Characteristics of Successful Urban Elementary Schools

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CHARACTERISTICS OF SUCCESSFUL URBAN ELEMENTARY SCHOOLS

A “Best Practices” Literature Review Prepared for Achievement Plus, A Partnership for Community Schools

Prepared by:
Daniel P. Mueller, Ph.D.
Wilder Research Center
1295 Bandana Boulevard North
Suite 210
St. Paul, MN  55108
647-4600

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A 1995 research-based review of successful practices in schools and workplaces by the U.S. General Accounting Office reached the following conclusions:

Successful schools . . . had a well-defined mission: they knew what they wanted to accomplish. They organized the work environment, human resource practices, and curriculum and instruction . . . in ways that supported that mission. The evidence that we reviewed consistently demonstrated the need to integrate mission and key practices. No one practice, by itself, seems to ensure success.

The missions in schools were focused on student learning. Work environment practices consistent with this included providing safe and orderly sites, encouraging parents' involvement and collaboration among staff, fostering leadership for instructional improvement, and authorizing school-level problem solving. Human resource practices included school-based control over entry and exit of staff and students and the encouragement of professional development. In terms of curriculum and instruction, successful schools established academically rigorous and well-focused curricula, provided effective and engaging instruction, exposed all students to challenging curricula and instruction, and ensured that students who needed extra assistance were given opportunities for success.¹

This statement highlights many of the key features of successful urban elementary schools that will be described below. Our review focuses on school-based factors that foster student learning and achievement, particularly among children of color and children living in poverty. Family and community factors in student achievement are not described here but are described in other complementary reviews.

Studies have shown that students most at-risk for educational failure are less likely to attend schools that employ successful practices.² The schools they attend tend to be of lower quality, to be less safe, and to provide fewer learning opportunities. The climate and instructional practices in schools attended by economically disadvantaged students tend to offer them fewer incentives or pressures to engage in school activities and to invest the effort for academic success.³

For purposes of this review, school-based characteristics or factors associated with improved student academic achievement are organized into five clusters: 1) outcome goals,
curriculum and assessment, 2) classroom practices and instruction, 3) classroom climate and orientation to student learning, 4) teacher leadership and development, and 5) school environment and other school-wide characteristics. Within each cluster, the key characteristics are delineated and described, along with examples of accompanying strategies or practices. Brief descriptions of exemplary programs that incorporate many of these characteristics or principles are provided at the end of the review.

The school-based factors considered in this review can have a major impact on student learning. An analysis of research in this field over the past 50 years rated the importance of 28 different factors in influencing student learning. Classroom management broadly-defined (i.e., level of student engagement, frequency of disruptive behavior, quality of instructional time) was rated as the most influential factor. Other school-based factors that were among the top 15 rated factors included: student-teacher interaction, quantity of instruction, school culture, classroom climate, curriculum design, and classroom assessment. Other factors considered included student aptitude and characteristics, home environment/parental support, community influences, school policies, and school demographics. Among these other factors, student aptitude and the home environment/parental support were rated as highly influential factors in student learning.

This review concluded that factors that directly affect students such as instruction and the home environment have a larger impact on their learning than more indirect factors such as school, district or state policies, school management, demographic characteristics of programs, or other school organizational characteristics.

One study found that school, classroom and teacher factors accounted for 25 percent of the variance in student achievement. Other studies have also found significant school effects on student achievement. Hence, evidence indicates that school-based factors can make a moderate, yet substantial difference in student academic achievement. Results from another study suggest that the influence of school factors may be smaller at the secondary school level. In this latter study, student ability and effort accounted for the most variance in academic achievement, followed by parental influences, and then, school factors.
OUTCOME GOALS, CURRICULUM AND ASSESSMENT

1. There are clearly-defined academic outcomes for all students (e.g., in reading, mathematics and writing).\(^7\)
   - What knowledge students are expected to acquire and what skills they need to learn are established through explicit, well-defined, measurable learner outcomes.
   - School staff know and understand these learner outcomes.
   - The accomplishment of these outcomes focuses actions and decisions in the school.
   - There is a “shared sense of mission.”

2. Curriculum is closely aligned with the academic outcomes.\(^8\)
   - The curriculum is built around the academic outcomes sought.
   - The curriculum provides a well-organized and well-focused plan for classroom activities with explicit learner objectives.
   - There is a linkage between the content of the curriculum and the daily lives (i.e., culture) of the students.\(^9\)

3. An academically rigorous and challenging curriculum is provided to all students.\(^10\)

   Programs aimed at disadvantaged students such as the Accelerated Schools Program and Success for All have demonstrated that engaging low-achieving students in a challenging, speeded-up curriculum, as opposed to a slowed down or remedial curriculum, has positive academic outcomes. While the curriculum should be challenging, it also needs to be realistic, given the level of students’ knowledge and skills.

4. Regular assessment of students' progress, aligned with outcome goals and the curriculum, is conducted.\(^11\)

   Studies have indicated that regular assessments of student progress can promote academic achievement if the assessments are well-aligned with the curriculum being studied and the outcome goals. Timely feedback of results to teachers and students is important. This permits teachers to adjust their instruction to better meet student needs. A number of studies cited frequent monitoring of student progress as an indicator of school effectiveness.
CLASSROOM PRACTICES AND INSTRUCTION

5. The contents of the core curriculum are thoroughly covered.\textsuperscript{12}

That is, students have the opportunity to learn what they need to learn to achieve the academic outcome goals. The lessons they are taught are of sufficient complexity, depth and duration to enable them to acquire the concepts and skills necessary to meet outcome targets.

6. Frequent monitoring of student progress occurs, with early intervention if problems emerge.\textsuperscript{13}

Student progress is evaluated regularly and instruction is adjusted to meet individual needs. Early intervention is provided to students who are having problems (e.g., in reading). For example, individual tutoring has been shown to be an effective intervention for students identified as being at high-risk for reading difficulties. One-on-one tutoring provided by classroom aides or teachers has been shown to be effective, although the gains achieved when teachers were used were larger.\textsuperscript{14} It is important for students who are not making adequate progress in reading in first grade to receive immediate and intensive assistance.

7. Instruction time on the core curriculum is maximized during the regular school day.\textsuperscript{15}

Generally, the more time students are engaged in instructional experiences, the more likely they are to learn. Studies have shown that time engaged in academic learning varies considerably across schools and classrooms within school. Academically engaged time or “time on task” is moderately correlated with academic achievement. This is probably because increasing time on task alone is a necessary but not sufficient condition for improving student achievement. That is, increasing the amount or quantity of time on tasks related to the attainment of learning goals is important. However, how that time is spent (i.e., the quality or effectiveness of instruction) is also important.

Time on task can be increased by:

- Minimizing classroom distractions and interruptions during academic periods during the school day. In poorly managed classrooms, off-task activities consume much of the teaching time. For example, in one study involving a 10-day observation of fourth grade reading periods, much of the time set aside for reading was lost "due to school-wide activities such as earthquake drills, spelling bees and painting murals; teacher absences; and decisions to shorten the time allotted for reading."\textsuperscript{16}

- Effective instructional practices (as described below).

- Efficient transitions between classroom activities.

- Effective classroom management (as described below).
- Routines for non-academic activities (e.g., bathroom breaks) that are understood and followed.

- Having activities for students to do when they finish assigned work early.

In addition, opportunities should be provided for students to enhance their academic skills in off-school hours (e.g., after school, during the summer).

8. **Instructional goals are well-matched to students’ skill levels and interests.**

To be effective, teachers must match the difficulty level and content of the lessons they teach with the knowledge/skills and interests of their students. They must avoid demanding too much and expecting too little.

Effective teachers adapt their lessons to the cultural backgrounds and learning styles of students. They bridge the gap between the culture of the school and the culture of students’ homes so that lessons become more meaningful.

The following practices foster an effective instructional match:

- Identify the instructional level appropriate for students through assessment.

- Match instructional goals to student knowledge/skill levels.

- Monitor student success rates on assigned tasks.

- Achieve modestly high student success rates on new tasks (70-85%).

- Achieve high student success rates on independent practice activities (90-100%).

- Modify assigned tasks as needed to ensure appropriate success rates for students.

- Take student interests into account in developing lessons. Make linkages between the lessons being taught and the daily life experiences of students outside of school.

9. **Instructional delivery is highly structured and interactive.**

Instructional approaches linked to higher student achievement are highly-structured and interactive. Such instruction is teacher-directed, academically focused and individualized to ensure that each student succeeds. This approach is sometimes referred to as “direct instruction” or explicit teaching. It has been shown to be effective with economically-disadvantaged students, particularly in teaching basic skills such as reading and mathematics.

The direct instruction approach works well in teaching basic skills or mastery of a body of knowledge. It is less effective in teaching such areas as written composition or literature comprehension and analysis. More indirect approaches, which promote creativity and problem solving, may be more successful in these areas.

Effective direct instruction practices include the following:
- Lessons are well-organized and well-planned with explicit learning goals and objectives.
- A brisk pace is followed with systematic sequencing of lessons.
- The purpose of the lesson and expectations for learning are clearly communicated to students.
- The teacher presents and demonstrates concepts and skills, and relates them to students’ prior knowledge and experience. Concrete examples are provided.
- There is supervised, guided practice of skills with high teacher-student-interaction—i.e., the teacher provides prompts and feedback (reinforcement and corrections) to ensure student success.
- Errors in students’ work are corrected before they interfere with subsequent learning.
- There is independent student practices with teacher monitoring.
- Regularly assigned and checked homework, related to the daily lesson, provides further opportunity to practice skills being learned.

10. **Instructional methods are used with a demonstrated capacity to accelerate student achievement, especially for disadvantaged students.**

Two categories of programs with clear evidence for effectiveness in this regard are: continuous progress programs and cooperative learning programs. In continuous progress programs, students proceed through a defined series of instructional objectives at their own pace. They are taught in small groups with students at similar skill levels. Students are frequently assessed and regrouped according to the results of these assessments. Cooperative learning programs involve students working together in small groups or teams to learn material initially presented by the teacher. Teams receive rewards based on the individual learning of the team members. Both of these programs have been found to increase achievement in basic skills compared to conventional practices, including pull-out or in-class remedial programs.

Other approaches with evidence for their effectiveness with disadvantaged students include full-day kindergarten, structured peer-tutoring programs, and some computer-assisted instruction programs.
11. **The classroom is managed in a manner conducive to student learning.**

According to Ysseldyke and Christenson (1996), classroom management includes the nature of the rules established to maintain appropriate classroom behavior, how the rules are communicated and reinforced, and the importance placed on student accountability related to these rules. Well-managed classrooms tend to have high-student time on task.

Effective classroom management includes the following practices:

- Classroom rules, behavioral expectations, and routines are established and clearly communicated at the beginning of the school year.
- Teachers model appropriate behavior for students.
- Student behavior is continuously monitored by the teacher (through circulating around the room and maintaining eye contact with students) and appropriate behavior is reinforced.
- Rule breaking or behavioral disruptions are dealt with promptly, and in a way that minimizes classroom disruption and maintains the dignity of the student.
- Rules are enforced consistently.
- Students understand the consequences of misbehavior.
- Incidents of inappropriate behavior are used to reteach or reinforce behavioral expectations.

**CLASSROOM CLIMATE AND ORIENTATION TO STUDENT LEARNING**

12. **School staff hold and demonstrate high expectations for all students.**

Teachers and other school staff by their actions and words communicate their belief that each student can succeed. That is, they communicate their confidence that the student is capable of learning the subject matter being taught, and that they won't give up on the student until he/she learns it. Even teachers' admonishments convey high expectations—e.g., "You are too smart to be doing that." High expectations are made concrete in other ways such as having a challenging curriculum for all students. One elementary school had college banners displayed as a way to convey high expectations for its students attending college in the future.

Practices that reflect high expectations for all students include:

- Setting high, yet realistic, instructional goals and objectives.
- Communicating these goals and objectives effectively so that students understand what is expected to them.
- Teachers interacting with students in an equitable manner—e.g., amount of attention and feedback given, opportunities provided to respond.
- Expecting all students to participate in classroom activities.
13. **School staff have the attitude, "What ever it takes."**²³

Teachers display a willingness to experiment, to try out new approaches, until they find what works. No excuses are made when disappointments occur; staff never give up on students.

14. **It is evident that all students are cared about and respected.**²⁴

The interactions of teachers with students contribute to students' sense of self-esteem and foster students' sense of belonging to the class and the school. Teachers make an effort to know about the cultural backgrounds of their students and show sensitivity and respect for students' cultural traditions and languages.

Evidence that students are cared for and respected includes the following:

- Students are generally comfortable and happy in the classroom.
- Individual differences are accepted and supported.
- Students concerns and opinions are encouraged and valued.
- The teacher shows awareness of and sensitivity to the cultural backgrounds of students (e.g., in the content of lessons, in classroom displays).

**Teacher Leadership and Development**

15. **Teachers are strongly invested and engaged in efforts to improve student achievement.**²⁵

Ultimately, the success of school reform efforts depend on what happens in the classroom. Teachers must manifest a strong sense of mission with regard to student achievement. Teacher engagement must occur before student engagement and higher achievement can occur, particularly in urban schools with high proportions of disadvantaged students. Hence, teacher "ownership" of the school improvement program model to be implemented is crucial. As an illustration, "Success for All," a widely replicated school reform program, requires an 80 percent favorable vote by school staff before implementation can proceed.

16. **There is an emphasis on the professional development of teachers.**²⁶

Professional staff development is a key component of successful school improvement efforts. Conventional teacher development or training efforts do not generally go far enough to be effective. Typical approaches attempt to equip teachers with new skills in a workshop setting, but do not ensure the these skills are applied to the classroom. To ensure such application, follow-up support is needed to help teachers link new skills with their current knowledge, test them out, adjust them to the specific conditions of their own classrooms, discuss the results with their colleagues, and make further adjustments, as needed. Thus, teachers must have the opportunity to learn from experience in a supportive environment.
Effective teacher training must be closely connected to the school improvement program and have the following features:

- presentation and demonstration of new skills;
- trainee practice of the new skills under simulated conditions;
- follow-up coaching and feedback as the skills are tried out in the trainee's own classroom.

Slavin and Madden (1989) maintain that effective training programs in the teaching of basic skills "are not simply a series of workshops to give teachers strategies to add to their repertoire; rather, they are complete, systematic and carefully constructed alternatives to traditional methods." They typically include detailed teacher's manuals, curriculum materials, lesson guides, and other related materials.

17. **Teachers are involved in decision-making and problem-solving.**

Providing opportunities for teachers to be part of school decision-making can foster teacher investment and engagement in school reform efforts. Having formal decision-making structures at the school that include teachers can serve to promote teacher professionalism and empowerment. The research evidence for a linkage between school-based management/teacher decision-making and improved student achievement is mixed. Hence, the salience of this factor to successful school improvement is not as well established as it is for many of the other factors listed in this review. Nevertheless, it would seem that significant teacher leadership is practically essential to launching a successful school improvement initiative.

**SCHOOL ENVIRONMENT AND OTHER SCHOOL-WIDE FACTORS**

18. **The school environment is orderly and safe.**

Effective schools are generally characterized by a orderly or structured environment that is conducive to learning. Evidence for a safe and orderly school environment includes:

- Students and staff feel safe at school.
- The school building is well maintained, regardless of its age.
- All staff are involved in monitoring and maintaining student discipline.
19. **Strong leadership for school improvement is provided by the principal.**

Strong leadership from the principal can be important in keeping efforts to improve student achievement moving forward. Studies indicate that the principal's instructional leadership is a key factor in effective elementary schools that serve disadvantaged students. Principals can be helpful in keeping staff focused on the school's mission and outcome goals, obtaining resources to assist improvement efforts, and protecting teachers from intrusions or interruptions that detract from efforts to increase student achievement.

A study of factors associated with school effectiveness found that principal autonomy in the hiring and firing of teachers was linked with higher student achievement. This study, however, was of eighth to twelfth grade students.

20. **Classroom size (i.e., number of students per classroom) is small.**

The research literature investigating the association between reduced class size and higher academic achievement has shown rather mixed results. However, recent reanalysis of this literature, plus new studies, point to a positive link between lower class size and higher academic achievement. That is, if class size is reduced below 20, student achievement can be increased by substantial amounts. Reduced class size seems most beneficial for kindergarten through third graders, for economically disadvantaged and ethnic minority students, and in the areas of reading and mathematics achievement. In one study, the beneficial effect of lower class size persisted four years later.

Lower class size, by itself, seems unlikely to improve student achievements unless it is accompanied by improved classroom practice. Reduced size may permit the kinds of changes in the classroom (e.g., better classroom management, increased student academic engagement time) that make a difference in student learning.

**Characteristics or Practices with Small or No Effects**

The following practices and characteristics have been found to have very limited or no effectiveness in improving the academic achievements of disadvantaged students:

- retention in grade for poorly performing students
- using a slowed down curriculum for lower achieving students
- remedial programs (compared to prevention programs)
- achievement testing programs not closely aligned with curriculum and classroom instruction
- teacher training programs without follow-up support for classroom implementation
- diffuse or broad school missions
- site-based management by schools
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LEADING PROGRAM MODELS
(Compiled by Tom Bohman, Wilder Research Center)

Below are brief descriptions of key program models with evidence for improving the academic achievement of disadvantaged elementary-school students.

Robert Slavin's Success for All -- a program based on research that links the academic problems of children in their formative years (e.g., retention or poorly developed reading skills) to being at subsequent risk of dropping out. Success for All is designed to ensure that children do not experience this initial failure and are therefore able to reach the third grade with adequate basic skills. For best results, the sponsors of Success for All recommend a full-day preschool and kindergarten that emphasize language development, readiness, and self-concept. The children use the Peabody Language Development Kits and a program called Story Telling and Retelling (STAR). In grades 1-2, trained tutors work with children who are failing to keep up with classmates in reading. In addition to tutoring, daily 90-minute reading sessions are held with small homogeneous ability groups. The kindergarten and first-grade programs emphasize language skills and provide children with phonetically regular mini-books which they read to each other in pairs. In the second and third grades, students use basal readers, but not workbooks. In these grades the reading program emphasizes cooperative learning activities built around partner reading, identification of characters, settings, problems, and solutions in narratives.

Stanley Pogrow's Higher Order Thinking Skills (HOTS) -- a program designed for Chapter 1 elementary school children. HOTS is based on the idea that current drill-and-practice remedial programs do not develop children's intellectual abilities. Instead, HOTS uses computers and Socratic questioning techniques to develop learning skills that strengthen the student in all academic areas. In a typical HOTS program, students spend at least 35 minutes a day in the computer lab in groups of 15 or fewer. Teachers use a scripted manual for each lesson. The first segment of 15 to 20 minutes consists of intensive conversation with the teacher, generally focusing on linkages between the previous day's work and concepts learned earlier.

Henry Levin's Accelerated Schools -- a program designed to enrich learning for educationally disadvantaged students. This program is characterized by high expectations for students, an elevated status for teachers, and the substantial involvement of parents. There is a great deal of independence from school to school, including the right for each school to set its own goals; but the Accelerated Schools model recommends that all participating schools have as a goal to raise the performance levels of every student to at least grade level by the time he or she leaves school. The model encourages experimentation, and teachers use such techniques as peer tutoring and cooperative learning.

James Comer's School Development Program -- a process designed to change the climate of schools that primarily serve disadvantaged children and youth to make schools more responsive to their needs and those of their families. The Comer program uses school-
based decision making and revitalized bonds between the school, the family, and the community to help children learn, parents function more effectively in supporting and educating their children, and teachers develop professionally. The Schools Development Program is a process that includes three essential features: the School Planning and Management Team (SPMT), the Mental Health Team (MHT), and the Parent Program. The SPMT is the most important element of the program. This team is the governing body in a Comer school, and is made up of the principal, teachers, other school staff, a parent representative, and an expert in child development. The MHT is made up of classroom teachers, resource teachers, administrators, psychologists, social workers, and nurses who focus on improving school climate.

Marie Clay's Reading Recovery – an intensive early-intervention program for first grade children who are having trouble with reading. Based on years of research in New Zealand, Reading Recovery is designed to promote success by teaching reading strategies before a pattern of failure can develop. The program includes procedures for the teaching of reading, a staff development program directed by a "teacher leader" with a year's training, and a set of administrative systems that work together for quality control. In most cases, Reading Recovery teachers select the lowest achieving students in the first grade and provide them with one-on-one tutoring for 30 minutes each day. These tutoring sessions supplement rather than replace regular reading lessons, and they include both reading and writing activities as well as strategies to develop children's reasoning and thinking skills.

Mortimer Adler's Paideia Program --based on the idea that all children are entitled to the same education both in terms of content and instructional methodology. Thus all children are given the same course of study, regardless of background or ability. Adler's program is based on three methods of instruction: (1) Didactic Instruction -- the classroom activity which focuses on teacher lectures (the kind of instruction more appropriate for the "acquisition of knowledge"); (2) Coaching—one-on-one instruction in which the teacher/coach or a peer works closely with students to improve their skills rather than assuming that students are able to transfer general corrective statements to their own work (the kind of instruction most appropriate for the "development of the intellect"); and (3) Socratic seminars—discussions among students and teachers based primarily on questions asked to explore ideas (designed to improve the students' expression of ideas, their ability to support ideas with relevant information, and develop better thinking and listening habits).
REFERENCES FOR PROGRAM MODELS


