources, it is imperative to determine whether there are existing expenditures that can be appropriately redirected to the suggested new purposes without compromising overall educational quality. In part, that determination must emanate from the thorough, objective analysis of educational effectiveness of existing costs that is advocated here as an important next step. In other instances, carrying out the specific recommendations found in the other sections of this report might not entail additional cost and might even provide savings.

The question of whether all children are provided an opportunity to be successful cannot be answered without an appropriate, firmly established methodology for evaluating student learning (Rothstein, Jacobsen, & Wilder, 2008). Throughout this report, we have emphasized the need to define student learning more broadly than can be assessed by multiple-choice tests that attempt to ascertain attainment of a restricted set of academic facts. A determination of the financial resources needed to provide a successful educational experience for all children must be accompanied by mechanisms for ongoing evaluation of whether specific expenditures are accomplishing their objectives (Guthrie, 2004). This evaluation function, if thoroughly embedded in our system of public educational practices, will require its own commitment of financial resources. It will need to assess student mastery of both academic content and other areas of student growth needed for successful, meaningful adult lives. Studies to identify the need for subsequent changes in educational practices and their levels of financial support will be guided by better data on what works and what does not.

A cautionary note is offered on the distinction between the implementation of recommendations by local boards of education and a decision that a recommended enhancement is of such critical importance that it should be implemented statewide. The Vision Project has embraced the principle that educational improvement strategies are most effective if there is local involvement in their development and implementation. When schools and districts have the flexibility to select from among several promising practices, based on their understanding of needs of their students, they have a greater opportunity to foster a level of enthusiasm for the initiative that improves its likelihood of success (Odden et al., 2008).

If, however, a recommended strategy proves to be so effective that it is deemed appropriate for statewide implementation, the cost will be far greater than for changes made in a limited number of schools and districts. The state of Georgia has incorporated principles of equity into its current school funding provisions that call for a quality educational offering to be available to all students, not just those fortunate enough to reside in certain districts. As transformational changes advanced by the Vision Project are considered for implementation, state-level policymakers will need to determine whether to incorporate them into a statewide plan for strengthening public education, and if so, to identify the cost and commit to securing the needed financial resources.

In the discussion of key issues, effective practices, and recommendations that follows, we differentiate between those that pertain to sources of revenue and those that pertain to the educational offering to be supported by that revenue. The consideration of potential revenue sources necessitates a brief examination of the state-local revenue structure. Although further study and data analysis are required to assign an overall dollar amount for implementing Vision Project recommendations, costs will be of sufficient magnitude to warrant a thorough review of both the current revenue structure and of potential revenue enhancements resulting from a reform of that structure.

Guiding Principles

Seven guiding principles underlie the recommendations in this section:

- Citizen commitment to support taxation for public schools is enhanced when the general public embraces public education as an essential factor in economic development, a democratic society, and quality of life.
- Taxpayers are more likely to accept the responsibility for providing high-quality public education if they perceive that financial resources are being spent wisely, efficiently, and in a manner that maximizes success for all students.
- Ongoing evaluation of the effectiveness of expenditures for public education in meeting stated goals increases the likelihood of securing and retaining public support for taxation to finance high-quality schools.
- A tax structure that is regarded as fair, balanced, and equitable by a high proportion of taxpayers has the potential of generating revenue that is sufficient for a high-quality system of public education.
- Expenditures of public revenue for high-quality educational programs, personnel, and services pay dividends that more than pay for the initial direct cost by fostering enhanced economic well-being of communities and the state.
- The most appropriate mechanism for directing revenue to public education is one that is based on a well-crafted strategic plan for maximizing student learning.
- An appropriate system for financing public education is one that ensures equitable access to a high-quality public education for all children.

Key Issues

The key issues relating to financial resources are derived from a review of the relevant literature including the work of nationally recognized scholars and researchers. Key issues are grouped by 1) revenue sources and 2) utilization of financial resources to provide high-quality public education.

Revenue Sources

Conducting a Comprehensive Examination of Georgia's Tax Structure

In the 2010 Session of the Georgia General Assembly, legislation was adopted (House Bill 1405) that created the Special Council on Tax Reform and Fairness for Georgians. The Council, which is composed of 12 members, including the governor, met for the first time on July 28, 2010, and is charged with completing its work and reporting findings and recommendations by the end of December 2010.

Several previous tax reform studies initiated by the legislature were concluded without any overhaul of Georgia's revenue system or the enactment of significant modifications to the existing tax structure ("Background Materials," 2010). With the exception of the imposition of the first state sales tax in 1951, the overall state and local revenue system has not been thoroughly reviewed, revised, and modernized since the 1930s (Georgia Budget and Policy Institute, 2010). Although a great quantity of tax bills has become law since then, almost all were enacted in isolation from any comprehensive, cohesive plan for ensuring that Georgia possessed the most appropriate possible system for securing revenue to fund state and local services, including public education.

At present, we do not know what form the examination of the Special Council on Tax Reform will take, nor can we predict its findings and recommendations. At immediate issue is whether the time allotted for completion of the council's work is sufficient to perform the needed level of analysis. It is likely the council will need additional time for further study and to ensure that all relevant issues concerning the tax structure are properly addressed before legislation is enacted.

Distinguishing Between a Revenue-Neutral Examination of the Suitability of the Tax System and an Analysis of the Need to Modify the Total Amount of Dollars Raised by the Tax System

Ideally, an objective study to identify and implement an optimal state and local tax structure is conducted before, and independently from, an initiative that is designed to result in either an increase or decrease in overall revenue. When a tax system meets generally accepted criteria for a quality revenue structure, decisions about changing the total amount of revenue collected can be more easily made without inappropriately burdening some groups of taxpayers.

In fiscal year 2011, a tax analysis that conforms to the revenue neutrality principle is problematic. Severe declines in almost all revenue sources over a two- to three-year period, at both the state and local level, can become "locked in" if a supposedly revenue-neutral tax study's deliberations do not consider (either inadvertently or by design) the total amount of revenue that would have been collected if the current economic recession had not occurred.

Identifying Elements of a High-Quality Revenue Structure

A tax system is widely considered by economists and public policy analysts to be of high quality if it is broadly based and characterized by stability, predictability, reliability, balance, and fairness. In addition, it should be capable of supporting desired public services without acting to impede economic vitality and growth. It should promote efficient and effective administration and facilitate taxpayer compliance. Each of these factors warrants close attention in the consideration of reform in the state-local tax structure (National Conference of State Legislatures, 2007).

The last major tax study performed pursuant to a resolution of the Georgia legislature concluded that the state's revenue structure was, in fact, an appropriately broad-based system because it relied on a wide array of major and minor revenue sources (Bahl, 1995). Options were offered for strengthening other elements of the state's tax code, but they did not result in legislated changes.

Comparing Tax Burdens Among Groups of Taxpayers and Among States

Taxpayers at different income levels shoulder varying burdens in taxes paid as a percentage of personal income (Essig & Coffey, 2006). Several recently proposed changes in the state and local revenue structure in Georgia are designed to promote business growth by shifting a portion of the burden away from business taxes; some suggested tax revisions would be particularly felt in the form of higher tax burdens on lower income citizens.

Davis et al. (2009), writing for the Institute on Taxation and Economic Policy, reported that lower- and middle-income non-elderly Georgians paid a higher percentage of household income in state and local taxes

than the national average in 2007, indicating a more regressive tax structure than the average state. The same study reported that property taxes had become a slightly higher percentage of all state and local revenue collected in Georgia between 1997 and 2007, while the proportion of revenue from the state income tax had remained unchanged during the same period, and revenue from sales and other tax sources had declined slightly as percentages of the total.

As Georgia examines options for strengthening its tax system, the relative reliance on various revenue sources in comparison to other states is an important area of inquiry. The state does not want to harm its economic well-being by discouraging business location, investment, and expansion, which could have a negative impact on both future employment and growth in state revenue (and, in turn, the ability to adequately support public education). If, however, Georgia is compared with other states in both overall tax burden and relative utilization of individual revenue sources, the analysis may yield valuable information on specific taxes that could potentially be tapped to a greater extent than at present.

Comparative tax studies have shown that Georgia ranks in the lowest quartile of states in total tax burden when measured on either a per-capita basis or in relation to personal income. Using U.S. Census Bureau data, the Federation of Tax Administrators (2010) ranked Georgia 48th in per-capita state tax revenue and 44th in 2009 state taxes paid as a percent of personal income. When state and local revenues were combined, Georgia ranked 39th in per-capita taxes paid in 2008 and 40th as a percent of personal income.

In the same year, Georgia relied more heavily on the general sales tax (29.1% of total state and local revenue) than the national average (22.9%), but less on excise taxes (8.6% and 10.8%, respectively). Property tax collections constituted 30.4 percent of total state and local revenue in Georgia, nearly matching the national average of 30.8 percent. Personal income tax represented a higher share of the total in Georgia (26.3%) than for the average of other states (22.9%), attributable in part to the fact that most Georgians pay at the state's highest income tax rate. Corporate income tax revenue, however, represented a lower percentage in Georgia (2.8%) than the national average (4.3%), and Georgia was considerably lower on collections from all other state and local revenue sources (2.9% and 8.2%, respectively).

Considering Implications for Changes in State and Local Responsibility for Securing Revenue to Support Public Education

In Georgia, as in most states, the property tax has been almost entirely a local revenue source, while the income tax has been exclusively a source of state revenue. Sales taxes fund services at both the state and local level in Georgia, although the use of locally approved sales tax is restricted to capital expenses in most school districts. In recent years, reductions in state funding have resulted in a trend toward a higher percentage of school funds being derived from local revenue, although weakened local property tax bases since 2008 have had a negative impact on what has historically been one of the most stable types of revenue (School System Financial Reports, n.d., 2010).

There have been proposals for changes in the tax structure that would markedly alter the balance in state and local funding, especially for public education. The elimination of all local property taxation for support of schools, coupled with higher state taxes, has been proposed on several occasions. More recently,

reduction or elimination of the state individual or corporate income tax (or both) was proposed, also to be accompanied by expanded use of the sales tax, but the impact this would have on the overall proportions of state and local revenues is unclear. Still other suggestions have been made to broaden the number of local tax sources available to boards of education.

In addition to implications for the quality of the overall state and local tax system, an important issue is the consideration of changes to the tax structure that affect state and local responsibility for funding public services. Attention should be directed to the question of whether such changes will have an impact on the ability of the state to ensure that an essential level of support for needed programs and services is made available statewide.

Determining Specific Options for Existing and Potential Revenue Sources

When examining the quality of the tax structure and potential opportunities for securing revenue to meet the needs of state and local governments and of public education in Georgia, several options merit further review to determine their appropriateness, as measured by standards mentioned in the preceding discussion (National Conference of State Legislatures, 2007). Examples of options that would broaden existing tax bases without increasing tax rates are briefly described in the following statements.

Numerous exemptions to sales, income, and property taxes have been legislated in Georgia over many years. Additional exemptions are proposed annually. Some are broad-based exemptions (such as the state sales tax exemption on food and medicines), while others are specific and limited in their applicability and/or duration. The latter includes exemptions that involve relatively small dollar amounts, but the high quantity of such exemptions results in a more significant reduction in total revenue. An objective review of exemptions may conclude that some represent beneficial tax policy, while others may be an unacceptable drain on needed state and local funds.

States vary considerably in the extent to which they apply the sales tax to services. Georgia collects sales tax on a relatively limited number of services. As the nation moves more to a service-based economy, a higher proportion of consumer expenditures are for purchases of services that are not taxed, thereby limiting growth of public revenue. Applying the sales tax to a wider array of services would restore a revenue stream at both the state and local level without the need to increase the sales tax rate.

Online sales transactions are becoming increasingly prevalent, yet Internet sales are not subject to the sales tax unless the seller maintains a presence in the same state as the buyer. Congressional authority would be needed to permit states to tax other Internet sales, and accounting enhancements would be needed to ensure accuracy and compliance. Retailers selling in stores are disadvantaged by the existing exemption on purchases placed online, and the sales tax base becomes narrower as more sales occur through Internet transactions.

Substantial amounts of revenue are estimated to remain uncollected for major tax sources at both the state and local level. The employment of additional personnel and improved reporting procedures by the Georgia Department of Revenue would entail a minor cost in comparison to the additional revenue that would be collected through increased enforcement of existing tax laws. That assistance could be extended

to local taxing authorities in the form of expertise in identifying and securing uncollected ad valorem taxes. Although the state has periodically declared that a greater emphasis is being placed on enforcement activities, the work is unfinished and needs to be an ongoing function.

Georgia is well below the national average in its utilization of excise taxes (motor fuels, tobacco, etc.), corporate income taxes (partly due to loopholes that could be closed through legislation), and other minor taxes. Updating these tax sources to be more consistent with other states could enable the state to restore severe cuts of recent years without creating an undue burden on any group of taxpayers.

In the 2010 Session of the Georgia General Assembly, an act was approved that eliminates the state income tax for all citizens who have reached age 65. Numerous local legislative acts have reduced or eliminated property taxes for senior citizens, and some of these are also without regard to personal income. Where exemptions are deemed appropriate, consideration could be given to restricting exemptions to taxpayers with limited income. This strategy could take several forms, including a "circuit-breaker," by which property taxes could not exceed a specified percentage of personal income, or an income tax credit for property taxes paid, or an income tax credit for sales taxes paid by low-income taxpayers. Other options could also be identified for protecting low-income citizens while enabling the collection of an appropriate revenue stream from able taxpayers.

Utilization of Financial Resources to Provide High-Quality Public Education

An Approach to the Question of What Constitutes an "Adequate" Level of Financial Support for Public Education

A pivotal question to ask in determining whether financial resources are adequate is "adequate to accomplish what?" If decision makers regularly return to the question of how much needs to be procured to accomplish a well-crafted mission for maximizing learning for all, a clearer road map emerges for directing resources to outcome goals. If clear strategies for enhancing student learning are not identified, and if a process for implementing them is not developed, then revenue and budgetary decisions are directionless (Grubb, 2009; Hill, Roza, & Harvey, 2008).

The need for a fiscal culture that directly ties financial resources to student learning-centered educational objectives is equally important in the budgetary process at the state level and at the local school district level. When that link is in place, it is easier to make not only an enlightened decision about what is adequate, but also a compelling argument to the taxpaying citizens that the financial resources are needed and deserve their support.

"The need for a fiscal culture that directly ties financial resources to student learning-centered educational objectives is equally important in the budgetary process at the state level and at the local school district level.

An Environment That Fosters Widespread Support from Voters, Taxpayers, and the General Public for a Commitment of Financial Resources to Ensure Success in Learning for All Students

Current population trends will result in an increasingly higher percentage of adults in our state and nation who are not the parents of school-age children. This demographic reality does not need to portend a pessimistic outlook about the future of financial support for public education. The key is to create a climate in our state and communities in which people recognize quality public education as an investment in the future and as being crucial to the well-being and economic health of society at large, rather than being only of immediate benefit to children enrolled in school and their parents (Sawhill, 2006).

Programs and services that more effectively link schools to their communities may present opportunities to advance a public perception of schools as centers of community life. (This issue is explored in greater depth in the Teaching and Learning Resources section.) Perhaps the most critical factor in enhancing strong public support for schools—even among segments of the population that are not involved directly or indirectly in educational programs—is the creation of an environment in which people perceive their tax dollars are being spent in the most effective way to maximize student learning. The establishment of a transparent plan for disseminating evidence of such effectiveness may be the most important issue confronting public education and one of the most important tasks of educational leaders (Hanushek & Lindseth, 2009).

Members of local boards of education and educators at both the school and district levels can play key roles in fostering societal support for the crucial value of public education in enhancing the quality of life for all citizens. A critical issue is consideration of strategies for the development of training programs to assist educational leaders in effectively communicating this message.

Financial Resources Needed to Implement the Recommendations of the Vision for Public Education in Georgia

Not all transformational changes leading to enhancements in the provision of public education involve additional costs. Indeed, many of the recommendations offered in this document can be implemented without the commitment of new financial resources. Other improvements can be initiated by more effectively targeting existing expenditures. In the quest for high levels of learning for all students, educators must determine the best process for maximizing existing dollars.

The full set of recommendations of the Vision Project cannot, however, become a reality without an infusion of new revenue. That inescapable fact is most readily demonstrated by the recommendations to expand education and related services to children prior to kindergarten. The section in this publication on Early Learning and Student Success makes a compelling argument that providing appropriate learning opportunities to our youngest children will more than recover the cost in later years. This is true for strengthening the economic vibrancy and standard of living of the entire society, as well as for enabling reduced costs in the future for later school remediation, the criminal justice system, and other drains on existing public funds.

Nonetheless, the fact remains that financial support for early learning will need to be "front-loaded" before offsetting cost savings can be realized in subsequent years. At issue, then, is the development of strategies for building widespread public belief that the investment in early learning will pay later dividends both for the quality of individuals' lives and for the future economic strength of our communities, state, and nation. A key factor in advancing this belief will be the creation of an evaluation mechanism to monitor and track the effectiveness of early childhood programs and services by following the progress of children throughout their school years. (The section on Early Learning and Student Success discusses this issue and provides several sources for further information.) This continuous evaluation process will make possible the identification of further refinements to early learning activities that will make an even greater contribution to later student success.

Other recommendations of the Vision Project that will require significant financial resources include expanded professional learning activities and the additional time and human resources needed for them to be effective; potential changes in approaches to compensation of professional personnel, and the development and implementation of statewide longitudinal data and accountability systems. Not to be overlooked is the issue of retrenchment from the pursuit of quality public education that has significantly reduced funding in recent years. If any such reductions led to greater efficiency without sacrificing the ability to provide and enhance student learning, an urgent issue is the need for a process to distinguish those reductions from other budget cuts that have had a demonstrably negative impact on learning.

The Cost-Benefit Debate

Some observers of public education in Georgia and throughout the United States have declared that "money doesn't matter" in determining the extent to which student achievement occurs, and that public education will not be improved by an infusion of new funds. Those who are critical of proposals for increased financial support for schools cite a substantial increase in overall spending for public education over the past 40 years without a corresponding increase in student performance (Hanushek, 2010). A better "return on investment" is demanded by these observers before consideration should be given to a greater commitment of revenue. They accuse some in educational governance and leadership of wanting only to spend more money without changing the manner in which it is spent, and hoping the problems will go away.

Lost in the discussion has been the fact that many such critics are not calling for reduced financial support for public education, nor are they opposed in all circumstances to increased funding. Rather, those demanding a greater return on investment argue that there is no mechanism in place for rigorously examining whether funds are being expended in the most efficient and effective way to achieve desired outcomes. The argument is further made that such outcomes are not even clearly identified or stated, and that evaluation methods for properly assessing success have not been implemented.

A key issue in this debate is a search to find opportunities for common ground. Educators can find much to criticize in the claims of those who contend that money doesn't matter. Although much of this criticism can be shown to be well deserved, it misses the most important point. Educational leaders should respond to those calling for a greater return on investment by agreeing with them in principle. After taking into

account erroneous assumptions, philosophical differences about the objectives of public education, faulty data, and inappropriate assessment methods, there remains common ground about the desire for learning to take place and for children and youth to be successful. By demonstrating a commitment to transformational changes for the purpose of strengthening student learning, educators place themselves in the best position to show convincing evidence of the need for strong financial support of public education.

Commitment of Financial Resources to Cover the Cost of Evaluation

The original QBE Act called for the establishment of a comprehensive educational data system, and declared in law a date by which the system was to be fully operational. When no data system was forthcoming, the deadline was repealed. Several subsequent attempts costing tens of millions of dollars have since failed to bring about a system for managing student, personnel, programmatic, and financial data that is capable of supporting research on the effectiveness of public education in the state. Limited progress has been made, but advances in technology since the adoption of the QBE Act make possible the evaluation of every aspect of public education in a comprehensive way. Vision Project initiatives and recommendations can be properly evaluated in light of stated objectives only if their implementation is accompanied by a process for collecting and using data on an ongoing basis as a core component of the operation of public schools in our state.

Opportunities for Cost Savings

Several significant expenditures that may appear, on the surface, to offer opportunities for substantial cost reductions may not afford more than minimal savings, if any. Following, we briefly describe several of these expenditure items.

Class size

Major cuts in funding during the past two years have resulted in school districts increasing class sizes. Although some observers contend that this can and has been done without harming the quality of education and of student learning, several factors argue for caution in using increased class size as a long-term vehicle for balancing budgets and financing other educational enhancements. For example, class formats such as large-group lecture classes for specific high school courses might make a convincing point against across-the-board state-imposed maximum class sizes. At the same time, several sections of this document describe the need for close personal interaction between teachers and students and identify such interactions as important factors in promoting student success, particularly for at-risk students. This objective may serve as an argument against obtaining significant savings from allowing general increases in class size.

Pay-for-performance plans and other compensation considerations

Some researchers have offered evidence that traditional "training and experience" salary schedules have little impact on student learning, and therefore should be scrapped in favor of merit pay systems that are directly tied to student performance measurements (Guthrie & Schuermann, 2008). These analysts further contend that earning master's degrees, in particular, drives up the cost without a corresponding increase in student learning.

Compensation plans based on degrees earned and the number of years of teaching experience are used in the overwhelming percentage of school districts in Georgia and throughout the nation (Springer, 2009). Issues involving personnel compensation are discussed in a subsequent key issue, but we mention it here because any consideration of significant changes in teacher pay should not be expected to afford significant, if any, cost savings.

The difficulty in encouraging the most talented college students to enter the teaching profession, and the need to offer attractive salaries to prospective teachers, provide an argument against reducing salaries for some personnel for the purpose of funding merit pay for others. Additionally, greater attention is being focused on the potential of increased instructional time for improving student learning (Farbman, 2009), and this issue also has ramifications for personnel compensation.

Similarly, the need for expanded professional learning activities for all teachers and instructional leaders can be expected to act as a counterweight to any attempt to obtain overall budgetary savings in personnel compensation. Fundamental changes in existing salary schedules may alter future earnings, particularly for teachers now entering the profession, but a net reduction in expenditures for salaries is not likely to occur.

Textbooks and instructional materials

Advances in technology are rapidly moving the delivery of instruction to a new realm in which textbooks and other printed materials are being increasingly replaced by electronic media, and this trend is expected to continue and intensify. (The section on Teaching and Learning Resources examines this issue in greater detail.) Although lower budgets for textbooks will result, there may not be an overall savings in school district budgets. There is great disparity in student access to electronic media in the home, and ensuring that all students have access to educational resources online may require that new expenditures for technology become standard items in school district budgets and state formulas for allocating funds.

Virtual learning

Brick-and-mortar expenses are expected to become a less-costly component of public education funding as online instruction and distance learning become increasingly present in the delivery of instruction. As discussed in the section on Teaching and Learning Resources, such instruction may soon become a reality for a portion of the education received by many or even most children, including those who continue to attend some classes in traditional facilities. Although the capital expense of construction may be reduced, the cost of implementing technology in a comprehensive way may be substantial, especially if a commitment is made to making virtual learning available to all students.

Other suggested cost savings

Some school districts have considered opportunities for reduced costs for student transportation. Despite reductions in state funding for this function, and despite the lack of a state requirement that transportation be provided for students residing within 1.5 miles of the school they attend, districts have found it difficult to bring about major savings in transportation expenses. Although every effort should be made to review costs and identify possible efficiencies, safety is cited as the primary reason for precluding more than minor cost reductions for this function.

Expenses for compensation of classified personnel may or may not be a viable target for cost savings. A careful review of the number of personnel needed for non-certificated support positions is an exercise that should be initiated in every school district. In particular, data could be assembled and made available from the state to enable each system to compare its expenses with other similar systems to identify potential areas for savings. Numbers of employed personnel are likely to present greater opportunities in this regard than salary or wage amounts. When classified personnel are already being paid at minimal levels, reducing pay even further for the purpose of balancing school district budgets may not be an appropriate method for improving efficiency if it results in school employees who do not receive a livable amount of compensation.

Finally, increased opportunities for students to engage in college-level studies or technical programs before they complete high school may or may not enable reduced expenditures. The suggestion has been offered that an increased emphasis on early childhood education, if successful, would render completion of the traditional four years of high school courses unnecessary. There is no anticipation, however, that youth of high school age would be required to pay tuition for college-level courses taken before their normal high school graduation time. For this reason, even a major change in the delivery of educational content to high school-age students is unlikely to bring about a reduction in costs for serving students at this level of their schooling.

Compensation and Benefits for Professional Educators

Several attempts at alternative compensation arrangements have been made in Georgia over the past 25 years. None has been implemented in a manner that remained in place for more than a few years, nor has any plan been disseminated to all schools or districts. A similar pattern is evident in most states (Springer, 2009).

Analysis of the strengths and weaknesses of specific alternatives for transforming teacher compensation are beyond the scope of this report. However, teacher compensation is by far the largest item in school district budgets, so the objective of identifying the most effective ways of improving student learning cannot be satisfactorily realized without careful study of the most optimal methods for paying instructional personnel. An issue that must be addressed is the process for identifying promising personnel compensation practices that can have lasting success.

One Vision Project recommendation calls for the piloting of "teacher and leader compensation programs to evaluate the effectiveness and viability of selected compensation scenarios." (See the section on Human and Organizational Capital, Recommendation 6.4, p. 92.) If individual local boards of education opt to pilot new compensation programs, and the results document improved student outcomes, important issues to address include the question of how the state can prepare for expansion of the program in other school districts, and how any additional cost can be financed on a statewide basis. If the state initiates a pilot program in selected districts, it should be prepared at the outset for a plan to fund the cost of implementing the program statewide if it proves successful.

The cost of personnel benefits—primarily retirement and health insurance programs—cannot be overlooked. This concern applies both to currently employed educators and retirees. Although funds budgeted for retirees are not a factor in improving student learning, the rapidly escalating cost for such benefits can be expected to have a substantial and growing impact on the availability of funds to support

Vision Project recommendations. Therefore, a key issue in the quest for financial resources to maximize student learning is a search for opportunities to control future growth in revenue that must be committed to cover the cost of benefits for current and retired educators.

Flexibility, Accountability, and Locus of Control

Conventional wisdom has long held that the entity that controls the purse strings is inherently the entity that retains power and control over use of funds and over the programs and services for which the funds are spent. A review of the history of state and local financing of education reveals that this postulate is not necessarily true for all education revenue sources or the manner in which the funds are expended.

State laws and regulations can have the effect of rigidly limiting the authority of local boards of education to control the expenditure of local revenue, which is raised ostensibly at the discretion of the local boards. Conversely, the state can collect and distribute state revenue to local school districts without strings attached, as is the case in Georgia with the equalization grant program. Generally, however, Georgia's state plan for supporting public education has been characterized by unusually prescriptive state controls over how local school districts can expend funds earned under provisions of the QBE Act (Ga. Code Ann. § 20-2-130 et seq., 2010).

A key issue in the search for an optimum school finance methodology is whether the state should exert detailed control over cost inputs or grant authority to local educators coupled with an accountability mechanism for ensuring that appropriate decisions are made to enhance student learning (Schlechty, 2008). If the latter is embraced, it is imperative that an evaluation system be developed that measures the performance of students, educators, schools, and districts in a way that captures all aspects of learning identified as important outcomes of public education.

Just as school districts seek flexibility from the state in the expenditure of both state and local funds, the consideration of granting some flexibility by the school district to the school level is an issue that warrants discussion. Individual schools are not taxing authorities, nor do they set budgets or control the total amount of dollars allocated to them by districts and their elected boards of education. Many school districts, however, have implemented procedures for school-level personnel to have measures of control over how their allocated dollars are spent (consistent with state requirements and local board rules). If such procedures are found to be beneficial in fostering school climates that enhance student learning, a process should be considered for disseminating the practices to other interested schools and districts.

Determination of the Financial Resources That Will Be Necessary to Address the Needs of Students Who Have Historically Been Less Likely to Succeed in School

The current QBE funding formula recognizes that the cost of educating students in different circumstances varies, sometimes widely. The weighted student funding mechanism is designed to channel more dollars to students in specific programs, such as

- special education,
- remedial programs for academically struggling students,

- early intervention programs aimed at keeping young students from falling behind before they need remediation,
- programs for English-language learners, alternative school programs, and
- gifted student programs.

At issue is whether the differentiated costs associated with specific components earned in the QBE Formula adequately take into consideration the real cost of enabling students in a variety of circumstances to be successful learners (Alexander & Salmon, 2007; Darling-Hammond, 2009; Guthrie & Rothstein, 1999; Rothstein, 2004). Just as overall funding may be more appropriately based on strategies for improving student outcomes rather than on input costs, it may also be important to express funding needs for disadvantaged and struggling students in terms of what is determined to be necessary to enable them to be successful, rather than simply by creating dollar amounts for a list of input costs.

Federal Funds

The state of Georgia cannot control the amount of federal education funds allocated to the state, nor can it control the purposes for which federal funds are spent. For many years, most federal dollars have been accompanied by stringent controls on how they may be expended. Although some of the recent "stimulus" dollars have been granted with greater flexibility, they do not represent an ongoing flow of funds that states can anticipate having available beyond the first three months of state fiscal year 2012.

Through its elected members of Congress and through communication with federal officials in the U.S. Department of Education, Georgia has an opportunity to have input on changes in federal legislation and funding. Particularly when educators throughout the nation can find consensus on issues of educational policy, the prospect for having an impact on education legislation at the federal level is increased. A lesser chance exists to influence the total amount of federal funds appropriated for education, although state legislation, budgetary decisions, and actions of the State Board of Education can have an impact on federal funds allocated to the state.

The ability to utilize federal funds in a manner that complements state education goals and strategies for enhancing student learning is an issue that deserves greater attention. Especially with regard to early childhood programs and services, there are several significant existing federal funding streams. (These are listed in the Early Learning and Student Success section, Recommendation 3.6, p. 32.) The challenge for Georgia is to determine ways to link additional support from state and local funds with federal dollars in a way that supports a comprehensive approach to meeting the state's objectives for early learners.

Equity for Students and for School Districts

Meeting the needs of all students requires recognition that programs, personnel, and services must be differentiated, and that the costs associated with meeting the needs of different students will also necessarily vary. Current school funding formulas take this need into account to an extent, but further transformational changes may be needed to establish funding strategies that improve opportunities for success for all students.

Any recommendation for improving student learning, if deemed worthy of a sufficient level of funding, should not be restricted to those school districts that are most able to supplement an inadequate level of state funding with additional revenue from local sources. The Vision Project does not offer recommendations for the benefit of some children but not others, based on where the children reside. One of the most significant issues to address in implementing Vision Project recommendations is the need to balance local control, decision making, and funding authority with the objective of making quality public education available statewide. We must address the question of whether the current equity provisions of the QBE Act are capable of making our vision for enhanced student learning a reality for students in all of Georgia's school districts.

Current Practices of Promise

Promising practices for the financing of public education are those programs, activities, or strategies currently being implemented in states, districts, or schools for which a body of research or other evidence has demonstrated their effectiveness in certain environments and under certain conditions. In this section, we cite practices of which we are aware and that are believed to have merit.

Revenue Sources

Procedure for Evaluating the State and Local Tax System for the Purpose of Recommending and Implementing Reforms

Since most tax legislation is enacted on a piecemeal basis and without consideration of how each tax change relates to the overall tax structure, the best practice for evaluating the tax system is a comprehensive examination of all revenue sources, including both state and local sources. To be effective, the evaluation process must involve the governor, legislature, business and community leaders, and public policymakers who are charged with carrying out the desired functions of state and local governments. Decision makers should retain and make full use of experts in public finance and taxation. An effective evaluation process is characterized by a commitment to objectively seek to bring about a revenue structure that meets the needs of the state's citizens without unduly burdening any group of citizens.

A Broad-Based State and Local Tax Structure

A state tax system that primarily relies only on one or two major sources of revenue is more likely to place excessive burdens on certain groups of taxpayers and is less likely to have the capability of responding to demands for revenue without further increasing those burdens (National Conference of State Legislatures, 2010). States that employ the best practices in developing and implementing high-quality revenue structures are those that make use of sales, income, and property taxes at levels which generate sufficient revenue to support desired state and local services without unduly burdening any group of taxpayers.

Fairness in the State and Local Tax Structure

When a state embarks on a study to consider reforms to its taxation system, best practice is to conduct a study that is sensitive to the varying ability of citizens in different circumstances to afford the payment

> We must address the question of whether the current equity provisions of the QBE Act are capable of making our vision for enhanced student learning a reality for students in all of Georgia's school districts.

of taxes without enduring financial hardship. The most appropriate examination of a state revenue structure is one that properly balances the financial well-being of businesses and individuals in a variety of circumstances with the need to secure financial resources sufficient to serve the common good (Institute on Taxation and Economic Policy, 2005).

Utilization of Financial Resources to Provide High-Quality Public Education

Approach to Establishing Funding Formulas and Mechanisms and to Defining Adequacy

Students in different circumstances require varying amounts to be expended on their education to enable them to be successful in school. For this reason, a state must have a mechanism in place to take these varying student needs into consideration. In a state's approach to establishing a funding formula, best practice involves linking funding to the attainment of objectives for success in student learning, rather than merely selecting arbitrarily determined dollar amounts for a shopping list of personnel, programmatic, and other inputs (Guthrie & Rothstein, 1999). To agree on an adequate level of financial support, decision makers must answer the question "adequate to accomplish what?" When learning objectives are clearly identified and strategies are devised to accomplish those objectives, the amount of funds needed to implement the strategies can be more easily determined and more easily documented as being justified.

Meeting the Needs of Students Who Require Additional Support

The most effective practices in making learning a reality for students who, for any reason, are at risk of not earning high school diplomas, are those that identify learning goals, set measurable performance objectives for meeting those goals, and implement strategies that research has shown to be effective with similar populations. As is the case for meeting the needs of all students, the best practices for gauging the proper level of financial support needed for students requiring additional support are those that tie expenditures to outcomes, rather than to a set of cost inputs.

Efficiency in the Budgeting Process and the Expenditure of Funds for Public Education

In the political arena, "zero-based budgeting" is often advocated as the most effective way to eliminate waste in the expenditure of funds for all public functions, including education. The best practice in promoting efficiency in educational expenditures, however, is one that accepts the need for several broad categories of expenditures but continually seeks to identify strategies for accomplishing the purpose of each function at the lowest cost, without sacrificing desired outcomes. For the state, the best practice is one that develops and provides tools to local educational leaders in examining expenditures for the purpose of focusing financial resources on the core mission of the school district: the enhancement of learning for all students.

Flexibility in the Expenditure of Funds for Education

State systems for providing public education distribute decision-making powers among state-level agencies, school districts, and schools in widely varying proportions. Legislative enactments and rules of state education governing boards might concentrate powers over the use of funds at the state level, or they might grant significant levels of authority to local boards of education and local educational leaders. Best practices are those which impose only broad state standards to ensure that no students are denied a quality educational experience, while at the same time affording major local control over deciding how best to expend funds within those broad state parameters for the purpose of accomplishing student learning goals (Schlechty, 2008).

Financing the Cost of Evaluation

Funds for evaluating the effectiveness of expenditures of financial resources for public education are not a peripheral function in either state appropriations or local school district budgets. At both levels, the best practice is found in budgets that recognize evaluation as an integral and indispensable activity in providing quality education. Financial support for ongoing evaluation to determine the extent to which schools and districts meet goals for student learning is a characteristic of those schools and districts that are best able to focus available funds on realizing their objectives.

Recommendations for Moving Forward

The recommendations described here are derived from the key issues, guiding principles and effective practices described earlier in this document. The recommendations are not necessarily mutually exclusive and may be integrated for implementation.

Recommendation 9.1: Expand both the scope and duration of the work of the Special Council on Tax Reform and Fairness for Georgians for the purpose of comprehensively reviewing the state tax structure and identifying ways to strengthen it.

Legislation should be adopted in the 2011 Session of the Georgia General Assembly that establishes a framework for objectively and thoroughly analyzing all components of the current tax system. The study should give careful consideration to the recommendations of the Special Council that was created by an act of the legislature in 2010, and should broaden the investigation to include a review of all revenue sources, whether they were examined in the 2010 study or not. The expanded inquiry should include consideration of revenue sources that are currently utilized to a greater extent in other states. Members of the Special Council empanelled in 2010 may be appointed to serve on the expanded study team, and additional members representing a broad cross-section of leaders in government and business should also be enlisted. Educational leaders should be represented, and researchers and policymakers with expertise in taxation and public finance should be retained to provide support for the study. The mission of the study should be two-fold:

1. Determine the most optimal state tax structure that is broad-based, reflects principles of stability, reliability and fairness to taxpayers, and is capable of producing revenue sufficient to meet the state's

needs for public services, including education. Since a high-quality system of taxation cannot be determined by examining state taxes in isolation, both state and local revenue sources should be included in the analysis. An equitable distribution of the responsibility for paying taxes, so as not to place an undue burden on any group of taxpayers, should be a priority.

2. If the total amount raised by current revenue is insufficient to finance the level of public services deemed appropriate for support by the state, careful consideration should be given to enhancing revenue potential without the need for increases in rates of taxation. Opportunities for such revenue growth include
   - eliminating many existing specific tax exemptions;
   - greater use of income-based exemptions;
   - broadening the sales tax base to include many services that are not taxed at present;
   - better enforcement of existing tax laws to increase compliance;
   - utilizing revenue sources that other states employ to a greater extent than Georgia, and with necessary federal support, moving toward wider taxation of Internet transactions.

Recommendation 9.2: Identify in state and local budgets for public education sufficient fiscal resources for implementing both a comprehensive data system and an evaluation system that use data to measure and improve effectiveness in meeting objectives for enhanced student learning.

Evaluation systems are not limited to those that assess performance of students and teachers. The effectiveness of programs, instructional practices, innovative procedures, and strategies for accomplishing the goal of enabling high learning levels for all students should all be rigorously evaluated. Unless a comprehensive data system is in place, and unless an ongoing analysis function that utilizes the data is regarded as one of the most crucial roles of school and district leaders, progress toward meeting district objectives cannot be properly assessed.

The cost of developing and implementing an effective evaluation system may be substantial at both the state and district levels, but the expense should not be regarded as an administrative cost that redirects funds away from instruction. Instead, the cost of evaluation should be considered an integral part of the instructional process. A recommitment by the state to fulfilling the goal of an appropriate data and evaluation system is imperative. It should be accompanied by a process for supporting local educational leaders as they implement evaluation programs at the district and school levels.

Recommendation 9.3: Initiate an ongoing process at the local school district level for systematically evaluating all expenditures to enable the development and adoption of budgets that are focused on district strategies for maximizing student learning.

Educational leaders have a responsibility to expend public funds in a manner that reflects the trust and confidence placed in them by those who pay taxes for the support of public schools. That trust can only be

maintained and strengthened when taxpayers (both individuals and businesses) are provided with evidence that funds are spent in the most efficient and effective manner possible.

A commitment to budgetary practices that focus on student learning should become a continuous and permanent part of the culture of school district leadership. That culture can be fostered by effective strategic planning, training programs by the Georgia Department of Education and professional associations, and extensive sharing of best practices among school districts.

Recommendation 9.4: Provide a high level of flexibility to local school districts in decision-making authority about the most effective strategies for the expenditure of funds to enable all students to be successful in school, coupled with appropriate methods for evaluating school and district success and for implementing positive state interventions when needed.

The flexibility that should be granted to local school districts should not be contingent only on student performance as measured by standardized tests currently mandated for use in judging school and district success. Other recommendations of the Vision Project call for broader, more substantive instruments for appropriately measuring student learning. These performance measures, when implemented, should become the basis for ascertaining whether districts and schools are making effective use of the flexibility provided.

Flexibility in the use of allocated funds should not be a privilege that is earned only after a district or school has already demonstrated satisfactory performance on achievement measures while functioning under highly prescriptive laws, regulations, and expenditure controls imposed by the state. Although some schools will exhibit acceptable performance under such conditions, other schools may continue to struggle unless they have the chance to make decisions at the local level that can be implemented with the enthusiastic support of teachers and school leaders.

Flexibility should, however, be granted in an environment that has high expectations for improved student learning. If a school's students continue to struggle to meet learning goals, the state should respond with constructive interventions rather than punitive actions. If state-imposed fiscal controls are deemed necessary in helping an under-performing school or district become more successful, they should be temporary in nature and characterized by support services that enable local educators to sustain improvements after flexibility has been restored.

Increased flexibility has the best opportunity to lead to enhanced learning for all students if it is accompanied by high-quality professional learning experiences that are directly related to improving the skills of teachers and the quality of instruction. The need to strengthen professional learning has been cited in several Vision Project recommendations, and the sufficient commitment of funds for this purpose (by both the state and local boards of education) should be regarded as a high priority in the budgetary process.

Flexibility should not be offered by the state as an excuse to reduce the overall level of funding for public education. Even when state controls are relaxed, the allocation of fewer dollars renders the granting of flexibility a hollow gesture.

Recommendation 9.5: Implement a cohesive and stable mechanism for the financial support of early learning programs and services for children ages 0 to 5 at a level that prepares all of Georgia's youngest citizens for success in their subsequent school years.

Before the early decades of the 20th century, financial support for formal public education from the first grade and up was characterized by rudimentary, disconnected, shifting levels of support that prevented a uniform system of public education for all of Georgia's children from becoming a reality. The same is true now for public financial support for the learning needs of our youngest citizens in the years before they enter kindergarten.

The earmarking of a portion of Georgia lottery receipts for the establishment and maintenance of a pre-kindergarten program was a positive step that positioned Georgia as one of the first states to make such a program available to large numbers of four-year-olds. Unfortunately, the Pre-K program competes with the Hope Scholarship program for dollars from a source that is no longer growing at the rate needed to sustain the needs of both programs in future years. Furthermore, the dedication of revenue from a gaming source, accompanied by only a very meager amount of general state revenue, serves to create an impression that meeting the learning needs of our youngest children is a relatively low state priority.

Promoting readiness for schooling must become one of the highest priorities for the use of revenue, whether it be from taxes or other sources. As described in the Vision Project section on Early Learning and Student Success, a commitment of funds to serve the needs of children from birth to age 5 will yield both personal benefits for Georgia's citizens and reductions in costs for other public expenses in future years. Through greater coordination with revenue from federal sources and state funds to support other related services for young children and their families, the budgetary process should acknowledge that learning begins at birth and facilitating that learning is an important state responsibility.

Recommendation 9.6: Provide the most optimal partnership between the state and local school districts in sharing the responsibility for financial support of public education, while ensuring that disparity in local fiscal capacity does not impede the implementation of Vision Project recommendations in all Georgia districts.

As stated in an earlier recommendation, Georgia's state and local revenue structure should continue to be broad-based, drawing taxes from a wide array of sources, including all of the major revenue sources presently in use. Taxes that have historically been either state or local revenue sources are integral components of such a broad-based tax system. For this reason, we advocate for a partnership in state and local funding of public education, although the details of that partnership should be the focus of further study to ensure it will support, rather than inhibit, the goal of enhanced learning for all students.

The proportion of funds derived from local revenue is potentially significant if it influences the prospect for implementing recommendations of the Vision Project in all school districts in Georgia. The opportunity to bring transformational improvements to the education of students in some localities in the state, but not others, is unacceptable. To the extent that the relative availability of sufficient local revenues is a factor in

making it possible to implement Vision Project recommendations, the state must assume responsibility for allocating state financial resources in a manner that appropriately addresses disparate local funding capacity.

Recommendation 9.7: Provide an ongoing level of state financial support for public education which, when combined with local revenue available to boards of education, makes the attainment of our Vision for Public Education in Georgia a reality and ensures its sustainability.

An "adequate" level of state financial support for public education can no longer be determined by whether the state is fully funding the components of a 25-year-old set of K–12 education statutes. Although a thorough study to revise and update the mechanism for funding education is long overdue, the true test of adequacy is whether the most promising strategies for maximizing student learning are backed by financial resources that are sufficient to enable those strategies to deliver on their promise. The promise—and the resources needed for its fulfillment—must extend to students at all ages and in all circumstances, including those who have historically been least likely to complete their years of public education successfully.

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Appendices

Appendix A

Vision Project Executive Committee

The Executive Committee shall have the following responsibilities:

- Establishment of norms for the executive committee;
- Selection of a coordinator/facilitator for the project upon recommendation of the executive directors;
- Selection of the design team upon recommendation of the executive directors;
- Selection of the planning committee and chair of the committee upon recommendation of the executive directors;
- Establishment of financial management and expenditure procedures for the project including the designation of a fiscal agent;
- Review and approval of the work products throughout the project;
- Review and approval of the vision document created by the planning committee;
- Review and approval of the strategy for dissemination, professional support, and adoption of the work product of the project as developed by the design team.

Membership of the Executive Committee

Georgia School Boards Association

Name	School District	Position
Joseph White	Mitchell County Schools	President
James Pope	Carrollton City Schools	President-Elect
Julia Bernath	Fulton County Schools	Immediate Past-President
David Johnson	Floyd County Schools	Vice President
Jeannie Henry	GSBA	Executive Director

Georgia School Superintendents Association

Steve Smith	Lowndes County Schools	President
Susan Andrews	Muscogee County Schools	President-Elect
Bettye Ray	Social Circle City Schools	Immediate Past-President
Ray Jordan	Turner County Schools	GAEL Member At-Large
Herbert Garrett	GSSA	Executive Director

The Presidents of GSBA and GSSA serve as co-chairs of the Executive Committee

Appendix B

Vision Project Planning Team and Design Team

Name	School District	Position
Albert Abrams*	Bibb County Schools	Member of Board
Millard Allen	Glynn County Schools	Member of Board
Dr. Susan Andrews*	Muscogee County Schools	Superintendent
Carl Bethune	Jefferson County Schools	Former Superintendent
Shirley Brooks	Ben Hill County Schools	Member of Board
Dr. Gayland Cooper	Rome City Schools	Superintendent
Gillis (Skip) Dawkins	Houston County Schools	Member of Board
Dr. Stan DeJarnett	Morgan County Schools	Superintendent
Chris Erwin	Banks County Schools	Superintendent
Dr. L. C. (Buster) Evans	Forsyth County Schools	Superintendent
James Fleming	Jefferson County Schools	Member of Board
Cliff Hood*	White County Schools	Former Member of Board
Ronald K. Hopkins*	Jefferson City Schools	Member of Board
Leonard McCoy	Colquitt County Schools	Superintendent
Dr. Ruth O'Dell*	Franklin County Schools	Superintendent
Sharon Patterson*	Bibb County Schools	Former Superintendent
Franklin Pinckney*	Ware County Schools	Member of Board
Dr. Barbara Pulliam Davis*	Greene County Schools	Superintendent
Charles Ragsdale	Harris County Schools	Member of Board
Diane Sandifer*	Harris County Schools	Former Member of Board
Will Schofield	Hall County Schools	Superintendent
Dr. Ed Smith	Troup County Schools	Former Superintendent
James (Ted) Stone	Jones County Schools	Former Member of Board
Sylvia Vann	Lee County Schools	Member of Board
William S. Wade	Dawson County Schools	Member of Board
Dr. Lawrence T. Walters	Lee County Schools	Superintendent
Alvin Wilbanks*	Gwinnett County Schools	Superintendent
Dr. Joy B. Williams	Pierce County Schools	Former Superintendent
Valarie Wilson	City Schools of Decatur	Member of Board
John Zauner	Carroll County Schools	Former Superintendent

*Indicates design team membership

Members of Design Team Only

Herb Garrett	GSSA	Executive Director
Jeannie (Sis) Henry	GSBA	Executive Director

Appendix C

Vision Project Facilitators

Early Learning and Student Success

Dr. Robert Lawrence
Mercer University, Tift College of Education
Atlanta, GA

Teaching and Learning

Dr. Maggie Glennon
Consultant

Teaching and Learning Resources

Gene Trammell, Ed.S.
Consultant

Human and Organizational Capital

Dr. Dennis Fordham
Consultant

Governance, Leadership, and Accountability

Dr. Patricia Stokes
Consultant

Culture, Climate, and Organizational Efficacy

Dr. Jack Parish
University of Georgia, College of Education
Athens, GA

Financial Resources

Dr. Jeffrey Williams
Consultant

General

Dr. William M. Barr

Dr. Debra Harden
Georgia School Superintendents Association

Berney Kirkland, APR
Gwinnett County Public Schools

Mark Willis
Georgia School Boards Association

Appendix D

Vision Project Research Associates

Research associates are faculty members of public and private colleges and universities in the state of Georgia and public school educators. The research associates have informed issues, been thought partners, and assisted in accomplishing the work of the planning team. They have contributed significantly to the creation of a new vision for public education in our state while fulfilling their institutions' mission of research and service by

- providing summaries and analyses of research and extant data in their areas of expertise;
- writing background papers for presentation to the work team and to the planning team;
- assisting work teams in development of proposals for consideration by the planning team;
- serving as thought partners for the work teams as they deliberate proposals;
- assisting work teams in better understanding the implications that given theories have for guiding educational practice;
- participating in work teams' presentations to the planning team;
- engaging with research associates from other Georgia colleges, universities, and local school districts; and
- vetting proposals developed by the work teams and, ultimately, the vision document itself as part of the review and approval process.

Early Learning and Student Success

Dr. Pamela Bedwell
Dean, School of Education
Macon State College
Macon, GA

Ashley Hope
Doctoral Candidate
Piedmont College
Demorest, GA

Ann Levett, Ed.D.
School of Education
Macon State College
Macon, GA

Rachel Sutz Pienta, Ph.D.
Middle, Secondary, Reading, and Deaf Education
College of Education
Valdosta State University
Valdosta, GA

Martha L. Venn, Ph.D.
Vice President for Academic Affairs
Macon State College
Macon, GA

Teaching and Learning

Gary Bingham, Ph.D.
Department of Early Childhood Education
Georgia State University
Atlanta, GA

Lantry L. Brockmeier, Ph.D.
Associate Professor
Curriculum, Leadership, and Technology
Valdosta State University
Valdosta, GA

Janna Dresden, Ph.D.
Director, Office of School Engagement
College of Education
University of Georgia
Athens, GA

Deirdre Greer, Ph.D.
Associate Professor & Program Coordinator, Early Childhood
Columbus State University
Columbus, GA

Hope Kinard
PAGE Representative
Graduate Teacher Academy
Classroom Teacher
Newton County School District
Covington, GA

Dr. Julie Garlen Maudlin
Assistant Professor
College of Education
Department of Teaching and Learning
Georgia Southern University
Statesboro, GA

Dr. Sallie Averitt Miller
Assistant Dean & Professor
College of Education and Health Professions
Columbus State University
Columbus, GA

William G. Wraga, Ed.D.
Professor
Program in Educational Administration and Policy
Department of Lifelong Education, Administration, and Policy
College of Education
University of Georgia
Athens, GA

Nick Zomer
PAGE Representative
Graduate Teacher Academy
Classroom Teacher
Cherokee County School District
Canton, GA

Teaching and Learning Resources

Michael C. Barr
Director of Support Services
Newton County School District
Covington, GA

Dr. Marty Bray
Associate Professor
Department of Educational Innovation
College of Education
University of West Georgia
Carrollton, GA

Bailey Mitchell
Chief Technology and Information Officer
Forsyth County School District
Cumming, GA

Human and Organizational Capital

Dianne Bath, Director
Georgia Center for Educational Renewal
College of Education
Georgia Southern University
Statesboro, GA

Tracy Elder, Ed.S.
Public Service Representative
Dean's Office, College of Education,
University of Georgia
Athens, GA

Mary A. Hooper, Ph.D.
Educational Leadership Faculty
College of Education: Department of Leadership and Applied Instruction
University of West Georgia
Carrollton, GA

Don Leech, Ed.D.
Professor and Department Head
Curriculum, Leadership, and Technology
Valdosta State University
Valdosta, GA

Barbara Mallory, Ed.D.
Assistant Professor of Educational Leadership
Program Coordinator, Educational Leadership
Georgia Southern University
Statesboro, GA

Sally J. Zepeda, Ph.D.
Professor
Department of Lifelong Education, Administration, and Policy
University of Georgia
Athens, GA

Governance, Leadership, and Accountability

Dr. Lucindia Chance
Professor, Educational Leadership
Department of Leadership, Technology, and Human Development
Georgia Southern University
Statesboro, GA

Sumitra Himangshu, Ph.D.
Assistant Professor
School of Education
Macon State College
Macon, GA

Simmie Raiford, Ph.D.
Assistant Professor
Curriculum, Leadership, and Technology
Valdosta State University
Valdosta, GA

Culture, Climate, and Organizational Efficacy

Dr. Pat Duttera
Associate Professor and Educational Leadership Coordinator
Columbus State University
Columbus, GA

Sheneka Williams, Ph.D.
Assistant Professor
Educational Administration and Policy Development
University of Georgia
Athens, GA

Financial Resources

Dr. David Sjoquist
Director, Fiscal Research Center
Andrew Young School of Policy Studies
Georgia State University
Atlanta, GA

Appendix E

Vision Project Graduate Research Assistants

Georgia Southern University

Candidates for Education Specialist Degree

The research assistants examined the literature on topics of interest for the research associates, classified the literature into workable topics and strands, and submitted the literature to the work teams as best practice, promising practice, or not appropriate for our work.

Dan Ailes, Chatham County Board of Education

Tim Blackston, Benedictine Military School

Derrick Butler, Chatham County Board of Education

Shelly B. Bydlinski, Glynn County Board of Education

Reginald Dawson, Bulloch County Board of Education

Kera Grant, Chatham County Board of Education

Anne-Marie Jones, Glynn County Board of Education

Stefanie Mason, Emanuel County Board of Education

James Rowland, Laurens County Board of Education

Jason Stickler, Liberty County Board of Education

Penny Teachey-Gary, Bulloch County Board of Education

Jamie Thomas, Wheeler County Board of Education

Kevin Van Houten, Liberty County Board of Education

Fern Way-Currin, Glynn County Board of Education

Brenda Whitley, Long County Board of Education

Georgia School Boards Association

5120 Sugarloaf Parkway, Lawrenceville, GA 30043
Phone: 770-962-2985 – Fax: 770-962-5392 – Website: www.gsba.com

Georgia School Superintendents Association

GSU, College of Education
PO Box 3977, Atlanta, GA 30302-3977
Phone: 404-413-8135 – Fax: 404-413-8136 – Website: www.ciclt.net

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