

2009 BEST
PRACTICES
Project



DATA REPORT & SUMMARY:
Differentiated Instruction



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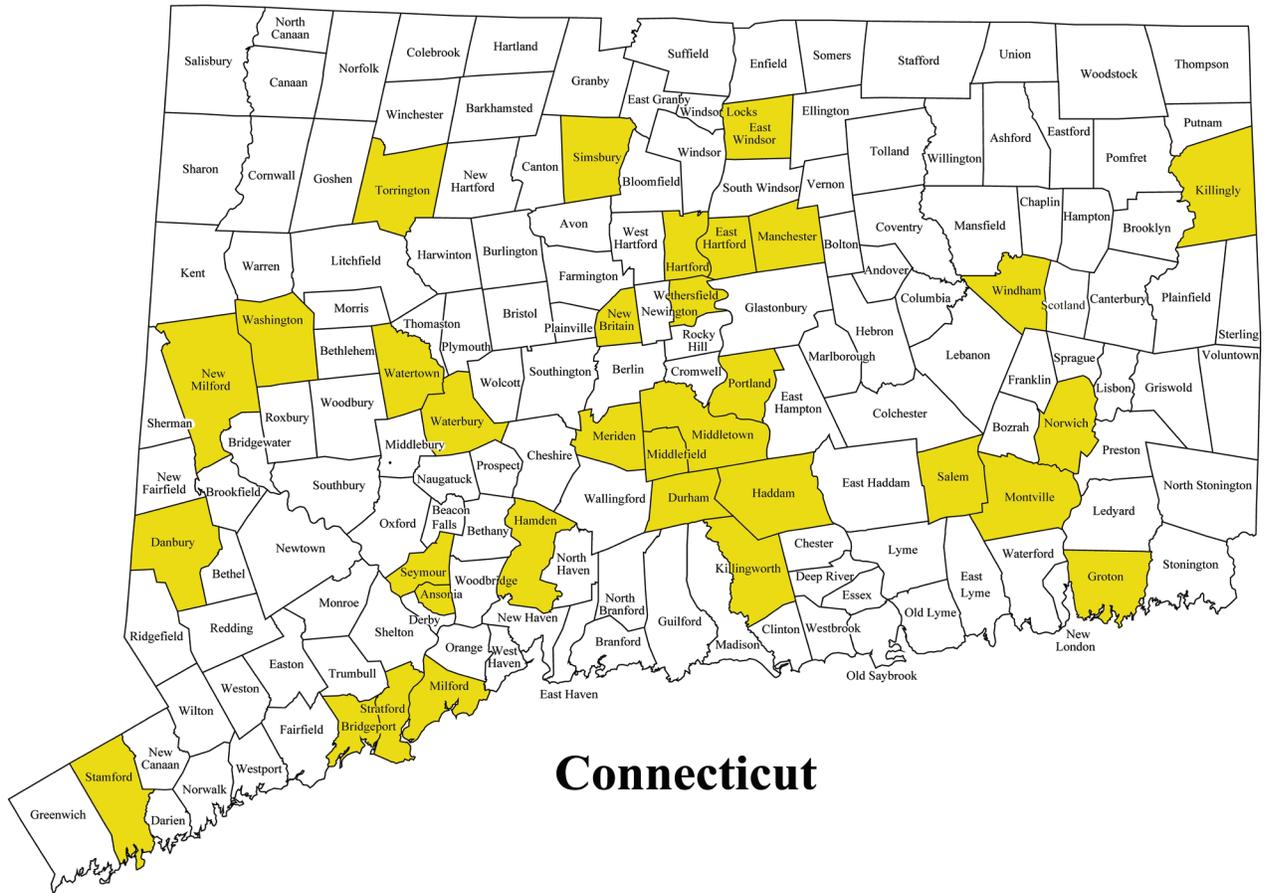
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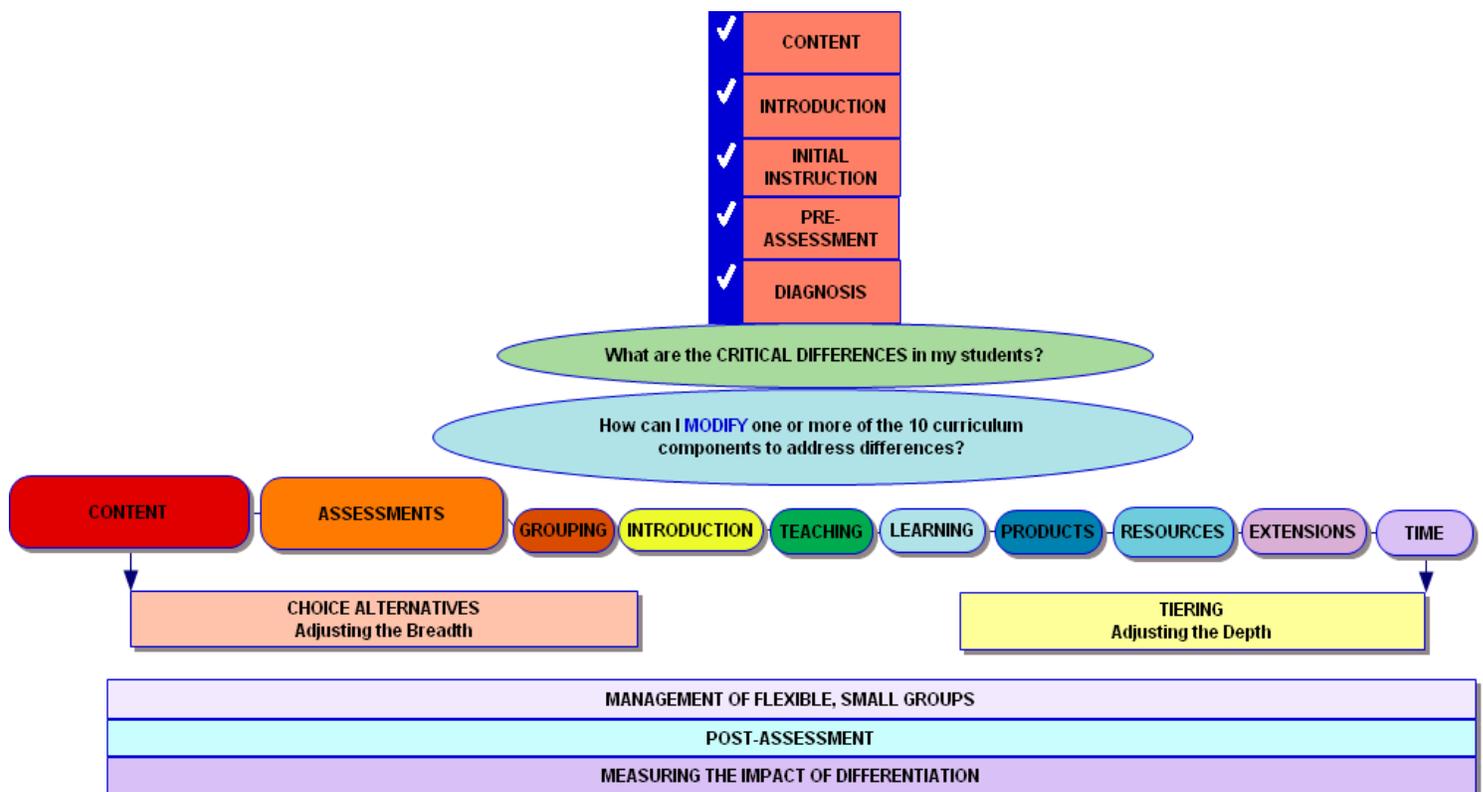
*Districts Receiving Customized Professional Development
on Differentiated Instruction (2006-2009)*



Map courtesy Connecticut Department of Economic and Community Development, 1996

What Is Differentiated Instruction?

Differentiated Instruction (DI) is a proactive, comprehensive, and systemic process used to enhance student learning. Teachers use DI to plan and provide instruction that maximizes academic achievement for all students while addressing the specific needs of some. DI is not a model or curriculum, but rather a process for matching various curriculum components to characteristics shared by groups of learners in the classroom (e.g., learning style preferences, learning rate) (see Figure 1). DI begins with the design of units of instruction that identify “power” standards, “big ideas,” and essential questions to guide instruction and assessment with high expectations for all students. These units need to be meaningful, developmentally built on prior and related knowledge, and aligned with *The Connecticut Framework: K-12 Curricular Goals and Standards* (1999).



*Figure 1. The Decision-Making Process for Differentiated Instruction (from *The Parallel Curriculum* by Carol Ann Tomlinson et al., a service publication of the National Association for Gifted Children, Corwin Press, 2001).*

DI is a powerful tool both for enhancing teaching and learning for gifted and talented learners as well as for the successful inclusion of students with disabilities in the least restrictive environment of the general education classroom. DI addresses critical aspects of early intervening services and a Response to Intervention (RTI) model (e.g., frequent progress monitoring and multi-tiered interventions). It utilizes accountability tools such as Data-Driven Decision Making (DDDM) and Making Standards Work (MSW).

Both the *No Child Left Behind Act of 2001* (NCLB) and the *Individuals with Disabilities Education Improvement Act* (IDEA 2004) require enhanced communication with parents, implementation of a scientifically based curriculum and instruction, effective use of resources based on student performance and student needs, and accountability for improved educational results for all students. To meet the diverse needs of all students, a multi-tiered system of early intervention services, embedded within the educational system, must draw upon the knowledge, skills, and services of general and special education personnel (see Figure 2). A multi-tiered system of differentiated intervention and instruction is a framework for organizing and implementing educational support on a classroom- and school-wide basis (National Association of State Directors of Special Education, 2005; CSDE, 2008).

DI involves offering several different learning experiences in response to students' diverse needs. Content, teaching strategies, learning activities, resources, and products are varied by students' reading levels, by students' preferred ways of learning or expressing themselves, by topic in response to students' interests, and by difficulty to challenge students at different readiness levels. DI looks at all aspects of effective instruction: planning, teaching, managing, and assessing.

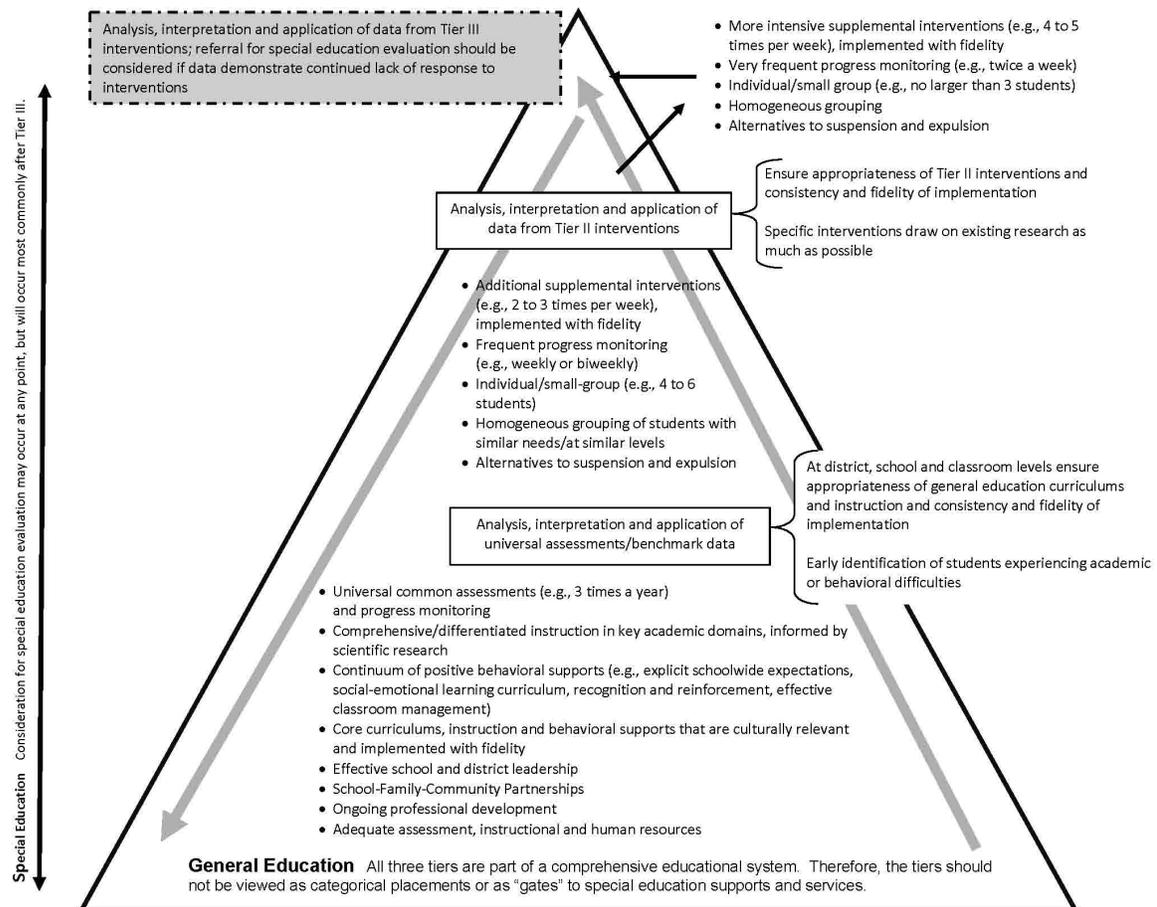


Figure 2. Multi-tiered Continuum of Supports (Using Scientific Research-Based Interventions: Improving Education for All Students, Connecticut's Framework for RTI. CSDE, August 2008.)

What is the purpose of the Best Practices Initiative: Differentiated Instruction (BPI:DI)?

The State Education Resource Center (SERC) works collaboratively with the Connecticut State Department of Education (CSDE) on a number of school improvement initiatives designed to ensure achievement for all students and close achievement gaps regarding race, ethnicity, fluency in English, socioeconomic status, and/or disabilities. The *Connecticut Accountability for Learning Initiative* (CALI) and the *Vanguard Schools Initiative* are examples of these comprehensive school improvement efforts.

With funds from the CSDE through the *Best Practices Initiative (BPI)*, SERC is addressing goals in the Connecticut State Personnel Development Plan (CSPD) designed to assist Local Education Agencies (LEAs) in meeting the needs of all students through targeted efforts to scale-up effective practices in DI across Connecticut (Table I). Funds for selected districts were made available through June 30, 2009. The BPI is designed to improve teaching and learning through DI for all students, including students who are gifted and talented, English Language Learners, average achievers, and/or students with disabilities.

Table I. *Selected goals from the CSPD that are addressed through the Best Practices Initiative: Differentiated Instruction.*

<i>CSPD Goal</i>	<i>Description</i>
OBJECTIVE 11	SERC/CSDE will develop a multi-component system to facilitate statewide replication of evidence-based practices.
OBJECTIVE 12	SERC/CSDE will replicate evidence-based practices with fidelity in selected school districts.
OBJECTIVE 13	Selected LEAs will receive job-embedded and evidence- or scientifically based professional development.
OBJECTIVE 14	Skills of general and special education teachers, staff, administrators, and parents in selected school districts will increase.
OBJECTIVE 15	Results for students with disabilities in selected districts will improve. [Addendum: results for students identified as gifted and talented will improve.]

In order to scale-up evidence-based practices across Connecticut, districts that currently include DI as a significant component of their District Improvement Plan are selected and provided with professional development, technical assistance, and fiscal support. The professional development focuses on training a team in DI in at least one (1) school within the district. The goal is for that school to then serve as a model to support scaling-up DI district-wide and with a school from a partner district.

Selected districts send district/school teams to participate in four (4) professional development seminars. Those teams must consist of one (1) central office administrator and one (1) building administrator, one (1) special education teacher, and one (1) general education teacher from the same school. Up to two (2) additional district or school personnel may be added to the team as determined by the sending district. These additional personnel should be integral to scaling-up DI at the school and/or district level for all learners. They might include a Gifted and Talented Coordinator, a Curriculum Specialist, or a teacher of English Language Learners.

A school identified by the district as positioned to become a model site will be provided professional development, on-site coaching, and support through SERC in order to ensure implementation integrity with respect to the critical elements of DI. Much of this support will occur in Year 1 so that in Years 2 and 3, this school will work with other schools in their district to scale up. They also will be paired with a school from another district wishing to “scale up” and implement evidence-based DI practices in order to achieve similar improvements in the learning outcomes of students.

See Appendix I for a list of requirements for acceptance into the *Best Practices Initiative: Differentiated Instruction*.

Table II. *Schools and districts that are participating in the Best Practices Initiative: Differentiated Instruction. Cohort number and year of participation are listed, as well as the schools' current status in the grant (inactive, training, scaling-up, expanding). Schools in **bold** have been identified by the district as model sites for DI for the district.*

Inactive = previously participated, but not currently active in the project
 Training = participating in seminars, planning for building-wide and district-wide implementation of DI
 Scaling-up = actively working with staff within building and/or partnering with at least one other district school on the implementation of DI
 Expanding = actively working with at least one other school in a neighboring district on the implementation of DI

<i>District</i>	<i>School</i>	<i>Cohort</i>	<i>Year of Participation</i>	<i>Status</i>
East Hartford	Silver Lane Elementary School	III	1	Training
Ellington	Ellington High School	III	1	Training
Portland	Portland High School	I	3	Expanding
Portland	Portland Middle School	II	2	Expanding
RSD #13	Strong Middle School	II	2	Scaling-up
RSD #13	Memorial Middle School	II	2	Scaling-up
RSD #13	Coginchaug Regional High School	III	1	Scaling-up
Salem	Salem School	III	1	Training
Seymour	Seymour Middle School	I	3	Scaling-up
Seymour	Seymour High School	II	2	Scaling-up
Waterbury	Woodrow Wilson Elementary School	I	3	Scaling-up
Waterbury	F. J. Kingsbury Elementary School	II	2	Inactive
Watertown	Judson Elementary School	III	1	Scaling-up
Watertown	Polk Elementary School	III	1	Scaling-up
Watertown	John Trumbull Primary School	III	1	Scaling-up

What does a multi-component system to facilitate statewide replication of evidence-based practices in Differentiated Instruction look like?

In 2006, SERC and the CSDE formed a leadership team to develop a multi-component system for the replication of best practices in DI across the state of Connecticut. Alice Henley, Assistant Director for Program Development [SERC], and Jeanne Purcell, Consultant [CSDE], along with Kim Bennett, Consultant [SERC], collaborated on the coordination, training design, and evaluation of the *Best Practices Initiative: Differentiated Instruction*.

All districts desiring to participate in the BPI:DI must demonstrate that they have met certain eligibility requirements, through application or past collaborative work with either SERC or CSDE (see Appendix I). Confirmation visits are made to each participating school prior to the beginning of training.

Districts that pass the screening process and are accepted into the project participate in a series of four training seminars each year for the first two years, as well as a two-day facilitators' training the summer after their first year of team training. Each year during the three-year commitment, schools in the project receive four on-site technical assistance visits by members of the DI training staff to aid building facilitators in the scaling-up of their new knowledge in their buildings and districts. (See Appendix II for a listing of the scaling-up activities participating districts must complete as a requirement of participation in the BPI:DI.)

In an effort to create systems change in the schools participating in the BPI:DI, the SERC/CSDE leadership team made explicit links between best practices in DI and other ongoing initiatives in the participating schools, particularly the Connecticut Accountability for Learning Initiative (CALI). SERC also has developed a best-practices Web site as a source of outcomes for projects such as the BPI:DI.

How can we determine if schools in Connecticut are implementing Differentiated Instruction with fidelity?

Of the 15 schools currently participating in the BPI:DI, nine have been identified by their district leadership team as model sites. These sites have received detailed training on the *Decision-Making Process for Differentiated Instruction* as the logic model for best practices in DI (see Figure 1). This is the model that they, in turn, are using as they work with other schools in their districts.

As part of their Year 2 training, the schools in Cohort I worked with consultants from SERC, CSDE, and Area Cooperative Educational Services (ACES), one of the Regional Education Service Centers (RESCs), to develop an *Innovation Configuration (IC) Map* for assessing fidelity of implementation of

differentiated practices in their schools. BPI: DI schools will begin utilizing this map as a monitoring tool during 2008-2009. See Appendix III for the first draft of the DI IC Map (2008).

Are Connecticut schools successfully forming partnerships within and between districts, to implement Differentiated Instruction?

As a requirement of participation in the project, all participating districts must establish a district team for managing district-wide implementation and to commit to full district involvement in DI. Four of the eight districts have written roll-out plans for district-wide implementation of DI, and an additional two have submitted preliminary plans as part of their initial application process. One district (Seymour) has trained district-wide in DI.

As of January 2009, 11 out of 15 schools (73%) have begun working with other schools to collaborate on the implementation of differentiated practices (See Table III). Of these, two (13%) are actively working with neighboring districts on expanding differentiated practices.

To expedite the formation of “partnership districts,” schools in Cohort III will be assigned a partner district from within the project, at the onset of their initial training program, rather than identifying the school in year 2 or 3.

Two, two-day facilitators’ trainings have been held in conjunction with the continued work of the *Best Practices Initiative: Differentiated Instruction*. Participants who had attended the four initial training seminars of Year 1 were eligible to attend. A total of 26 new DI facilitators have been trained as a result of this additional professional development opportunity. Facilitators at several schools have already begun working with staff in their own building, with staff in other schools within their districts, and with partner schools in neighboring districts on cooperative professional development. See Table III for details of these collaborative events.

Table III. *Schools and districts that are participating in the Best Practices Initiative: Differentiated Instruction, including a brief description of scaling-up or expansion activities.*

<i>District</i>	<i>School</i>	<i>Scaling-up and Partnering Activities</i>
East Hartford	Silver Lane Elementary School	Participating in BPI:DI as part of a larger district contract on scaling-up best practices in Tier 1 (core program).
Ellington	Ellington High School	Representatives from the high school are participating in Cohort III training.
Portland	Portland High School	Co-trained with representatives from Portland Middle School in Cohort I; hosted mini-conference on DI for the Middlesex Consortium*, Summer 2008. <i>* Cromwell Public Schools, East Hampton Public Schools, Middletown Public Schools, Portland Public Schools, Regional School District #13 Public Schools, Regional School District #17 Public Schools, and Valley Regional Technical Schools</i>
Portland	Portland Middle School	Co-trained with Portland High School in Cohort I, then expanded team in Cohort II; hosted Mini-conference on DI for the Middlesex Consortium*, Summer 2008. <i>* Cromwell Public Schools, East Hampton Public Schools, Middletown Public Schools, Portland Public Schools, Regional School District #13 Public Schools, Regional School District #17 Public Schools, and Valley Regional Technical Schools</i>
RSD # 13	Strong Middle School	Co-trained with Memorial Middle School in Cohort II. Trained Coginchaug Regional High School staff on basic principles of DI, Fall 2008. New participants to collaborate with members from Strong Middle School and Coginchaug Regional High School to form a vertical math team for Cohort III.
RSD # 13	Memorial Middle School	Co-trained with Strong Middle School in Cohort II. New participants to collaborate with members from Strong Middle School and Coginchaug Regional High School to form a vertical math team for Cohort III.
RSD # 13	Coginchaug Regional High School	Participants to collaborate with members from Strong Middle School and Coginchaug Regional High School to form a vertical math team for Cohort III.
Salem	Salem School	Representatives from both elementary and middle school levels to participate in Cohort III training.

<i>District</i>	<i>School</i>	<i>Scaling-up and Partnering Activities</i>
Seymour	Seymour Middle School	Facilitator team has provided ongoing training to building staff on basics of DI (Year 2). Team responsible for in-service of new staff in the basic principles of DI (Year 3).
Seymour	Seymour High School	Facilitator team developing a peer coaching model for training building staff on principles of DI (Year 2). Team developing “DI kits” for each department and providing overviews to staff on the contents of these kits (including differentiated lessons, supplies to aid in differentiation, video and print resources).
Waterbury	Woodrow Wilson Elementary School	School receiving additional support to rebuild facilitator team; partnered with Kingsbury Elementary School in year 2.
Waterbury	F. J. Kingsbury Elementary School	School withdrew from participation, Year 1.
Watertown	Judson Elementary School	Co-training with Polk Elementary School and John Trumbull Primary School in Cohort III.
Watertown	Polk Elementary School	Co-training with Judson Elementary School and John Trumbull Primary School in Cohort III.
Watertown	John Trumbull Primary School	Co-training with Polk Elementary School and Judson Elementary School in Cohort III.

Is participation in the *Best Practices Initiative: Differentiated Instruction* resulting in changes in educator skills and practices?

Leadership

All participating districts have identified a district-wide coordinator for DI. As of January 2009, six of the eight districts in the BPI:DI have identified district-level DI teams. Thirteen of the 15 schools participating in the BPI:DI have developed school-based DI teams. The minimum requirements for each school team were the inclusion of one central office administrator, one building administrator, one general educator, and one special educator. See Table IV for a listing of the composition for each participating team. Five of the eight districts have central office representation and active participation in team trainings and activities; an additional two are in the application process but have already identified district-level representation for the trainings.

Table IV. Schools and districts that have participated in the Best Practices Initiative: Differentiated Instruction, including team composition by role.

<i>District</i>	<i>School</i>	<i>Central Office</i>	<i>Bldg Admin.</i>	<i>Gen. Ed.</i>	<i>Sp. Ed.</i>	<i>Other</i>
East Hartford	Silver Lane Elementary School	2	1	1	1	1
Portland	Combined Portland High School/Middle School Team	1	1	4	2	0
Portland	Portland Middle School	1	1	2	2	0
RSD #13	Strong Middle School	0	1	1	1	0
RSD #13	Memorial Middle School	0	1	1	1	0
RSD #13	Vertical Math Team (Strong/Memorial/Coginchaug)	1	2	1	2	0
Salem	Salem School	1	1	2	2	0
Seymour	Seymour Middle School	1	1	3	1	0
Seymour	Seymour High School	0	1	5	1	0
Waterbury	Woodrow Wilson Elementary School	0	1	4	1	0
Waterbury	F. J. Kingsbury Elementary School	0	1	1	1	0
Watertown	Judson Elementary School	0	1	0	1	0
Watertown	Polk Elementary School	0	1	0	0	0
Watertown	John Trumbull Primary School	1	1	1	1	0

Data Collection and Program Evaluation

Teams participating in the BPI:DI are required to contribute data, artifacts, and products to monitor their development and the impact of their work on students, to assist SERC and CSDE in evaluation of the BPI:DI as a model for the scaling-up and expansion of best practices, and to publish exemplars of best practices for other educators to use.

All teams agree to assist in the development of SERC's best-practices Web site by providing at least two differentiated lessons or units of study by the end of their second year of training and support. Differentiated lessons have been submitted by five participating schools (all Cohort I schools, and two Cohort II schools) as of 2008-09; three lessons are being prepared internally (at SERC) for Web posting; two additional ones are in revision (at the schools, with the assistance of SERC staff).

See Appendix IV for a list of some types of ongoing data being collected and submitted by participating schools.

Systems Change

Schools participating in the BPI:DI have successfully integrated their learning on DI into current structures and practices in their buildings.

Participants in Cohort I trainings self-reported an increase in overall knowledge of DI from 2.7 to 4.3 on a 5-point scale after Year 1 training. They also self-reported confidence in their ability to train on the topic of DI as a 3.5 on a 5-point scale, after additional facilitators' training.

Connecticut Accountability for Learning Initiative (CALI)

As part of the second year of training, participants examine their current initiatives and practices to identify coherence between these initiatives and the information gained from the BPI:DI. A special emphasis is placed on connections with the decision-making process of DI and the strategic decision-making models of the components of CALI.

The following represents a brief synopsis of coherence activities that have been undertaken by each district currently participating in the BPI:DI.

East Hartford Public Schools:

East Hartford has been involved extensively in professional development with SERC and CSDE for the past eight years (Early Intervention; Positive Behavior Support; Courageous Conversations About Race; Inclusion; Transition; CALI). In 2008-2009, the district underwent its first year of training as part of Cohort III and established a district-level SRBI team to promote coherence among initiatives and develop a continuum of academic and behavioral support for all students. The district is currently examining the role of Data Teams as structures for encouraging this coherence. Participation in BPI:DI supports the desire of district leadership to establish high-quality Tier 1 (core program) for all students.

Portland Public Schools:

This district is in its third year of training (Cohorts I and II). Portland's participation in BPI:DI resulted from work with CSDE to develop differentiated units of instruction aimed at increasing achievement of students in need of extensions and enrichment. The district is actively involved in incorporating principles of differentiated lesson plan design into its curricula.

Regional School District #13 Public Schools:

Region 13 is in its second year of training (Cohorts II and III). As a result of its year of training, the district desired to use current Data Team structure as a vehicle for incorporating DI content into strategic decision-making processes. It is participating in Data-Driven Decision Making/Data Teams training this year to enhance the function of current Data Teams as decision-making units.

Salem Public Schools:

In its first year of training (Cohort III), Salem began participation in BPI:DI as a result of work with CSDE on instructional design and curriculum differentiation.

Seymour Public Schools:

Seymour is in its third year of training (Cohorts I and II) and has been involved extensively in professional development with SERC for the past seven years (Inclusion, DI). The district began participation in BPI:DI as a result of two years of district-wide professional development on the basics of DI. As a result of its training in the BPI:DI, the district undertook a year of professional training district-wide on Common Formative Assessments (CFA). It is using its current professional learning community structures (Critical Friends, Grade Level Teams) in both its CFA and DI work. Seymour has been actively involved in re-writing its district curriculum over the last three years, and writers are incorporating principles from both DI and CFA training into curriculum design. In addition, differentiation strategies are included on its electronic lesson plans for routine submission to building administrators.

Waterbury Public Schools:

The district is in the third year of training (Cohorts I and II). Waterbury has extensive history of professional development with SERC (Co-Teaching, DI, CALI, Positive Behavioral Interventions and Supports, Literacy). As one of the larger urban districts in the state (39 schools), Waterbury has a focus on systemization of best practices across the district. Participating schools are using new information from the BPI:DI in their current Data Teams structure as part of the strategic decision-making process.

Watertown Public Schools:

In its first year of training in Cohort III, Watertown is currently collaborating with SERC on a multi-year, comprehensive contract of professional development, including DI and Co-teaching. It is developing a district-level team to establish a system of coherence between district initiatives, sustain best practices, and build internal training capacity. The district is interested in utilizing the current structure of co-taught classrooms to better implement DI.

Unified School District #1:

The district is currently negotiating an alternative training plan for DI training (after being unable to participate in Cohort III). Staff has attended many SERC sessions over the last several years. As a district comprised of schools within each of the 21 correctional facilities in the Connecticut Department of Corrections, USD #1 has great interest in providing comprehensive academic support to the very specialized needs of the students in the district.

Is the *Best Practices Initiative: Differentiated Instruction* resulting in increased capacity to provide training and technical assistance in Differentiated Instruction in Connecticut?

To date, four districts and seven schools have trained a total of 26 DI facilitators through the BPI:DI facilitators' training. Facilitators in four of the seven schools have been actively providing training and technical assistance, both formally and informally, within their schools, districts, and regions of the state.

Is participation in the *Best Practices Initiative: Differentiated Instruction* resulting in positive outcomes for students?

CMT/CAPT Data

Data for CMT and CAPT were graphed for participating districts and schools from 2001 to 2008. Areas examined were average scaled score, the percentage of students at goal, and the percentage of students at or above proficiency in the areas of math, reading, and writing. Four grades were compared across the project: grade 4 (two elementary schools); grades 6 and 8 (four middle schools); and grade 10 (two high schools). Data were not available for the remaining schools currently in the project.

Results of this comparison are presented in Appendix V.

Highlights

Elementary Schools

Two elementary schools are summarized in the data in Appendix V: Woodrow Wilson Elementary School and F. J. Kingsbury Elementary School, both in Waterbury. Fourth-grade students at Wilson showed a remarkable overall rate of improvement in all three areas of math, reading and writing, an improvement that far exceeded the rate of improvement of fourth-graders statewide. Students at Kingsbury also showed a greater rate of improvement than the state average in math.

Middle Schools

Four middle schools were represented in the data in Appendix V: Seymour Middle School, Portland Middle School, Strong Middle School, and Memorial Middle School (the latter two are part of Regional School District #13). Sixth-grade students at Portland, Strong, and Memorial schools showed greater overall performance in math, reading and writing than did students, overall, in the state. Seymour Middle School sixth graders showed a greater rate of improvement in math, reading, and writing than did students statewide. All schools showed a significant upward shift in performance immediately after the 2006 beginning of the BPI:DI.

Results for eighth-grade students in the study were less consistent. Students at Portland, Strong, and Memorial schools showed greater overall performance in math, reading, and writing than did students statewide. Eighth-graders at Seymour Middle School showed slightly higher performance in writing than the state average. Portland eighth graders showed greater rate of improvement over students statewide in math. Students at Portland, Strong, and Memorial middle schools showed greater rate of improvement over students statewide in reading. All schools participating in the project showed eighth-grade writing improvement greater than state improvement for the years 2006-2009.

High Schools

Two high schools were summarized in the data in Appendix V: Seymour High School and Portland High School. Tenth graders at Portland High School showed greater overall performance in math, reading, and writing than did students in the state overall. Tenth graders at Seymour High School showed a greater rate of improvement in reading and writing than did students in the state overall.

The high school data, however, had a significantly different pattern immediately following the initiation of the BPI:DI than did the elementary and middle schools. During this period, the high schools experienced a significant dip in performance relative to the state performance. In general, an “implementation dip” is common at the beginning of the systemization of an innovation.¹ But the structure of high schools can make adjustments to change more challenging than in elementary and middle schools. Given this observation, the DI staff will have to closely examine the way that technical assistance is provided to participating high school teams, especially at the beginning of training. Still, the fact that high school student outcomes showed improvement after the implementation of the BPI:DI is encouraging.

Future Research

None of the schools in the project had a large-enough number of students with individualized education programs (IEPs) to disaggregate CMT/CAPT data by subgroup. In addition, many schools no longer formally identify students as gifted and talented. To gather data on improvements in student outcomes for all student populations, every team participating in 2008-2009 will be asked to identify two students each for fourth grade, sixth grade, eighth grade, and tenth grade in each of the following categories: students with IEPs, students with average abilities, and students identified as gifted and talented (those at the top 2 percent of their grade level). Schools will provide data for these case studies on a regular basis (to be determined by the measurement tool used).

¹Fullan, M. (2001). *Leading in a culture of change*. New York: John Wiley and Sons.

What is the current need/demand for training and support in Differentiated Instruction in Connecticut?

Systems Needs

In order to develop and sustain a district-wide and statewide system of strategic decision making around providing instruction that serves the needs of individual students, groups of students, and whole classes or grades, it is imperative that differentiated practices be used as a part of a greater comprehensive system of academic and behavioral support for all students.

The essential features of a comprehensive district-wide system of differentiated instructional practices are:

- Adequate and sustained **funding support** for materials and resources used to reach all learners;
- Commitment to providing instruction to meet the needs of **diverse learners** in the general education classroom;
- Relevant and effective **political support**;
- **Training capacity** that expands beyond SERC and CSDE;
- **Model schools** that demonstrate effective implementation and sustainability; and
- **Program evaluation** to ensure implementation fidelity and measure outcomes.

In addition, to expand these practices throughout the state, the following supports would be necessary:

- **A statewide leadership team** that involves a variety of partners and stakeholders committed to the improvement of instruction for all students; and
- **Coaching capacity** that expands beyond SERC and CSDE.

Local Demand

Demand by Connecticut school districts for participation in job-embedded professional development in DI has increased dramatically over the last three years, from five district contracts serving 25 schools (including the BPI:DI schools) in 2006-2007, to 14 district contracts serving 49 schools in 2008-2009 (see page ii). Demand for the statewide DI facilitators' training in 2007-2008 was so great that the session was replicated: 60 new facilitators were trained in one three-day session last summer. Given the movement across the state to utilize the framework of Scientific Research-Based Interventions by July 1, 2009, for making decisions about the academic and social emotional needs of all students, and to provide multiple tiers of intervention for all students in the general education classroom, there will, no doubt, be a growing interest in how to differentiate instructional practices to reach all learners. In addition, the continued concern over the disparity between the achievement of students of color and

their white classmates, as well as between students with disabilities and second language learners and their peers, pushes educators to examine the decision-making process and choices made when designing instruction for all students.

Summary

Differentiated Instruction (DI) is a comprehensive and systematic decision-making process teachers use to enhance and support the learning of all students. The Best Practices Initiative: Differentiated Instruction (BPI:DI) has enabled staff at SERC and the CSDE to identify schools that exemplify these practices and processes, cultivate instructional leaders at these model schools, and expand these promising practices throughout districts and the state.

It is the hope and expectation of all involved in the BPI: DI that this training design become a model for building and sustaining best practices in Differentiated Instruction across Connecticut through the increasing network of DI trainers being trained through the grant.

APPENDIX I

Requirements for participants in the Best Practices Initiative: Differentiated Instruction

ELIGIBLE APPLICANTS

Local Education Agencies (LEAs) within the state of Connecticut that have participated in in-district partnerships regarding Differentiated Instruction with either SERC or CSDE are eligible to apply. LEAs must demonstrate commitment to utilizing funds to:

- 1) Establish a district-level team in Year 1 (if such a team is not in place) responsible for scaling-up DI across the district, maintain this team throughout the funding cycle, and delineate mechanisms for sustaining the team after the Best Practices Initiative (BPI);
- 2) Identify a district-level DI Coordinator if one has not already been identified and plan for sustaining the Coordinator role;
- 3) Identify a district/school team to participate in the professional development seminars and on-site technical assistance to support application;
- 4) Develop at least one (1) school within their district as a “model” DI site as defined by the critical components of DI in Year 1;
- 5) Develop two to three “model” DI schools within the district by the end of Year 2;
- 6) Expand DI to all schools in their own district, as appropriate, within three to six years;
- 7) Work collaboratively with a partner district, as identified by SERC, that is interested in initiating and/or scaling-up DI in one of its own schools by the end of Year 2 and in Year 3 of the program;
- 8) Actively collaborate with SERC and its partners at the Bureau of Curriculum and Instruction, including the School Improvement Unit, at the Connecticut State Department of Education to identify lessons learned and to contribute to the research base through all funding years; this includes participation in networking meetings scheduled two to three times in Years 2 and 3;
- 9) Identify District Facilitators to attend summer professional development to be in a position to train and provide TA to other teachers;
- 10) Actively participate in the development of a Web-based collection of differentiated lessons;

- 11) Utilize the *Concerns-Based Adoption Model* (CBAM) to develop an *Innovation Configuration (IC) Map* throughout the funding years to collect and analyze student and school-wide data, including data on:
 - Classroom instructional strategies,
 - Student achievement,
 - CMT/CAPT scores, and
 - Attendance;
- 12) Participate in all evaluation activities as outlined by project evaluators contracted by SERC and CSDE;
- 13) Utilize components of the *Connecticut Accountability for Learning Initiative* (CALI) and/or other similar accountability programs by Year 2 so as to facilitate coherence in school improvement efforts across Connecticut; those components include Data-Driven Decision Making and Data Teams; identification of “power” standards, “big ideas,” and essential questions to guide instruction and assessment; performance assessment and scoring guides to monitor student progress; use of evidence-based teaching strategies; and professional learning communities.

APPENDIX II

Scaling-up and expanding: Obligations of districts participating in the Best Practices Initiative: Differentiated Instruction

<p>District-Level Leadership Team</p>	<p>Selected districts will be required to immediately establish a district-level leadership team to lead and coordinate sustained and accurate implementation of DI practices and systems at the district and school levels, if such a team is not already in place that could be assigned these responsibilities. This district-level leadership team will work to review philosophy, policy, structures, and practices across the district that address the instructional and curriculum issues regarding students, including students who are gifted and talented, English Language Learners, and those in need of special education because of disabilities. The goal is to increase the academic achievement of all students. This team will be responsible for the coordination of training, coaching, and evaluation activities related to implementation. It will facilitate connections between DI and other school improvement efforts to enhance coherence, collaboration, and sustainability. The district-level leadership team facilitates the inclusion of DI-specific priorities in the District Improvement Plan. This action plan will identify human and fiscal resources that will sustain DI following the conclusion of BPI activities.</p>
<p>Coordinator</p>	<p>Selected districts will identify a district-level DI Coordinator, if one is not already in place, who will guide local implementation, ensure fidelity of implementation, and serve as a liaison to the State/SERC Leadership Team as well as the District-Level Leadership Team and its partner district/schools. The identified Coordinator must have adequate time in his/her schedule to manage day-to-day operations. The Coordinator must have knowledge and implementation expertise regarding DI practices, interventions, and systems change strategies. The action plan must identify resources and strategies for sustaining this role after the completion of BPI activities.</p>
<p>DI Team</p>	<p>Selected districts will form a district/school team to participate in the professional development seminars and networking sessions. This team must consist of one (1) central office administrator and one (1) building administrator, one (1) special education teacher, and one (1) general education teacher from the same school. Up to two (2) additional district or school personnel may be added to the team as determined by the sending district. These additional personnel should be key to scaling-up DI at the school and/or district level for all learners. They might include a Gifted and Talented Coordinator, a Curriculum Specialist, or a teacher of English Language Learners.</p>
<p>“Model” School(s)</p>	<p>Selected districts will identify one (1) school within their district that has been actively involved in DI and is situated to quickly become a model site in Year 1; this model school will partner with other schools in the selected districts working to scale up DI through three years of the BPI: DI.</p>

District-wide Implementation	Selected districts will have plans to expand DI to all schools in their own district, as appropriate, within 3-6 years.
Partner Schools	Selected districts will work collaboratively with a partner district, as identified by SERC, that is interested in initiating and scaling up DI in one of its own schools in Years 2 and 3 of the program.
Collaboration with Partners	Actively collaborate with SERC and the Bureau of Curriculum and Instruction at CSDE to identify lessons learned and to contribute to the research base through all funding years. This will include participation in a calendar of networking meetings each funding year.
Facilitators	Identify building facilitators to attend summer professional development so as to be in a position to train and provide TA to other teachers.
Web	Actively participate in the development of a Web-based collection of differentiated lessons.
Data Collection	Selected districts will be required to use an <i>Innovation Configuration (IC) Map</i> for the purpose of frequent monitoring and decision making around implementation of differentiated strategies for planning, managing, assessing, and teaching. Selected districts must also agree to let SERC use photographs/videos as evidence of effective classroom practices.
Evaluation	Selected districts will participate in all evaluation activities as outlined by project evaluators contracted by SERC and CSDE.
Connecticut Accountability for Learning Initiative (CALI)	Selected districts will utilize components of the <i>Connecticut Accountability for Learning Initiative (CALI)</i> and/or other similar accountability programs by Year 2 so as to facilitate coherence in school improvement efforts across Connecticut. Those components include Data-Driven Decision Making and Data Teams; identification of “power” standards, “big ideas,” and essential questions to guide instruction and assessment; performance assessment and scoring guides to monitor student progress; use of evidence-based teaching strategies; and professional learning communities.

APPENDIX III

The Innovation Configuration (IC) Map for Differentiated Instruction (Draft 1, 2008)

The IC Map is used for collecting and analyzing student and school-wide data to assess schools' fidelity in implementing DI. This model uses a 3-point or 4-point scale to measure the level of fidelity in teacher practices, though schools may adopt their own model as needed. For an electronic copy of the IC Map, contact Alice Henley, Assistant Director, State Education Resource Center (SERC), (860) 632-1485, ext. 311, or henley@ctserc.org.

[Note: Items marked (*) to be defined in a glossary by the participating teams, for use in their schools]

<i>Curriculum Components That May Be Differentiated</i>				
CATEGORY	4	3	2	1
Alignment of Content*	The teacher provides learning objectives that are consistently clear and aligned with state/national standards, the district's priority standards, and scope and sequence.	The teacher provides learning objectives that are sometimes clear and aligned with state/national standards, the district's priority standards, and scope and sequence.	The teacher provides learning objectives that are often unclear and poorly aligned with state/national standards.	The teacher provides learning objectives that are unclear and not aligned with state/national standards.
Introduction*	The teacher provides an introduction that consistently establishes relevance, includes an engaging scenario, communicates learning objectives, and connects with students' prior knowledge.	The teacher provides an introduction that includes an engaging scenario and communicates learning objectives but does not either connect with prior knowledge or establish relevance.	The teacher provides an introduction that communicates the objective but is either not engaging or does not establish relevance.	The teacher provides no introduction.
Preassessment*	The teacher consistently uses a variety of preassessments that address students' learning profiles* and the learning objectives for units of instruction*.	The teacher sometimes uses preassessments that address the students' learning profiles* and the learning objectives for units of instruction.	The teacher uses preassessments that either do not address the students' learning profiles or learning objectives for units of instruction.	The teacher does not use preassessments.

Adjusting the Breadth: Differentiating by Providing Alternatives and Choice				
<i>Curriculum Components That May Be Differentiated</i>				
CATEGORY	4	3	2	1
Analysis of Preassessment Data	The teacher consistently analyzes preassessment data, identifies the most critical student learning difference, and plans to adjust the breadth or depth of components accordingly.	The teacher analyzes preassessment data and identifies the most critical student learning difference but does not plan to adjust the breadth or depth accordingly.	The teacher analyzes preassessment data but is unable to identify the most critical student learning difference and plan to adjust the breadth or depth accordingly.	The teacher does not analyze preassessment data.
Product Alternatives*	The teacher provides alternative products that are aligned with the learning objectives to address the range of student interest and learning styles.	The teacher provides alternative products that are aligned with the learning objectives but do not address the full range of student interest and learning styles.	The teacher provides alternative products that do not align with the learning objectives or do not address the full range of student interests and learning styles.	The teacher does not provide a selection of products.
Product Choice	The teacher consistently provides opportunities for students to choose their products.	The teacher sometimes provides opportunities for students to choose their products.	The teacher seldom provides opportunities for students to choose their products.	The teacher does not provide opportunities to choose their products.
CATEGORY	3	2	1	
Resource Alternatives*	The teacher provides a selection of resources that are aligned with the learning objectives to address the full range of student interests and learning styles.	The teacher provides a selection of resources that may not be aligned with the learning objectives or may not address the full range of student interests and learning styles.	The teacher provides a single resource that may or may not address students' learning needs.	
Grouping Alternatives	The teacher uses a variety of grouping strategies that are aligned with the learning objectives and address the full range of student interests and learning styles.	The teacher uses a variety of grouping strategies that may not be aligned with the learning objectives or may not address the full range of student interests and learning styles.	The teacher does not vary grouping strategies.	

Adjusting the Depth: Differentiating by Providing Tiering*				
<i>Curriculum Components that May Be Differentiated</i>				
	3	2	1	
Differentiation of Content*	The teacher adjusts the content to increase or decrease its complexity*, abstractness*, familiarity*, or opportunity for application* to address the full range of students' prior knowledge/skills or learning rates.	The teacher adjusts the content, but the adjustment does not address the full range of students' prior knowledge/skills or learning rates.	The teacher does not make adjustments to the content.	
Assessments* (formative and summative)	The teacher adjusts assessments to address the differentiated content.	The teacher adjusts assessments, but they do not address the differentiated content.	The teacher does not adjust assessments.	
	4	3	2	1
Grouping Strategies	The teacher uses a variety of grouping strategies that are aligned with the learning objectives and address the full range of students' prior knowledge/skills or learning rates.	The teacher uses a variety of grouping strategies that may not be aligned with the learning objectives or may not address the full range of students' prior knowledge/skills or learning rates.	The teacher randomly uses grouping strategies.	The teacher does not vary grouping strategies.
Teaching Strategies*	The teacher adjusts instructional methods, pacing, and scaffolding to align with the learning objectives and to address the full range of students' prior knowledge/skills or learning rates.	The teacher adjusts instructional methods, pacing, or scaffolding to align with the learning objectives but may not address the full range of students' prior knowledge/skills or learning rates.	The teacher randomly adjusts instructional methods, pacing, and scaffolding.	The teacher does not adjust instructional methods, pacing, or scaffolding.

	4	3	2	1
Learning Activities*	The teacher designs learning activities to help students develop and apply critical thinking skills*. The learning activities are adjusted to address the full range of students' prior knowledge/skills or learning rates.	The teacher designs learning activities to help students develop and apply critical thinking skills, but the activities are not appropriate to the full range of students' prior knowledge/skills or learning rates.	The teacher designs learning activities that may not address students' developing critical thinking skills.	The teacher does not design learning activities.
Products	The teacher designs assignments that result in products that vary in complexity, critical thinking, or independence, and the teacher matches students to particular assignments appropriate to their prior knowledge/skills and learning rate.	The teacher designs assignments that result in products that vary in complexity, critical thinking, or independence, but does not match all students to particular assignments appropriate to their prior knowledge/skills and learning rate.	The teacher designs assignments that result in products that vary in complexity, critical thinking, or independence, but the assignments are not matched to students' prior knowledge/skills and learning rate.	The teacher does not design differentiated products.
	3	2	1	
Resources	The teacher provides resources that vary in complexity*, abstractness* and/or familiarity* to address the full range of students' prior knowledge/skills or learning rates.	The teacher provides resources that do not address the full range of students' prior knowledge/skills or learning rates.	The teacher provides one resource.	
Time	The teacher consistently provides opportunity for subgroups of students to learn at varied paces.	The teacher inconsistently provides opportunities for subgroups of students to learn at varied paces.	The teacher does not provide opportunities for subgroups of students to learn at varied paces.	

APPENDIX IV

Ongoing data collected through the Best Practices Initiative: Differentiated Instruction

Results Statement	Item to be collected:	Collected by:
<i>SERC/CSDE will develop a multi-component system to facilitate statewide replication of evidence-based practices.</i>	Action Plans for DI roll-out Completed Team Registration, Statement of Assurances, Application	SERC (from each team) SERC (from district coordinator)
<i>SERC/CSDE will replicate evidence-based practices with fidelity in selected school districts.</i>	IC Map data (annually)	Teams (from classroom observations)
<i>Selected LEAs will receive job-embedded and evidence- or scientifically based professional development.</i>	Training and TA dates	SERC (from trainers, TA providers)
<i>Skills of general and special education teachers, staff, administrators, and parents in selected school districts will increase.</i>	Self-inventory of skills/knowledge in DI (pre- and post-, each year) Stages of Concern Questionnaire data (pre- and post-, each year)	SERC (from participants) Teams (from building staff)
<i>Results for students with disabilities in selected districts will improve.</i> <i>[Addendum: Results for students identified as gifted and talented will improve.]</i>	Quarterly case study data: 2 students with IEPs, 2 students of average ability, 2 students identified as gifted and talented (or in top 2% of their grade) [per grade level in their school] CMT/CAPT data	Teams (from building educators) State (compiled by SERC)

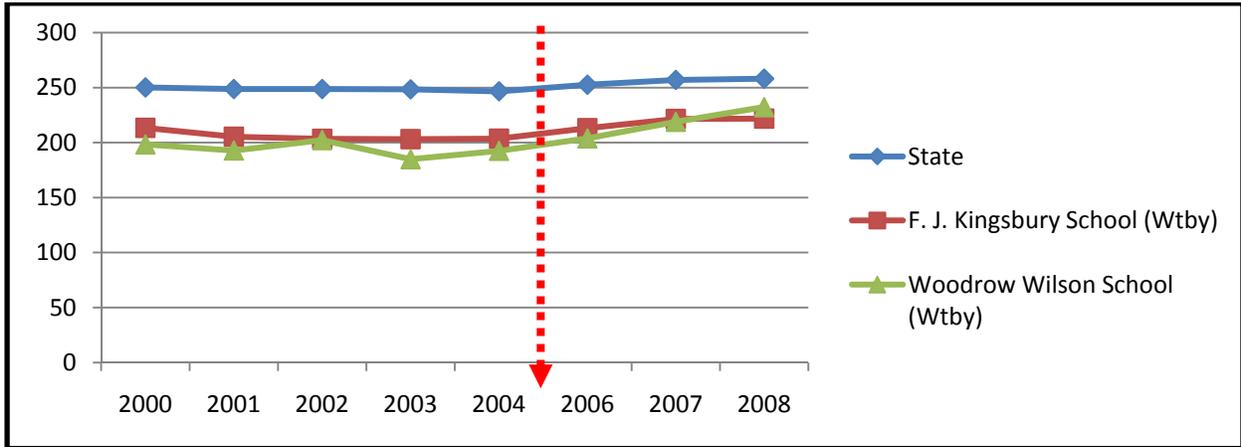
APPENDIX V

CMT/CAPT Performance Data for DI Pilot and Partner Schools

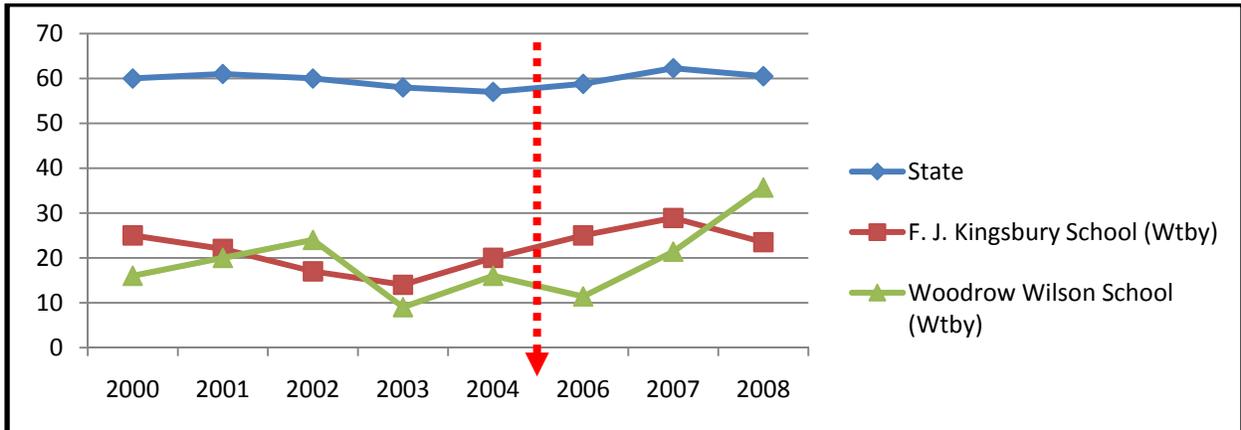
NOTE: Data from the years 2001-2004 or 2005 represent baseline data, before these schools began participation in the Best Practices Initiative: Differentiated Instruction (BPI:DI) program. Years 2006-2008 represent implementation years for the BPI:DI. Some 2005 data are not available.

CMT Math Scores, Grade 4, 2000-2008

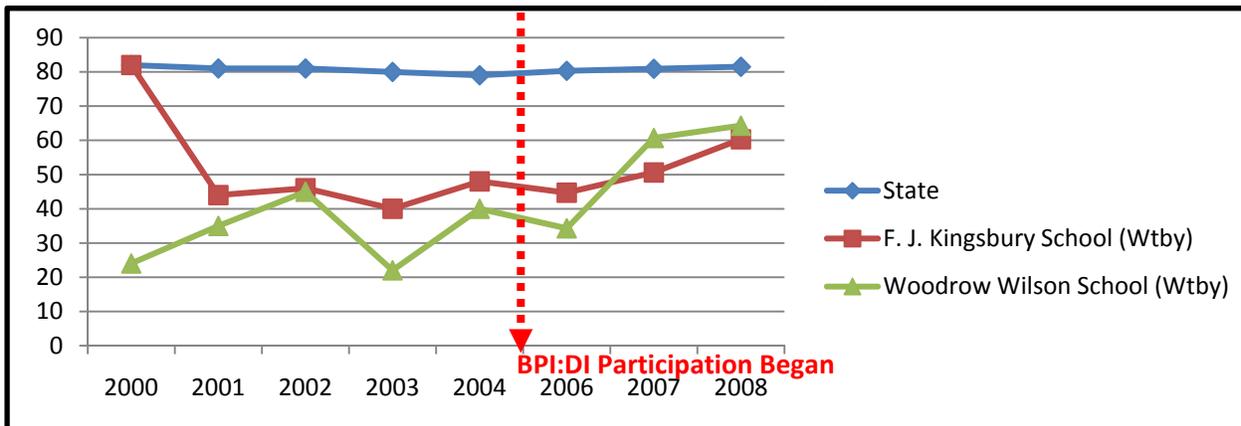
Average Scaled Score



Percent Reaching Goal

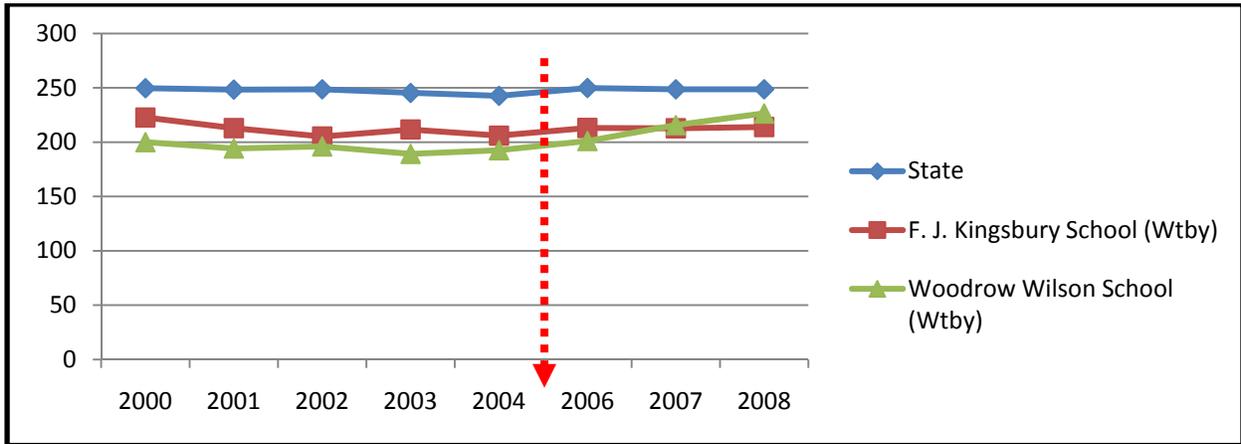


Percent At or Above Proficiency

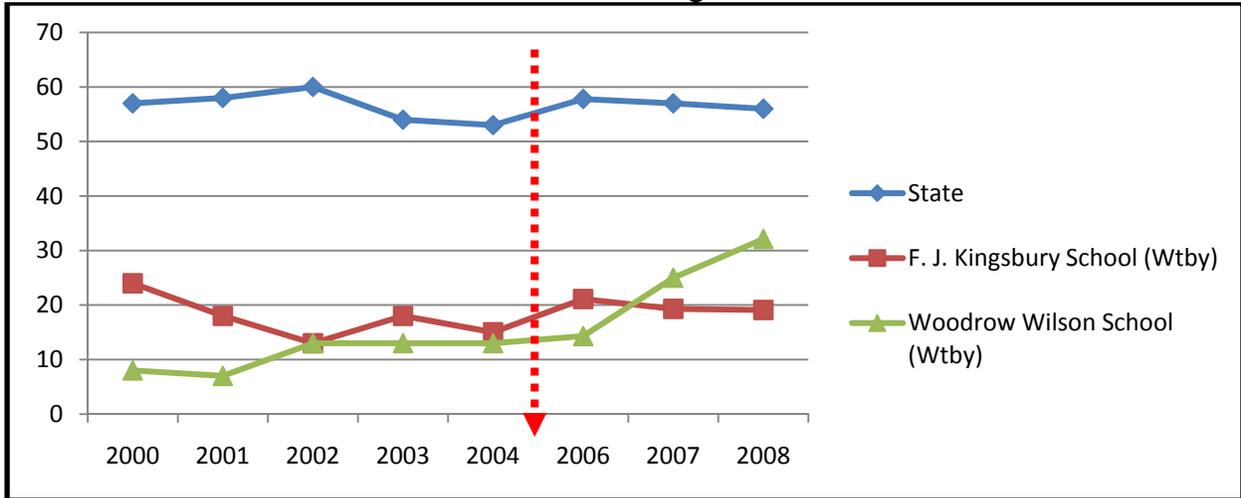


DI Scaling-up and Partner Schools: CMT Reading Scores, Grade 4, 2000-2008

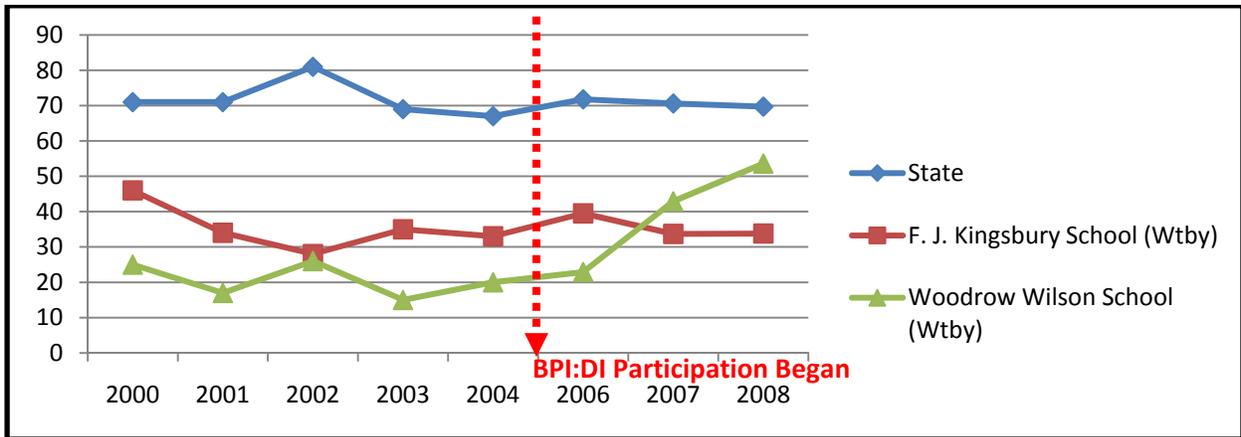
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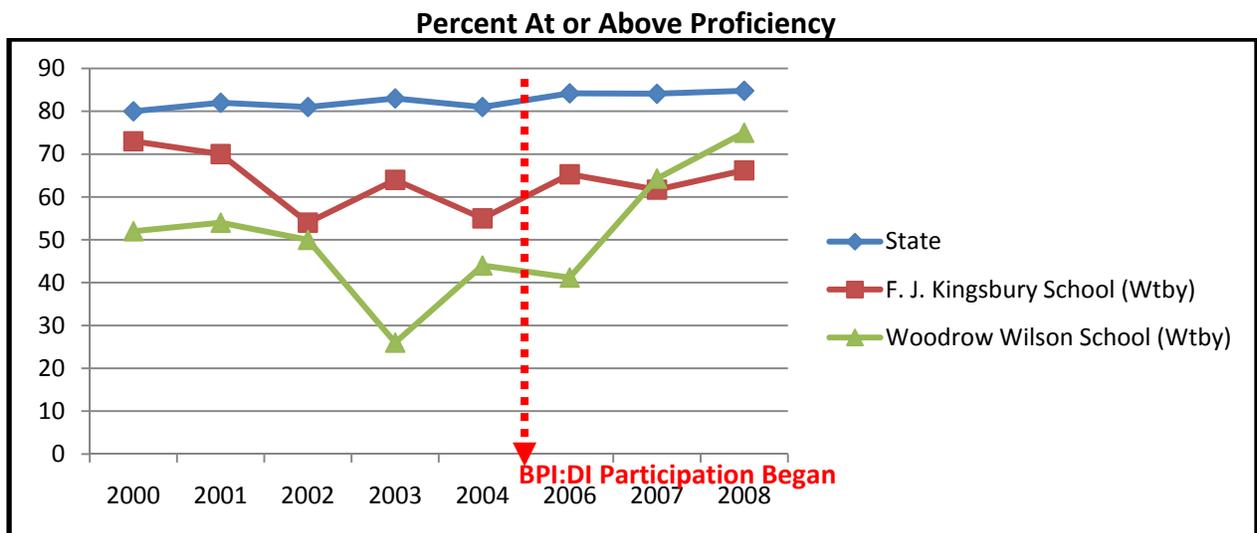
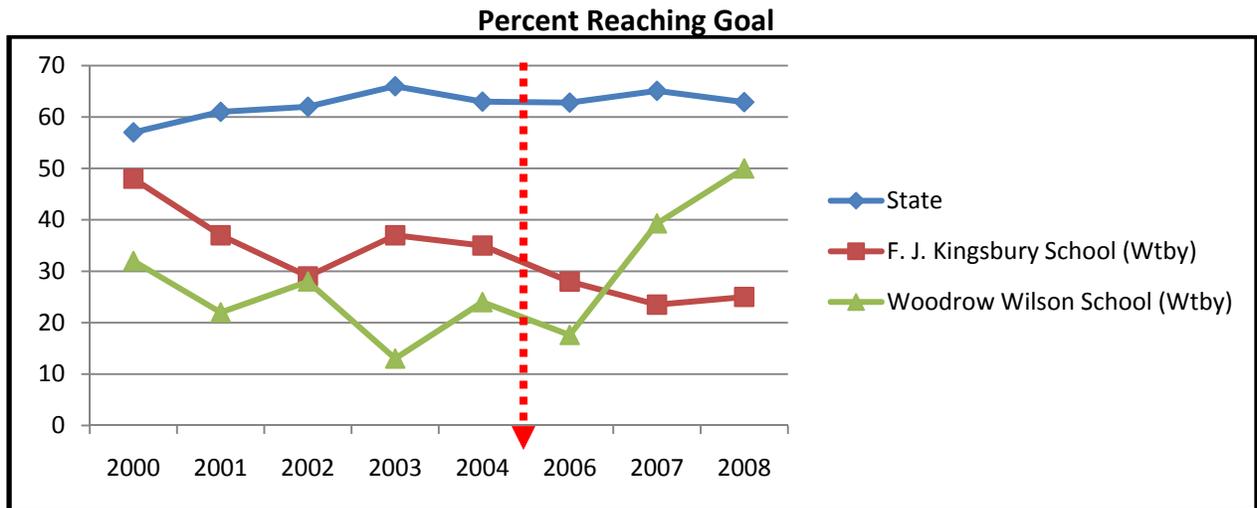
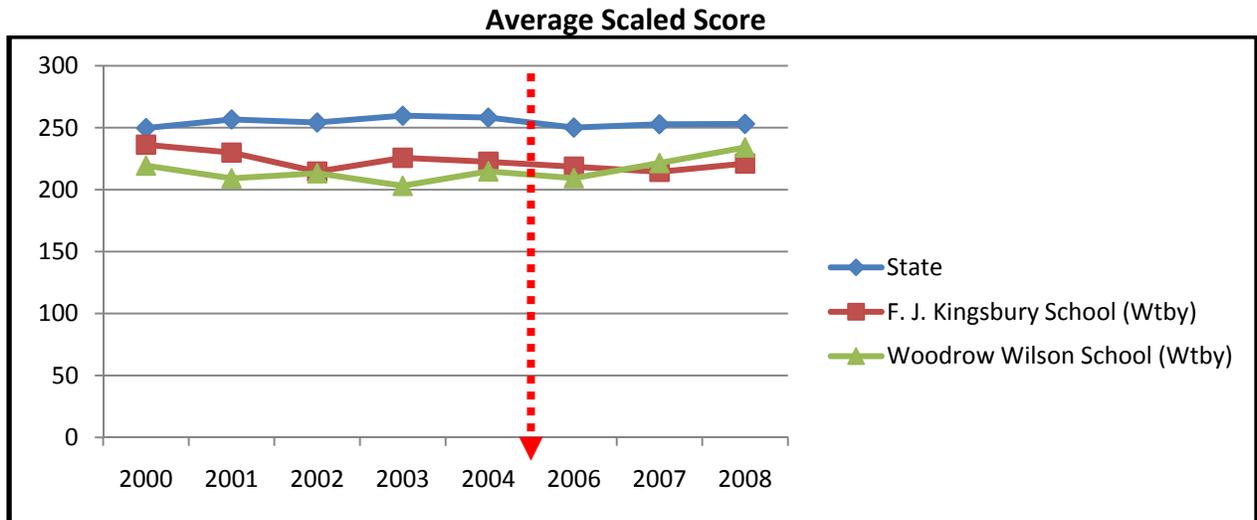
Percent Reaching Goal



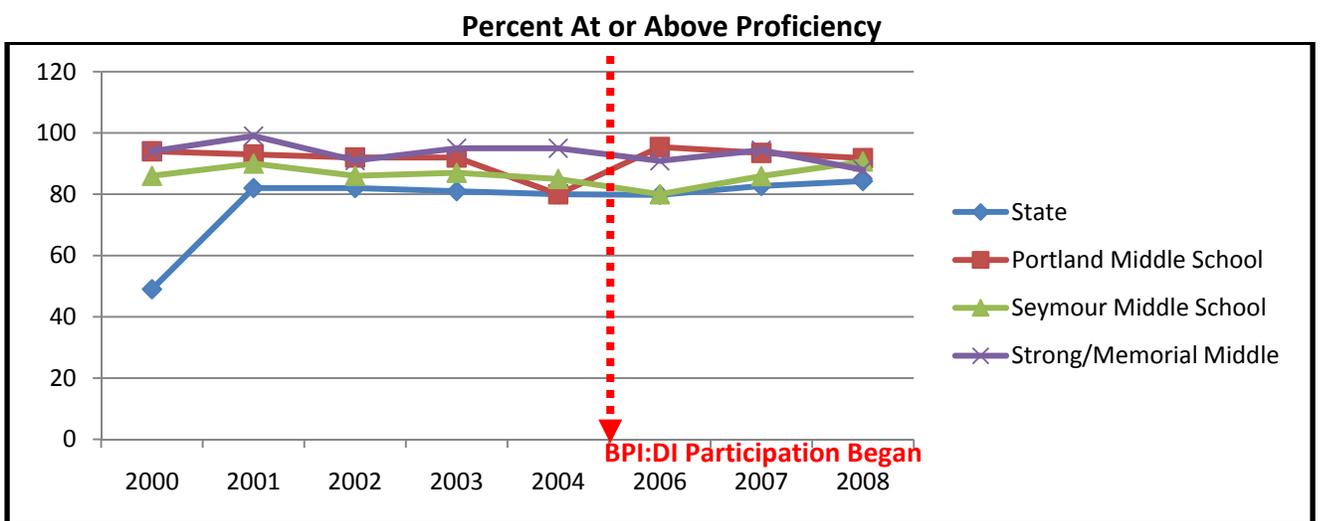
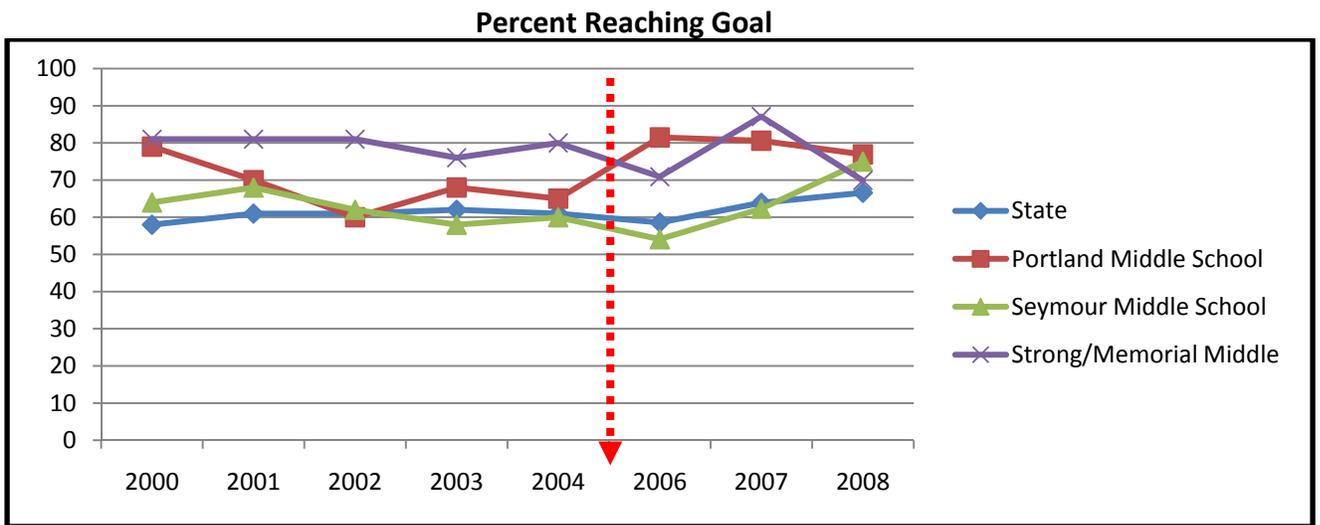
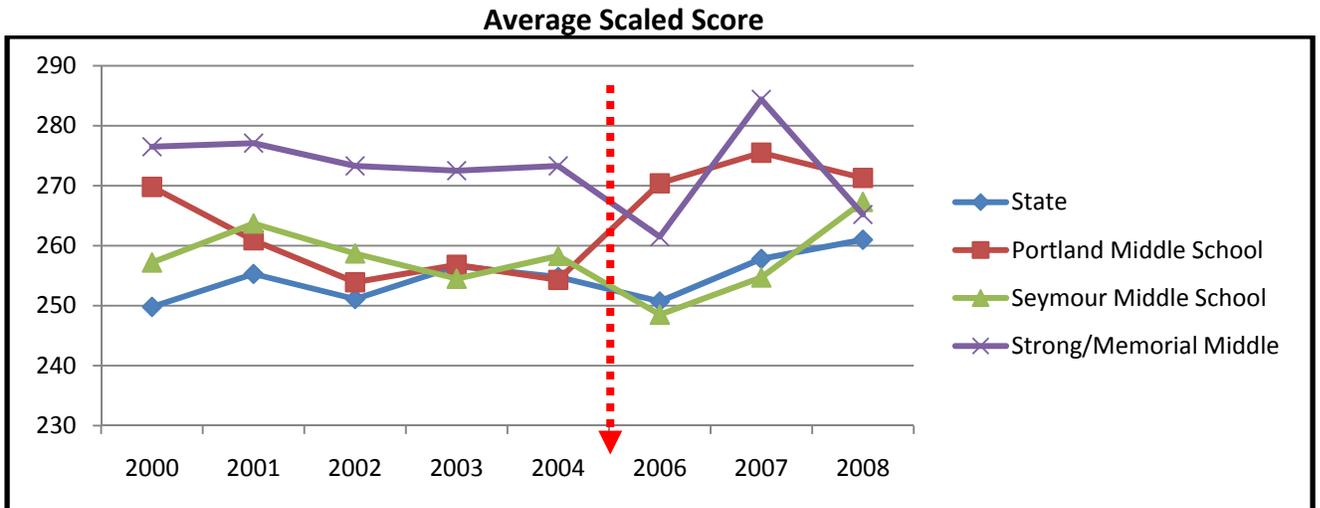
Percent At or Above Proficiency



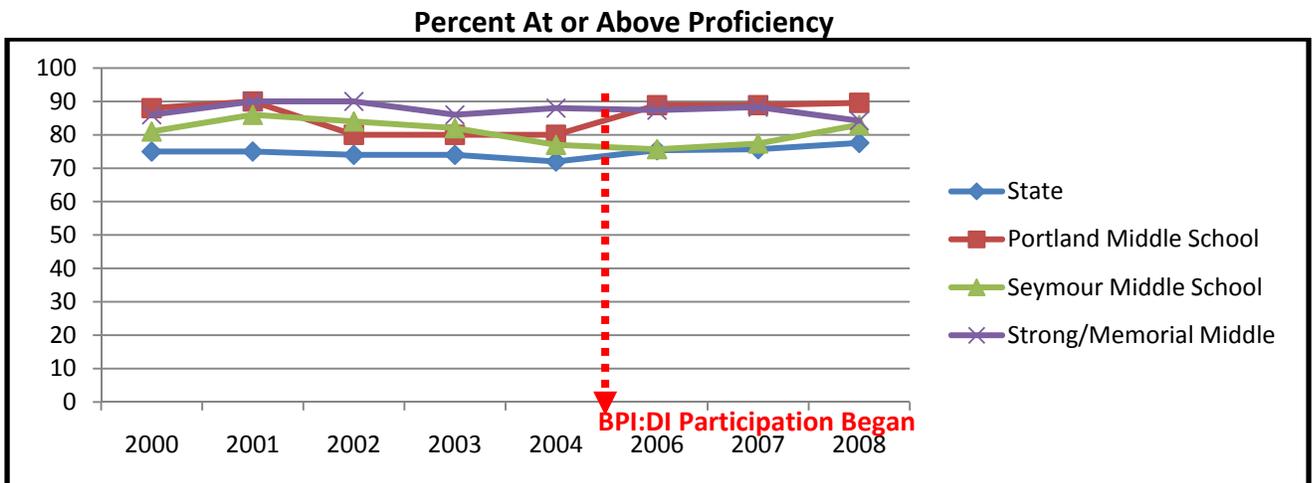
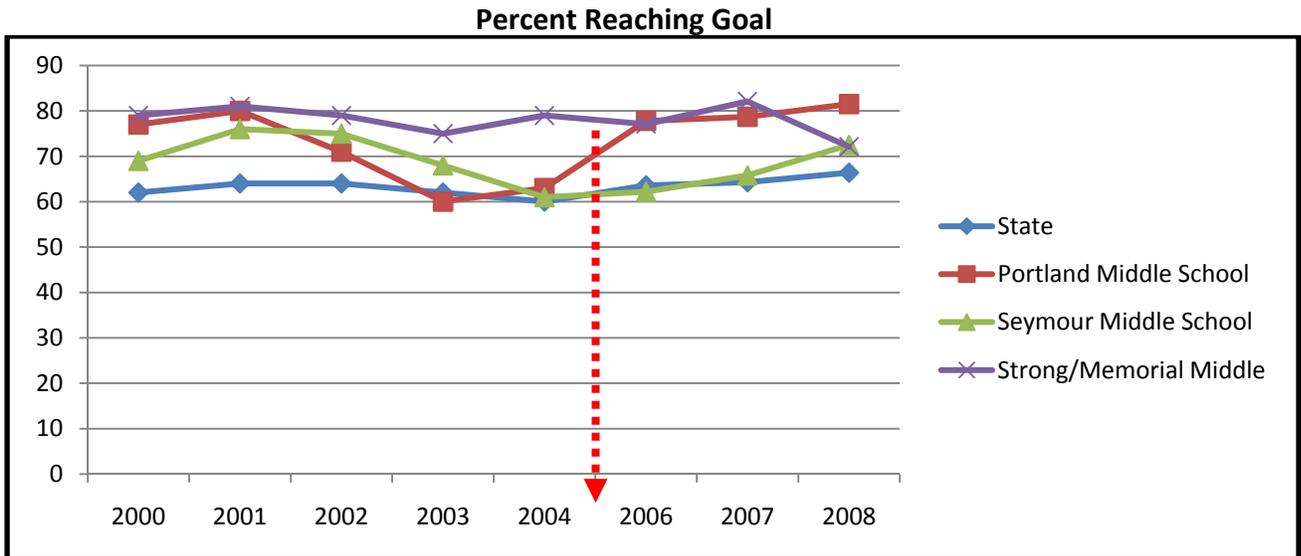
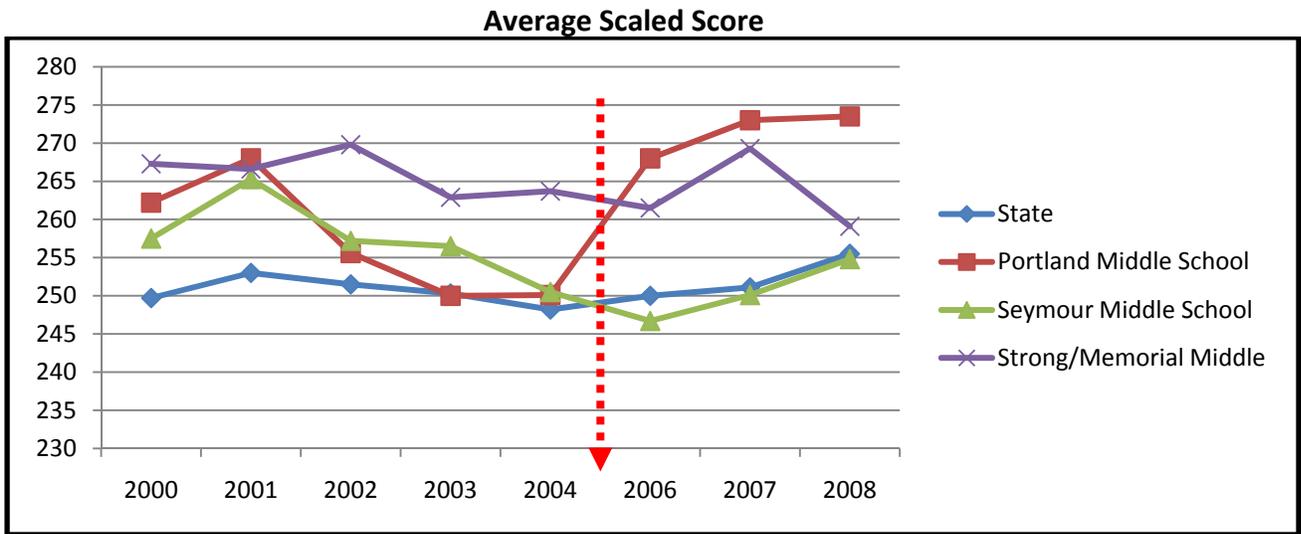
DI Scaling-up and Partner Schools: CMT Writing Scores, Grade 4, 2000-2008



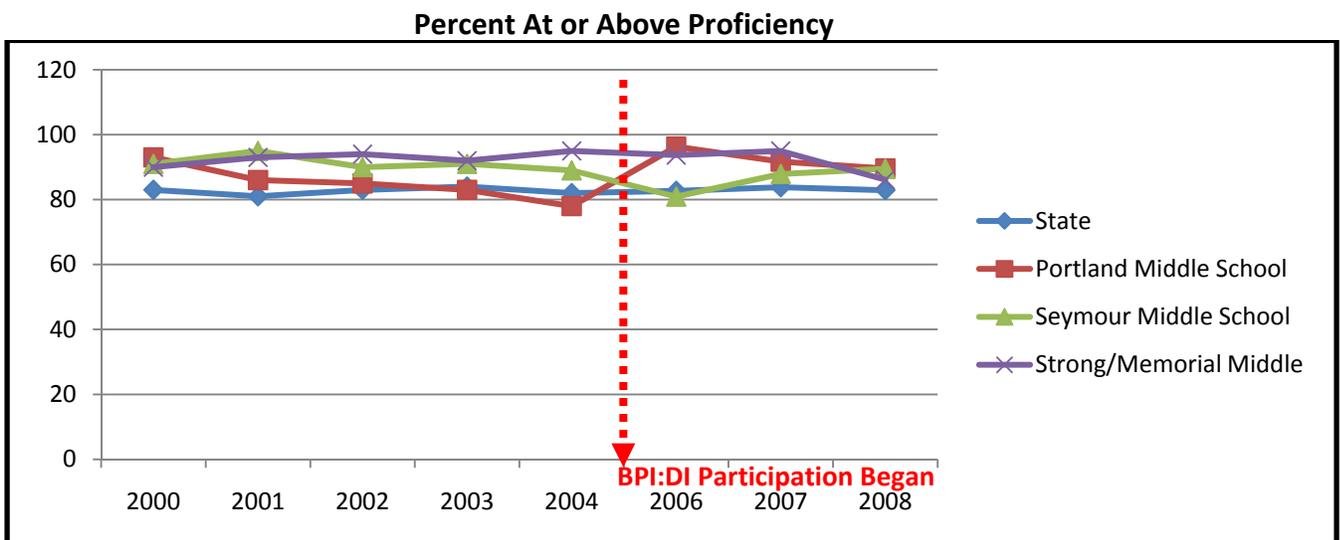
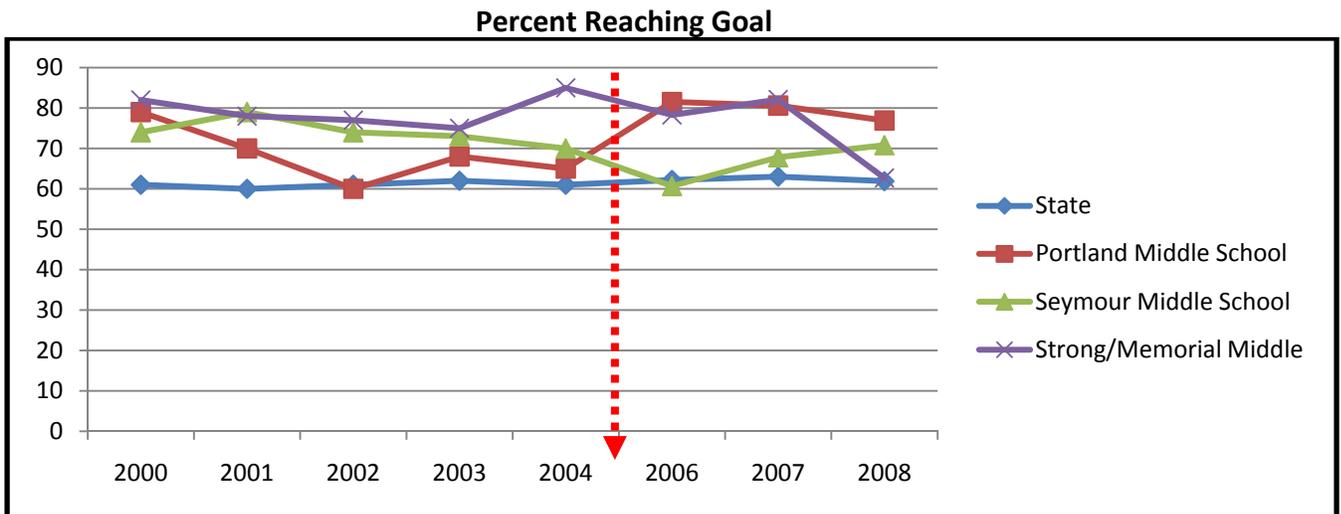
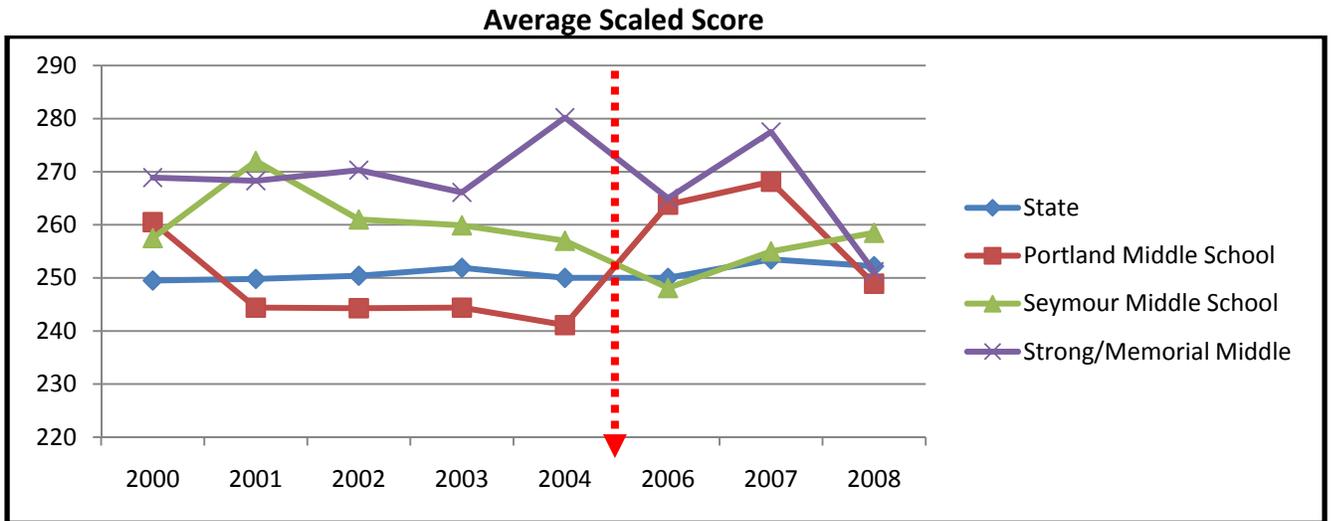
DI Scaling-up and Partner Schools: CMT Math Scores, Grade 6, 2000-2008



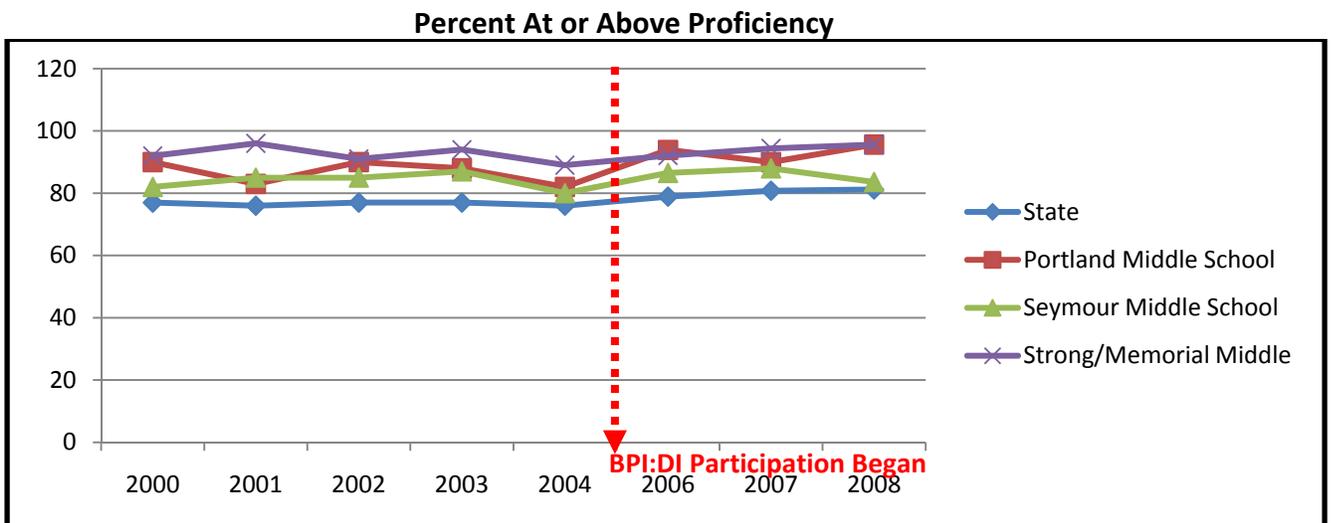
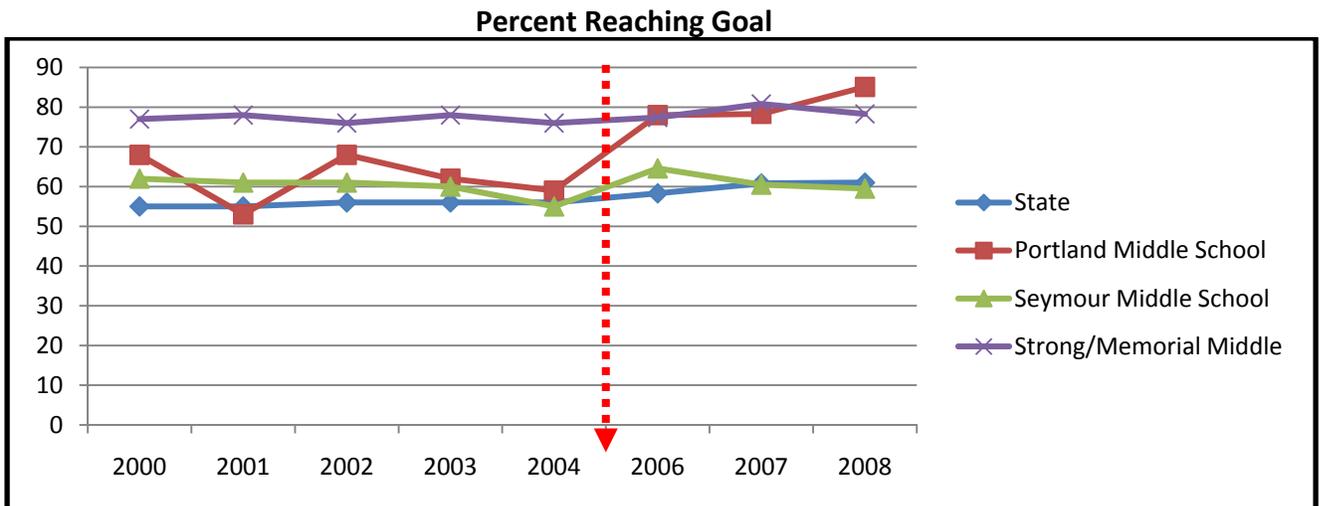
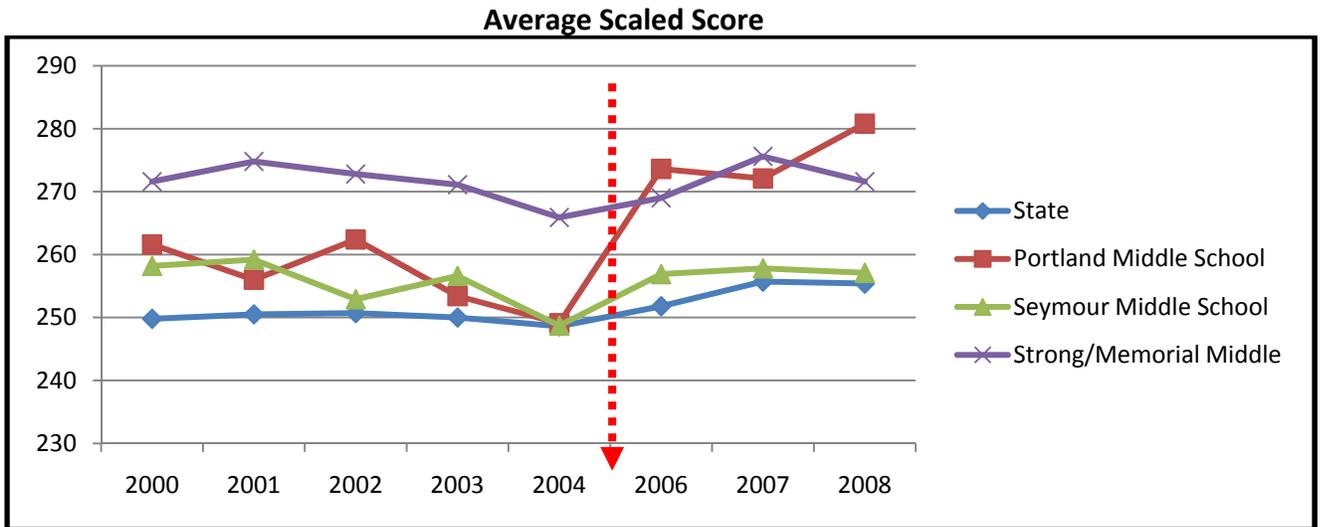
DI Scaling-up and Partner Schools: CMT Reading Scores, Grade 6, 2000-2008



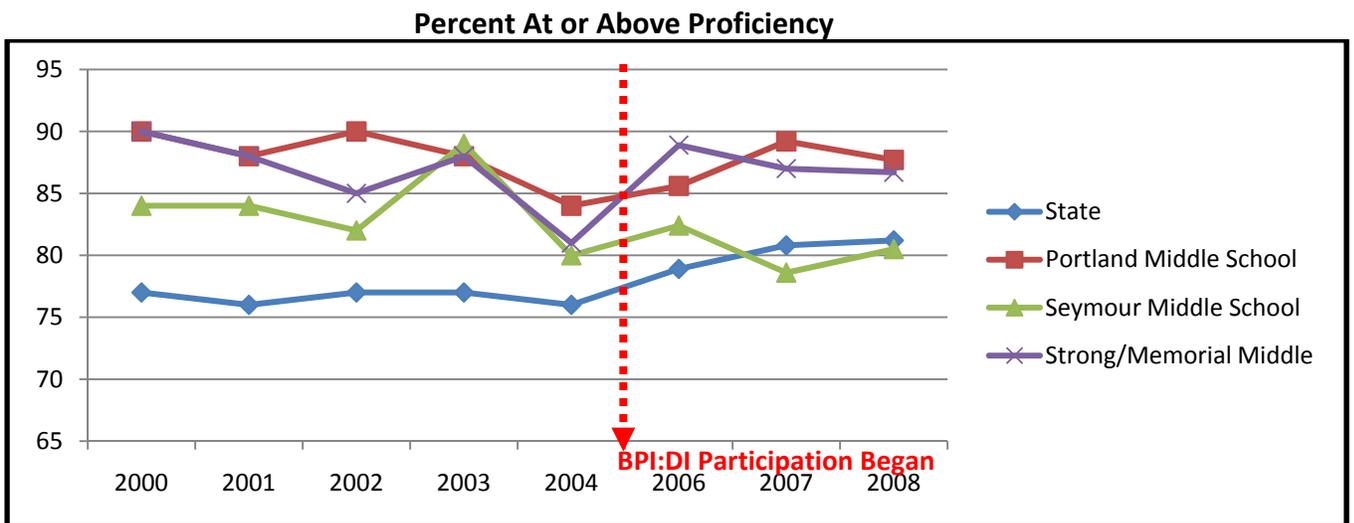
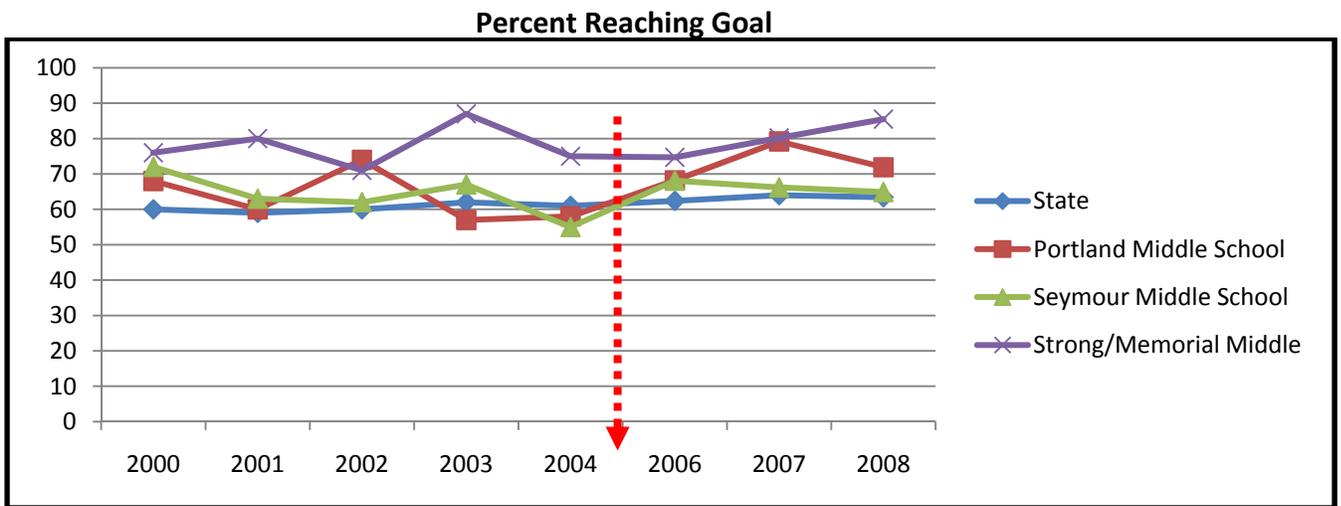
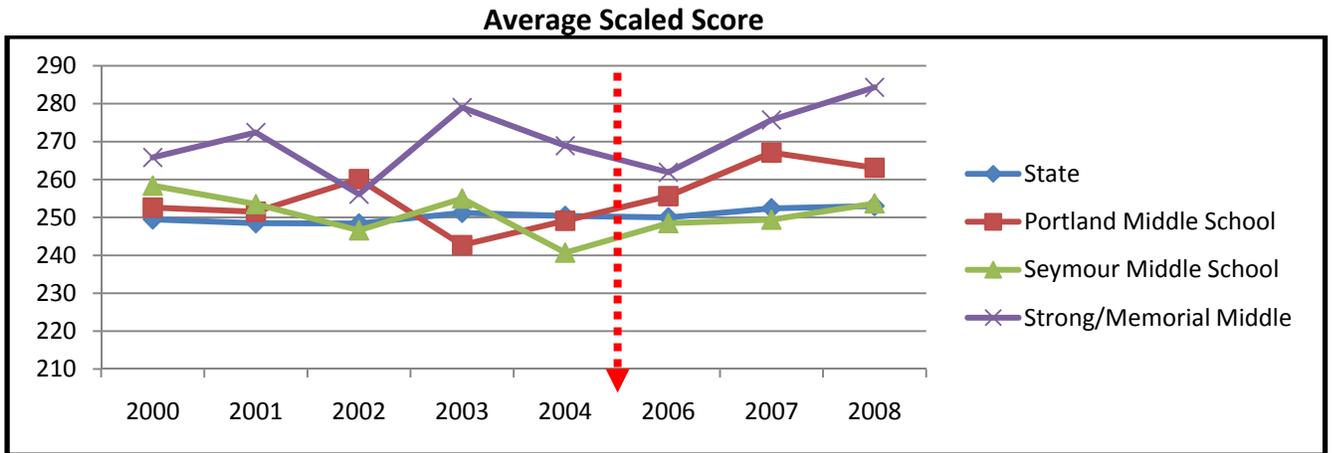
DI Scaling-up and Partner Schools: CMT Writing Scores, Grade 6, 2000-2008



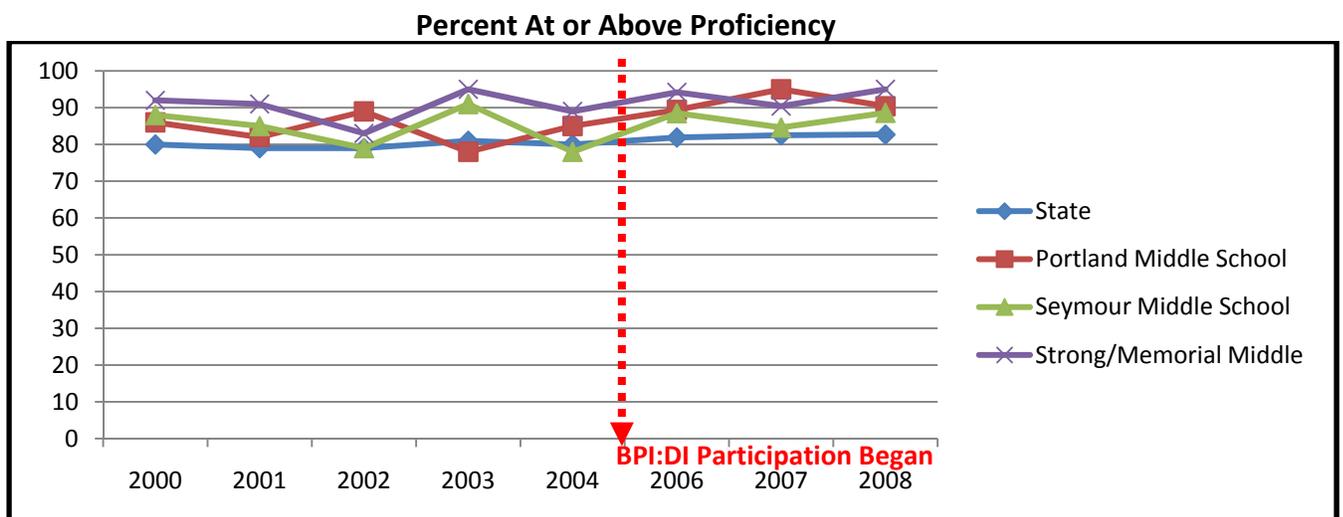
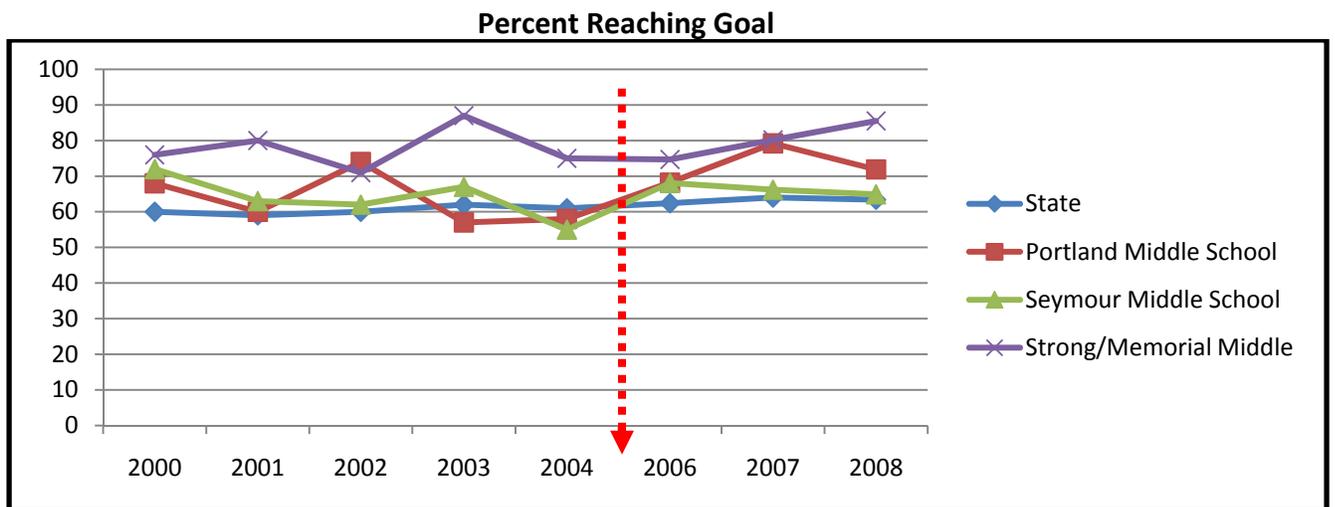
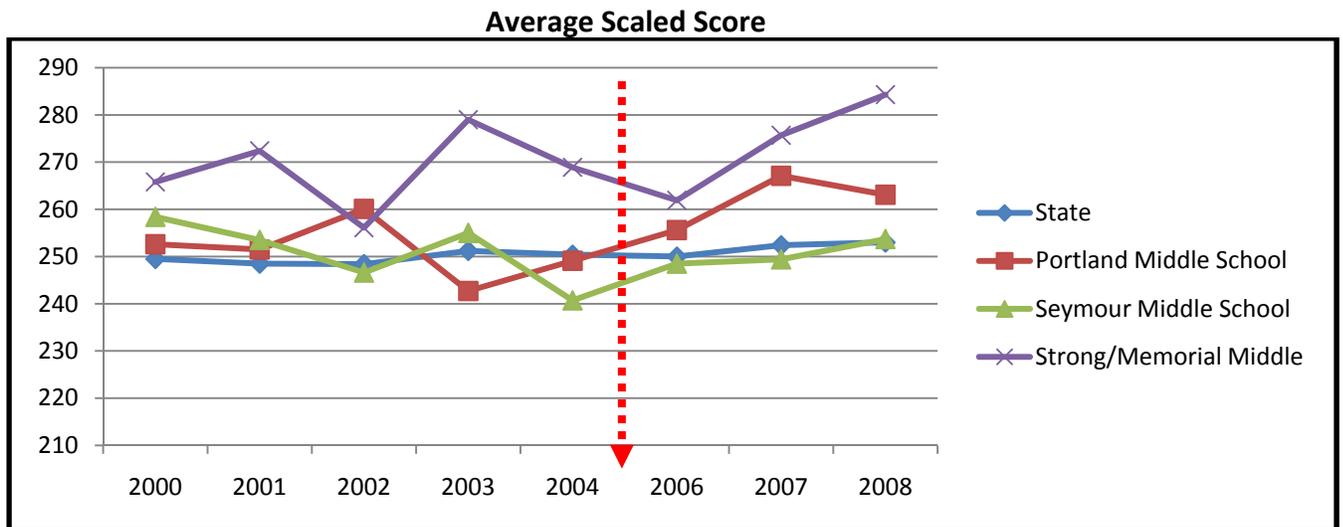
DI Scaling-up and Partner Schools: CMT Math Scores, Grade 8, 2000-2008



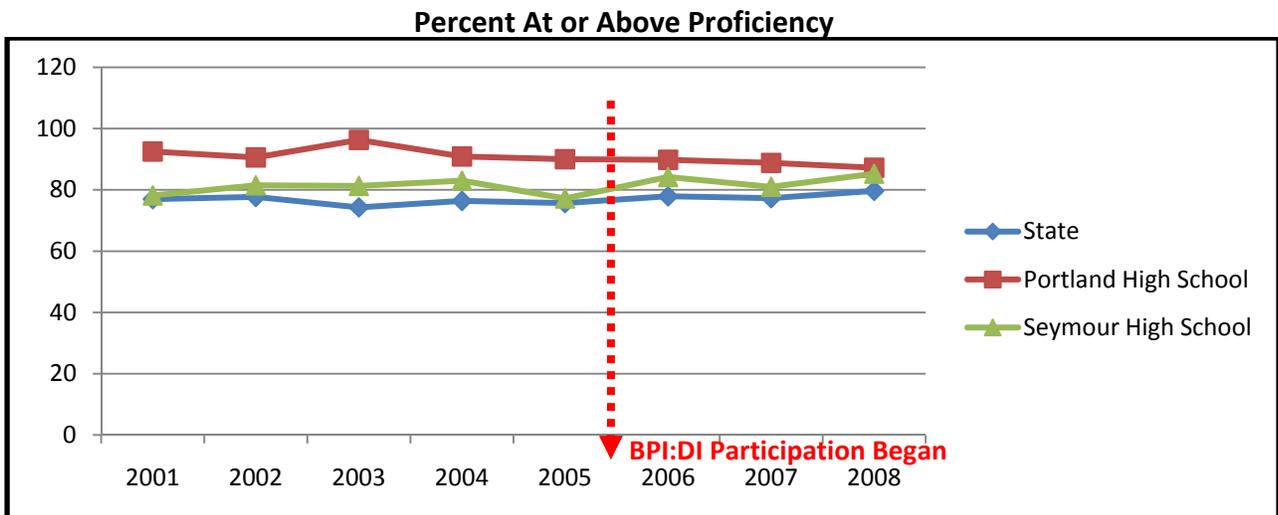
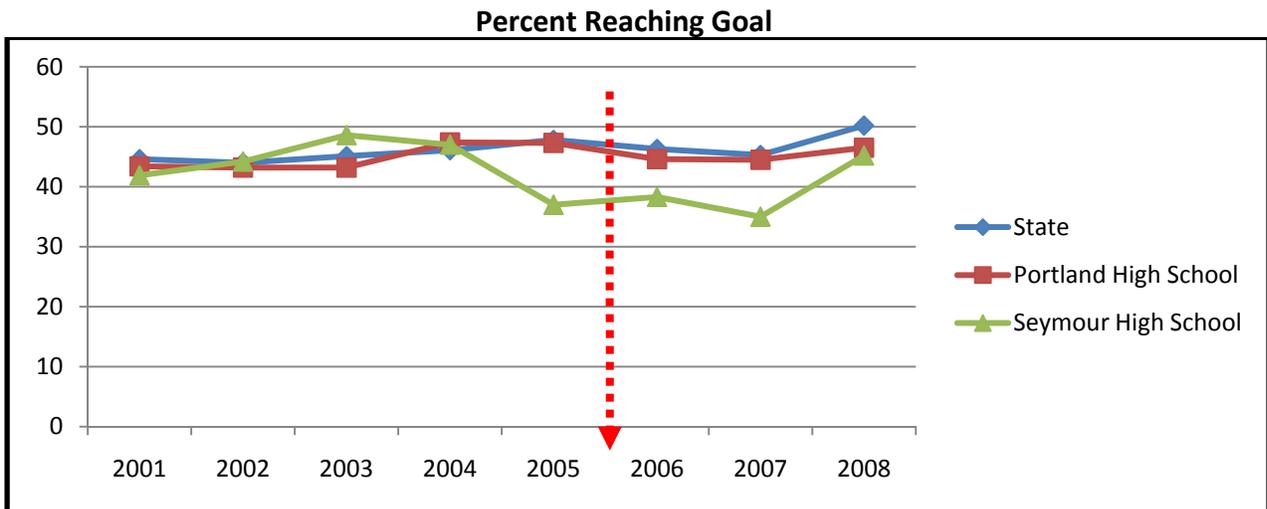
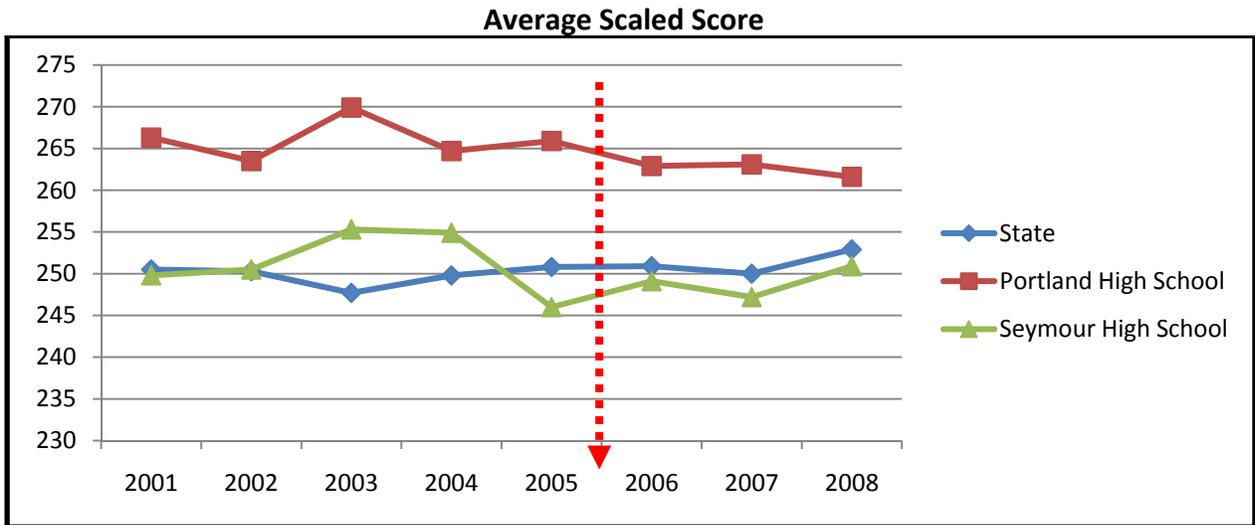
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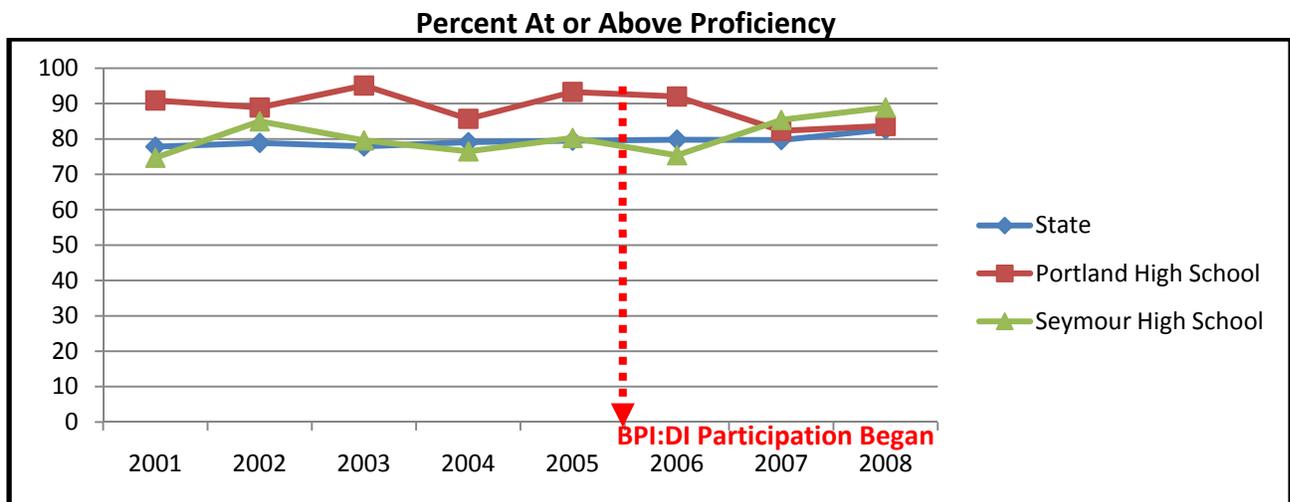
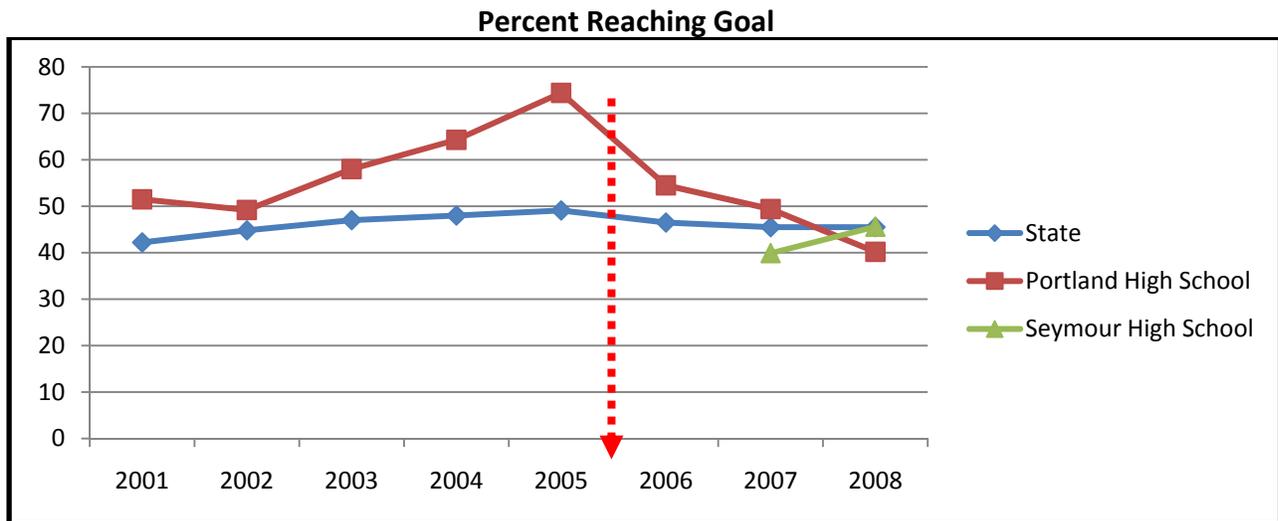
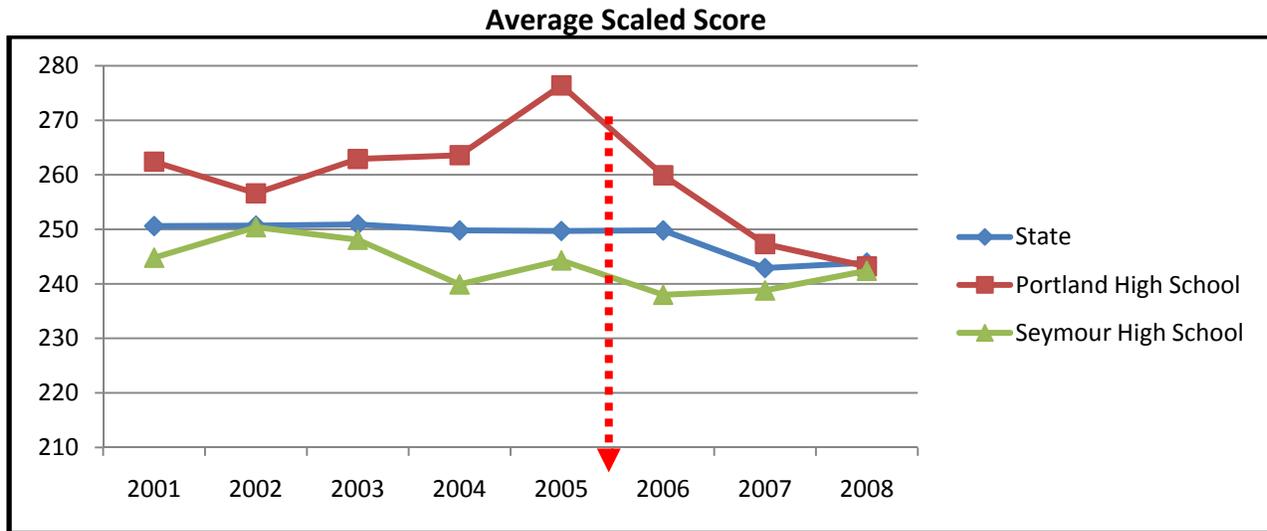
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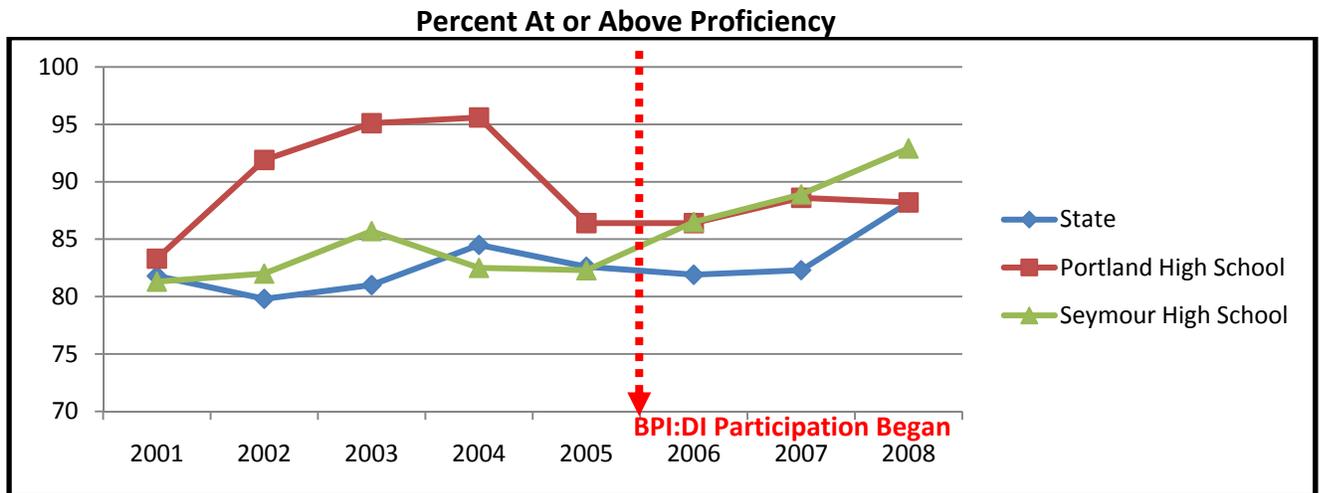
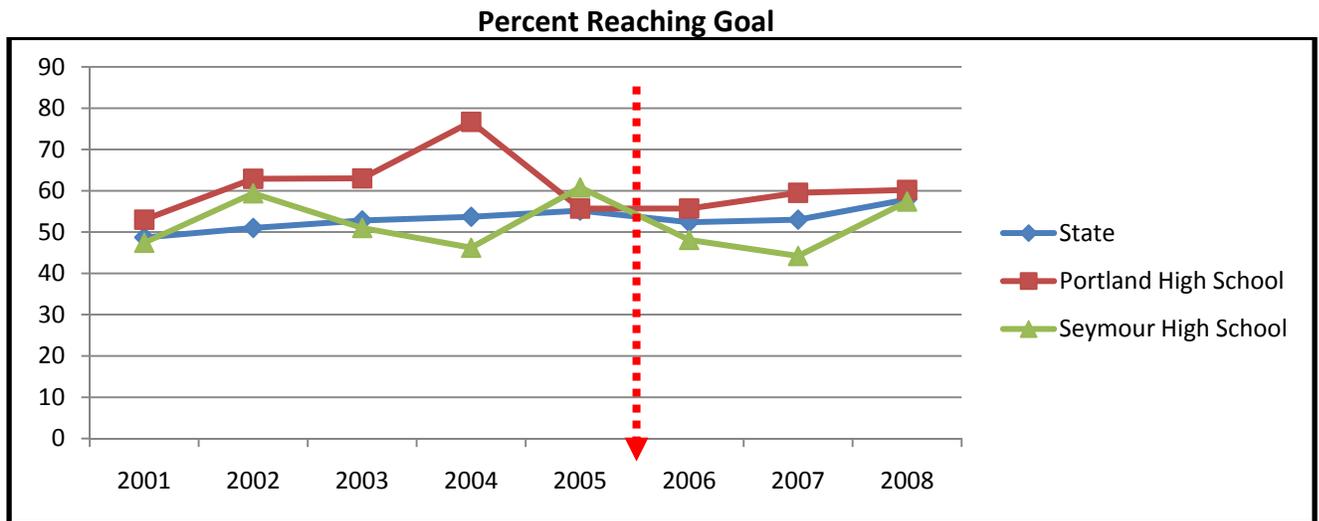
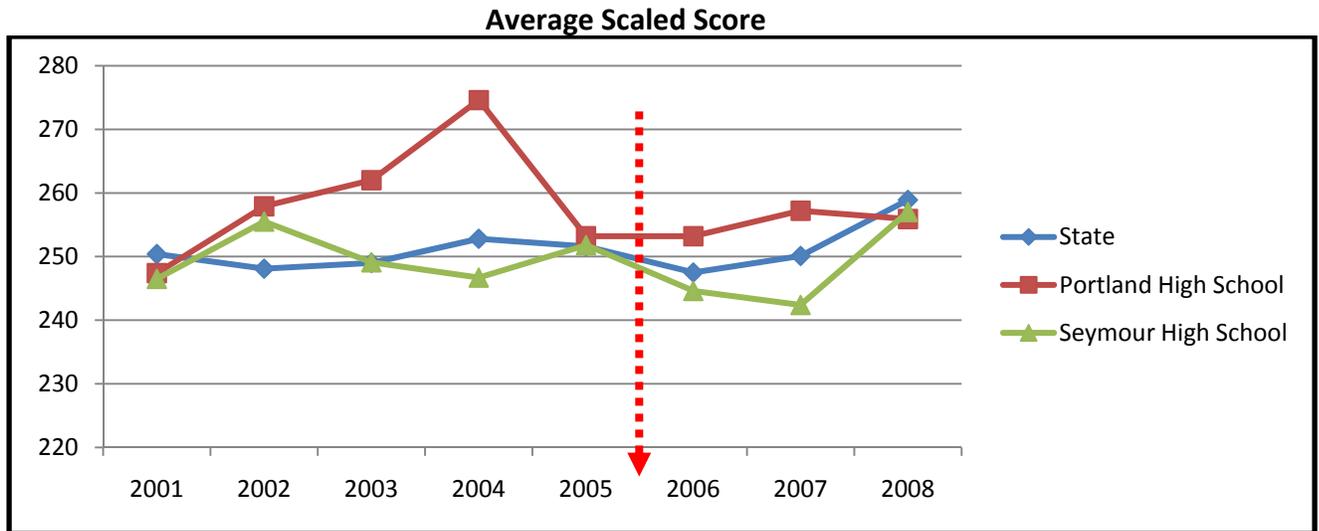
DI Scaling-up and Partner Schools: CAPT Math Scores, Grade 10, 2000-2008



DI Scaling-up and Partner Schools: CAPT Reading Scores, Grade 10, 2000-2008



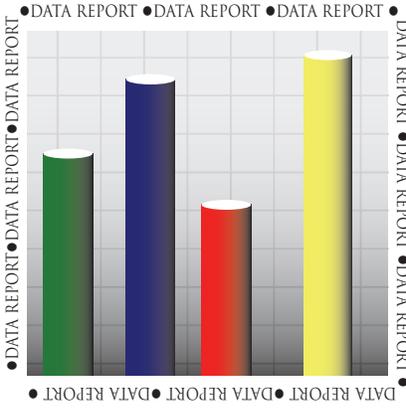
DI Scaling-up and Partner Schools: CAPT Writing Scores, Grade 10, 2000-2008





In collaboration with:
Connecticut State Department of Education
Bureau of Curriculum and Instruction

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SERC