V. Innovative Educational Methods and Practices in MSAP Schools

This chapter examines the extent to which federally funded magnet projects and schools feature innovative educational methods and practices that meet identified student needs and interests. In examining this question, we take a broad view of innovative practices. These include: innovation in the overall *school program or mission* (e.g., a new school focus or theme); innovations in *instructional practices* (e.g., new curriculum content or pedagogy); and innovations in *supports for teaching and learning* (e.g., new professional development activities for teachers, or improvements in the school climate).

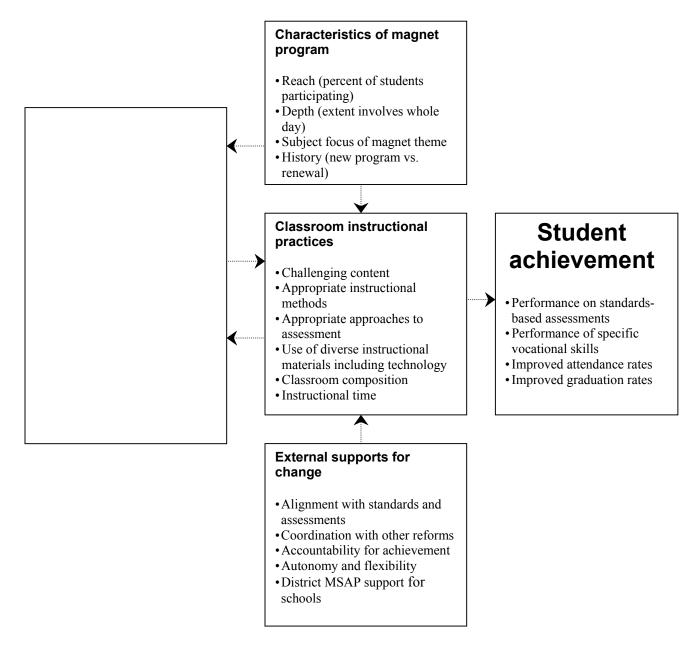
Drawing on recent research on school effectiveness, we hypothesize that changes in these three areas may lead to improved student achievement in several ways. In particular, as shown in Figure V-1, we anticipate that adopting a clear school mission or focus and implementing strong supports for teaching and learning will help improve the quality of instruction. Improvements in instructional quality, in turn, should lead to gains in student achievement. ^{2, 3}

See, for example, Bryk, A., V. Lee, and P. Holland. *Catholic Schools and the Common Good*. Cambridge, MA: Harvard University, 1993; Coleman, J.S., and T. Hoffer. *Public and Private High Schools: The Impact of the Community*. New York: Basic Books, 1987; Newmann, F.M., and Associates. *Authentic Assessment: Restructuring Schools for Intellectual Quality*. San Francisco: Jossey-Bass, Inc., 1996; Purkey, S.C. and M.S. Smith. "Effective Schools: A Review." *Elementary School Journal 83*(4) (1983), 427–452; and Sebring, P.B., and A. Bryk. "School Leadership and the Bottom Line in Chicago." *Phi Delta Kappan 8*(6) (2000), 440–443.

See, for example, Brophy, J.E. and T. Good. "Teacher Behavior and Student Achievement." In Handbook of Research on Teaching, Third Edition, edited by M. Wittrock. New York: Macmillan, 1986; Carpenter, T.P., E. Fennema, and M.L. Franke. "Cognitively Guided Instruction: A Knowledge Base for Reform in Primary Mathematics Instruction." Elementary School Journal 97 (1996), 3–20; Gamoran, A., A.C. Porter, J. Smithson, and P.A. White. "Upgrading High School Mathematics Instruction: Improving Learning Opportunities for Lowachieving, Low-income Youth." Educational Evaluation and Policy Analysis, 19(4) (1997), 325-328; Knapp, M.S., P.M. Shields, and B.J. Turnbull. Academic Challenge for the Children of Poverty. Washington, DC: U.S. Department of Education, 1992; National Reading Panel. Report of the National Reading Panel Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction. Bethesda, MD: National Institutes of Health, 2000; Taylor, B.M., P.D. Pearson, K.F. Clark, and S. Walpole. Beating the Odds in Teaching All Children to Read. University of Michigan, Ann Arbor: Center for the Improvement of Early Reading Achievement, 1999; Teddlie, C. and S. Stringfield. Schools Making a Difference: Lessons from a 10-year Study of School Effects. New York, NY: Teachers College, Columbia University, 1993; and Wong, K.K., L.V. Hedges, G.D. Borman, and J.V. D'Agostino, Final Report Prospects; Special Analysis, Washington, DC: U.S. Department of Education, Office of the Undersecretary, 1996.

As shown in Figure V-1, we also hypothesize effects of external policies and supports, including alignment with standards and assessments and coordination with other reforms. The external policies and supports implemented in MSAP districts were described in Chapter IV.

Figure V-1 Conceptual Framework: Connections between Improved Student Achievement and Various Aspects of Magnet School Educational Programs and Contexts



In this chapter, we describe the innovations that MSAP-supported schools have adopted. The results are based on data from a survey completed by MSAP principals during the 1999-2000 school year—the second year of the MSAP grant. In our second and third evaluation reports, to appear in 2001 and 2002, we will report results based on a survey of principals to be conducted during 2000-01, the third year of the MSAP grant, and we will examine the relationships between the innovations adopted by MSAP schools and student achievement.⁴

The chapter is organized in five sections. In the first three sections, we describe the key innovations that MSAP schools have implemented in their programs, classroom instruction, and supports for teaching and learning. Then, we consider the approaches that MSAP schools have taken to identify and respond to student needs. Finally, we examine the extent to which MSAP schools have served as models for other schools and districts interested in adopting new practices.

Innovations in the School Program

One key characteristic of magnet schools is the adoption of a theme or focus area. A theme is expected to enhance the effectiveness of magnet schools by nurturing the development of a unique school identity and by promoting a coherent curriculum and program of instruction. To identify the theme or themes adopted by each MSAP school, we reviewed the MSAP grant applications, and, for each school, we classified the themes using the following categories. (We classified each school's theme in multiple categories if more than one category fit.)

- Mathematics—usually specified only as "math"; often linked to science
- **Science**—both general science and, less frequently, specific areas of study such as zoological sciences or medical sciences
- **Technology**—generally one of several descriptors by schools emphasizing the use of computers and other high-tech equipment; often linked to mathematics and science
- **Academics**—themes focusing on academic subject areas other than mathematics and science (e.g., language arts, humanities, government, or law)
- Language—foreign language study, including language immersion programs
- Gifted and Talented Education (GATE)—special academic programs designed for high-achieving students
- Arts—fine, graphic, integrated, performing, and visual arts; drama; and music all included
- Careers—programs to help prepare students for careers in general (most common at the elementary level) or for specific careers (most common at the high school level, with themes such as Aerospace/Aviation, Pre-Engineering, Medical Professions, and Travel and Tourism)
- **Communications**—mass media, broadcasting, written communication, and communication in general
- **Community**—programs that either conduct studies of the community or are linked to it through volunteer service or special projects
- Global studies—expansion of the curriculum to take in the world, for a general orientation or for a specific focus such as Pacific Rim Studies

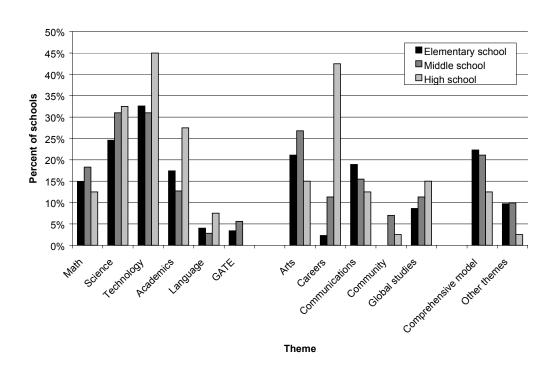
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⁴ See Chapter VI and the Methodology section of the Overview Appendix for more information on our planned analyses of student achievement.

- Comprehensive models—externally developed education models or teaching methodologies that MSAP schools identify as an important aspect of their theme
- Other themes—themes that do not fit into the other categories

Figure V-2, below, displays the percentage of the 286 MSAP schools that have themes in each of these areas.⁵ At the elementary level, the most common themes are science, technology, the arts, and communications. At the middle school level, the common themes are similar: science, mathematics, technology, and the arts. At the high school level, programs in science, technology, and academics, as well as career-oriented programs, are quite frequent. Themes based on externally developed comprehensive educational models and teaching methodologies also are fairly common, especially in elementary and middle schools. The models most frequently mentioned are the Pre- or Primary International Baccalaureate (16 schools), Montessori (12 schools), Microsociety (5 schools), Paideia (5 schools), Multiple Intelligences (3 schools), and Core Knowledge (3 schools).

Figure V-2
Percentage of MSAP Schools That Have Adopted Various Themes, by Level



n=286 schools

Source: MSAP applications and performance reports

While, as Figure V-2 indicates, some MSAP schools have adopted comprehensive models that they identify as part of their magnet theme, many other MSAP schools have adopted models but do not view the model as part of their theme. In fact, about 56 percent of MSAP schools report adopting an externally designed model.⁶ The adoption of comprehensive designs is especially likely in school-wide Title I schools. Sixty-one percent of MSAP schools operating school-wide Title I programs have adopted external designs, compared to 54 percent of schools operating Title I targeted assistance programs, and 48 percent of non-Title I schools. The percentage of MSAP Title I schools adopting comprehensive models

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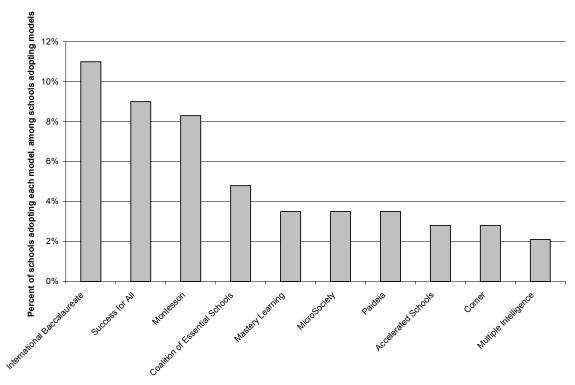
⁵ See Table A-V-1 in Appendix V.

⁶ See Table A-V-2 in Appendix V.

is considerably higher than the percentage for Title I schools overall. Nationally, in 1998-99, about 31 percent of Title I schools had adopted comprehensive reform models.⁷

The ten most commonly adopted externally developed models adopted by MSAP schools include five of the six identified above as part of magnet school themes (International Baccalaureate, Montessori, Microsociety, Paideia, and Multiple Intelligences), as well as five others (Success for All, Coalition of Essential Schools, Mastery Learning, Accelerated Schools, and the Comer School Development Program). About half of the MSAP schools that adopted models selected one of these ten. (See Figure V-3.) The models selected by the other schools are relatively uncommon—each by and large being selected by only one or two schools.

Figure V-3
Specific Comprehensive Models Adopted by MSAP Schools



Ten Most Common School Reform Models Adopted by MSAP-supported Schools

n=145 schools

Source: MSAP Principal Survey, 1999-2000, Item 27

The national percentage of Title I schools adopting reform models is based on data from the 1998-99 wave of the National Longitudinal Survey of Schools. See Berends, M., S. Kirby, S. Naftel, and J.S. Sloan. (In review.) *The Status of Standards-based Reforms in Title I Schools: First-year Findings from the National Longitudinal Survey of Schools.* Washington, DC: U.S. Department of Education, Planning and Evaluation Service. Nationally representative data are not currently available on the percentage of non-Title I schools that have adopted comprehensive models.

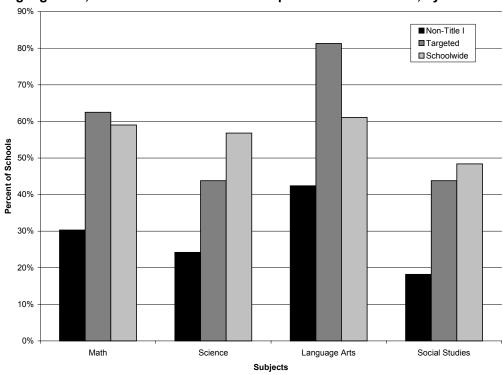
See Table A-V-3 in Appendix V.

Innovations in Classroom Instructional Practices

Innovations in classroom instruction clearly are an essential element of most MSAP projects. Thus, we asked the principal of each MSAP school to indicate whether the school had introduced changes in instruction in mathematics, science, language arts, or social studies since the MSAP award. Overall, about 53 percent of MSAP schools report making changes in instructional practices in mathematics, 48 percent in science, 59 percent in language arts, and 41 percent in social studies.

The data indicate that MSAP Title I schools are more likely to report making changes in instructional practices in the core subjects than non-Title I schools. Figure V-4 displays the results for MSAP elementary schools. For example, in mathematics 30 percent of non-Title I elementary schools report changes in instruction, compared to 63 percent for Title I targeted assistance schools and nearly 60 percent for Title I school-wide programs. These differences between Title I and non-Title I schools suggest that receipt of an MSAP award may engender a process of curriculum reform in Title I schools. In non-Title I schools, an MSAP award may help develop a new curriculum area or theme, without necessarily affecting the full program of instruction.

Figure V-4
Percentage of MSAP Elementary Schools That Have Introduced Changes in Mathematics, Science, Language Arts, or Social Studies since Receipt of the MSAP Award, by Title I Status



n=144 schools Source: MSAP Principal Survey, Items 25 and 32

See Table A-V-4 in Appendix V.

In examining the relationship between Title I status and the implementation of magnet activities, it is necessary to focus separately on elementary, middle, and high schools because a much higher proportion of MSAP elementary schools operate Title I programs than do MSAP middle and high schools. Combining all schools in a single analysis would result in elementary schools being disproportionally represented among Title I schools, and middle and high schools among non-Title I schools.

For schools that report making changes in instruction since receiving the MSAP award, we asked the principal for a brief sentence describing the kinds of changes that were implemented in each subject. In mathematics, many principals report increasing the emphasis given to higher order thinking skills—for example, problem solving, reasoning, work with open-ended problems, and inquiry. About 35 percent of the elementary schools that report making changes in the instruction of elementary mathematics cite increasing the emphasis on higher order thinking. At the middle and high school level, schools report adding new mathematics courses and, especially at the high school level, increasing the use of technology.

Similarly, in science, at all levels, schools report an increased emphasis on higher order thinking, content integration across courses, and technology. In addition, about 20 percent of elementary and middle schools report increasing the integration of science with other subjects.

In language arts, elementary schools report an increased emphasis on balanced instructional methods (e.g., phonemic awareness in the early grades), integration across subjects, and changes in grouping for instruction (for example, periodic regrouping of students based on achievement). At the middle and high school levels, principals report the addition of new courses, as well as increased efforts to align instruction with state and district standards, and the incorporation of technology.

Finally, in social studies, elementary and middle school principals report increased integration of social studies with other subjects. At the high school level, they report increased alignment with state and district standards, the addition of new courses, and the incorporation of technology.

Innovations in Supports for Teaching and Learning

We gathered data on each of the nine types of supports for teaching and learning in MSAP schools that were included in the conceptual model in Figure V-1:

- Ongoing professional development for teachers
- Professional community among teachers
- Positive school climate
- Mechanisms for student academic support and personalization
- Mechanisms for parental involvement
- Organization of school day and staff configuration focused on learning
- High standards for all students
- School leadership focused on teaching and learning
- Continuous improvement processes

In the discussion below, we focus on three of these: high standards for all students, a strong professional community among teachers, and a positive school climate. These three types of supports for teaching and learning have been given particular attention in the literature on effective schools (see footnote 1, in this chapter), and thus they are especially critical. We plan to focus on other dimensions in later reports.

Standards. The adoption of high standards for all students is a key element of current school reform efforts. At the state and district levels, such reforms include the development of curriculum

¹¹ See Table A-V-5 in Appendix V.

frameworks, aligned assessments, and student performance standards. (See Chapter IV for a discussion of these state- and district-level reforms.) If standards are to have an effect at the school level, they must be translated into specific curriculum interventions and required activities for students—for example, requirements that all students encounter particular types of content or engage in particular types of intellectual tasks.

To examine the standards set for students at the school level, we asked each MSAP principal whether the school required particular types of content or instructional practices for all students. The specific required practices we asked about differed at the elementary, middle, and high school levels, reflecting differences in the curriculum across the three levels. At the elementary level, we asked about eight required practices that have been suggested in the literature on effective schools: one hour of reading each day; one hour of math each day; three hours of science each week; a required number of books to read; a required amount of writing; a required oral presentation; a required amount of homework; and a required portfolio.

Figure V-5 shows the percentage of MSAP elementary schools that have adopted each type of requirement, separately for non-Title I, Title I targeted assistance, and Title I school-wide schools.¹² (The results of comparable analyses for middle and high school are shown in Appendix V.) The results indicate that nearly all MSAP schools require at least one hour of reading and math each day. A smaller but still substantial proportion of MSAP schools requires each of the other activities. In general, Title I schools are somewhat less likely than non-Title I schools to have adopted the specific requirements we asked about.

¹² See Table A-V-6(a) in Appendix V.

100% ■Non-Title I ■ Targeted Assistance 90% Percent of MSAP elementary schools with required activity □Schoolwide 80% 70% 60% 50% 40% 30% 20% 10% One hour of One hour of Three hours Required Required Portfolio Required Required oral reading each math each of science number of amount of amount of presentation writing day day each week books to read homework Required Practice

Figure V-5
Percentage of MSAP Elementary Schools That Require Specified Practices for All Students, by Title I Status

n=155 schools

Source: MSAP Principal Survey, 1999-2000, Item 46

To present our data on required practices, we compared the number of practices required by each MSAP school to the total of required practices identified for that level (e.g., for elementary level, a total of eight practices). The results for MSAP elementary schools are presented in Figure V-6, with each dot indicating one MSAP elementary school. For example, 0 practices has three dots, indicating that three elementary schools require none of the eight practices; 1 also has three dots, indicating that three schools require one of the eight practices, and so on to 8 practices, with 42 dots, indicating that 42 elementary schools require all eight practices. (The 42 elementary schools account for 27 percent of all the MSAP elementary schools summarized in the figure.¹³) As Figure V-6 shows, substantial variation is found across MSAP elementary schools in the extent to which these high standards for all students have been implemented. While 42 MSAP elementary schools require all eight practices, 13 schools (8 percent) require none, one, or two.

¹³ See Table A-V-7 in Appendix V. Results for middle and high schools also are shown in this table.

20 0 1 2 3 4 5 6 7 8

Number of Required Practices

Figure V-6 Number of Activities Required by MSAP Elementary Schools

How to read: Each dot represents one MSAP elementary school.

n=156 schools

Source: MSAP Principal Survey, 1999-2000, Item 46

Professional community. Recent research has called attention to professional community among school staff as an important element of effective schools (e.g., the research cited in footnote 1 of this chapter). For example, Newmann and Wehlage have defined professional community in terms of three conditions: a shared sense of purpose among teachers focusing on student learning; collaborative activity to achieve the shared purpose; and a sense of collective responsibility for student learning. ¹⁴ To gather data on aspects of professional community in each MSAP school, we asked each principal to express agreement or disagreement with 14 short statements about the work environment in the school.

The results are presented in Figure V-7.¹⁵ The results show that some aspects of professional community are more common than others in MSAP schools. For example, principals of most MSAP schools strongly agree that their teachers care about students. About half strongly agree that their teachers support each other, are willing to put in extra hours, and collaborate. Fewer principals strongly agree that rules are enforced or that there is coordination across grades.

For all but three of the 14 elements of professional community we asked about, elementary principals reported more positive conditions that did secondary principals. The three exceptions are teacher coordination across grades, principal confidence in the expertise of their staff, and the principal's belief that it is worthwhile to do his or her best. (On the latter, the percentage of principals reporting this as a problem is very small for both elementary and secondary schools.)

Newmann, F. and G. Wehlage. Successful School Restructuring. Madison, WI: Wisconsin Center for Education Research, 1995, 30.

¹⁵ See Tables A-V-8 (a), (b), and (c) in Appendix V.

80% ■ Elementary school 70% Percent of MSAP principals who strongly agree ■ Middle school ☐ High school 60% 50% 40% 30% 20% 10% Most lead test state bale's about the sort Turing and the enter and and a state of the enter the state of the sta Teachers and directed and the state of the s Teachers willing to put in active hours Mod tead hat state about students Administrative and lead test substantials I have confidence in teacher at the first Took to mad to mothing early dear Teacher support enducing tiles Staff members support each other Nostleather seathern deas School seems we till tartily **Aspect of Professional Community**

Figure V-7
Percentage of MSAP Principals Who Strongly Agree with Aspects of Professional Community in MSAP Schools, by Level

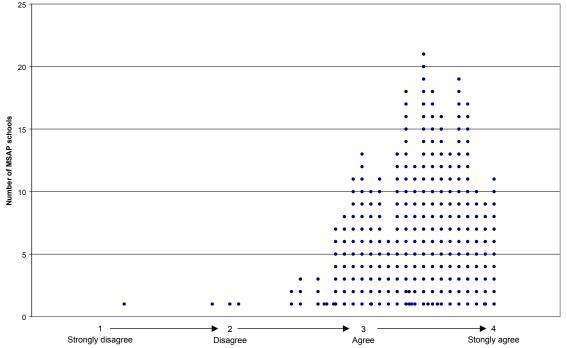
n=254-259 schools (varies with item) Source: MSAP Principal Survey, 1999-2000, Item 11

To summarize our data on professional community, we created a composite index to describe the level of professional community in each school. First we created an index by averaging each principal's degree of agreement with the 14 statements about the school work environment described above, coding strongly agree=4, agree=3, disagree=2, and strongly disagree=1. A value of the composite index of 4 indicates that the principal strongly agreed with *all* 14 statements about the school work environment we included on the survey. Since the statements generally describe positive aspects of professional community, this implies a strong professional community in the school. An index value of 3 might indicate that the principal expressed agreement (but not strong agreement) with each statement, or it might indicate a mix of strong agreement on some items and disagreement on others. Thus, an index value of 3 represents a somewhat less strong sense of professional community than an index value of 4. Similarly, an index value of 2 might indicate that the principal expressed disagreement with each statement, or it might indicate a mix of strong disagreement and agreement, implying a relatively weak sense of community. Finally, an index value of 1 indicates that the principal strongly disagreed with *all* 14 statements included on the survey. This implies little sense of professional community in the school.

We reverse-coded two negative items: ethnic differences create tensions, and it is sometimes a waste of time to do my best.

The results for elementary schools are shown in Figure V-8.¹⁷ (Results for middle and high schools are shown in the Appendix.¹⁸) The results are presented with dots: for example, the first dot between 1 (strongly disagree) and 2 (disagree) indicates that in one MSAP elementary school the principal strongly disagreed with nearly all of the 14 survey items regarding professional community and thus reported a weak sense of professional community in the school. Figure V-8 shows that most of the schools have index values between 3 (agree) and 4 (strongly agree), indicating that relatively high levels of professional community are reported for the MSAP elementary schools. Some variation is also evident: some MSAP elementary schools have index values between 2 and 3, indicating moderate levels of professional community, and two schools have index values below 2.

Figure V-8 Strength of Professional Community in MSAP Elementary Schools



Overall Strength of Professional Community (Degree of Agreement)

How to read: Each dot represents one MSAP elementary school.

n=159 schools

Source: MSAP Principal Survey, 1999-2000, Item 11

School climate. As a final measure of the supports for teaching and learning in MSAP schools, we asked the principal of each MSAP school to report on the extent to which eight types of student problems are present in the school.¹⁹ The eight types of problems include: tardiness, absenteeism, transience, apathy, lack of parental involvement, poverty, students unprepared to learn, and poor health.

¹⁸ See Table A-V-9 in Appendix V.

V-12

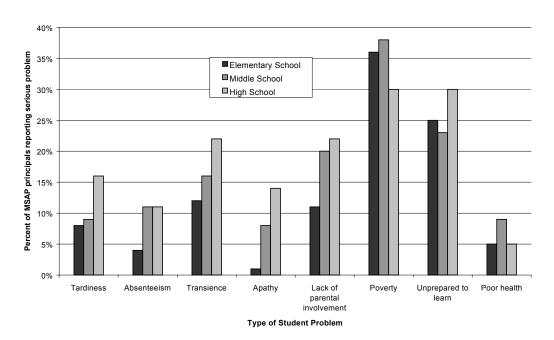
¹⁷ See Table A-V-9 in Appendix V.

The items we used are drawn from the Schools and Staffing Survey (SASS). Analyses based on the 1993-94 SASS, the most recent year for which data are currently available, indicate that principals tend to report that school problems are somewhat less severe than do teachers in the same school. Thus, we expect that the results presented above may be more positive than the results we would have obtained if we had surveyed teachers. See Henke, R.R., S.P. Choy, S. Geis, and S.P. Broughman, *Schools and Staffing in the United States: A Statistical Profile*, 1993-94. Washington, DC: U.S. Department of Education, 1996.

As shown in Figure V-9, more than 30 percent of MSAP elementary, middle, and high school principals report that poverty is a serious problem in their schools, and more than 20 percent report that students arriving unprepared to learn is a serious problem.²⁰ More than 10 percent of elementary school principals, more than 15 percent of middle school principals, and more than 20 percent of high school principals report that lack of parental involvement and student transience are serious problems.

One way to assess these results is to compare them with the results obtained by the Schools and Staffing Survey (SASS) in a national sample of schools. SASS results are available for the nation as a whole, as well as for central city, suburban (urban fringe/large town), and rural/small town schools. This comparison suggests that the percent of MSAP principals reporting serious problems is higher than the percent for the overall national population of schools, and slightly lower than the national results for principals in central city schools.²¹

Figure V-9
Percentage of Principals Reporting Serious Student Problems in MSAP Schools, by Level



n=264 to 266 schools (varies with items)
Source: MSAP Principal Survey, 1999-2000, Item 11

To summarize our data on problems in each MSAP school, we created another composite index by averaging each principal's responses concerning the eight problems shown in Figure V-9, coding each response as follows: serious problem=4, moderate problem=3, minor problem=2, and not a problem=1. The results for MSAP elementary schools are shown in Figure V-10, with each dot again representing one MSAP elementary school.²² As the figure shows, the variation across schools is quite substantial. Some

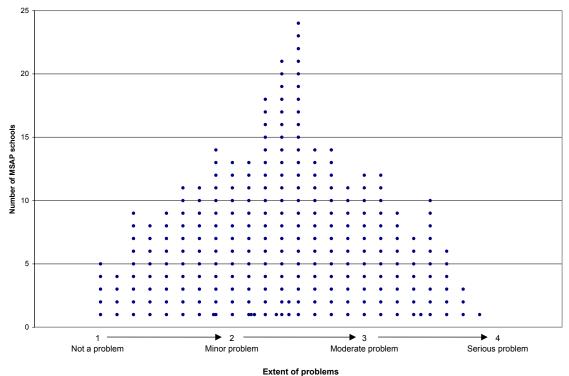
See Table A-V-10 in Appendix V.

For example, in 1993-94, the most recent year for which SASS data are currently available, 26 percent of principals of central city elementary schools reported that poverty was a serious problem, as did 11 percent of suburban elementary principals, 22 percent of central city secondary principals, and 8 percent of suburban secondary principals. The percents of principals reporting that students arrive unprepared to learn are 19, 8, 17, and 9 respectively. (See Henke et al., 1996.)

²² See Table A-V-11 in Appendix V.

MSAP elementary schools have index values between 1 and 2, indicating that, on average, the problems in the school range from none to minor. At the same time, some schools have index values between 3 and 4, indicating that, on average, the problems in the school range from moderate to serious. (Results for middle and high schools are shown in the Appendix.²³)

Figure V-10 Extent of Student Problems in MSAP Elementary Schools



How to read: Each dot represents one MSAP elementary school.

n=159 schools

Source: MSAP Principal Survey, 1999-2000, Item 12

In addition to asking about the student problems discussed above, we also asked about several other types of problems some MSAP schools face, including vandalism and physical abuse of teachers, as well as alcohol and drug abuse. The results are shown in Figure V-11.²⁴ While these problems are less common than the types of student problems shown in Figure V-9, some of them do occur in MSAP schools, especially in MSAP middle and high schools. For example, six percent of the principals of MSAP middle and high schools report that disrespect for teachers is a serious problem, and eight percent of the principals of MSAP high schools report that pregnancy is a serious problem.

See Table A-V-11 in Appendix V.

²⁴ See Table A-V-12 in Appendix V.

Elementary school
Middle school
High school
High school

And the Angele de Berger of the Berger of t

Figure V-11
Percentage of Principals Reporting Additional Serious Student Problems in MSAP Schools, by Level

n=258-260 schools

Source: MSAP Principal Survey, 1999-2000, Item 12

Our interviews with MSAP Project Directors provide some illustrations of the ways in which the adoption of a magnet school theme has helped MSAP schools to improve the school's sense of professional community and school climate.

MSAP Project Directors told us:

- The MSAP Project Director in one district says that the integrated thematic instruction in one MSAP school has two benefits. It is raising student achievement and reducing the number of behavior problems.
- A number of Project Directors have reported that the MSAP grants bring new energy to their schools, but it takes time and effort to get the programs started. As one Project Director stated, "For the first time since our project started 12 months ago, this month I began to hear principals saying, 'My students and staff are energized by this grant.' We are 'settling in' after all sorts of efforts to get things going. It took a lot of time, and it was a challenge to get the computers hooked up."

• An MSAP school is one of 30 schools in the state recognized for its educational reforms in incorporating arts into the core subjects, and it has established links with a community college, business partners, and other members of the community. For example, students and faculty at an MSAP high school worked together, creating a sculpture to celebrate the millennium through a state Art Museum effort. The Project Director says, "The community has benefited so much from this grant," and notes that "students have a thriving school that would otherwise be dying."

Responding to Student Needs and Interests

MSAP schools are intended to adopt innovative practices that meet identified student needs and interests. We set out to examine the extent to which this objective has been met, in several ways. First, we asked each MSAP principal whether the school administers a parent satisfaction survey or student survey to assess school performance. We reasoned that surveys of this type would indicate a commitment to identify student needs and interests. Overall, about 57 percent of MSAP school principals report using a parent satisfaction survey for school self-assessment, and about 58 percent report using a student survey. ²⁵

As a second approach to examining the extent to which MSAP programs incorporate information on students' needs and interests, we asked whether several specific practices have been implemented, including the provision of additional time for low achievers, individualized instruction, and tutoring by non-school staff. Between 55 and 62 percent of MSAP schools had adopted each of these practices prior to the MSAP award, and between 30 and 41 percent of MSAP schools have adopted each of these practices since the award or plan to do so in the next two years. Only 2 to 7 percent of MSAP schools have no plans to implement these practices.²⁶

Finally, we asked principals to report on the ways in which two types of students with special needs are engaged in magnet programs: students with individual education plans (IEPs), and limited English proficient (LEP) students. We found that, on average, in MSAP elementary schools, 86 percent of students with IEPs are involved in regular magnet activities (i.e., magnet activities intended for all students), 78 percent are involved in MSAP middle schools, and 69 percent are involved in MSAP high schools. In addition, 40 percent of elementary students with IEPs are also involved in magnet activities specially designed to accommodate students with special needs, as are 44 percent of middle school students with IEPs, and 25 percent of high school students with IEPs.²⁷

Similarly, in MSAP elementary schools, 80 percent of LEP students are involved in regular magnet activities, as are 86 percent in MSAP middle schools, and 72 percent in MSAP high schools. In addition, at the elementary level, 37 percent of LEP students are involved in magnet activities specifically designed to accommodate LEP students, as are 32 percent at the middle school level, and 26 percent at the high school level. About 22 percent of elementary LEP students are involved in bilingual magnet activities, as are 10 percent of middle school LEP students, and 2 percent of high school LEP students. All of these results suggest that magnet school programs are making efforts to respond to students with special needs and interests.

²⁵ See Appendix Table A-V-13 in Appendix V.

See Appendix Table A-V-14 in Appendix V.

²⁷ See Appendix Table A-V-15 in Appendix V.

The interviews we conducted with district MSAP project directors provide a detailed illustration of the strategies one project has implemented to accommodate the specific needs of at-risk students.

An MSAP Project Director told us:

• One MSAP project is making special efforts to serve low-achieving students. They are using funds normally set aside for summer school to identify the most at-risk students and involve them in extended-day schooling. They have also developed instructional packages aimed directly at working with low-achieving students. As a result, other schools are requesting the materials and asking to participate in the professional development activities that focus on the materials. In addition, the project has developed training packages on innovative practices, drawing considerable attention from other schools.

Role of MSAP Schools as Models

To examine the role of MSAP schools as models of the implementation of innovative practices, we asked each MSAP principal whether the school has provided information to other schools. Overall, about 70 percent of MSAP principals report that they have provided such information. MSAP high schools are somewhat more likely than elementary schools to serve as models: about 81 percent of MSAP high school principals report that they have shared information with other schools, compared to about 66 percent of elementary school principals.

Nearly three-quarters of the MSAP principals also report that they have received requests for information from researchers and others outside the schools. We asked about the types of information most frequently requested. Principals report that the most frequent requests are for information about the school's theme. Requests for information on classroom instruction also are relatively common, especially about the use of computers and other technology; as are requests about instructional supports, including information on the use of time (e.g., block scheduling), parental involvement, and improvements in school safety and climate.

Our telephone interviews with district MSAP project directors provide several specific examples of the ways MSAP schools have served as models.

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²⁸ See Table A-V-16 in Appendix V.

MSAP Project Directors told us:

- The teachers in one MSAP school developed a checklist tool to make the database of
 objectives more manageable. It has been circulated within the district, and other, nonMSAP staff are now using it as well.
- A grantee district that received a Global Connection grant to increase the use of technology across subject areas in all of its schools has turned to its MSAP high school as a source of ideas for other schools in the city. At state and national conferences as well as local training sessions, the school's teachers have shared innovative practices on the integration of academic and vocational classes through the use of technology. The school has had many visitors from other states and countries who are interested in the innovative practices developed at the school.
- One MSAP project has found professional development particularly useful, and it has
 fostered certain practices in other district schools. These practices include, for
 example, being able to schedule common planning and discussion time for teachers;
 and giving teachers blank tapes so that they can videotape themselves in the
 classroom and review the tapes in private. Some of the program's MSAP teachers
 have received national recognition as being exemplary.

What We Have Learned

- MSAP schools have adopted a variety of themes, with many focusing on science, technology, the arts, communication, and careers. Many MSAP schools have also adopted programs based on externally developed comprehensive models, such as the International Baccalaureate, Montessori, and Success for All.
- Many MSAP schools—especially Title I schools—have introduced changes in the
 instruction of mathematics, science, language arts, and social studies since receiving
 the MSAP award. These changes frequently involve giving additional emphasis to
 higher order thinking, including problem solving, reasoning inquiry, and applications.
- There is considerable variation across MSAP schools in supports for teaching and learning. In particular, schools vary in the extent to which they have established high standards for all students, in the sense of professional community among teachers, and in school climate.
- There is evidence that many MSAP schools have developed programs that respond to individual students' needs—for example, through the provision of extended learning time, or through the inclusion of students with special needs in magnet programs.
- Some magnet schools—especially high schools—serve as models for other schools in their areas or provide information to researchers and other audiences. In particular, MSAP schools provide information on their school themes and focus areas, on changes in instructional practices, and on supports for teaching and learning.

What We Hope to Learn

 While our data from the MSAP applications and the MSAP Principal Survey provide a broad overview of the themes that MSAP schools have selected, we do not yet

- know how well the schools have been able to implement instructional practices consistent with these themes. Our Case Study data should provide important new information on this topic.
- The information on instruction available for this report is entirely based on the principal's perspective; we do not yet know how teachers describe instruction in their classrooms. We are observing classrooms in Case Study schools and plan to collect data from teachers in Case Study schools in spring 2001.
- While we have provided an initial portrait of the supports for teaching and learning in MSAP schools, this picture is entirely based on data from MSAP principals. We should learn much more about professional development, leadership, and the sense of community and climate, based on data from teachers to be collected in spring 2001.
- Our survey data indicate that many MSAP schools have developed programs designed to respond to individual student needs; we lack information from students about the extent to which the MSAP programs have succeeded in meeting these needs. Our student focus groups should provide important information about this.
- While we know that many MSAP schools have served as models or provided information on their magnet programs, we do not know how well MSAP schools have played this role. We should learn much more about this in our upcoming site visits.