

*Using* Scientific  
Research-Based  
Interventions:  
*Improving Education  
for all Students*



*Connecticut's Framework for RTI*

*february* 2008  
**EXECUTIVE**  
*summary*



Connecticut State Department of Education  
*Bureau of School and District Improvement*

# Connecticut State Department of Education

Mark K. McQuillan, Commissioner

George A. Coleman, Deputy Commissioner

## Bureau of School and District Improvement

Susan J. Kennedy, Acting Bureau Chief

Nancy M. Cappello, Project Manager

## Bureau of Curriculum and Instruction

Barbara M. Westwater, Bureau Chief

Don Goranson, Jr., Editor, Publications Unit

## State Education Resource Center

Marianne Kirner, Director

Michelle LeBrun-Griffin, Consultant

Jodylynn Talevi, Media/Technology Associate

## SRBI Advisory Panel

Michelle LeBrun-Griffin, Facilitator

JoAnn Andrees, Superintendent, West Haven

Christopher Banach, Special Education Teacher, Newington

Ingrid Canady, Consultant, SERC

Nancy Cappello, Consultant, CSDE

Marianne Cavanaugh, Math Department Head, East Hartford

Karen Costello, Administrator for Program Development, East Lyme

Michael Coyne, Program Coordinator for Special Education, UCONN

George Dowaliby, Director of TABS, CREC

Craig Edmondson, Executive Director, ACES

Rossella Fanelli, School Psychologist, New Canaan

Margie Gillis, Project Director, Haskins Laboratory

Jim Granfield, Interim Dean, School of Education, SCSU

Joan Hofmann, Professor, Saint Joseph College

Susan Kennedy, Acting Bureau Chief, CSDE

Brenda Key, Teacher, West Hartford

Marianne Kirner, Director, SERC

Mary Ann Marold, Principal, Waterbury

Meghan Martins, Consultant, CSDE

Jule McCombes-Tolis, Professor of Special Education, SCSU

Barbara Mechler, Consultant, CES

Perri Murdica, Consultant, CSDE

Donna Page, Principal, Newton

Rose Paolino, School Counselor, West Haven

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Frances Rabinowitz, Superintendent, Hamden

Michael Regan, Director of Pupil Services, Newtown

Thomas Scarice, Principal, CREC

David Scata, Director of Pupil Services, East Haddam

Rena Schine, School Psychologist and Advocate, LDA

Louise Spear-Swerling, Professor of Special Education and Reading, SCSU

Gaeton Stella, Superintendent, Woodbridge

George Sugai, Professor and Neag Endowed Chair, UCONN

Charlene Tate-Nichols, Consultant, CSDE

Palma Vaccaro, Director of Pupil Services, Meriden

Michael Wasta, Leader-in-Residence, CSDE

Celinda Weber, Special Education Teacher, Ellington

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# Foreword

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## **All of us must lead the learning for Connecticut's students.**

*"Everyone must play a part in leading the learning. Leading the learning means knowing your job and doing it well; it means opening yourself to new tasks and responsibilities; letting go of old assumptions and being prepared to be trained in new skill areas; and holding yourself to the highest standards possible."*

*Mark K. McQuillan, Commissioner of Education, March 27, 2007*

An effective education is vital not only for individual advancement, but also to provide a capable workforce and citizenry for our state. Our future workforce is utterly dependent on our public schools to turn out knowledgeable, highly literate, responsible and technically able graduates that are prepared to contribute to the progress of this global society.

Schools in Connecticut and across the nation face significant challenges to ensure that all students graduate having the benefit of a superior education. The State Board of Education has established goals for Connecticut's students to achieve this superior education which include:

- expanding preschool;
- restructuring high school; and
- closing the achievement gaps while improving the performance of all students.

All schools in Connecticut have the collective responsibility to ensure that research-validated practices are embedded daily in order to achieve these desired goals. The basic principles of a Response to Intervention (RTI) model hold considerable promise for helping Connecticut schools improve education for all students and address the large disparities within the state.

It is my pleasure to present the State Department of Education's framework for RTI entitled Using Scientific Research-Based Interventions: Improving Education for All Students. This framework builds upon the coherence of various researched-based school improvement models, including those adopted by our Connecticut Accountability for Learning Initiative (CALI). It is my belief that this publication, and future Department of Education professional development activities, will support our efforts in leading the learning to ensure educational success for all of our students. Horace Mann's words spoken more than 150 years ago still aptly apply today: "Education is the right of every child – the great equalizer and balance wheel of the social machinery." The future of our state and nation depend upon our expectations and pursuit for high academic and behavior standards for ourselves and our children.

A handwritten signature in black ink that reads "Mark K. McQuillan". The signature is written in a cursive style.

Mark K. McQuillan, Commissioner of Education  
February, 2008



# Executive Summary

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## Background

Federal laws have issued clear expectations for schools regarding their obligations to educate diverse groups of students well. This legislation includes the **No Child Left Behind Act of 2001 (NCLB)**, a reauthorization of the **Elementary and Secondary Education Act (ESEA)** and the **Individuals with Disabilities Education Improvement Act of 2004 (IDEA)**. NCLB aims to ensure the academic growth and achievement of all students regardless of their race, ethnicity, fluency in English, disability or socioeconomic status. IDEA 2004 continues the federal mandate, in effect since 1975, for schools to provide all children with disabilities a free and appropriate public education (FAPE) in the least restrictive environment (LRE), and also contains some important revisions with clear implications for general as well as special education. These revisions encourage the implementation of research-based interventions that facilitate success in the general education setting for a broad range of students. In particular, school districts are allowed to use a process known as **Response to Intervention (RTI)** as part of identification procedures for learning disabilities, by far the largest category under which K-12 students in special education are served, roughly half of all special education students nationwide (see [www.ideadata.org](http://www.ideadata.org)).

RTI models grew out of research suggesting that traditional approaches to identifying learning disabilities are seriously flawed and that students sometimes end up in the special education system not due to genuine disabilities, but other factors, such as inadequate general education practices and limited opportunities for extra help for struggling students (e.g., Fletcher et al., 1994; Lyon, 1996; Spear-Swerling and Sternberg, 1996), including those students acquiring English. RTI involves providing scientific, research-based instruction and intervention matched to student needs, with important educational decisions based on students' levels of performance and learning rates over time. Rather than limiting the provision of instructional and social/behavioral supports for those students classified under a particular label or program, supports are provided to all students, based on individual needs.

**The basic principles underlying RTI hold considerable promise for helping Connecticut schools to improve education for all students and address the large disparities in performance within the state.** These basic principles have been embraced by the Connecticut State Department of Education (CSDE) for a number of years, as well as supported by state legislation and policy. Furthermore, numerous ongoing projects and initiatives in Connecticut, such as those involving collaborations among researchers, teacher educators and public schools, provide a strong foundation for the implementation of RTI.

## SRBI Advisory Panel

An advisory panel appointed by Interim Commissioner George Coleman, and co-chaired by Associate Commissioners Frances Rabinowitz and George Dowaliby, first convened in November 2006. The panel was given the responsibility of reviewing current research and practice on RTI to develop a state model that could be implemented in CT schools. Early on, members of **the panel decided to refer to the RTI process in Connecticut as scientific research-based interventions (SRBI) to emphasize the central role of general education in the intervention process and the importance of educational practices that are scientific and research-based.** Months of reading, deliberation and discussion led the SRBI Advisory Panel to several conclusions.

### What are the key elements of SRBI?

Important elements of SRBI include the following:

- Core general education curriculums that are comprehensive in addressing a range of important competencies in each academic domain, culturally relevant and research-based to the extent that research exists to inform their selection or development.
- A schoolwide or districtwide comprehensive system of social-emotional learning and behavioral supports.
- Strategies for assuring that educators are modeling respectful and ethical behaviors, fostering student engagement/connectedness to school and assessing the quality of the overall school climate so that students experience physical, emotional and intellectual safety.
- The use of research-based, effective instructional strategies both within and across a variety of academic domains.
- Differentiation of instruction for all learners, including students performing above and below grade level expectations and English language learners (ELLs).
- Common assessments of all students that enable teachers to monitor academic and social progress, and identify those who are experiencing difficulty early.
- Early intervention for students experiencing academic and/or behavioral difficulties to prevent the development of more serious educational issues later on.
- Educational decision-making driven by data involving students' growth and performance relative to peers; data are carefully and collaboratively analyzed by teams of educators (e.g., data teams, early intervention teams), with the results applied not only to inform instruction for individual students, but also to evaluate and improve core general education practices and the overall efficacy of interventions.

- A continuum of support that is part of the general education system, with increasing intensity and/or individualization across multiple tiers.
- A systemic approach to core educational practices in which teachers within a grade use the same sets of common assessments for all students, address the same curricular competencies, and share the same behavioral expectations; assessments, curricular competencies and behavioral expectations also are well-coordinated across grades.

### **How can SRBI benefit Connecticut students?**

The implementation of SRBI can greatly assist districts in meeting the expectations of NCLB, IDEA 2004, and state legislation and policy. However, there is an even more compelling reason for schools to implement these approaches: **The logic underlying SRBI can provide a coordinated, comprehensive, high-quality system of education for all students.** SRBI can transform how schools function to provide a much more effective, prevention-oriented system than the one that currently exists in many Connecticut schools (Brown-Chidsey and Steege, 2005; McCook, 2006; Speece, Case, and Molloy, 2003; and Vellutino and Scanlon, 2002).

### **What is the rationale behind SRBI?**

The broad benefits of SRBI come from its emphasis on uniting scientific, research-based practices with systems approaches to education. Scientific evidence is substantial for a number of areas central to children's school success and well-being, such as reading, language development, some areas of mathematics and social-emotional learning. Many print and electronic resources have summarized this research and provided clear recommendations for educational practice, including both state and national consensus reports (e.g., Blum, McNeeley and Rinehart, 2002; Connecticut State Department of Education, 2000, 2007; National Reading Panel, 2000; and RAND Reading Study Group, 2002).

However, the use of scientific, research-based practices in education, though necessary, is not sufficient by itself to provide a comprehensive, effective educational system for *all* students. In the area of health care, Gawande (2007) notes that medical centers using the same scientific, research-based medical guidelines for evaluating and treating patients can still vary widely in patient outcomes. He attributes some of these differences in patient outcomes to a factor he terms "diligence." Among other characteristics, more diligent medical centers (i.e., those with the best patient outcomes) set high goals for patients' functioning and pay exceptional attention to prevention of problems and early intervention. Here is where a population-based, systems approach can be helpful.

Population-based systems approaches involve routine monitoring of entire populations, with a focus on prevention, early intervention and comprehensive supports or treatments, often with different levels of support for individuals at different levels of risk.

One kind of population-based approach involves well-child health care for infants and children. Well-child doctor visits are intended largely to provide preventive care, such as vaccinations, regular screenings, and monitoring of children's growth across a variety of domains, including linguistic, cognitive and social-emotional, as well as physical development.

As applied to education, population-based systems approaches focus heavily on general education, because most school children are in general education and because prevention and early intervention require this focus. All children's school progress is routinely monitored so that focus areas for improvement can be detected and addressed early. Routine monitoring of all children also helps to avoid the potential for unconscious bias inherent in procedures relying on teacher referral as a gateway to early intervention. Effective core practices--that is, general education curriculums, instruction and social/behavioral supports for all students --are emphasized, because these high-quality core practices are essential to the prevention of academic and behavioral difficulties. Providing interventions for students in need without also ensuring effective core general education practices are like having health care that hospitalizes children critically ill with polio but doesn't prevent polio through vaccination. A systemic approach to education requires schoolwide or districtwide consistency with regard to the development or selection of core academic and social assessments, curriculums, social/behavioral supports, educator methodologies and interventions. Without this consistency, evaluating the efficacy of educational practices is often impossible, and efforts to maintain implementation integrity may be fragmented and inefficient.

Just as well-child care benefits all children, not only those with health concerns, scientific, research-based general education curriculums and instructional strategies help all learners. Differentiation of instruction enables high-achieving children to be more appropriately challenged as well as addresses the needs of students who are struggling. A comprehensive system of social-emotional learning, educator practice and behavioral supports creates a more positive school environment for all students, not just those with behavioral or emotional difficulties.

SRBI approaches differ greatly from existing practices in many Connecticut schools. Although students may be academically assessed frequently, the assessments used often are not sufficient for monitoring progress, informing instruction or detecting need for intervention early-on. Perhaps most crucially, educational decisions are rarely based on the kinds of data that would permit a district to respond to students' needs in a timely manner, and eventually to increase its overall effectiveness with students, because the appropriate kinds of assessments and a systemic approach are frequently not being used.

For example, the Connecticut Mastery Test (CMT) and Connecticut Academic Performance Test (CAPT), routinely administered to all Connecticut students, are helpful in summarizing students' performance at particular points in time and in assisting school and district personnel with overall program evaluation. LAS links is administered in Connecticut to all English language learners (ELLs) to determine linguistic proficiency and yearly progress in English. However, different kinds of assessments are needed to monitor students' progress during the school year, inform instruction on a day-to-day



basis, and permit *timely* intervention. To accomplish the latter goals, districts and schools need assessments that can be given and scored quickly, and that are reliable and valid for monitoring student progress. Furthermore, without districtwide or at least schoolwide consistency and quality in general education practices, educators cannot analyze data effectively, even with the right kinds of assessments. SRBI will enable school personnel to determine which educational practices yield positive student outcomes and accelerate student learning.

### **Is SRBI feasible for schools?**

Will this cost a lot of money? Will it be too time consuming?

Adequate human, financial and time resources for schools certainly are important, and many stakeholders have central roles to play in ensuring a high-quality education for all Connecticut students. For example, adequate funding for school districts should be provided. Schools of education should ensure that prospective teachers are well-prepared to address a variety of academic and social differences in students' needs. Families should set limits on children's activities that compete with schoolwork and communicate to children that education is highly valued by supporting and reinforcing learning at home.

Implementation of SRBI largely involves finding more effective ways to deploy *existing* resources. Many practices involved in SRBI are those which educators already are responsible: assessing students, developing or selecting core curriculums, using instructional strategies ethically and managing student behavior. Implementation of SRBI should not require extensive additional time commitments for educators, administrators and support services personnel--although, for some of these groups, it certainly may change how educators spend their time. Primarily, SRBI will require using more systemic approaches to educational practices, as well as gathering, analyzing and applying the appropriate data to maximize the effectiveness of these practices. Similarly, with regard to finances, implementing SRBI will involve changing patterns of expenditures to get the greatest educational effectiveness from available resources. **Prevention and early intervention typically are much more cost-effective than trying to fix entrenched problems** (Connecticut Early Childhood Cabinet, 2006). Therefore, over time, districts should realize certain savings that offset the costs of SRBI implementation.

Advisory panel members recognized that implementing SRBI will not be easy for many schools. All schools and districts will need to build capacity over time. Nevertheless, SRBI are feasible for schools if implemented appropriately and with capacity built incrementally, with well-defined interim goals and timelines. Some schools in Connecticut are already using these approaches successfully.

### **The Three-tiered Model**

SRBI should be operationalized as a systemic approach with successive tiers that involve increasingly intensive levels of intervention. The advisory panel decided to recommend a three-tiered model for **preK-12 general education** in Connecticut schools.

Graphically, the model can be represented as a triangle (see Figure 1 on page 12). The base, the widest portion of the triangle, is Tier I; the middle portion of the triangle is Tier II; and the top, smallest portion of the triangle, is Tier III. Each tier is summarized here but described in much greater detail in the full document. It must be emphasized that all three tiers are part of a comprehensive educational system involving scientific, research-based core general education practices and interventions, with supports from a wide range of support services personnel. In particular, the tiers should not be viewed as categorical placements or as “gates” to special education. When interventions are designed to meet specific students’ needs, implemented with fidelity and there are data demonstrating students’ progress, then most students should not require special education services.

**Tier I.** Tier I comprises core general education curriculums and instruction, attention to the quality of the school climate, as well as a comprehensive system of social-emotional learning and behavioral supports for *all* students. Effective Tier I practices are essential to the entire three-tiered model. Without effective core practices, an unduly high proportion of students may require intervention. Core curriculums should develop the full range of competencies that research has shown to be important to achievement in a particular domain at specific grade levels. For example, in reading, core primary grade (K-3) curriculums should address all of the areas emphasized in the National Reading Panel (2000) report: phonemic awareness, phonics, fluency, vocabulary, and oral and reading comprehension. Teachers should use scientific, research-based instructional strategies both within domains (e.g., NRP, 2000) and across domains (e.g., Marzano et al., 2001). A comprehensive system of social-emotional learning and behavioral supports includes explicit teaching of social skills, ethical teaching practices, clear behavioral expectations for all students, and a set of procedures for encouraging appropriate behaviors and discouraging inappropriate ones. This kind of system is not limited to controlling overtly disruptive, noncompliant behaviors; it also addresses the quality of the school climate and social-emotional learning as a domain of students’ development. Furthermore, differentiation of instruction and instruction relevant and responsive to culturally and linguistically diverse students, including ELLs, must be part of Tier I practices across all important domains of schooling. All of these core practices must be systemic (schoolwide and districtwide) and implemented with fidelity, that is, in the manner they were intended to be used.

A key first step in educational decision making involves obtaining or developing universal common assessments in important academic domains (e.g., reading and mathematics) that can be used as benchmarks. The benchmarks establish where students should be functioning at different points in the school year in order to be on target to attain grade-level competencies and standards by the end of the school year. Most authorities recommend the use of curriculum-based measures (CBMs) to establish benchmarks and monitor student progress in Tier I (Brown-Chidsey and Steege, 2005; McCook, 2006). Selection of appropriate progress-monitoring assessments is vital to ensure that assessments are technically adequate (i.e., reliable and valid) and do not waste valuable instructional time. Other kinds of assessments and student data are also important in Tier I, such as diagnostic assessments of certain students when additional information is needed to clarify the nature of their difficulties, and data relevant to the quality of the school climate and efficacy of the core system of social-emotional learning and

behavioral supports, such as disciplinary referrals. Student data should be analyzed collaboratively by groups of educators (e.g., data teams and early intervention teams) that include school administrators, content/grade-level general educators and specialists.

Evaluation of the overall effectiveness of Tier I is particularly vital and cannot merely be assumed. A general rule of thumb is that effective core curriculums, instruction, supportive school climate and social/behavioral supports should “work” for at least 80 percent of students. For example, at least 80 percent of all students within a grade should be meeting important academic benchmarks and behavioral expectations for Tier I practices to be deemed effective. If this is not the case, **the analysis of core general education practices is a necessary first step to improving student outcomes.**

**Tier II.** Assuming that Tier I practices are effective for most students, instruction is culturally relevant and there is appropriate differentiation of instruction, students who fail to make adequate progress in Tier I should receive Tier II interventions. Tier II interventions provide more intensive instruction or social/behavioral supports than students receive in Tier I, primarily through the use of smaller groups, instruction that is highly focused on specific skills and/or learning strategies, and more frequent monitoring of progress and social development. Interventions are short term (e.g., 8 to 20 weeks) and remain part of the general education system, with supports from specialists. These interventions are supplemental to the core academic instruction and behavioral supports that are part of Tier I. In other words, Tier II students receive support *both* in Tier I and Tier II. Tier II interventionists may be general educators, specialists or other educators with appropriate certification and/or training for implementing the intervention. If a student’s lack of progress is due to limited English language proficiency, it is necessary to apply research-based strategies for second-language acquisition in the provision of the intervention.

Accurate pinpointing of individual students’ focus areas for improvement and alignment of research-based interventions that will accelerate student learning are especially critical to the success of Tier II. Students’ progress should be carefully monitored during the intervention period, with interventions changed or modified as needed. Ineffective intervention should not be continued or unchanged for an entire intervention period if student progress is not being made. Assessments for monitoring progress in Tier II must target the student’s specific skill in the social or academic area of concern, be reasonably quick to administer, and be technically adequate (i.e., reliable and valid) for multiple administrations, for example, by providing multiple alternate, equivalent forms (Brown-Chidsey and Steege, 2005). Data analysis and decision-making in Tier II should again be determined by teams of educators. If appropriately selected and implemented with fidelity, interventions should result in growth for most students in Tier II.

**Tier III.** Students continuing to make inadequate progress despite Tier II interventions are considered for Tier III. The primary difference between Tier II and Tier III interventions involves the intensity and/or individualization of the intervention. Greater intensity of intervention can be achieved with a smaller teacher-student ratio, a longer duration of instruction, detailed attention to the social environment and more frequent progress monitoring. More individualized interventions would include function-based support plans for students with behavioral difficulties, including teacher practice.

Implementing these kinds of intensive, individualized interventions requires an especially high degree of expertise on the part of the teacher. Tier III interventionists may include general educators as well as specialists, but in either case, educators may need additional professional development to ensure they have the skill-set required to implement and monitor the intervention with fidelity.

As in Tier II, Tier III interventions are short-term (e.g., 8 to 20 weeks), remain part of the general education system, and are supplemental to core instruction. Furthermore, many students receiving Tier III interventions will require support in all three tiers in order to accelerate learning sufficiently to meet grade-level expectations. If a student does not show adequate progress by the end of the intervention period, despite attempts to improve the intervention during this period, the team must examine carefully why the student is making little to no progress. Among the issues that should be considered are whether the interventions implemented as designed are yielding the results necessary for improvement over time. Based on these considerations, the team determines whether a comprehensive evaluation for special education is necessary.

### **SRBI and a High-quality Education for Preschool Children**

Certain differences between preschool education and K-12 public school education make it difficult to discuss the former in the context of SRBI. For example, not all children attend a preschool program prior to school entry at kindergarten, and many programs for preschoolers opt to use curriculums that focus on the development of broad cognitive, linguistic and social competence rather than the teaching of specific pre-academic skills. Currently, a large proportion of Connecticut's children receive a preschool education in a community-based early childhood program that is not a component of K-12 public education. Access to and availability of affordable programs is limited and programs vary greatly in quality. Compounding these challenges is the limited preparedness of some teaching personnel to offer a high-quality preschool education to all children in their programs. Nevertheless, the basic principles and potential benefits of SRBI are just as applicable to preschool education as to K-12 education as evidenced by the development of Recognition and Response for young children (e.g., see <http://www.recognitionandresponse.org/content/view/83/94/>).

Incorporating SRBI into the education of preschool-aged children is essential to educating all Connecticut children well and to closing achievement gaps among subgroups of children. For example, large differences in oral vocabulary, an important foundation for later reading achievement, emerge between children of different socioeconomic levels as early as age 3, primarily due to differences in exposure to words (Hart and Risley, 1995). High-quality educational opportunities at the preschool level and application of SRBI can prevent or ameliorate later learning and behavioral difficulties and can help to give all beginning kindergartners the foundation needed to be successful in school.

### **SRBI and Special Education**

Although the focus of the three-tiered model involves general education, other specialists--including, among other professionals, school psychologists, speech-

language pathologists, ESL teachers, special educators, reading/language arts consultants, math consultants, counselors and social workers--have crucial supportive roles to play in the implementation of SRBI. Among other functions, these specialists can serve as resources for general educators in the implementation of specific curriculums, instructional strategies, assessments, climate and social/behavioral supports; suggest ways to differentiate instruction; and provide guidance about appropriate interventions for individual students. In some cases, specialists will also be directly involved in helping to administer assessments or implement interventions.

Of course, even with the implementation of SRBI, special educators will continue to serve students with disabilities. Some of these students will be identified prior to kindergarten, while others will be identified during formal schooling. Students may be referred for an evaluation for special education at any time and in any tier of instruction. However, children should never be referred for a special education evaluation if their difficulties are due mainly to inadequate general education practices. Therefore, referral for special education evaluation would not occur until appropriate academic or behavioral interventions have ensured that the student's difficulties are not due to insufficient instruction, unhealthy school climate, inadequate practices in the areas of social-emotional learning or cultural relevance.

State guidelines will change in spring 2008 to require the use of SRBI as part of the identification procedures for learning disabilities. Implementation of SRBI requires some time, so districts should begin work on developing this process immediately. By **July 1, 2009**, the use of IQ-achievement discrepancy formulas will be replaced by evidence-based analysis of identified gaps between student performance and expected outcomes. These changes will support, through state guidelines, the scientific consensus about best practices for identification of learning disabilities (e.g., Speece and Shekita, 2002), as well as conform to the provisions of IDEA 2004.

SRBI benefit not only students with learning disabilities, but students with other disabilities as well; for example, by making general education practices more responsive to students' needs, more students with disabilities will be included and successful in the general education classroom. SRBI will also help teams in determining eligibility for special education by ensuring that the student's disability is not due primarily to ineffective general education practices.

School personnel should engage families when concerns about a child's academic or behavioral performance are first noted. They should be provided with continuing information about the child's progress on assessments, as well as opportunities to participate in team meetings and decision-making until the child either attains grade-appropriate performance or a comprehensive evaluation for special education is warranted. During the formal assessment process to determine a learning disability, parents must receive data-based documentation which reflects the student's progress derived from the interventions. When a student is determined to be eligible for special education, instruction or interventions that are highly focused on students' specific needs, as indicated in a student's individualized education program (IEP), continue to be monitored and documented to determine effectiveness.

## **Making SRBI Work**

The advisory panel also reached a consensus about several basic factors that are important to making SRBI work:

**Effective Leadership.** SRBI require some fundamental shifts in thinking from more traditional educational viewpoints, such as the idea that when students are underperforming, one looks carefully at curriculum, instruction and environment *first*, before looking for “problems” within the student. Effective leadership at both the district and school levels is vital to attain these shifts. Furthermore, effective leadership is needed to find ways to allocate time for SRBI, e.g., scheduling common planning time for teachers, making use of support staff members such as paraprofessionals, and selecting appropriate progress-monitoring assessments that do not require inordinate amounts of administration time. A systemic approach to core educational practices requires a strong knowledge base on the part of district and school administrators, because poor choices of core practices will greatly undermine the entire SRBI process. At the school level, the leadership and involvement of the principal in SRBI is especially important. In addition, many specialists also can help to provide leadership in SRBI implementation, including, but not limited to, school psychologists, who have expertise in system wide program design, collaboration and assessment; reading/language arts consultants, who have expertise in the domain of literacy relevant to students at all achievement levels; math consultants, who have expertise in the domain of mathematics; English-as-a-Second-Language (ESL) teachers, who have expertise in second-language acquisition strategies; and special educators, who have expertise in a variety of academic and behavioral domains that can help to meet the needs of struggling students.

**High-quality Teaching and Professional Development.** Effective teaching can make a tremendous difference in student outcomes. Among other teaching competencies, teachers should be able to implement with fidelity high-quality core curriculums and social/behavioral supports; create a positive classroom climate; provide appropriate differentiation of instruction; administer common progress-monitoring and formative assessments; and use assessments to improve instruction. Teachers involved in Tier II and Tier III interventions need corresponding expertise in how to select, implement and evaluate those interventions. Furthermore, in all tiers of instruction, teachers’ abilities to motivate and engage students from a variety of cultural and linguistic backgrounds and achievement levels are crucial. Professional development will be essential for many teachers in all three tiers so they are able to achieve these competencies.

In addition to providing teachers and other school personnel with professional development, schools and districts must support teachers in other ways, such as by giving them research-based core curriculums, sufficient materials, including those necessary to differentiate instruction; technically adequate assessments feasible to administer to large groups of children (or the resources for teachers to develop such assessments themselves); and sufficient access to specialists. To ensure high-quality teachers for Connecticut’s schools, schools of education must provide teacher candidates with substantive, thorough preservice preparation that enables them to address a range of cognitive, linguistic, cultural and behavioral differences in students. Teacher candidates also must have a solid background in professional ethics. Strong

preservice preparation will not eliminate the need for professional development for in-service teachers, but it will keep school districts from having to play “catch-up” in developing basic knowledge with which all teachers should enter the profession.

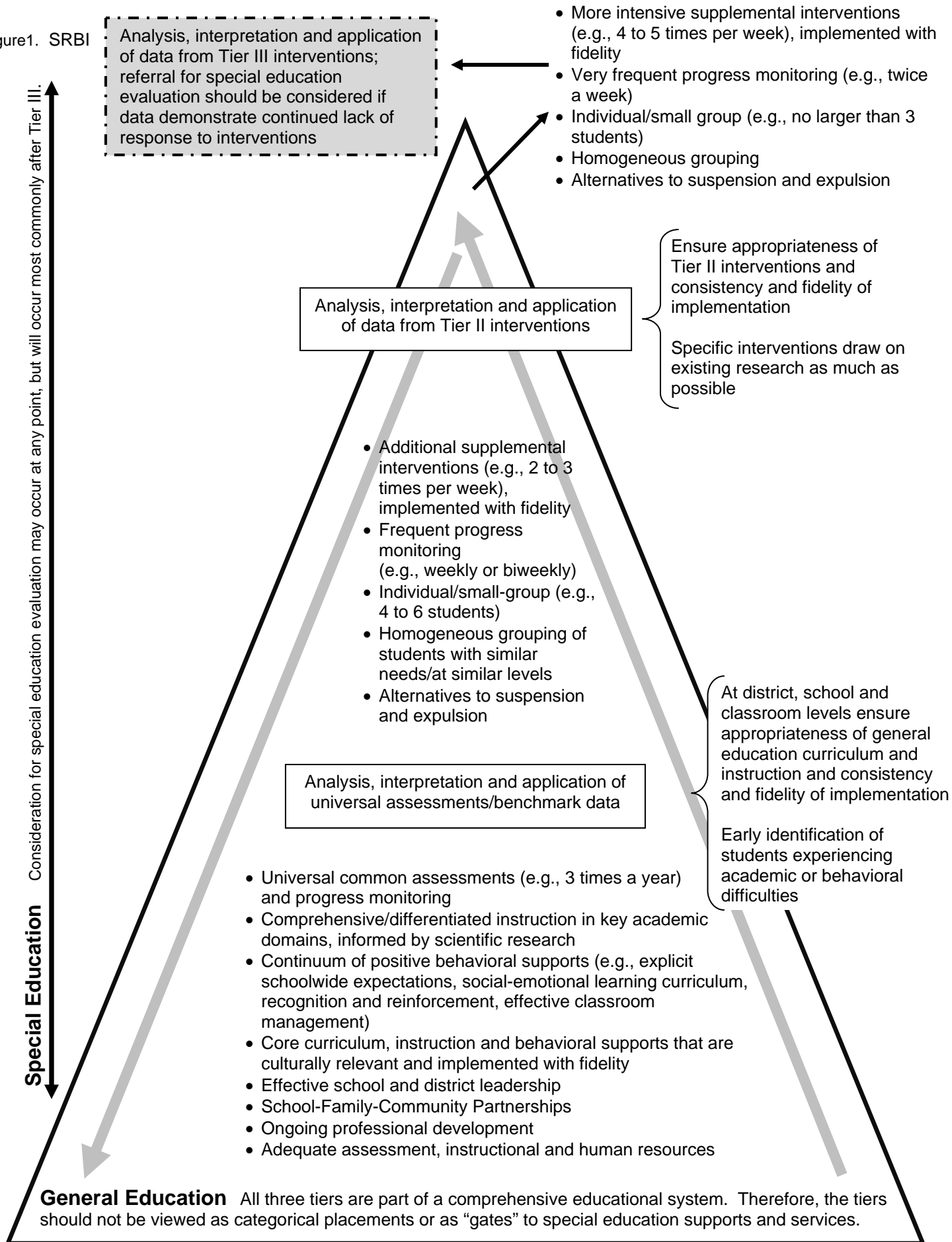
**Access to and Use of Technology.** To make SRBI feasible, districts need an ongoing database of information from student assessments for each school, grade and class, as well as other relevant information such as attendance, retention rates, drop-out rates, suspension rates, numbers of disciplinary referrals and quality of the school climate. They must have a reasonably fast and accurate way to make comparisons across schools, grades and classrooms, in order to answer questions such as whether the curriculum and behavioral system are working for most students, whether students are progressing adequately from grade to grade, and whether individual students are meeting important benchmarks. Technology is essential to meet the needs involved in managing and analyzing large databases of student information and for assisting with the monitoring of student progress over time.

## **Conclusion**

The full document contains much more detail about SRBI and its impact on education for all students such as additional information about specific initiatives in Connecticut that support various components of SRBI, criteria for selection of research-based curriculums and interventions, discussion of data analysis and decision-making in the three tiers, information about decision rules, and answers to some frequently asked questions, among other topics. Even in the full document, however, addressing every point relevant to implementing SRBI are not feasible, and advisory panel members agreed not to be overly prescriptive. This executive summary is intended to be an introduction, and the full document a general guide to SRBI as an organizational framework for school improvement. Readers are urged to seek out and employ the many helpful print and web-based resources referenced in the document. The State Department of Education in collaboration with the State Education Resource Center (SERC) and the Regional Education Service Centers (RESCs) will be offering a series of professional development activities to assist school personnel in the implementation of SRBI.

Schools can play a vital role in eliminating inequities and honoring individual differences. A key measure of the quality of education is its ability to be effective with a variety of children, not just a single, advantaged segment of the school population. SRBI can enable school personnel to be more successful in closing the achievement gaps while at the same time benefitting those students who are not ‘at risk’. Moreover, by giving a broader range of students the chance to be successful, and by improving the quality of education for all students, these approaches can contribute to developing one of Connecticut’s most valuable resources: our children.

Figure 1. SRBI





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