

A Case Study of Key Effective Practices in Ohio's  
Improved School Districts

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## TABLE OF CONTENTS

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<b>Table of Contents.....</b>	<b>ii</b>
<b>Executive Summary.....</b>	<b>iii</b>
<b>1 Introduction .....</b>	<b>1</b>
1.1 INTRODUCTION .....	1
1.2 EFFECTIVE SCHOOLS RESEARCH.....	1
<b>2 Methodology.....</b>	<b>5</b>
2.1 OVERVIEW OF THE EVALUATION METHODS.....	5
<b>3 Results .....</b>	<b>7</b>
3.1 KEY EFFECTIVE PRACTICES.....	8
3.1.1 Curriculum alignment .....	8
3.1.2 Professional development .....	12
3.1.3 Emphasis on literacy .....	14
3.1.4 Data analysis and tracking .....	17
3.1.5 Intervention and remediation .....	20
3.1.6 Test preparation strategies.....	22
3.2 PRINCIPLES OF EFFECTIVE IMPLEMENTATION .....	25
3.2.1 Dynamic leadership .....	26
3.2.2 Widely accepted, clear goals.....	26
3.2.3 Collaborative planning .....	28
3.2.4 Linkages and Relationships Among Key Effective Practices.....	29
<b>4 Summary and discussion.....</b>	<b>30</b>
<b>5 References Cited.....</b>	<b>35</b>
<b>6 Appendices.....</b>	<b>37</b>



## EXECUTIVE SUMMARY

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The report is the final report of a yearlong study of key effective practices in Ohio's improved school districts. Between the 1999-2000 and the 2000-2001 school years, approximately one third (189) of Ohio's school districts improved their performance rating on the Ohio Local Report Card. The purpose of this study was to identify practices educators considered to be responsible for their districts' substantial improvements. The evaluation entailed three phases of data collection: use of the Delphi technique to identify effective practices used by Ohio's improved districts, telephone interviews with administrators and teachers in select districts to more fully describe effective practices, and site visits to select districts to gather supporting documentation of the steps taken to improve proficiency scores.

The key effective practices identified correspond closely with the characteristics of effective schools research. In order of importance as ranked by the fifty school districts involved in this study, the key effective practices found in Ohio's improved schools were:

- (1) **Curriculum alignment** – analysis of the curriculum as it appeared in the classroom; comparison to state mandated proficiencies to identify curricular deficiencies; alignment of curriculum across grade levels and subjects.

- (2) **Professional development** – available and/or required professional development activities, especially in the areas of curriculum mapping and alignment, literacy instruction, and use of data to guide instruction.
- (3) **Emphasis on literacy** – intensive focus on literacy across subjects; adoption of reading programs and training for teachers in their use; intensive intervention and remediation strategies.
- (4) **Data analysis and tracking** – analysis of proficiency test scores and other standardized assessments at the district, building, classroom and individual student level; use of results to guide curriculum alignment, classroom instruction and intervention and remediation; data-driven decision-making
- (5) **Intervention and remediation strategies** – identification of students in need of remedial help; use of a variety of intervention strategies including before-, during- and after-school programs, use of classroom instructional time, and summer school.
- (6) **Test preparation strategies** – activities specific to taking proficiency tests, including use of practice tests, intensive review, test-taking skills, and motivational techniques.

In addition to the practices identified above, the improved districts demonstrated the following characteristics: dynamic leadership; clear and widely accepted goals; and collaborative planning. These characteristics appeared to be an important foundation for implementing the key effective practices self-reported by district and school personnel. Also, of key importance is the way the key effective practices named in this study were linked and were mutually reinforcing. No district reported that a single change, such as aligning curriculum, made all the difference. Rather, the schools used the key effective practices together, mutually reinforcing and all focused on a common goal.

The report describes each practice, and characteristic of Ohio's improved school districts. In addition, the report highlights the responsibilities of district, school leadership and teaching professionals with regards to the key effective practices.



# **1 INTRODUCTION**

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## **1.1 Introduction**

The present evaluation report is the final report of a yearlong study of key effective practices in Ohio's improved school districts. Between the 1999-2000 and the 2000-2001 school years, approximately one third (189) of Ohio's school districts improved their performance rating on the Ohio Local Report Card. The purpose of this study was to identify practices educators considered to be responsible for their districts' substantial improvements. An interim report described the results of the on-line Delphi process used in the first phase to identify the practices responsible for achievement (A Case study of Key Effective Practices in Ohio's Improved School Districts: Report of Results from Phase I). The current report describes the second and third phases of the project and synthesizes the results of all three phases. A brief synopsis of methods used in the evaluation (see the interim report for complete technical details of the Delphi process employed in Phase I) and a description of the procedures used to define improvement in Ohio schools are presented below. First, however, a summary of the literature on effective schools research is offered since this literature provided the analytical framework for the interpretation of evaluation findings.

## **1.2 Effective Schools Research**

Effective schools research first appeared in the late 1970's and had saturated the education

literature by the 1990's.<sup>1</sup> The findings of effective schools research are not without criticism. For example, critical research has argued that only 8-15% of variations in pupil outcomes are due to differences that can be attributed to schools; there is considerable variation from researcher to researcher on the characteristics of effective schools; there is a lack of cross-cultural agreement on what makes schools effective; cultural background and socioeconomic status are powerful influences on schooling success; and differences at the classroom rather than the school level explain the great majority of the variation among pupil achievement.<sup>2</sup> Yet, many research studies have shown that certain effective schools characteristics are correlated with successful schools.<sup>3</sup> Therefore, it is important to consider the findings from this study in the context of the 30 years of effective schools research. Misrepresentation occurs when effective schools characteristics are used almost mechanistically as a school improvement checklist independent of school demographics and context. Therefore, in the consideration of evaluation results of key effective practices in Ohio, frequently cited characteristics of effective *American* schools are used as a framework rather than a standard for judgment. These characteristics and a description of representative practices reported in the literature are:

- Curriculum alignment and organization – curriculum is aligned to proficiency standards across all subject areas and grade levels; frequent use of standardized assessments to monitor student progress; clear instructional objectives.
- School-wide professional development – highly competent teaching staff maintained and supported with topical and regular opportunities for professional growth; primary focus of professional development is on activities of teaching and learning.

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<sup>1</sup> Edmonds, 1979; Fuller & Clarke, 1994; Purkey & Smith, 1983; Rutter, et al., 1979.

<sup>2</sup> See, for example, Elliott, 1996; Hurn, 1993; Jansen, 1995; Reezigt, Guldmond, & Creemers, 1999; Slee & Weiner, 1998.

<sup>3</sup> Erbe, 2000; Hill & Rowe, 1996; Hopkins, 1999; Jansen 1995; Levine & Lezotte, 1995; Proudford & Baker, 1995; Taylor, et al., 2000; Taylor, Pressley, & Pearson, 2000; Zigarelli, 1996.

- Emphasis on basic skills instruction – student acquisition of basic skills in core areas takes precedence over most other school activities; literacy is emphasized.
- High student expectations and standards – culture of high expectations in which no children are permitted to fall below minimum levels of achievement; academic development of students is highest priority; expectations are communicated.
- Maximizing learning time – concentration on teaching and learning; effective classroom management; structured lessons; non-academic time (e.g., recess, lunch) can be used for academics when necessary.
- Active, stable, competent leadership – strong, firm, competent, capable administrative leadership who practices shared decision-making.
- Clear goals – coherent curricular philosophy; common language to support curriculum.
- Collaborative planning and collegiality – organizational cohesion; shared vision and goals; highly committed teaching staff.
- Student involvement in school organization – opportunities for the direct participation of students in the running of the school and in educational activities in the classrooms.
- Favorable student-teacher relationships – responsive to student needs; willing to deal with students personal/social problems; demanding without being rigid; positive attitude of teachers towards students, and vice versa.

- Safe school environment – orderly, quality learning environment; clean and well cared for buildings; student rights and responsibilities are considered.
- Parent involvement – parent support of school and home-school partnerships.



## 2 METHODOLOGY

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### 2.1 Overview of the Evaluation Methods

An expanded description of methodology appears in Appendix A. The study followed a three-phase research design as follows:

- I. Use of the Delphi technique to identify effective practices used by Ohio's improved districts.
- II. Telephone interviews with administrators and teachers in select districts to more fully describe effective practices.
- III. Site visits to selected districts to gather supporting documentation of the steps taken to improve proficiency scores.

- I. **Delphi Technique.** In the first phase, a three-stage modified on-line Delphi process was employed using fifty school districts identified as the highest performing in each of eight district types (see Appendix A for details). The three-stage Delphi process consisted of identifying key effective practices, ranking those practices identified, and responding to the rankings as well as the contributions of other participants. Key effective practices identified in this stage were grouped according to the subject headings that participants had entered for them and Delphi respondents were asked to rank them in importance.

- II. Telephone Interviews.** The second phase of the study used telephone interviews to gather more detailed information about the implementation of the various practices identified in the on-line Delphi process. The six practices most noted in these responses served as the basis for selecting individuals to interview via telephone. Participants in the Delphi process were primarily superintendents and principals. In order to get a broader picture of the implementation of the key effective practices they identified, these administrators were asked to recommend classrooms teachers for further interviews.
- III. Site Visits.** Having identified effective practices and gathered information about implementation, site visits to 12 districts during the third phase of the evaluation provided a degree of validation of effective practices and their implementation. The 12 districts visited were chosen because of the richness of information they provided in the first two phases of the study.

It is important to note that the study is limited to those key effective practices district personnel think, believe, or report as having made a difference. These self-reported key effective practices represent those consistently identified by district administrators, principals, and teachers as being most related to their improvement. However, these practices may not be consistently positive or improving factors across all districts. Also, additional research is needed to establish the strength and causality of the relationship between these identified practices and actual improvement in student achievement. It was not a goal of this study to validate the effectiveness of the practices educators identified. Also, for logistical reasons, district selection of improvement was based on test scores from a single year. Thus, scores showed significant improvement from the previous year, but do not necessarily indicate sustained improvement over time.

The various instruments and protocols used in the evaluation are in the appendices that appear at the end of the report. The results of the evaluation are described next.



### 3 RESULTS

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The key effective practices identified as part of this study are described in this section. These self-reported practices correspond closely with the characteristics of effective schools identified in the research literature and described earlier. In order of importance as ranked by the 50 school districts, the key effective practices found in Ohio's improved schools were:

- (1) **Curriculum alignment** – analysis of the curriculum as it appeared in the classroom; comparison to state mandated proficiencies to identify curricular deficiencies; alignment of the curriculum across grade levels and subjects.
- (2) **Professional development** – available and/or required professional development activities, especially in the areas of curriculum mapping and alignment, literacy instruction, and use of data to guide instruction.
- (3) **Emphasis on literacy** – intensive focus on literacy across subjects; adoption of reading programs and training for teachers in their use; intensive intervention and remediation strategies.
- (4) **Data analysis and tracking** – analysis of proficiency test scores and other standardized assessments at the district, building, classroom and individual student level; use of results to guide curriculum alignment, classroom instruction and intervention and remediation; data driven decision-making
- (5) **Intervention and remediation strategies** – identification of students in need of remedial help; use of a variety of intervention strategies including before,

during and after school programs, use of classroom instructional time, and summer school.

(6) **Test preparation strategies** – activities specific to taking proficiency tests, including use of practice tests, intensive review, test-taking skills, and motivational techniques.

## **3.1 Key Effective Practices**

### **3.1.1 Curriculum alignment**

In this study participants identified curriculum alignment as the single greatest factor in achieving improved test results. It was reported most frequently, and during the Delphi portion of the study it was ranked first in importance. These findings are supported by the effective schools research literature that notes the importance of curriculum aligned to proficiency standards across all subject areas and grade levels, the frequent use of standardized assessments to monitor student progress, and clear instructional objectives.

The school districts studied concentrated their efforts in curriculum alignment and demonstrated the key practices found in the literature. From the available data, the following two themes related to curriculum alignment consistently emerged: curriculum mapping and change in instructional practices. Each theme is described separately below. The efforts made at various organizational levels (e.g., district leaders, school leadership, and teaching staff) to achieve these practices are pulled from the results and reported separately at the end of each section.

- **Curriculum mapping**

District and school leadership emphasized aligning all areas of the curriculum to state proficiency outcomes. Toward this end, districts embraced a three- to five-year cycle of curriculum renewal and academic courses of study aligned with proficiency outcomes with target goals, strategies, and success indicators by content areas. Some schools incorporated proficiency outcomes into courses other than the traditional academic areas. Teachers were responsible for a collaborative effort to ensure that

each grade at every school was teaching the same thing, and that teachers knew what was expected at the next higher grade, as evidenced by the following quotes from several school personnel.

*“ We are constantly making sure that what we are teaching is aligned. We don’t teach anything that isn’t. [There is a] strict regiment for teachers to stay on target.”*  
(Elementary school teacher)

*“ Each school is required to develop an Academic Achievement Plan aligned to the District Achievement Plan which is the state Comprehensive Improvement Plan. Schools must provide steps for achieving established performance targets.”* (District superintendent)

*“ Teachers have worked hard to match subject content and classroom activities to the competencies/proficiency outcomes.”* (School principal)

In addition, as seen in the following quotes, some schools found it was important to their success to adapt the state grade-level expectations to better fit their teaching philosophy and student needs.

*“ The state provided the model for the curriculum. We didn’t follow the model exactly. . . .”*  
(Middle school English department chair)

*“ In some cases we choose to ignore or skip a listed competency because we judge it to be unrealistic for general mastery given the readiness of the learners and the resources of the district.”* (District superintendent)

- **Change in instructional practices**

Teachers reported that their classroom teaching had changed to mirror the questioning format of proficiency tests, and the use of practice tests, and more time was dedicated to test preparation. As stated by several elementary school teachers:

*“[I] don’t want to say teaching to the test, but making sure key subjects/concepts are being taught and children are understanding them.”*

*“How to read test questions: every classroom focused on this.”*

Teachers had mixed feelings about these instructional changes. Some found positive aspects of proficiency test modeling, and stated the following:

*“Analyzing why students missed questions has helped us to improve. We knew our students weren’t restating the question in their short answers, automatically losing one point. It doesn’t say this on the test. Even if they get the answer wrong they still get a point for restating the questions.”*

*“[We are] more focused on what we need to do. . . .Not as much hit or miss.”*

Other teachers felt instructional changes delimited the teacher-student learning process. One elementary school teacher mentioned the following:

*“Teaching to the test. . . a lot of the past things we aren’t doing Teachers really don’t like it.”*

In addition, some schools believed that one cost of closely aligning curriculum content with proficiency outcomes was a reduction in the variety of educational resources available to students and the ability to tap into diverse learning capacities of students. Several district superintendents voiced this by saying:

*“Alignment can eliminate some topics, skills and processes in favor of others. . . . Elective courses in a subject area become displaced by required intervention courses. . . . If you are buying instructional materials related to proficiency improvement, you cannot spend that*

*money on any other instructional materials. . . . It is the hidden cost of proficiency testing that the taxpayers do not usually see and that the legislators never acknowledge.”*

*“ We have made it a priority to improve student learning and proficiency test scores. We realize that these are not always the same thing”*

Of interest, however, at least one school evidenced an alternative approach to success. This high-performing school offered a broader curriculum, which recognized a diversity of student interests and capacities. As stated by several school district superintendents:

*“ All students in the district have the advantage of receiving instruction from a certified art, music, and PE certified teacher. These teachers, because of their specialized training challenge students to excel in other areas outside the core curriculum. The emphasis our district has on the arts has a direct impact on the success of our students.”*

*“ We provide students numerous activities to promote the development of leadership skills.”*

### ***Responsibilities at each level***

Curriculum alignment and mapping was a coherent, integrated effort initiated by district leaders, particularly at a superintendent level, and clearly communicated to school principals, who in turn, held the teaching professionals accountable for course restructuring and alignment. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
Clear district-wide goals of curriculum alignment to state proficiency standards.	Understanding of goals for curriculum alignment & communication of goals to teaching staff.	Curriculum alignment to state proficiency standards.
Monitoring of effort on regular, recurrent cycle of curricular renewal.	Monitoring of teacher effort through student performance data tracking.	Grade level standards and expectations determined through collaborative planning.
		Change in instructional practices to reflect proficiency format, use of practice tests to prepare for test expectations.

### 3.1.2 Professional development

Schools cited professional development as very important to their effective improvement. The effective schools research literature supports this finding, stressing the importance of offering relevant professional development training to all staff, and that sessions should emphasize activities of teaching and learning.

In the schools studied, there was a resurgence of interest among teachers in professional development that supported district or school goals. One veteran teacher admitted that she (and others) had only recently begun attending staff development opportunities citing the influx and relevance of current offerings. Schools through stipends or release time supported local, regional, and national opportunities. Often districts or schools required a certain number of hours of professional development. Also, teachers may have been responding to a renewed interest at the administrative level to develop and sustain a qualified staff. This renewed interest is demonstrated by the following quote from a district superintendent.

*“Hiring and retaining the best teachers is of vital importance. Once we have high quality teachers, we support them and empower them at the building and district levels.”*

The professional development sessions focused on the following topics:

- Improving student achievement
- Implementation of Continuous Improvement Plans (CIPs)
- Curriculum alignment and mapping
- Use of assessments to monitor and identify student academic progress
- Instructional strategies to reflect proficiency test format.

In a few schools, as demonstrated by the following quote, proficiency data determined the type of staff development sessions needed to support reading, writing, math, and science.

*“Trying to change professional development so we put in place a focus on standards.”* (District director of research, evaluation and assessment.)

To illustrate the central role that professional development played in district improvement, the following description of one district from this study is offered. This district illustrates the number and variety of professional development activities offered and their relation to the other key effective practices identified in this study that was characteristic of the improved districts.

The district is a small, primarily rural district of 1,100 students. In 1997 the district met just 9 of the 27 state standards. By 1999 the district met 12 standards, and continued the pattern of improvement, meeting 14 standards in the year 2000. During the 2000-2001 school year, the secondary staff had two waiver days for professional development. Professors from a nearby university presented workshops on reading in the content area and curriculum mapping. In addition, after school professional development sessions were held focusing on writing and reading across the curriculum. Professional development in these areas was done over a long a period of time, giving teachers the opportunity to practice the techniques and later receive feedback. For elementary staff, participation in Summer Institute for Reading Intervention (SIRI) was strongly encouraged.

Summer school positions were contingent upon completion of the SIRI program. Other professional development workshops were offered on the use of a specific reading program, Malcolm Baldrige Business Criteria, differentiated instruction, and positive behavior support. Informal school leaders were used to encourage other teachers to put these ideas into practice. In addition, the local university offered on-site courses on curriculum mapping.

***Responsibilities at each level***

A renewed commitment to professional development was a critical component of curriculum alignment and mapping, with a refocus on teaching capacities in literacy, basic skills, and early intervention. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
<p>Recognized articulation district-wide goals of curriculum alignment and teacher quality and retention.</p> <p>Dedicated more resources to professional development.</p> <p>Expanded number and scope of professional development sessions.</p>	<p>Communicated to teaching staff district’s recognition of need for qualified teachers and dedication of additional resources to professional training.</p> <p>Coordinate planning for opportunities with staff.</p>	<p>Acknowledge leadership support.</p> <p>Enroll and attend a greater number and variety of staff development opportunities.</p> <p>Classroom use of new skills and collaborative support among teachers for the use of new skills</p>

**3.1.3 Emphasis on literacy**

Districts in this study placed heavy emphasis on literacy, noting in particular an increase in writing activities. Furthermore, efforts were made through teaching teams and collaboration to infuse literacy activities into all aspects of learning. Effective schools research supports

this finding, noting that in effective schools the acquisition of basic skills in core areas takes precedence over most other school activities.

Literacy activities were especially evident in those districts with OhioReads and/or Reading Excellence Act (REA) literacy grants. Activities included the following:

- Literacy teams were formed
- Literacy Coaches were identified or hired
- Literacy folders were created and maintained on every child
- Special programs were offered in some schools to improve reading and writing skills
- Professional development topics were devoted to literacy strategies.

Two school principals had the following to say regarding the literacy activities:

*“We have made a conscious effort to work hard on reading and writing to get as many children on reading level or beyond as possible.”* (Elementary principal)

*“We have identified two critical goals that are currently being emphasized in all disciplines – writing and reading are key components of all the proficiency tests as well as being vital life skills.”* (High school principal)

The importance placed on literacy can also be seen in attempts to make it a focus in all subject areas. For example, it is also apparent by the number of districts that formed specialized reading teams. Teams not only provided remediation, but regular classroom instruction. A district superintendent said:

*“This program has a team of teachers who go into the above grades to do intense small group instruction with children. These teams work in each class one half hour each day.”*

In addition, the importance of literacy can be seen in the time and resources devoted to it. The following example of literacy initiatives undertaken in an urban school district in central

Ohio shows the variety of coordinated practices and the use of resources that characterized many of the districts in this study.

*“Our district has implemented a well-focused literacy initiative. We are using the strategies for Literacy Collaborative (once known as E.L.L.I.). There are several components of the elementary portion that we have implemented. We have committed to at least one Reading Recovery teacher in all elementary buildings. We have also funded the training and release of teachers called Literacy Coordinators at each of our nine elementary buildings. These teachers are peer coaches who come into the classrooms and help to build reflective literacy practices for classroom teachers. They also implement collaboration sessions once per quarter in which primary and intermediate teams work through professional development specifically designed to improve the practice of participating teachers. The curriculum director has supported the alignment of the language arts program by providing staff with materials aligned with a newly implemented reading course of study. The reading course of study was developed and evaluated using Phi Delta Kappan alignment strategies and tools. Literacy Coordinators have worked with Title I staff to develop benchmark assessments in reading and writing to measure student growth at the beginning middle and end of the school year. Our school system has also committed to a database called the School Monitoring System which helps buildings to study standardized and benchmark data. We are at the beginning stages in implementing this project, but have worked to tailor this database to short-term and long-term success in our buildings. We have also committed to releasing three teachers on special assignment to work as data specialists throughout the district. The data specialists would work with teachers and administrators to support students based on strengths and weaknesses revealed through data analysis. We have also implemented strategies addressed by Richard Allington in his books, Schools That Work, and Classrooms That Work. We have increased the number of books that students have access to in their classrooms with a goal of between 1,000 to 1,500 titles. We have also challenged teachers to expand the reading and writing minutes per day in every class preK-12. It is important to note that we are at the initial stages of several strategies focusing on reading and writing literacy. We are reminded that our data analysis work will be very important in finding the cost benefits from these initiatives.”* (Supervisor of federal and state programs)

Districts in this study also identified teacher participation in the state-sponsored Summer Institute for Reading Intervention as an important contributor to improved reading scores. An elementary school principal had the following to say regarding this issue:

*“The training that our teachers have received through SIRI has been very useful in improving student reading achievement. I have made SIRI training an element of job postings for summer school and our extended learning opportunities (ELO) program. The student gains from the summer school 2000 and the ELO during the winter of 2001 have been great. Our ELO program used SIRI trained teachers and we saw .7 GE gains in the two months of the ELO program.”*

***Responsibilities at each level***

An emphasis on literacy and basic skills was clearly related to curricular alignment to state proficiency standards, professional development and goal clarity. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
Sought and obtained external sources of funding for literacy efforts.	Sought and obtained external sources of funding for literacy efforts.	Understood literacy to be a critical area.
Distributed funds to support literacy effort in schools.	Hired literacy specialists, dedicated teacher resources to literacy team and literacy training.	Participated on literacy teams, in planning literacy program, and monitoring of student progress in literacy.
		Attended professional development on literacy-related topics.

**3.1.4 Data analysis and tracking**

All districts visited in this study had assigned a person to track data and keep school buildings apprised of their students’ achievement progress. Also, individual schools routinely used a variety of assessment tools to measure and monitor student progress, and

competency plans with proficiency outcomes specified. Indeed, frequent use of standardized assessments to monitor student progress is one characteristic of effective schools identified in the research literature.

Assessments were used to track progress toward state, district, and school performance goals and, importantly, teachers used them to identify students in need of intervention and those “on the bubble” or close to passing the proficiency tests, as shown in the following quote from an elementary school teacher.

*“Our principal sat down with all of us last year and told us how to keep track of everything. We targeted ‘bubble kids.’”*

In the districts in this study, results of standardized assessments, particularly the state proficiency tests, were used to monitor not only individual student progress, but progress at the class, building, and district levels. Results were analyzed by subject, strand, and item, and used to guide curricular, instructional, and intervention activities. The quotes below capture the practice of all schools evaluated. Most conducted strand item analyses to target improvement to grade and content area.

*“All critical district-level decisions are made based on analyses of the appropriate data.”* (District superintendent)

*“Let data guide our decision-making... Taking time to look at the proficiency strands... Taking curriculum mapping off the shelf and actually using it. ... Ongoing assessment.”* (Elementary school principal)

*“[Data were used to determine] what numbers of students were needed to go over the 75% mark in each classroom and each school.”* (District superintendent)

Some schools switched to different tests believing the new test afforded a better measure of their curriculum, as shown by the following quote.

*“ We used off-year proficiency tests but found that they didn’t align with the proficiency test, so we went with the Stanford Nine program.”* (District superintendent)

One teacher summarized the belief most educators seemed to have in the power of data to predict student performance as, *“ You have to trust the test.”*

***Responsibilities at each level***

Data analysis and tracking appeared to drive decision-making with respect to the efficacy (i.e., student performance response) of curriculum alignment and mapping. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
District goal to improve student performance.	Goal communicated to teaching staff.	Well aware of proficiency goals.
Professional development to enable teaching staff and school leadership to achieve goals	Attend professional development on use of assessment and using data to guide decision-making.	Attend professional development on use of assessment and using data to guide instruction.
Devoted district-level staff position to data analysis and tracking.	Either tracked data themselves or assigned staff person the responsibility of monitoring student performance data.	Frequent testing of student proficiencies to produced data needed for tracking.
Standardized assessments across schools and grade levels.	Use of standard tests and a variety of school-based or classroom-based assessments.	Development of competency plans for each student used to identify students in need of remediation.
		Use of standard tests and a variety of school-based or classroom-based assessments.

### 3.1.5 Intervention and remediation

Every school had intervention practices in place to monitor and identifying students needing extra help to pass the proficiency tests. Many schools had formal, written policies for classroom- and building-level intervention techniques. Teachers created and maintained testing profiles for each student in many schools. Also, teachers at all schools were given time during regular school day to monitor data and identify students in need of intervention. As stated by one district superintendent, the purpose of intervention was clear, “*Intervention must always be tied to assessment.*”

The intervention programs were both voluntary for those students wanting higher scores and mandatory for those students “on the bubble” who needed remedial classes to help them pass the tests. The latter were monitored closely, and parents were notified through certified letters of their child’s mandatory participation. The availability of support sessions was communicated to parents through “invitational” flyers and brochures. One district assistant superintendent said:

*“There was a real a real impact on those kids that were on the edge.”*

Every school offered a variety of support opportunities. For example, special programs were created, such as the HOPE program (i.e., Hold On to the Potential in Everyone), Credit Recovery, Tutoring/Mentoring, Life Choices Counseling, and Proficiency Intervention. Intensive sessions (e.g., Proficiency Preparation Program, Proficiency Academies) were held at many schools with prescribed times – three or four times each week for .5 – 1.5 hours depending on grade level. These intensive review periods might begin six to nine weeks prior to testing. Many schools purchased computer programs to support the core subjects, and non-passing students were assigned to a lab for remediation.

The intervention programs created new roles and responsibilities for teachers to identify and help students who failed portions of proficiency tests (e.g., Academic Assistants, Intervention Specialists, tutors, and Intervention Assistance Teams). Teachers received a stipend for extra hours of intervention service. In some schools, special staff persons, such as tutors and full time intervention teachers, were hired to support the programs. A full time intervention teacher conducted lessons in the classroom to help students do well on the proficiency tests. In regards to the teacher's efforts, the following was said.

*"She focuses on the skills needed to do well on the exams."* (Assistant superintendent)

*"She has studied the test inside and out."* (Elementary teacher)

Effective schools research describes effective schools as maximizing instructional time, including, when necessary, the use of non-academic time. In the present evaluation, staff worked to get the most out of each school day. For example, in some schools recess was a time of remediation instruction and, as described above, teachers were posted in the library, computer laboratories, and arrived before and stayed after school to offer academic support. In many high schools, the math and writing labs were open every period for student use. Also, programs were offered at various times in efforts to reach as many students as possible. For example, intervention sessions were offered during the school day, at noon extensions, before and after school, on Saturday mornings, and during the summer school session. Study tables appeared in school libraries that were staffed by volunteer tutors or regular teachers.

Math teachers were assigned to the library at different periods to provide tutoring. A district assistant superintendent said:

*"The after-school sessions were key. All of the fourth grade teachers stayed to teach." s*

### ***Responsibilities at each level***

Intervention and remediation were linked directly to district goals, curriculum alignment, and

professional development, and were associated with literacy, high student expectations, and test preparation. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
<p>District goal to improve student performance for <b>all</b> students.</p> <p>Professional development to enable teaching staff and school leadership to achieve goals.</p>	<p>Goal of all students meeting state standards communicated to teaching staff.</p> <p>Provided training and time for teaching staff to learn and apply effective intervention strategies.</p> <p>Time, space, staff reallocated and new staff hired to support a variety of intervention and remediation programs.</p>	<p>Well aware of proficiency goals and need to include all students.</p> <p>Attend professional development on use of assessment to identify students in need of intervention. Devote classroom time to testing, monitoring and identifying students at risk.</p> <p>Teachers accept new roles and responsibilities of intervention programs, and collaborate with tutor and volunteers in remediation efforts.</p>

### **3.1.6 Test preparation strategies**

Districts in this study reported the use of a variety of practices specific to the proficiency test. In addition to altering regular classroom instruction to mirror both the content and form of the test, a host of other practices existed. Intensive review sessions were offered for four to six weeks immediately prior to test administration. The frequent use of practice tests, both mirror tests and actual previous proficiency tests, were used to familiarize students with the testing format. Schools in some districts took care to simulate testing conditions, and later, during the actual test they carefully controlled the testing environment.

Much test preparation was targeted at individual students and areas of weakness as revealed by data analysis. In one case students themselves were asked to complete an item analysis of their own test performance and identify the areas they need to work on in order to pass the test the next time. Intervention strategies included use of actual test questions for instruction and practice.

It was also reported that test-taking strategies were taught explicitly. For instance, in one case an analysis of student test scores showed that students were performing poorly on open-ended questions. Students were taught to earn a point simply by repeating the question in their answer.

Motivating students also appeared to be important, as evidenced by the following quote. This was accomplished in a variety of ways. In one case it took the form of competitive challenge.

*“ We took the data [proficiency test results] to the student leadership and said, ‘Are you happy with this?’ ... The students began to take ownership.”* (District director of curriculum)

In other cases building student confidence was reported to be an important factor in maximizing test performance. The goal of improving proficiency test scores was clear to students as well as teachers, and in some cases became the focus of school-wide spirit. An elementary school in one district even held a pep rally prior to testing, inviting cheerleaders from the high school to help build team spirit. Not a form of test preparation, but related specifically to the test was the recognition of student success. As seen in the quote below, schools in some districts devised a variety of acknowledgments and rewards.

*“ At every opportunity we talked about showing what they [students] know as a part of school pride.”*

Some of the ways schools recognized and rewarded students passing the proficiency tests included:

- Exemption from final classroom examination in that subject area
- Extra two and a half days off from school for students passing all sections of the test
- Open campus privileges
- Awards drawings from among passing students
- Free transportation and group rate for passing students to go to local amusement park
- Recognition of class achievement and improvements on morning announcements
- Awards Assembly, with public invited
- Bronze, silver and gold certificates given to those who passed three, four, and five of five proficiency tests, respectively.

Finally, it was not just the students that were recognized. The district administration in some cases rewarded school staff that had demonstrated improvement with congratulatory baked goods.

### ***Responsibilities at each level***

Test preparation was associated with student expectations and intervention and remediation programs -- all of which were linked to district goals curriculum alignment. Responsibilities of district leadership, school principals, and teaching professionals that emerged from the evaluation data for this key effective practice included the following:

<b>District Leadership</b>	<b>School Principals</b>	<b>Teaching Professionals</b>
<p>District goal to improve student performance for <b>all</b> students.</p> <p>Professional development to enable teaching staff and school leadership to achieve goals.</p> <p>Implement recognition and reward system for schools meeting goals.</p>	<p>Goal of all students meeting state standards communicated to teaching staff.</p> <p>Provided training and time for teaching staff to learn and apply effective intervention strategies.</p> <p>Implement a recognition and reward system for students passing proficiency tests.</p>	<p>Well aware of proficiency goals and need to include all students.</p> <p>Attend professional development and change instructional practices to reflect proficiency format and test-taking skills.</p> <p>Recurrent use of practice tests to prepare for test and identify students in need of intervention.</p> <p>Students aware of incentives.</p>

In addition to these key effective practices identified above, several key principles of implementation were identified and are discussed next.

**3.2 Principles of effective implementation**

In addition to the practices identified above, the improved districts demonstrated the following characteristics:

- Dynamic leadership
- Clear and widely accepted goals
- Collaborative planning
- Strong linkages and relationships among the various key effective practices

A description of these characteristics that appeared to be an important foundation for implementing the effective practices noted previously is described next. These characteristics are also frequently noted as critical components of effective schools in the research literature.

### 3.2.1 Dynamic leadership

Strong, firm, competent, capable administrative leadership was the most consistent characteristics reported in effective schools research. All schools in the present evaluation had a person or team dedicated to curricular issues, particularly curriculum alignment to state proficiency standards. Typically, this person served at a high level in the district (e.g., assistant superintendent or curriculum director) and worked closely with school administrators (e.g., principal, assistant principal, or curriculum coordinator/consultant). In some school districts, this leader's one task was to ensure the curriculum at each school in the district was internally consistent and aligned to state proficiency outcomes. The person given this responsibility may have been hired from outside or from within the district. In a few schools, the district curriculum leader routinely conducted classroom observations to collect data on instructional practices, which were shared district-wide. As shown by the following quotes, leadership was not only closely linked to curriculum, but to student expectations and standards.

*“Under the leadership of a new superintendent, our district identified a few key initiatives...with the express goal of improving student achievement.”* (Assistant superintendent)

*“The administration had the vision and the leadership to show the staff “another way.”* (Chapter I reading teacher)

In addition to a curriculum leader, most school districts had a person devoted to analyzing achievement data, and to develop action plans for improvement by grade level and content area. One such person, a director of instructional services, said:

[One responsibility of the data analyst was to] *conduct several staff in-service meetings a year in order to train staff to use student proficiency results to plan for the needs of their students.”*

### 3.2.2 Widely accepted, clear goals

The effective schools research literature also notes the importance of a coherent curricular philosophy and use of a common language to support curriculum in the translation of

district goals to school-level practice. In the present evaluation, all school districts had a dynamic and renewing Continuous Improvement Plan (CIP) that defined the district's educational mission and goals. School buildings aligned their individual School Improvement Plan (SIP) to the district's CIP. An elementary school principal said:

*“Our district strategic plan, our district CIP, and each building CIP align.”*

As stated by one high school principal, these plans were *the* source used in curricular alignment and mapping in an attempt for school personnel to create a coherent curriculum and *“make it part of the culture of the organization.”*

All districts accepted the goal of improving proficiency test score results. This goal was clearly communicated to staff through CIP goals, in-service sessions, professional development topics, and general school staff meetings. Teachers understood their challenge was to ensure that “Every child passes every section of every test.” One district director of curriculum said:

*“The most powerful change was in our belief system.”*

Students were made aware of the high expectations through a variety of means to include: changes in classroom instructional strategies discussed above that mirrored testing; frequent testing to monitor their progress and to identify students needing intervention; high visibility of intervention programs; and intensive test preparatory periods prior to testing. This awareness is made evident through the following quote:

*“Children were absolutely aware of the standard and knew what they needed to do. They knew the content. They knew they were prepared. It became a pep rally.”* (District superintendent)

### 3.2.3 Collaborative planning

Although the goal of improving proficiency test scores was imposed from the outside, districts that were most successful achieved a relatively high degree of “buy-in” from teachers. Effective schools research shows that the willing and integral participation of the teaching staff in the curricular planning is critical to organizational cohesion and to the success of implementing a reform or restructuring effort. Collaborative planning induces collegiality that, in turn, creates a highly committed teaching staff. In the following quotes it is seen that administrators and curriculum planners at most of the schools evaluated recognized the importance of teacher ownership of curricular revisions.

*“It is easy to base decisions on what we [administrators] think is best, [but] involving all stakeholder groups has led to a better decision-making process and a “buy-in” necessary to change.”*  
(Elementary principal)

*“One of the ways to bridge the written curriculum and the taught curriculum is to have the teachers who will be teaching the curriculum assist in writing and aligning it.”* (District superintendent)

One curriculum director reported saying to the teaching staff, “*Tell us what you want to do.*” At the other extreme, however, teacher collaboration in the planning process was less evident. A special education teacher said:

*“[The curriculum director] presented the process to teachers. She didn’t ask teachers if they wanted to do it. Teachers were given deadlines.”*

Regardless of the extent of participation in developing the curriculum plan, teachers were responsible for aligning their courses, grade level instruction, or content area. Teachers formed grade level and cross-grade planning teams to create curriculum maps. Grade level or team teachers meet monthly to share student progress and assessment outcomes at teacher study group meetings. Some schools held these meetings at a district office to allow all teachers at a grade level to communicate and ensure a coherent curriculum across schools.

Teachers meet regularly to share current research on relevant topics. Building administrators and districts supported these collaborative efforts in providing early release time for such meetings, time to observe “model” teachers in the classroom, and professional development training on curriculum mapping, use of assessments, Ohio’s proficiency test protocols, and mentoring entry level teachers. A district director of curriculum said:

*“ We have several outstanding teachers who are doing model lessons in classrooms as we implement new practices. They can serve as a co-teacher or model the lesson for the teachers.”*

### **3.2.4 Linkages and Relationships Among Key Effective Practices**

Of key importance is the way the key effective practices named in this study were linked and were mutually reinforcing. No district reported that a single change, such as aligning curriculum, made all the difference. For example, alignment of curriculum is not likely to improve test results unless teachers are prepared to teach the newly aligned curriculum. Use of data to make instructional decisions requires that teachers be able to interpret the data and apply the results to their teaching. Intervention and remediation increases test performance when the remediation is targeted at weaknesses identified through test analysis. Mandating that designated amounts of classroom time be devoted to literacy is most effective when teachers update their literacy skills through professional development.

The schools used the key effective practices together, mutually reinforcing and all focused on a common goal. For instance, analysis of proficiency test results might identify student writing skills as weak. The curriculum is revised to include more writing. Professional development focuses on teaching and assessing writing and using data analysis to identify which students are having the greatest difficulty. Intervention and remediation in writing skills is targeted for those students. In this example, curriculum alignment, professional development, intervention and remediation, and the use of data analysis are all components of a single process.



## **4 SUMMARY AND DISCUSSION**

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The practices that educators in Ohio's improved districts report as being most responsible for improvement are highly consistent with research on effective schools. All the districts, regardless of type, reported the same general practices as being responsible for their improvement. Regardless of size, geographic area, and demographic composition, curriculum alignment, professional development, and emphasis on basic skills, (especially literacy), were strongly manifested in the school districts studied. Other striking features of Ohio's improved school districts were the extent to which data was being used to guide improvement efforts and the variety of intervention and remediation strategies used. Data analysis and tracking of student performance was carried out at the district, building, classroom, or individual student level at all districts studied. Addressing student weaknesses took place either within the context of regular classroom instruction or in designated remedial classes, proficiency camps, in-school tutoring and labs, and before and after school tutoring.

However, it must be noted that given the post hoc selection of districts and reliance on self-report as the primary means of data collection that characterize this study, it cannot be concluded that the practices identified are, indeed, responsible for the improvement. Nor should it be concluded that the ways in which districts implemented the general practices associated with school effectiveness, are the only ways of achieving success. One district

included in the final twelve districts examined stands out from the others in attributing its progress to such things as a strong emphasis on the arts. Although participants from this district identified the same practices mentioned by other districts, their implementation of them does not appear to be as directly targeted at raising test scores. In other words, there may be more than one way to improve education and have those improvements manifest themselves on the measures mandated by the state.

In fact, it is important to note that effective schools research indicates a great deal of variation is to be expected, especially at the classroom level, in how these practices are implemented. Table 1 provides an example of the various practices and characteristics identified in the improved school districts, and examples of the diversity of ways the practices were implemented or evidenced. For example, in the districts studied, student performance data were used to varying degrees to guide professional development, to identify curricular weaknesses, to identify “bubble kids” in need of remediation, and to identify individual student weaknesses for the purpose of designing classroom instruction. Some districts had the resources to create a district level position for data management, while others assigned that role to department heads. While the implementation of common practices varied, it did not vary systematically by district type.

**Table 1. Key Effective Practices in Ohio School Districts**

Effective Schools Practice or Characteristic	Examples of Implemented Practice
<b>Curriculum Alignment</b>	<ul style="list-style-type: none"> <li>• Curriculum mapping to Ohio proficiency standards</li> <li>• Cycle specified for curriculum renewal</li> <li>• Teacher collaboration to create coherent grade-level and cross grade level curriculum</li> <li>• Instructional practices changed to mirror proficiency test question format</li> <li>• Use of practice tests</li> <li>• Classroom time dedicated to test preparation</li> <li>• Student performance monitored</li> <li>• Student performance data used to guide instruction</li> </ul>
<b>Professional Development</b>	<ul style="list-style-type: none"> <li>• Increase in number and variety of training</li> <li>• Topical focus on improving student achievement, implementation of CIP, curriculum alignment and mapping, and instructional strategies to reflect test format</li> </ul>
<b>Emphasis on Basic Skills</b>	<ul style="list-style-type: none"> <li>• Concentration on reading, writing, math, and science</li> <li>• Literacy emphasis</li> <li>• Student performance in basic skills, to include literacy, closely monitored</li> </ul>
<b>Data Analysis</b>	<ul style="list-style-type: none"> <li>• Analysis of proficiency test results by district, school, subject, strand, item, and individual students</li> <li>• Use of results to revise curriculum</li> <li>• Use of results to determine professional development activities.</li> </ul>
<b>Intervention and Remediation</b>	<ul style="list-style-type: none"> <li>• Intervention/remediation programs offered at lunch, during recess, library staffed at all hours by teacher/tutor, computer labs available (math/science) at all hours during school day.</li> </ul>

**Table 1. Key Effective Practices in Ohio School Districts (cont.)**

<p><b>Test Preparation</b></p>	<ul style="list-style-type: none"> <li>• Direct instruction in test-taking skills</li> <li>• Extensive use of practice tests</li> <li>• Instructional practice altered to mirror form and content of the proficiency tests</li> <li>• Intervention strategies to identify students needing help to pass proficiency tests</li> <li>• Variety of intervention/remediation programs offered at variety of times during school day, and before/after school</li> <li>• Intervention specialists hired or teachers reassigned or paid to conduct remediation programs</li> <li>• Students recognized and rewarded for success</li> </ul>
<p><b>Dynamic Leadership</b></p>	<ul style="list-style-type: none"> <li>• High level administrator (e.g. superintendent or curriculum director) as driving force</li> <li>• Curriculum director with clear responsibility for internally consistent curriculum aligned to state proficiencies</li> <li>• Use of external curriculum consultants</li> <li>• Classroom observation to collect and disseminated data on instructional practice</li> </ul>
<p><b>Clear and Widely Accepted Goals</b></p>	<ul style="list-style-type: none"> <li>• Continuous Improvement Plan (CIP) with defined goals</li> <li>• School building improvement plans aligned to CIP goals</li> <li>• Goals communicated to staff and students</li> <li>• High degree of stakeholder buy-in</li> </ul>
<p><b>Collaborative Planning</b></p>	<ul style="list-style-type: none"> <li>• Teaching staff involved in curriculum planning</li> <li>• Teacher staff responsible for aligning curriculum in content/grade area</li> <li>• Teachers collaborate to achieve coherent curriculum</li> <li>• Professional development on curriculum alignment</li> <li>• PD in mentoring of entry level teachers</li> </ul>

Another characteristic of the improved districts in this study was a high degree of teacher involvement in decision-making. The goal, passing state proficiency exams, was externally

mandated. That goal was clearly communicated and accepted, and teachers collaborated across levels and disciplines and across buildings in curriculum alignment activities to achieve that goal. Teachers in some schools and districts held regular meetings to discuss curriculum, instruction, intervention, and professional development-- all with the explicit goal of raising test scores. As the school effectiveness literature suggests, collaborative planning and collegiality in pursuit of a shared vision is an important component of success. Successful districts managed to create a high degree of “buy-in” from teachers, and in some cases students and parents as well.

In the end, a fairly clear picture of how Ohio’s school districts improved test scores emerges from this study. Districts of all types were remarkably similar at the macro level in the factors responsible for their improvement. Changes in curriculum and instruction, professional development activities, literacy instruction, intervention and remediation programs, all guided by an analysis of test results, have been effective in achieving immediate results.



## 5 References Cited

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- Edmonds, R. (1979) Effective schools for the urban poor. *Educational Leadership*, 37, 15-24.
- Elliott, J. (1996). School effectiveness research and its critics: Alternative visions of schooling. *Cambridge Journal of Education*, 26 (2), 199-224.
- Erbe, B. (2000, April). Correlates of school achievement in Chicago elementary schools. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- Fuller, B., & Clarke, P. (1994). Raising school effects while ignoring culture? Local conditions and the influence of classroom tools, rules, and pedagogy. *Review of Educational Research*, 64, 119-157.
- Hill, P., & Rowe, K. (1996). Multilevel modeling in school effectiveness research. *School Effectiveness and School Improvement*, 7, 1-34.
- Hurn, C. (1993). *The limits and possibilities of schooling: An introduction to sociology of education* (3rd ed.). Needham Heights, MA: Allyn and Bacon.
- Jansen, J. (1995). Effective schools? *Comparative Education*, 31(2), 181-201.
- Levine, D., & Lezotte, L. (1995). *Effective schools research*. Washington, D.C.: Educational Management. (ERIC Document Reproduction Service No. ED382724)
- Proudford, C., & Baker, R. (1995). Schools that make a difference: A sociological perspective on effective schooling. *British Journal of Sociology of Education*, 16(3), 277-292.
- Purkey, S., & Smith, M., (1983) Effective schools: a review. *The Elementary School Journal*, 83, 427-462.

- Reezigt, G., Henk, G., & Creemers, B. (1999). Empirical validity for a comprehensive model on educational effectiveness. *School Effectiveness and School Improvement, 10* (2), 193-216.
- Rutter, M., Vaughan, B., Martimore, P., & Ouston, J. (1979). *Fifteen thousand hours: Secondary schools and their effects on children*. London: Open Books.
- Slee, R., & Weiner, G. (2000). School effectiveness for whom? Challenges to the school effectives and school improvement movements. *School effectiveness and school improvement, 11*(1), 131-143.
- Taylor, B., Pearson, D., Clark, K., Walpole, S. (2000). *Beating the odds in teaching all students to read: Lessons from effective schools and accomplished teachers*. Ann Harbor: Center for the Improvement of Early Reading Achievement (ERIC Document Reproduction Service No. ED450352)
- Taylor, B., Pressley, M., & Pearson, D. (2000). *Effective teachers and schools: Trends across recent studies*. Ann Harbor, MI: Center for the Improvement of Early Reading Achievement. (ERIC Document Reproduction Service No. ED440810)
- Zigarelli, M. (1996). An empirical test of conclusions from effective schools research. *Journal of Educational Research, 90*(2), 103-110.



## **6 Appendices**

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## Appendix A

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### **Methodology**

The study followed a three-phase research design as follows:

- I. Use of the Delphi technique to identify effective practices used by Ohio's improved districts.
- II. Telephone interviews with administrators and teachers in select districts to more fully describe effective practices.
- III. Site visits to select districts to gather supporting documentation of the steps taken to improve proficiency scores.

An overview of the evaluation methods employed in each phase is next.

### **Phase I --Defining Improvement**

The Ohio Local Report Card released in February 2000 showed that 189 school districts had improved their proficiency rating from the previous year. However, achieving a higher performance rating does not indicate the degree of improvement a district has made. It is possible for a district to meet only one additional indicator and to move up a category, while another district might meet six additional indicators and remain in the same category. The amount of improvement a school could make up the scale (i.e., from Academic Emergency at the bottom to Effective at the top) is highly influenced by several factors. The most powerful of these is the current performance level—low performing schools have more

room to improve, whereas schools already performing at a high level will have greater difficulty achieving meaningful increases. Another influence is the size of the student population – schools/districts of smaller size can be influenced more profoundly by the high or low performance of a few students, and vice versa – it is more difficult for schools/districts with large populations to demonstrate gains. Again, districts could make considerable progress yet not change from one status label to another, while others might improve only slightly but enough to push them into the next status level.

For the reasons just elaborated, school improvement was calculated taking these factors into account: the degree to which a district could be expected to improve given its size and current performance level. Based on the size and current level of performance of a given district, an appropriate performance target was calculated that marked a statistically significant level improvement. Districts for this study were selected based upon the degree to which they exceeded expected performance levels.

Lastly, it was felt necessary to consider geographic location since the literature has demonstrated different schooling effects in urban and rural contexts. Thus, rather than select the most improved districts statewide, the study selected the most improved school districts within each of the eight district “types” used by the Ohio Department of Education as shown below:

**Ohio Department of Education school typology**

Type	Geographic location and socioeconomic (SES) description
(1)	Small rural, low SES
(2)	Rural, moderate SES
(3)	Small town, moderate SES
(4)	Urban/non rural, low SES
(5)	Urban/non-rural, high SES
(6)	Major urban
(7)	Urban, moderate SES
(8)	Very high SES

Identifying and Contacting Participants. Ohio school districts were ranked according to the degree to which they exceeded expectations as calculated above. The highest performing districts in each of the eight district types were selected totaling 50 districts. The number of districts selected from each category was proportional to the number of districts of that type in the state.

Letters were sent from the Indiana Center for Evaluation to the superintendents of these 50 school districts inviting them to participate in an on-line Delphi process to determine factors considered most responsible for school improvement. Superintendents were asked to identify two individuals who could best contribute to a discussion of their district's improvement. A total of 107 participants were identified. Letters were then sent to the 107 participants recommended by the superintendents. In many cases the superintendents themselves volunteered to participate. The remainder of the participants was composed of assistant superintendents and curriculum coordinators. The letter described the study and directed participants to a website where the Delphi portion of the study was to take place.

Delphi Technique. In the first phase, a three-stage modified on-line Delphi process was employed. Collection of data via the web allowed participants to contribute ideas at any time, respond only to those ideas that were most relevant to them, and to see and respond to the contributions of other participants while maintaining anonymity. It also allowed the Indiana Center for Evaluation to continuously monitor contributions, pose guiding questions, and issue instructions and guidance as needed. The three-stage Delphi process consisted of identifying key effective practices, ranking those practices identified, and responding to the rankings as well as the contributions of other participants. Key effective practices identified in this stage were grouped according to the subject headings that participants had entered for them and Delphi respondents were asked to rank them in importance.

## **Phase II --Telephone Interviews**

The second phase of the study used telephone interviews to gather more detailed information about the implementation of the various practices identified in the on-line

Delphi process. Of the 50 districts selected for the Delphi phase of the study, 17 did not contribute to the website. One person from each of these 17 non-responding districts was interviewed by telephone. The purpose of these interviews was to ensure that there were no systematic differences in improvement efforts between those districts that responded and those that did not. The respondent and non-respondent telephone protocols are in Appendix B and C, respectively.

A total of 404 responses were received from the remaining 33 districts. The six practices most noted in these responses served as the basis for selecting individuals to interview via telephone. Contacts were selected by key effective practice identified in the first stage. That is, a response that described professional development as a key effective practice warranted a telephone interview with that respondent to gain further information about that practice. As much as possible, interviews about each effective practice were distributed across various district types. For instance, representatives interviewed about professional development were from different types of districts. Lastly, as part of the interviews, superintendents and curriculum coordinators were asked to identify three teachers who could provide information about the key effective practices at the building and classroom levels. A total of 81 calls to the combined non-respondent and respondent sample were planned (see below).

Interviews lasted between 20 and 35 minutes. Teachers were asked the same questions asked of administrators. All interviews with representatives from the 17 non-responding districts were completed. All scheduled interviews with district administrators (16) were completed. All but three interviews with teachers were completed for a total of 45 teacher interviews.

**Non-respondent:** 17 of the 50 districts selected to participate in the on-line portion of the study failed to respond. Call one (1) non-respondent in each of these 17 districts

**Total non-respondent calls = 17**

**Respondent:** 404 responses from 64 respondents in the remaining 33 districts. The initial caller recommended three other persons to call, which is indicated by the number of contacts in parenthesis.

**Total respondent calls = 64**

	<u># of districts</u>	<u>#of contacts</u>	<u>total # of calls</u>
Curriculum mapping and alignment	3	(1+3) 4	12
Professional development	3	(1+3) 4	12
Emphasis on literacy	3	(1+3) 4	12
Data analysis and tracking	3	(1+3) 4	12
Intervention and remediation	2	(1+3) 4	8
Test preparation strategies	2	(1+3) 4	8

### **Phase III --Site Visits**

Having identified effective practices and gathered information about implementation, visits to 12 districts provided a degree of validation of effective practices and their implementation. The 12 districts visited were chosen because of the richness of information they provided in the first two phases of the study. These districts are presented in Appendix D. All district types were represented. Site visitors were given a site visit protocol identifying documents and types of evidence that might be collected about each key effective practice. Additional interviews, document collection, and classroom observations were carried out. The information gathered on site was then coded according to the key effective practice it supported. A list of documents collected during the site visit is in Appendix E.



## Appendix B

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### Delphi Respondents Telephone Interview Protocol

Name \_\_\_\_\_ Phone \_\_\_\_\_ District type \_\_\_\_\_

Hello, my name is \_\_\_\_\_. I am calling from the Indiana Center for Evaluation. As you know, your district was among the most improved in the state last year, and in the spring we collected some information from you about what your district had done to improve student performance. You contributed your ideas to a website. I would like to talk with you about those ideas. Do you have about 30 minutes to give me some more information about process of improvement in your district?

*(If no, may I schedule another time to talk with you?)*

In one of your postings to the website you identified \_\_\_\_\_ as a key practice leading to improved test scores. I would like to know more about how that came about.

#### **Who, What, When, Where, How**

When did the district begin \_\_\_\_\_ (the practice identified)?

Who was responsible for initiating the process? (*Get names*)

Who was involved in planning? (*Get names*)

How were plans communicated throughout the district? (*Ask for concrete examples*)

What steps were taken to \_\_\_\_\_ (implement this practice)? (*Ask for concrete examples*)

What resources were required/used? (*Ask for concrete examples*)

In what specific ways has classroom instruction been affected, changed? (*Ask for concrete examples*)

Specifically, how did these practices cause student test scores improve?

Did any difficulties arise in implementing this practice?

**Actions, Events, Experiences, Behaviors**

I would like for you to reconstruct some of the key events in this process. Would you please describe \_\_\_\_\_?

Could you recommend three teachers whom I might contact for their views of the implementation of this/these practices?

*Get contact info – name, school, phone number, email?*



## Appendix C

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### Telephone Interview Protocol for Delphi Non-Respondents

Name:  
Phone:  
District Type:

Hello, my name is\_\_\_\_\_. I am calling from the Indiana Center for Evaluation. In the spring we collected some information on-line about what Ohio’s most improved districts were doing to improve performance. You had been identified by your superintendent as a potential participant in the study. Do you have a few moments to answer just a couple of questions? *(If no, is there a better time for me to contact you?)*

As you know, your district was among the most improved in the state. Can you tell me briefly what the district did that you believe led to the improvement in proficiency test scores? *(Probe for several answers.) (Record responses verbatim.)*

Code responses after each conversation

- Curriculum mapping and alignment
  - ◆ Professional development
  - ◆ Emphasis on literacy
  - ◆ Data analysis and tracking
  - ◆ Intervention and remediation
  - ◆ Test preparation
  - ◆ Use of tutors and volunteers
  - ◆ Stakeholder teacher buy-in
  - ◆ Clarity of vision – communication
  - ◆ Other

Which of these do you think contributed most to the improvement?

I see that you did not post these responses to the website. Why is that?

Thank you for your time.



## Appendix D

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### Site Visit District Sample, with Report Card status noted

1. Crooksville Exempted Village School District  
Small rural, low SES
2. Prebble-Shawnee Local School District  
Rural, moderate SES
3. Triad Local School District  
Rural, moderate SES
4. Dover City School District  
Small town, moderate SES
5. Canton Local School District  
Small town, moderate SES
6. Painesville School District  
Urban/non-rural low SES
7. Lancaster City School District  
Urban/non-rural low SES
8. Newark City School District  
Urban/non-rural high SES
9. Cleveland Municipal School District  
Major urban
10. Beavercreek City School District  
Urban, moderate SES

11. Chardon Local School District  
Urban, moderate SES
12. Worthington City School District  
Very high SES



## Appendix E

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### Site Visit Protocol for Document Collection

#### Curriculum mapping/Alignment

- ◆ Copy of curriculum before and after alignment.
- ◆ Copies of curricular maps – scope and sequence for all grades.
- ◆ Researcher observed teaching consistent with written curriculum.
- ◆ Lesson plans identifying proficiency addressed.
  
- ◆ Professional Development
- ◆ Titles and dates of professional development activities
- ◆ Lists of participants in those activities
- ◆ Policies regarding professional development, i.e. required of all teachers, release time for attendance, payment of fees, etc.
- ◆ Organizational support for incorporating workshop ideas and materials into classrooms, i.e. a monthly teachers’ meeting to discuss methods, classroom observations by staff.
- ◆ Researcher observation of classroom activities related to workshop themes.
  
- ◆ Literacy
- ◆ Commercial curricular/instructional programs purchased and/or used, i.e. Success for All, Four Blocks. Etc.
- ◆ Lists of tutors and schedules
- ◆ Number of students receiving tutoring
- ◆ Training materials/process for tutors
- ◆ Who tutors? Parents, community members, teacher aides, student teachers, other students, classroom teachers.
- ◆ Availability of books, book purchases, library building.
- ◆ Scheduled reading times, i.e. first twenty minutes a day for everyone, use of free periods/study halls, etc.
- ◆ Incentive programs, i.e. Book-It, principal get pie in face for 1,000 books read, etc.

- ◆ Data analysis/tracking
- ◆ Trend reports of test scores.
- ◆ Charts of individual student progress.
- ◆ Evidence of classroom teaching specifically informed by scores, i.e. low word problem scores leads to increased instructional time on solving word problems
- ◆ Data analysis computer programs.
- ◆ Researcher observed teacher use of test score data.
- ◆ Off year testing and use of other benchmark tests.
  
- ◆ Intervention/Remediation
- ◆ Number of students receiving individual remediation
- ◆ Presence of remedial classes.
- ◆ Written policy on identifying students in need of remediation.
- ◆ Remediation embedded in regular classrooms.
- ◆ Tutoring programs.
  
- ◆ Test Preparation
- ◆ Use of practice tests
- ◆ Intensive review immediately prior to testing.
- ◆ Manipulation of the testing environment, i.e. no more than 20 students in a room while taking the test.
- ◆ Alteration of teaching methods to parallel test, i.e. teaching spelling by having students identify the misspelled words from among four choices.
- ◆ Positive outlook/enthusiasm, i.e. pep rallies prior to test, banners around school, etc.
  
- ◆ Other information to be collected
- ◆ District test scores and trends prior to and following reform efforts.
- ◆ Timeline/sequence of implementation of key effective practices.