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Preliminary Examination of Student Achievement Data and Findings Reported by MSPs in Their Latest (2004-05) Annual and Evaluators' Reports

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The present draft is based on materials, information, and data that were available to the authors as of December 2005.

III. PRELIMINARY EXAMINATION OF STUDENT ACHIEVEMENT DATA AND FINDINGS REPORTED BY MSPs IN THEIR LATEST (2004-05) ANNUAL AND EVALUATORS' REPORTS

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1. Introduction

To augment the preceding analyses, the MSP-PE team tapped a third source of student achievement data. This source consisted of the MSPs' latest (2004-05) annual and evaluators' reports, including the MSPs' other scholarly publications and presentations.[1] The MSP-PE team reviewed this information for additional insights, beyond those discussed in Sections I and II, into student achievement changes.

NSF's Annual Reporting Requirements for MSPs. All MSPs are required to submit an annual progress report. NSF has specific guidelines for these reports. In them, MSPs are to describe their activities and progress toward completing annual measurable goals.

The guidelines also distinguish between reporting raw student achievement data (e.g., as required for the MSP-MIS) and reporting quantitative and qualitative data that measure the MSPs' specific measurable goals (as required for the annual reports). The guidelines ask MSPs to *interpret* data in relation to their measurable goals and baseline data, and encourage MSPs to *reflect* on the link between MSP activities and student achievement outcomes, to inform the partnership's decision-making process (NSF, 2004). Although the annual reports are not required to include student achievement data, the annual reports serve as another potential source of information about student achievement changes. The present section is therefore devoted to a preliminary review of the reports.

Sample of MSPs' Reports Included in the Review. The MSP-PE team reviewed the latest annual reports (submitted in the summer of 2005 and covering 2003-04) from 36 MSPs: all comprehensive, targeted, and institute awards in cohorts I and II (see Appendix A). Only cohorts I and II were selected because cohort III MSPs had only begun to report the first year of their partnerships' activities, too early to expect any impact on teaching practices or student achievement. As a passing note, the reports are voluminous, usually totaling about 100 pages each, with some reports being double or triple that length.

Number of MSPs Reporting Student Achievement Data. Exhibit 1 shows that 26 of the 36 MSPs (73%) in cohorts I and II included student achievement data or their discussion in their latest annual or evaluators' reports. Of the other 10 MSPs, five had submitted student achievement data to the MSP-MIS.[2] The remaining five MSPs

[1] The reports occasionally referenced related papers, authored by the MSPs' staff, which were not part of the annual report submission to NSF. Only those papers available to MSP-PE team members were included in this review.

[2] Although not discussed in the annual reports, those MSPs that only submitted to the MSP-MIS might have assumed the submission satisfied NSF's requirement.

attributed their omission to a number of reasons. Two MSPs noted that achievement data were not available to the MSP staff because partner school districts had not submitted the

data in a timely manner. Two MSPs reported that they were completing the analysis at the time the report was being written, and one of the MSPs had only planned for data collection in Year-4 of the MSP.

Exhibit 1

K-12 STUDENT ACHIEVEMENT DATA REPORTED IN MSPs' SUMMER 2005 REPORTS (cohorts I and II only)

Student Achievement Data Included in Reports	MSPs	
	No.	Pct.
Raw Data Only	6	17
Analysis and Data	13	36
Narrative Analysis Only (no data)	7	19
Neither Analysis nor Raw Data	10	28
Total	36	100

2. Comparative Frameworks Selected by MSPs to Analyze and Report Student Achievement Data

NSF requests that MSPs *interpret* student achievement data by comparing their findings to other sources in order to gauge the progress made by students targeted by MSP activities. MSPs that conducted complete or preliminary analyses of student achievement data selected different types of comparative frameworks to interpret their data. For instance, some MSPs made modest interpretations by not selecting a comparison group but by comparing their progress in relation to measurable goals. Other MSPs made comparisons between the students served by their MSP and those that did not participate in an MSP (e.g., rest of district, and rest of state). A few MSPs attempted to attribute changes in student achievement to MSP activities. The following sections describe the different frameworks utilized by MSPs to analyze student achievement data and to assess the annual progress made by their partnerships.

Measurable Goals as a Framework for Comparison. MSPs selected measurable goals in a number of ways. Two illustrations follow. One MSP used a goal calling for

annual increases in the "percent proficient" in the state assessment, combined with decreases in the "percent below basic" in the same assessment. The MSP presented data

for its 17 participating districts, comparing the baseline year (2002-03) with the MSP's first year (2003-04) (see Exhibit 2). By this goal, the MSP suggested that the desired changes were occurring in mathematics, but not science. For future years, the same MSP also reported that it will follow a cross-sectional target and comparison group evaluation design, comparing student achievement in the MSP districts to the state. However, the MSP had not yet reported or discussed any data from the rest of the state.

Exhibit 2

PERCENT OF STUDENTS SCORING LIMITED AND PASSING ON THE 6TH GRADE STATE ASSESSMENTS IN MATH AND SCIENCE FOR 2002-03 AND 2003-04

MATHEMATICS

District	Limited						Passing					
	Percent Below Basic			Percent Basic			Percent Proficient			Percent Advanced		
	02/03	03/04	Diff.	02/03	03/04	Diff.	02/03	03/04	Diff.	02/03	03/04	Diff.
A	58.2	50.6	-7.6	14.2	13.1	-1.1	26.3	33.9	7.6	1.3	2.4	1.1
B	62.8	48.4	-14.4	11.8	9.2	-2.6	24.5	37.5	13.0	0.9	4.8	3.5
C	33.5	19.0	-14.5	10.0	9.5	-0.5	52.5	58.9	6.6	4.0	12.5	8.5
D	35.2	20.1	-15.1	17.0	13.9	-3.1	45.3	56.3	11.0	2.5	9.7	7.2
E	10.1	6.0	-4.1	7.2	2.7	-4.5	70.4	63.3	-7.1	12.3	28.1	15.8
F	18.6	13.4	-5.2	9.5	7.1	-2.4	59.3	58.6	-0.7	12.6	20.9	8.3
G	28.9	16.5	-12.4	14.8	6.2	-8.6	50.2	65.7	15.5	6.1	11.6	5.5
H	37.6	25.3	-12.3	15.5	7.9	-7.6	46.4	58.9	12.5	0.5	7.9	7.4
I	47.7	33.5	-14.2	15.3	9.6	-5.7	32.3	51.3	19.0	4.7	5.5	0.8
J	27.2	24.2	-3.0	17.2	9.1	-8.1	50.6	57.6	7.0	5.0	9.1	4.1
K	14.5	11.7	-2.8	10.5	8.4	-2.1	66.6	60.9	-5.7	8.4	19.0	10.6
L	24.5	11.4	-13.1	15.2	10.4	-4.8	51.0	63.9	12.9	9.3	14.4	5.3
M	21.5	5.5	-16.0	7.5	8.2	0.7	61.3	72.6	11.3	9.7	13.7	4.0
N	18.8	8.8	-10.0	7.4	5.1	-2.3	63.3	62.9	-0.4	10.5	23.2	12.7
O	20.7	18.6	-2.1	10.4	7.4	-3.0	61.5	56.6	-4.9	7.4	17.4	10.0
P	26.2	19.5	-6.7	6.9	5.9	-1.0	56.9	59.3	2.4	10.0	15.3	5.3
Q	19.7	15.2	-4.5	9.8	2.2	-7.6	65.1	70.7	5.6	5.4	12.0	6.6

SCIENCE

District	Limited						Passing					
	Percent Below Basic			Percent Basic			Percent Proficient			Percent Advanced		
	02/03	03/04	Diff.	02/03	03/04	Diff.	02/03	03/04	Diff.	02/03	03/04	Diff.
A	34.1	40.0	5.9	40.0	21.6	-18.4	50.4	34.8	-15.6	2.5	3.6	1.1
B	42.4	45.7	3.3	45.7	15.8	-29.9	37.9	36.6	-1.3	0.8	1.9	1.1
C	17.0	13.1	-3.9	13.1	8.9	-4.2	62.0	69.7	7.7	4.0	8.3	4.3
D	17.6	13.2	-4.4	13.2	16.0	2.8	67.3	60.4	-6.9	5.0	10.4	5.4
E	4.4	5.8	1.4	5.8	8.9	3.1	77.1	65.3	-11.8	11.8	20.0	8.2
F	7.0	12.5	5.5	12.5	10.9	-1.6	75.8	61.1	-14.7	11.6	15.5	3.9
G	11.2	17.0	5.8	17.0	10.4	-6.6	73.3	63.5	-9.8	4.7	9.1	4.4
H	14.1	14.2	0.1	14.2	12.1	-2.1	68.1	66.3	-1.8	4.8	7.4	2.6
I	44.7	44.6	-0.1	44.6	16.0	-28.6	38.3	37.9	-0.4	0.3	1.5	1.2
J	20.0	25.5	5.5	25.5	13.9	-11.6	65.0	58.8	-6.2	0.6	1.8	1.2
K	7.3	9.0	1.7	9.0	10.6	1.6	74.5	66.0	-8.5	6.6	14.4	7.8
L	15.0	8.9	-6.1	8.9	8.9	0.0	70.4	68.3	-2.1	6.3	13.9	7.6
M	3.2	2.8	-0.4	2.8	6.8	4.0	62.4	74.0	11.6	29.0	16.4	-12.6
N	12.0	4.8	-7.2	4.8	9.1	4.3	73.6	66.6	-7.0	8.3	19.5	11.2
O	12.0	14.6	2.6	14.6	10.2	-4.4	71.1	62.6	-8.5	8.2	12.6	4.4
P	16.9	16.1	-0.8	16.1	11.9	-4.2	63.1	62.7	-0.4	6.9	9.3	2.4
Q	10.8	10.0	-0.8	10.0	10.9	0.9	74.1	70.0	-4.1	2.5	7.6	5.1

Source: MSP's Annual Report for the period 6/2004 through 6/2005 (14)[3].

Data from another MSP were reported along with pre-identified numeric measurable goals to be attained after five years, pro-rated on an annual basis (see Exhibit 3). The MSP discussed how an increasing number of districts was meeting the measurable goal, expressing confidence that the five-year goals would be met.

[3] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 3

NUMBER OF PARTNER SCHOOL DISTRICTS MEETING THE MSP'S STUDENT ACHIEVEMENT MEASURABLE GOALS FOR 2001-02, 2002-03, 2003-04

Measurable Goal			Proposal 2001-2002			Baseline: 2002-2003			Year 1: 2003-2004		
Grade	At Performance Level of	% of Students Scoring	Average of MSP Districts	Range %	# Districts Achieving Goal	Average of MSP Districts	Range %	# Districts Achieving Goal	Average of MSP Districts	Range %	# Districts Achieving Goal
5	Advanced and Proficient	75% or higher	56%	(14-85)	6	59.9%	(8-85)	8	66.3%	(21-92%)	13
	Below Basic	10% or fewer	23%	(4-69)	9	19.1%	(5-62)	9	16.5%	(2-52%)	13
8	Advanced and Proficient	75% or higher	53%	(2-84)	5	54.1%	(13-83)	4	57.0%	(12-85%)	7
	Below Basic	10% or fewer	26%	(6-82)	5	23.6%	(6-64)	6	22.5%	(6-69%)	7
11	Advanced and Proficient	75% or higher	48%	(5-77)	2	50.7%	(2-82)	2	51.3%	(3-80%)	4
	Below Basic	10% or fewer	30%	(8-70)	1	28.7%	(8-88)	2	30.2%	(9-90%)	2

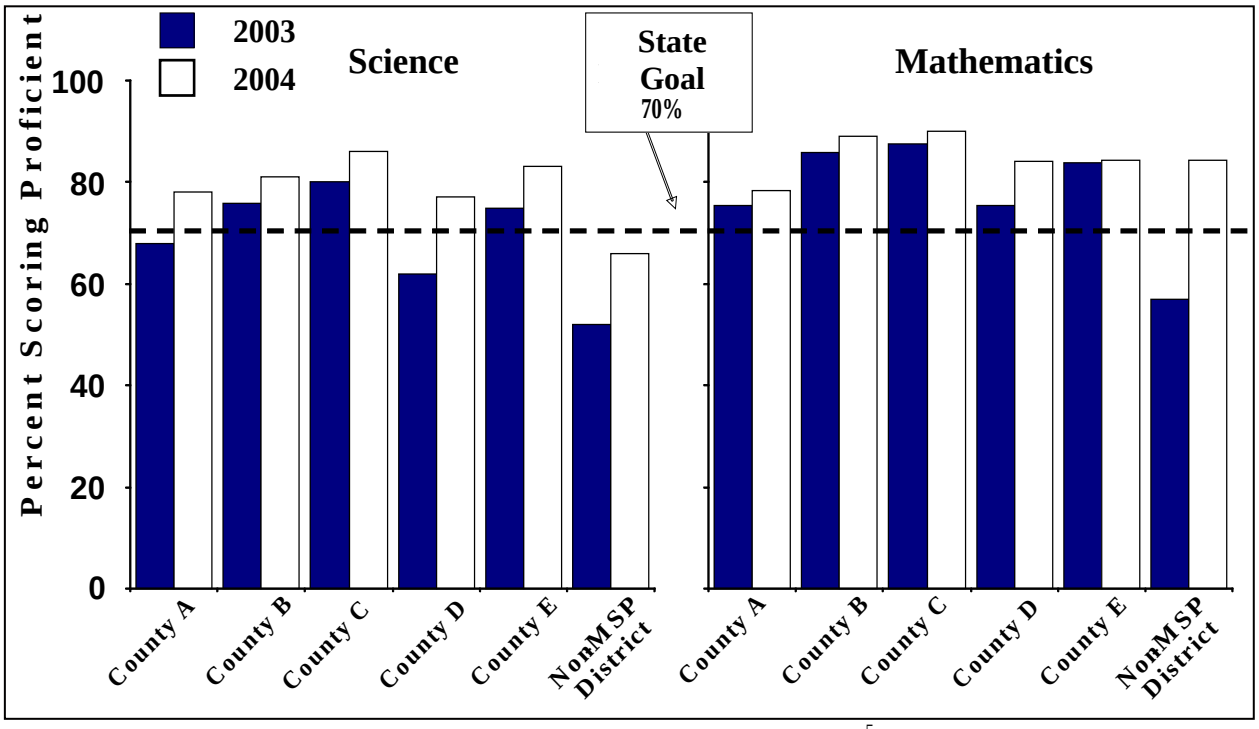
Source: MSP's Annual Report for the Period 09/2004 through 09/2005 (11)[4].

Achievement Data with Some Comparison Groups. Some MSPs analyzed student achievement data by making comparisons between MSP and non-MSP groups (e.g., statewide or regional averages, or MSP school districts and schools not involved in MSP). One MSP reported improvements in the percentage of students passing the state math and science assessments from 2002-03 to 2003-04, also indicating that the MSP's five districts had met the state's benchmarks. However, the gains made by the comparison district (which exceeded the gains made by MSP districts) were not discussed and only illustrated in a table (see Exhibit 4). This MSP used a stronger evaluation design than the measurable goal-only design previously described, but the MSP gave no rationale for selecting the comparison district, and why it had selected only one comparison district.

[4] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 4

PERCENT OF STUDENTS SCORING PROFICIENT ON THE 2002-03 AND 2003-04 STATE ASSESSMENT FOR MATH AND SCIENCE



Source: MSP's Annual Report for the Period 10/2004 through 9/2005 (3)[5].

Another MSP reporting improvement in the percentage of students passing the math and science state assessments in the first two years of the partnership (2002-03 to 2003-04) indicated that MSP districts did not outperform comparison districts (see Exhibit 5—in this case, the "measurable goals" refer to the number of times the MSP districts exceed the comparison districts). The rationale for identifying and selecting the comparison districts was not discussed. Also, the MSP's evaluator noted that MSP activities had yet to reach full implementation within the participating school districts. However, a within-MSP analysis had not been conducted to establish any relationship between the extent of improvement and the intensity of the MSP's work with each of the participating school districts.

[5] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 5

STUDENT ACHIEVEMENT CHANGES DURING THE PARTNERSHIP'S FIRST TWO YEARS

Source: MSP's Evaluation Report for Year 2 (2)[6].

Achievement Data with Some Attention to Attribution. A few MSPs tried to reflect on the linkage between the MSP activities delivered and change in the achievement of the students involved in the activities. Exhibit 6 shows the findings of an MSP that reported increases in the percent of students passing the state math assessment from 2002-03 to 2003-04, compared to statewide and regional performances. The evaluator noted that there was no significant difference between the MSP district and statewide or regional increase in student achievement. However, a within-MSP analysis revealed that the only school district with full teacher participation in MSP and the most intense MSP involvement (district A) made improvements markedly greater than both the statewide and regional passing percentages.

[6] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 6

PERCENT OF STUDENTS PASSING THE STATE ASSESSMENT BY MSP PARTNER DISTRICT, SUM OF GRADES 3-11

	Percent Passing		Percentage Point Gain from Year 1 to Year 2
	Year 1 2002-03	Year 2 2003-04	
STATE	57	66	9
REGION	51	59	8
DISTRICTS			
A	37	52	15
B	72	76	4
C	61	69	8
D	65	71	6
E	40	49	9
F	37	45	8
G	57	66	9
H	38	46	8
I	64	71	7

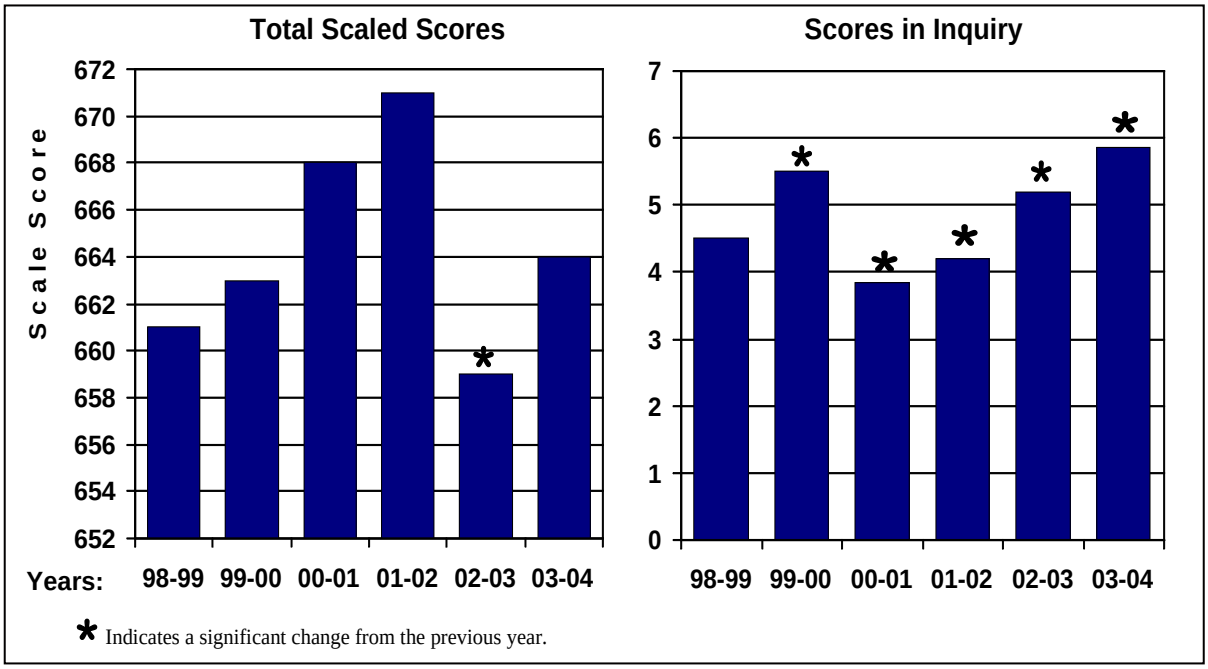
Source: MSP's Annual Report for the period 10/2004 through 10/2005 (18)[7].

In addition, an MSP that provides professional development to teachers in inquiry-based teaching in math and science reported that in one school participating in MSP, there was a significant gain in the inquiry strand of a grade seven science assessment from 2002-03 to 2003-04 (but with no change in overall test score) compared to baseline (see Exhibit 7). Other MSP schools showed no differences in the inquiry strand, possibly because of high baseline scores. The MSP reported that they were attempting to assess change in student achievement by employing a cross-sectional target and comparison evaluation design, which compares classrooms with teachers who participated in MSP activities (MSP classrooms) to non-MSP classrooms. However, the evaluator noted that accessing individual student records was a challenging task, which was ultimately resolved, and is currently assigning student identification numbers and matching student achievement data to MSP-trained teachers. Findings of this analysis are scheduled to be reported in the MSP's next annual report.

[7] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 7

GRADE 7 SCIENCE SCORES ON THE STATE ASSESSMENT FOR ONE SCHOOL PARTICIPATING IN MSP



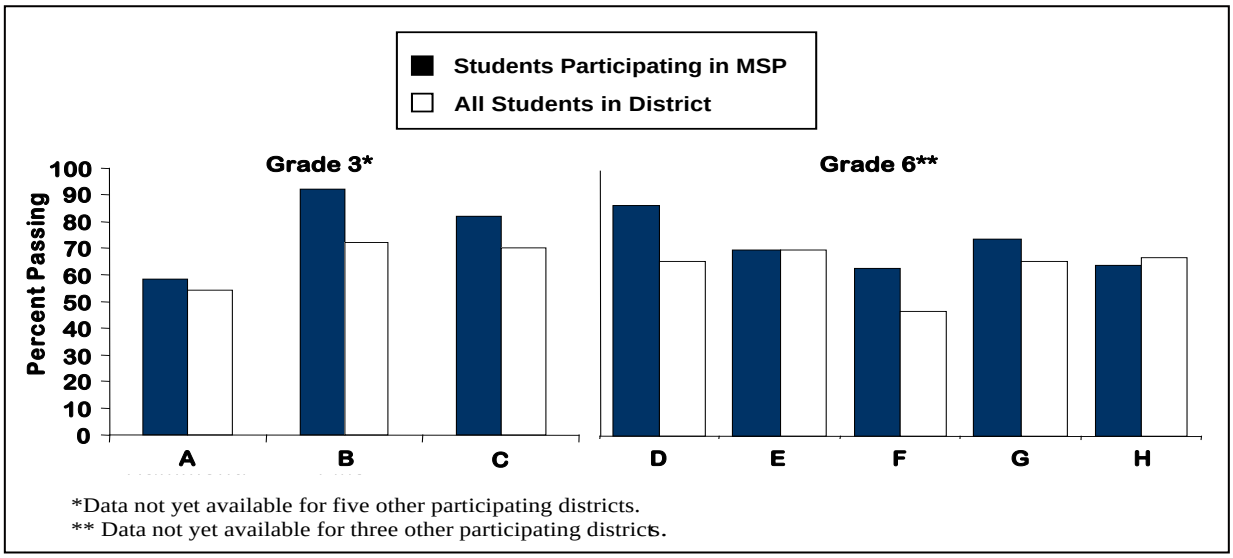
Source: MSP's Annual Report for Period 10/2004 through 10/2005 (19)[8].

One MSP noted that, as MSP activities reach a higher percentage of teachers and ultimately an entire district, comparisons to the rest of the district will be difficult to make. Exhibit 8 shows MSP student scores aggregated by grade, compared to the rest of the district. The MSP's evaluator reported that the percentage of MSP students passing the state assessment in the 3rd and 6th grades was higher than the rest of the districts in all but two school districts reporting. However, the MSP intends eventually to scale-up its activities to cover the entire district. Therefore, the MSP is currently looking for alternative comparison groups.

[8] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 8

PERCENT OF STUDENTS PASSING THE 2003-04 STATE ASSESSMENT IN MATH, BY MSP DISTRICT



Source: MSP's Annual Report for the period 6/04 through 6/05[9].

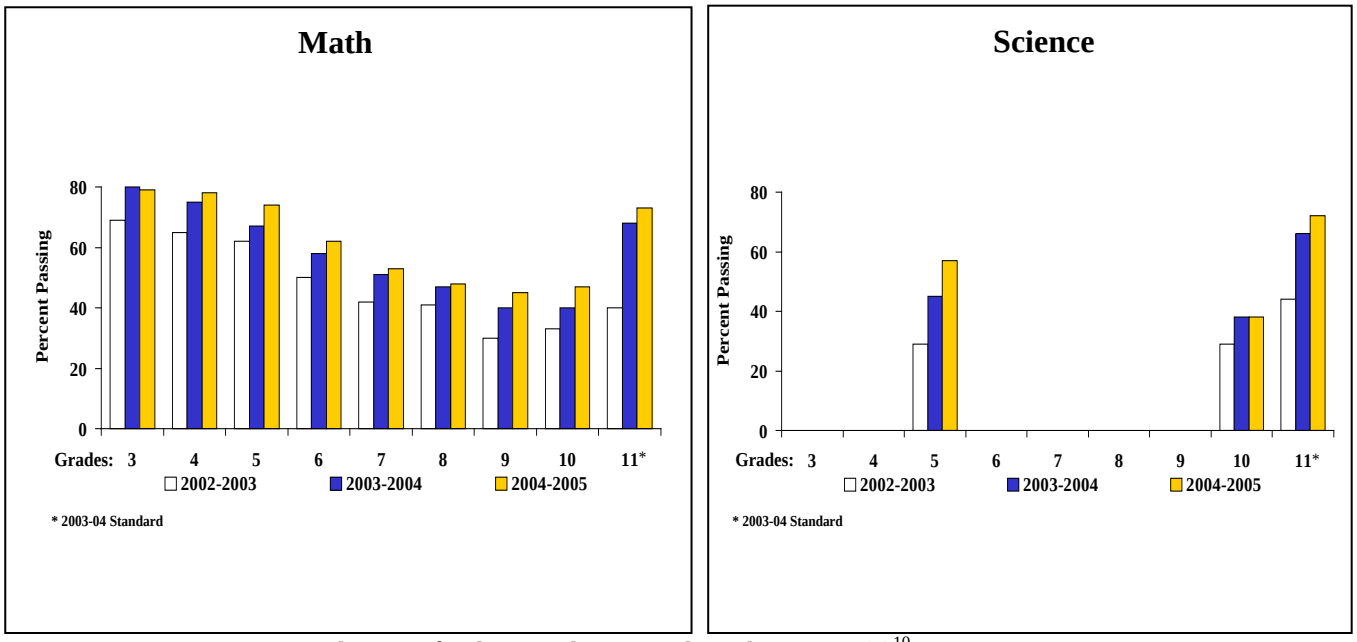
3. Evidence of Convergence of Data Between the Review of Reports and the Preceding Analyses

Overall, the review of MSPs' annual and evaluators' reports shows that MSPs are reporting improvements in student achievement in the initial years of the partnership, and especially from 2002-03 to 2003-04. This finding is parallel to the conclusions reached by both preceding analyses, which used different sources of achievement data. For instance, the Section I analysis that had used MSP-MIS data as its primary source identified statistically significant improvements at all three grade spans (elementary, middle, and high) from 2002-03 to 2003-04. The present analysis, which includes five of the nine MSPs covered in the Section I analysis, also reveals improvements in both science and math for all grade spans. For example, Exhibit 9 presents test scores reported by an MSP for a three-year period (2002-03, 2003-04, 2004-05), showing improvements for both math and science at all grade spans and simultaneously taking into account the fact that the standards for "percent passing" also have increased each year.

[9] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

Exhibit 9

PERCENT OF STUDENTS PASSING THE STATE MATH AND SCIENCE ASSESSMENTS, FOR YEARS 2002-03, 2003-04, AND 2004-05



Source: MSP's Annual Report for the period 10/2004 through 10/2005 (4)[10].

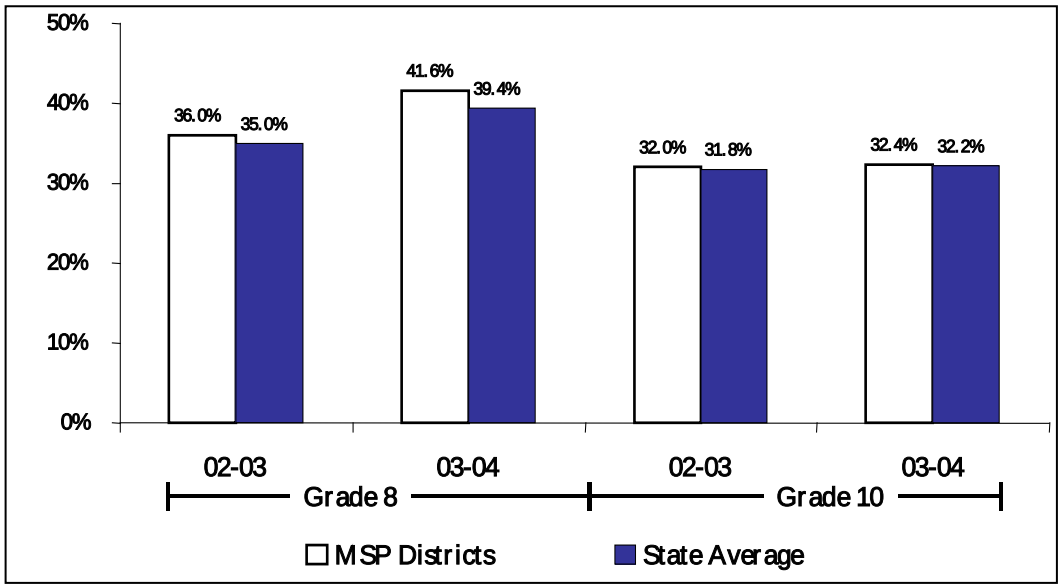
In addition to showing overall improvement in student achievement across MSPs, a within- MSP analysis in Section II (using archival achievement data from the state of Washington) found no increases in student achievement at the community or school level. This conclusion also was reached by reviewing the annual reports by the MSP that operates in Washington state. Exhibit 10 shows that, although there were slight improvements in the percent of students passing the state science assessment for grades eight and 10, there was no relative improvement in achievement compared to statewide.[11]

[10] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

[11] The MSP's evaluator notes that the results were expected, given that professional development efforts had only started earlier in the year.

Exhibit 10

PERCENT OF STUDENTS IN GRADES 8 AND 10 PASSING THE STATE ASSESSMENT IN SCIENCE, FOR 2002-03 AND 2003-04



Source: MSP's Annual Report for the period 6/2004 through 6/2005 (36)[12].

At the same time, Section III's findings offer a comparative perspective not available in Section I: that the MSP improvements might nevertheless not have been any greater than improvements judged either by measurable goals or comparison groups. The lack of differences in relation to comparison groups converges with findings from Section II.

Along similar lines, the Section III source of evidence can potentially provide additional information linking an MSP's activities with student achievement changes. This information was only available in a limited manner in the analyses in Sections I and II.

Overall, although there is considerable complementarity among the three analyses, the findings and the review of the reports itself should be considered preliminary, given that not all MSPs' publications have been collected and reviewed. In addition, the review did not include all MSPs; future reviews will include more updated and complete information from all MSPs.

[12] This number identifies individual MSPs. The codes are used to maintain anonymity of the individual MSPs.

4. Conclusions

The review of MSPs' annual and evaluators' reports showed that although there are some inherent limitations to their use, the reports are a useful source of achievement data, which should be used to supplement ongoing and future analyses. The data source provides alternative comparative frameworks to assess the MSPs' progress toward increasing student achievement, a feature lacking in Section I's analyses limited to the MSP-MIS data. In addition, the reports provide analyses that try to link student achievement to MSP activities, a feature lacking in Section II's analyses.

Nevertheless, there are limitations to using the reports. For instance, the use of measurable goals as a strategy to assess the MSPs' progress, though providing a modest basis for interpretation, nevertheless revealed one shortcoming: None of the MSPs using this strategy included a rationale for selecting their goals. Thus, if a selected goal is relatively weak or low, the meaningfulness of any MSP improvement may be questioned. Conversely, if a selected goal is too strong or high, an MSP may have contributed important work though still missing its goal.

In addition, some MSPs are presenting achievement data aggregated by school or school district, levels that may not match the group of teachers and students targeted by the MSP. In this case, greater focus is needed by only examining the changes in achievement by those participating in the MSP's activities.

Yet another limitation is that none of the MSPs' analyses thus far have taken into account the demographic characteristics and other baseline differences among the groups that have been compared.

Opportunities for Improvement. To overcome some of the limitations of using this data source, the MSPs' annual reports could be strengthened by encouraging brief descriptions of the rationale used in selecting measurable goals to be included in the report's section describing statistical or analytical methods employed in the evaluation. Also, MSPs could receive guidance on developing detailed timelines that show the start and end dates of the different activities being delivered. The development of the timeline might engage evaluators and other MSP staff into a thoughtful reflection on when their activities should have an impact on student learning and student achievement, and also might lead to the development of logic models, which could help MSPs to effectively consider the feasibility and appropriateness of selected measurable goals.

In addition, although the majority of MSPs have reported student achievement data, a concerted effort should be made to collect data from those MSPs that have been unable to report.

References

National Science Foundation, ***Math and Science Partnership Program, Guidelines For the MSP Annual Report***, Distributed to Funded MSP Grants in May, 2003.

National Science Foundation, ***Math and Science Partnership Program (MSP)***, Arlington, VA, 2002, Program Solicitation No. NSF-02-190.

National Science Foundation, ***Math and Science Partnership Program (MSP)***, Arlington, VA, 2003, Program Solicitation No. NSF-03-605.

Appendix A

LIST OF COHORT I AND II MSPs IN THE REVIEW

APPENDIX A

LIST OF COHORT I AND II MSPs INCLUDED IN THE REVIEW

Award Type/Cohort/Grant Title	Lead Institution
Comprehensive (Cohort I)	
North Carolina Partnership for Improving M&S	University of North Carolina Gen. Administration Office
New Jersey Math Science Partnership	Rutgers University
Appalachian Mathematics and Science Partnership	University of Kentucky
El Paso Math and Science Partnership	University of Texas at El Paso
Mathematics and Science Partnership (FOCUS)	University of California–Irvine
SUPER STEM Education	University of Maryland–Baltimore County
Comprehensive (Cohort II)	
System-Wide Change for All Learners and Educators (SCALE)	University of Wisconsin–Madison
Puerto Rico Math and Science Partnership	University of Puerto Rico
Promoting Rigorous Outcomes in Mathematics/Science Education (PROM/SE)	Michigan State University
Milwaukee Mathematics Partnerships: Sharing Leadership for Student Success	University of Wisconsin–Milwaukee
Math and Science Partnership of Southwest Pennsylvania	Allegheny Intermediate Unit
Partnership for Reform in Science and Mathematics (PRISM)	University System of Georgia
Targeted (Cohort I)	
Mathematical ACTS	University of California–Riverside
Stark County Math and Science Partnership	Stark County Educational Service Center
Teachers and Scientist Collaborating	Duke University
Vermont Mathematics Partnership	Vermont Institute of Science, Math, and Tech.
Cleveland Math and Science Partnership	Cleveland Municipal School District
Alliance for Improvement of Mathematics Skills PreK-16	Texas Engineering Experiment Station/Del Mar College
St. Louis Inner Ring Cooperative: Intervention Case Studies in K-12 Math and Science	Washington University
Texas Middle and Secondary Mathematics Project	Stephen F. Austin State University
E-Mentoring for Student Success	National Science Teachers Association
Indiana University–Indiana Mathematics Initiative Partnership	Indiana University
Vertically Integrated Partnerships K-16 (VIP K-16)	University System of Maryland
PRIME: Promoting Reflective Inquiry in Mathematics Education	Black Hills Special Services Cooperative
Deepening Everyone's Math Content Knowledge	University of Rochester
Targeted (Cohort II)	
SUNY-Brockport College and Rochester City (SCOLLARCITY) Integrative Technology Tools for Preservice and Inservice Teacher Education	SUNY College at Brockport
Revitalizing Algebra	San Francisco State University

Award Type/Cohort/Grant Title	Lead Institution
Teachers Assisting Students to Excel in Learning Mathematics (TASEL-M)	California State University–Fullerton
Focus on Mathematics	Boston University
Consortium for Achievement in Mathematics and Science	Merck Institute of Science Education
The Mathematics and Science Partnership of Greater Philadelphia (MSPGP)	La Salle University
The MSTP Project: Mathematics and Science	Hofstra University
The East Alabama Partnership for the Improvement of Mathematics Education (TEAM-Math)	Auburn University
Partnership for Student Success in Science (PS3)	Palo Alto Unified School District
North Cascades and Olympic Science Partnership	Western Washington University
Institute (Cohort II)	
Institute for Advanced Study/Park City Mathematics Institute	Institute for Advanced Study
Total	36