

Appendix VI—Measurement of Student Achievement in MSAP-supported Schools

Table A-VI-1
Distribution of Subject Areas and Other Performance Categories
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Subject or Performance Area	Elementary School	Middle School	High School	Mixed Grades	Overall
Reading, Writing, English Language Arts	98.3	95.7	94.9	100.0	97.2
Mathematics	97.1	94.3	92.3	83.3	95.5
Science	27.6	22.9	38.5	50.0	28.4
Social Studies	19.0	30.0	35.9	50.0	24.6
Foreign Language	4.0	4.3	18.0	16.7	6.2
Theme-Related (goals in content areas or skills related to magnet theme)	23.6	32.9	15.4	33.3	24.9
Advanced Vocational Skills (e.g., certificates of competency)	4.0	7.1	48.7	50.0	11.8
Arts and Performances	0.0	4.3	5.1	16.7	2.1
Applied Learning, Critical Thinking	14.9	7.1	7.7	16.7	12.1
Computer/Technology Use (including multi-media)	7.5	20.0	28.2	0.0	13.2
Career Awareness	21.3	18.6	15.4	33.3	20.1
Attitudes/Work Habits	9.2	8.6	10.3	0.0	9.0
Other (including basic skills, composite scores incorporating multiple subjects)	28.7	24.3	46.2	50.0	30.4
Not subject-specific (e.g., dropouts, graduations)	16.1	25.7	41.0	33.3	22.2
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table VI-A-2
Kinds of Performance Data Collected
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Performance Measure	Elementary School	Middle School	High School	Mixed Grades	Overall
Standardized Test	97.7	95.7	100.0	100.0	97.6
Course-taking and Grades	17.2	27.1	35.9	33.3	22.5
Alternative Assessments	71.3	61.4	87.2	83.3	71.3
Educational Trajectory Benchmarks	16.1	21.4	38.5	33.3	20.8
Advanced Vocation-Related Outcomes	0.0	0.0	20.5	0.0	2.8
Preparation for Postsecondary Education	0.0	0.0	12.8	0.0	1.7
Unclassified	4.0	2.9	12.8	0.0	4.8
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-3
Types of Performance Level Attainments in Achievement Objectives
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Type of Goal	Elementary School	Middle School	High School	Mixed Grades	Overall
Increasing performance levels over two or three years of the grant	72.4	62.9	79.5	50.0	70.6
Move students' performance level toward that of a reference group	28.2	38.6	30.8	33.3	31.1
Meet a specified level of performance that does not increase over the three years	57.5	57.1	71.8	83.3	59.9
Show <i>gains</i> similar to those of a reference group	31.6	34.3	25.6	33.3	31.5
Other (i.e., show expected annual growth in a Fall-Spring test, improve relative to a reference group, etc.)	10.9	5.7	10.3	0.0	9.3
Unclassifiable or missing	16.1	25.7	18.0	50.0	19.4
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-4
Time Frame for Measuring Achievement Outcomes
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

When Outcome is Assessed	Elementary School	Middle School	High School	Mixed Grades	Overall
Once (Year 1 or Year 2)	0.6	0.0	7.7	0.0	1.4
Each Year of Grant	87.9	92.9	97.4	83.3	90.3
Year 3 of Grant	32.2	31.4	41.0	50.0	33.6
Unclear or Unstated	4.6	0.0	5.1	0.0	3.5
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-5
Objectives to Reduce Minority-Non-minority or Male-Female Achievement Disparities
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Goal is to Reduce Achievement Gap	Elementary School	Middle School	High School	Mixed Grades	Overall
Minority/Non-Minority	50.6	61.4	41.0	50.0	51.9
Male/Female	1.2	5.7	2.6	0.0	2.4
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-6
Baseline Groups for Measuring Progress
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Baseline Comparison	Elementary School	Middle School	High School	Mixed Grades	Overall
Prior Cohort in Same Grade	68.4	78.6	87.2	83.	73.7
Individual Gains (Same Cohort)	19.0	15.7	5.1	0.0	15.9
Other	12.1	0.0	5.1	0.0	8.0
None	70.7	74.3	82.0	83.3	73.4
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-7
Reference Groups against which Magnet Student Performance Is Compared
(Percentage of Schools with One or More Objectives in Category, by School Grade Level)

Reference Group	Elementary School	Middle School	High School	Mixed Grades	Overall
Within-District Match	25.9	31.4	18.0	33.3	26.3
District Average	19.5	18.6	18.0	0.0	18.7
Within-State Match	2.3	0.0	0.0	0.0	1.4
State Average	3.4	1.4	0.0	0.0	2.4
Other (e.g., new vs. continuing students in the same school)	0.0	4.3	2.6	0.0	1.4
None	92.0	91.4	100.0	100.0	93.1
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-8
Distribution of Subject Areas and Other Performance Categories
(Average Percentage of School Objectives in Category, by School Grade Level)

Subject or Performance Area	Elementary School	Middle School	High School	Mixed Grades	Overall
Reading, Writing, English Language Arts	44.2	41.8	31.1	34.4	41.7
Mathematics	28.5	27.0	22.2	15.8	27.0
Science	4.1	3.5	6.4	6.4	4.3
Social Studies	2.2	3.5	4.6	5.0	2.9
Foreign Language	0.5	0.2	2.2	0.7	0.6
Theme-Related (goals in content areas or skills related to magnet theme)	2.6	6.4	0.8	1.8	3.2
Advanced Vocational Skills (e.g., certificates of competency)	0.6	0.7	8.5	7.3	1.8
Arts and Performances	0.0	0.3	0.7	1.3	0.2
Applied Learning, Critical Thinking	1.5	0.5	0.7	0.7	1.1
Computer/Technology Use (including multi-media)	1.0	4.0	3.8	0.0	2.1
Career Awareness	4.3	3.4	2.1	6.7	3.8
Attitudes/Work Habits	1.2	1.5	1.5	0.0	1.3
Other (including basic skills, composite scores incorporating multiple subjects)	5.8	4.7	9.0	16.2	6.2
Not subject-specific (e.g., dropouts, graduations)	1.7	2.7	6.5	3.7	2.6
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-9
Kinds of Performance Data Collected
(Average Percentage of School Objectives in Category, by School Grade Level)

Performance Measure	Elementary School	Middle School	High School	Mixed Grades	Overall
Standardized Test	73.3	78.9	60.7	65.8	72.8
Course-taking and Grades	5.6	4.9	13.4	14.7	6.7
Alternative Assessments	16.2	13.1	15.3	15.8	15.3
Educational Trajectory Benchmarks	1.8	2.4	4.7	3.7	2.4
Advanced Vocation-Related Outcomes	0.0	0.0	3.0	0.0	0.4
Preparation for Postsecondary Education	0.0	0.0	1.6	0.0	0.2
Unclassified	1.4	0.7	1.3	0.0	1.2
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-10
Nature of Change Called for by Objectives
(Average Percentage of School Objectives in Category, by School Grade Level)

Type of Goal	Elementary School	Middle School	High School	Mixed Grades	Overall
Increasing performance levels over two or three years of the grant	48.9	43.7	59.4	36.7	48.8
Move students' performance level toward that of a reference group	12.9	15.6	12.7	18.4	13.6
Meet a specified level of performance that does not increase over the three years	16.3	17.8	17.3	31.2	17.1
Show <i>gains</i> similar to those of a reference group	13.3	16.8	5.1	9.5	13.0
Other (i.e., show expected annual growth in a Fall-Spring test, improve relative to a reference group, etc.)	5.2	3.3	3.1	0.0	4.4
Unclassifiable or missing	1.6	2.7	2.5	4.3	2.1
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-11
Time Frame for Measuring Achievement Outcomes
(Average Percentage of School Objectives in Category, by School Grade Level)

When Outcome is Assessed	Elementary School	Middle School	High School	Mixed Grades	Overall
Once (Year 1 or Year 2)	0.1	0.0	1.6	0.0	0.3
Each Year of Grant	78.0	81.6	77.4	68.6	78.6
Year 3 of Grant	18.9	18.1	18.3	30.7	18.8
Unclear or Unstated	1.2	0.0	2.3	0.0	1.0
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-12
Objectives for Reducing Minority-Non-minority or Male-Female Achievement Disparities
(Average Percentage of School Objectives in Category, by School Grade Level)

Goal is to Reduce Achievement Gap	Elementary School	Middle School	High School	Mixed Grades	Overall
Minority/Non-Minority	19.8	22.8	15.1	17.2	19.8
Male/Female	0.3	1.2	0.5	0.0	0.5
No Gap Reduction	78.2	76.1	84.4	82.8	78.6
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-13
Baseline Groups for Measuring Progress
(Average Percentage of School Objectives in Category, by School Grade Level)

Baseline Comparison	Elementary School	Middle School	High School	Mixed Grades	Overall
Prior Cohort in Same Grade	50.9	54.9	65.1	49.8	53.8
Individual Gains (Same Cohort)	11.3	10.8	0.4	0.0	9.5
Other	3.3	0.0	1.0	0.0	2.2
None	32.7	34.3	33.5	50.2	33.6
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports

Table A-VI-14
Reference Groups Against Which Magnet Student Performance is Compared
(Average Percentage of School Objectives in Category, by School Grade Level)

Reference Group	Elementary School	Middle School	High School	Mixed Grades	Overall
Within-District Match	9.1	11.0	6.5	13.9	9.3
District Average	14.3	13.3	3.9	0.0	12.4
Within-State Match	1.0	0.0	0.0	0.0	0.6
State Average	2.1	1.4	0.0	0.0	1.6
Other (e.g., new vs. continuing students in the same school)	0.0	4.0	1.1	0.0	1.1
None	71.8	70.2	88.5	86.1	74.0
N (Total Schools)	174	70	39	6	289

Source: MSAP Applications and 1998-99 Performance Reports