

**Kyrene Middle School Evaluation:
Phase 3 (Results)**

David R. Garcia
Assistant Professor, Arizona State University

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Introduction

The evaluation of the Kyrene Elementary School District (Kyrene) Middle School model (model) is a three-year, three-phase design that started in spring 2006. The first year was a process evaluation and transitioned to an outcome evaluation in year three.

The evaluation was based on a guiding framework that divided the model into 3 phases: implementation, maturation and outcomes. Phase 1 of the evaluation focused on the extent to which the model has been implemented as intended. Phase 2 of the evaluation included targeted follow-up on key implementation issues and a shift toward defining program outcomes. In Phase 2, the program was assumed to be in the maturation stage where maturation is marked by the establishment of routine operational procedures to carry out program activities. In the third and final year of the evaluation (Phase 3), the evaluation shifted to a focus on assessing program outcomes. Given that the Kyrene middle schools serve grades 6 through 8, the outcome evaluation centered on the progression of cohorts of students as they moved across the middle school grades from the 2004-05 to the 2007-08 school years.

The Phase 3 evaluation was conducted by David R. Garcia, Ph. D., Assistant Professor, Arizona State University.

Background

The Kyrene Governing Board adopted the model on March 8, 2005. The model consists of a five-period daily schedule that includes four core classes of 68-minutes (Language Arts, Mathematics, Social Studies and Science); one 68-minute daily period Exploratory course meeting on an A/B rotation throughout the year; and a 30-minute lunch. The district now refers to all course offerings outside of Core classes as Exploratory. There are two types of Exploratory courses (outside of Core): year long courses in Spanish, Band, Orchestra, Physical Education, and Chorus, and courses with nine weeks of content, delivered over eighteen weeks on an A/B rotation (formerly the “wheel”), which include Art, Theater, Multi-media, and Family and Consumer Sciences. The daily schedule includes an Academic Lab-Homeroom period of 34 minutes that meets four days per week allowing for the continuation of one early student release day each week. The early student release day is Wednesday and is intended for teacher professional development. In addition, teachers have one 68-minute period per day for planning and preparation.

The recommendation from district officials stated that the model would address the following needs:

1. Improve student achievement (effectiveness)
2. Maintain the quality of Kyrene programs
3. Prepare students for High School coursework
4. Maintain or improve teacher/student ratios
5. Allot preparation and development time for teachers
6. Yield cost savings in order for the governing board to balance the budget in the 2005-06 school year (www.kyrene.org/gb).

Implementation of the model began in fall of the 2005-06 school year. After the model was implemented, district officials collaborated with the research team to articulate the structure of the program evaluation. The research team presented the full plan for the evaluation to the governing board in a public meeting on January 24, 2006.

The evaluation was conducted using a community participation model where key stakeholder groups in Kyrene participated in the research design and all information on the evaluation was made public prior to conducting the research. The specific program outcomes were developed in collaboration with the district’s K-8 committee. The K-8 committee worked with the researcher to craft the specific language to describe each outcome, identify the baseline year for comparisons, select the data used to measure the outcome and to identify the metrics used to measure change over time. The outcomes, data sources, baseline year and metrics were presented to the Kyrene Governing Board prior to commencing with the research.

In collaboration with Kyrene stakeholders, the following outcomes, data sources, baseline years and metrics were chosen for the outcomes phase of the evaluation (see Table 1).

Table 1:

	Outcome	Data Source	Baseline Year	Metric
Academic Achievement	Increase the number of proficient students in reading, and mathematics	AIMS with Kyrene assessment to confirm results	2005	Percentage of students meeting/exceeding standards, percent of proficient students
Variability	Reduce variability in academic achievement among schools	AIMS with Kyrene assessment to confirm results	2005	Between school differences in the percentage of students meeting/exceeding standards, percent of proficient students
Other Academic	Increase the number of students Exceeding and reduce the number of students in Falls Far Below	AIMS	2005	Decrease in the percentage of students in FFB and an increase in the percentage in Exceeds

Discipline	Maintain or reduce number of disciplinary referrals	District discipline data	2005	Decrease in either the number or the rate of disciplinary referrals “in class” or “during transitions”
Teacher Satisfaction	Maintain high level of teacher professional satisfaction	Teacher professional satisfaction survey	Spring 2006, survey re-administered spring 2008	Change in professional satisfaction over time
Cost Savings	Provide cost savings	District budget data	2005	District personnel to model costs over time, researcher to confirm results

Methods

Quasi-cohorts: Tracking the progress of student groups over time

In order to measure changes in student academic achievement from 2004-05 to 2007-08, four quasi-cohorts of students were created. The quasi-cohorts were created to parallel the progress of student groups as they progressed through middle school. For example, the quasi-cohort of 6th graders in 2005-06 was compared to the group of 7th graders in 2006-07 and the group of 8th graders in 2007-08. In total two quasi-cohorts tracked student groups from 6th to 8th grade, a third tracked progress for students in grades 6 and 7 only, and a fourth tracked progress from 7th to 8th grade only (see Table 2 for a graphic representation of the quasi-cohorts).

Table 2: Quasi-cohorts used for analysis of student achievement data

	2005-06	2006-07	2007-08	2008-09
Grade 6	6	6	6	6
Grade 7	7	7	7	7
Grade 8	8	8	8	8

In contrast to a true cohort design, where individual students are tracked over time, the quasi-cohort design follows groups of students over time. Since data were analyzed by looking at groups of students by grade level across school years, each comparison group did not contain the exact set of individual students. The composition of the quasi-cohorts was influenced by student mobility in and out of the Kyrene school district. In cases where student turnover from one year to the next is high, the quasi-cohort design can be limited.

There are two major advantages to the use of a quasi-cohort design. First, the perspective allows for a more consistent measure of change over time than a cross-sectional design, a common approach used in education research and school accountability. The cross-sectional perspective examines the same grade levels using a different group of students each year (e.g. 6th graders in 2005 are compared to a different group of 6th graders in 2006). The cross-sectional perspective can be distorted by wide variation across student groups. Second, with a quasi-cohort, publicly-available results can be used to conduct the evaluation. The results were already known to the Kyrene public.

When individual students are tracked, the aggregate results will likely differ from the publicly-reported results because only a subset of students is included in the analysis (i.e. those students successfully tracked over time). Therefore, the results will likely be inconsistent with what the Kyrene public has come to understand about the achievement of their schools.

Using the margin of error

In evaluations of change over time, a common question is how much of a difference between two data values is sufficient to indicate a meaningful change. In keeping with the spirit of the community participation model, the following guidelines are intended to aide the reader in evaluating the following tables on their own.

The guidelines are based on the calculation of a margin of error based on a 95 percent confidence interval. The width of the margin of error is a function of three factors: 1) the desired degree of precision, which in this evaluation is 95 percent, 2) the distance from which the observed value deviates from the midpoint or 50 percent and 3) the number of students upon which the margin of error is calculated. All other factors being equal, the margin of error decreases as the size of the groups upon which they are calculated increases.

The reader can use the margin of error to gauge the extent to which the difference between any two percentage values in this report are large enough to indicate a distinguishable difference.. The margin of error can be used to calculate a “range” for each percentage value. For example, at the district level, the margin of error at 50 percent is 2 percentage points so the reader should evaluate this value as a range from 48 to 52 percent. If the range for a comparison percentage falls within this range, then the differences between the two percentages should not be considered as distinguishable from each other after taking into account potential error.

Table 3: Margin of error at select percent values

District

Percent	Students	Margin of Error
90	2000	1.3
50	2000	2.2
10	2000	1.3

School

Percent	Students	Margin of Error
90	300	3.4
50	300	5.7
10	300	3.4

As a rule of thumb, if the ranges for two percentage values do not overlap, then the difference can be considered statistically distinguishable. If the ranges do overlap, then the difference between the two percentage values is likely too small to be considered distinguishable after taking into account potential error. The margins of error for the school level results are larger because there were fewer students in each group but the ranges can be applied like the district results (see Appendix A for the school level reports).

In addition to the margin of error, the researcher considered the existence of trends before coming to conclusions about the impact associated with the model. In this case, the question is not one of distinguishable difference but meaningful differences. The strongest evidence of meaningful differences is a trend where similar results are observed across either multiple years, student quasi-cohorts or subject areas.

Findings

Increase the percentage of students at meet or exceeds on AIMS and the percentage of students at proficient on district assessments in reading and mathematics

In every quasi-cohort, AIMS reading and mathematics scores increased as students moved from 6th to 7th grade. This increase was followed, in every quasi-cohort, by a decrease of nearly the same magnitude as students moved from 7th to 8th grade. By 8th grade the percentage of students meeting or exceeding the standards returned to the 6th grade level or slightly lower (see Tables 4 and 5).

Table 4: Percentage of students meeting or exceeding the standard, reading

		Kyrene District AIMS Reading			
		2005	2006	2007	2008
Grade 6		85	85	86	
Grade 7		87	88	86	87
Grade 8			84	85	84

Table 5: Percentage of students meeting or exceeding the standard, mathematics

Kyrene District				
AIMS Mathematics				
	2005	2006	2007	2008
Grade 6	84	83	86	
Grade 7	86	91	89	88
Grade 8		82	84	81

While student performance drops from the 7th to 8th grade, this pattern parallels the statewide trends and, therefore, suggests that this phenomenon was not particular to Kyrene or the model, but rather the inconsistencies were likely the result of a larger, systematic test effect (see Tables 6 and 7).

Table 6: Percentage of students meeting or exceeding the standard, reading

Arizona				
AIMS Reading				
	2005	2006	2007	2008
Grade 6	68	67	70	68
Grade 7	70	68	69	70
Grade 8		65	65	67

Table 7: Percentage of students meeting or exceeding the standard, mathematics

Arizona				
AIMS Mathematics				
	2005	2006	2007	2008
Grade 6	65	64	67	67
Grade 7	69	70	72	71
Grade 8		62	62	62

According to the district’s communication arts results, there was a general decline in the percent of proficient students over time. In nearly every year and grade, the percent of proficient students declined as students progressed through middle school. For example, 64 percent of 6th graders in 2005 were proficient in communication arts. As this group moved to 7th grade, the percentage declined to 60 percent and in 8th grade 56 percentage of students were proficient (see Table 8). The lone exception was a 3 percentage point increase for students moving from 6th grade in 2006 to 7th grade in 2007. This increase, however, was followed by a subsequent decrease of 5 percentage points at the end of 8th grade.

Table 8: Percentage of students proficient, communication arts

Kyrene District Communication Arts				
	2005	2006	2007	2008
Grade 6	64	58	63	
Grade 7	62	60	61	57
Grade 8		57	56	56

In contrast to its communication arts results, the district’s mathematics results showed gains in student achievement for three of the four quasi-cohorts as they progressed through middle school (see Table 9). For example, the 6th graders in 2005 increased from 57 percent proficient to 63 percent proficient as 7th graders in 2006. This cohort also experienced the only decrease because as 8th graders the percentage of proficient students in this group decreased to 58 percent.

Table 9: Percentage of students proficient, mathematics

Kyrene District Mathematics				
	2005	2006	2007	2008
Grade 6	57	57	57	
Grade 7	61	63	63	62
Grade 8		65	58	64

Reduce the variability in academic achievement among schools

The range in school-level scores, the difference between the highest and lowest performing schools in the district, indicates the extent to which student performance varied across schools. Reduced variability would indicate increasing equity in student academic achievement across schools in the district. A decrease in variability, however, must be evaluated in conjunction with the previous academic outcome. The objective of the model was to decrease variability while increasing the overall district results. A pattern of increased results coupled with less variability indicates that all schools benefited after the implementation of the model. Increased or greater variability across schools coupled with an increase in the overall scores indicates that some schools experienced greater benefits under the model relative to other schools.

The analysis of the changes in variability on the AIMS test, shown in Tables 10 and 11, shows a consistent pattern for reading. By 8th grade, there was greater variability for all the cohorts than when the students began in a Kyrene middle school as 6th graders (see Table 10). For example, for the cohort that began in Kyrene as 6th graders in 2006 the range between the highest and lowest schools in reading was 10 percentage points and increased to 14 percentage points by the time the group was in 8th grade.

Table 10: Difference between highest and lowest performing schools in the percentage of students at meets or exceeds, reading

	AIMS Reading Variability			
	2005	2006	2007	2008
Grade 6	9	10	17	
Grade 7	9	12	8	15
Grade 8		16	14	16

In mathematics, the results were inconsistent. For the two student cohorts that began in a Kyrene middle school under the model for all grades 6-8, the amount of variability between schools in 8th grade was nearly identical to the 6th grade levels. The shortened cohorts showed contradictory results.

Table 11: Difference between highest and lowest performing schools in the percentage of students at meets or exceeds, mathematics

AIMS Mathematics				
Variability				
	2005	2006	2007	2008
Grade 6	14	19	18	
Grade 7	8	8	8	14
Grade 8		18	13	19

Overall, the variability was greater on district assessments than on AIMS, indicating wider gaps in achievement on this measure between the highest and lowest performing schools in the district. Over time, the results varied across subject and school years. In communication arts there was greater variability (see Tables 12). While in mathematics there was a consistent decrease in variability as the two full quasi-cohorts moved from the 6th to the 8th grade (see Table 13).

Table 12: Difference between highest and lowest performing schools in the percentage of students proficient, communication arts

Communication Arts				
Variability				
	2005	2006	2007	2008
Grade 6	18	19	27	
Grade 7	16	21	24	27
Grade 8		23	21	21

Table 13: Difference between highest and lowest performing schools in the percentage of students proficient, mathematics

	Mathematics Variability			
	2005	2006	2007	2008
Grade 6	29	28	25	
Grade 7	7	18	19	29
Grade 8		15	23	22

Other academic indicators: Decrease in the percentage of students in falls far below on AIMS and increase in the percentage of students in exceeds the standards

There was an extremely low percentage of Kyrene middle school students that scored in the falls far below (FFB) category in AIMS reading. For all quasi-cohorts, the percentage of students in the lowest category is consistently two or three percent, with the exception of the quasi-cohort in 8th grade in 2008, where the proportion of students in FFB is 4 percent (see Tables 14). In nearly all cases, the change between adjacent years was only one (1) percentage point. These differences are not large enough to signify a substantive change over time.

Table 14: Percentage of students in falls far below category, reading

	Kyrene District AIMS Reading			
	2005	2006	2007	2008
Grade 6	3	2	3	
Grade 7	2	2	2	3
Grade 8		3	3	4

The percentage of students in falls far below is slightly larger in mathematics (see Table 15), but the degree of change was only slightly larger than in reading. In no case did the amount of change rise above the confidence interval guidelines (22 percent) to indicate a substantive change.

Table 15: Percentage of students in falls far below category, mathematics

Kyrene District AIMS Mathematics				
	2005	2006	2007	2008
Grade 6	6	6	7	
Grade 7	4	3	4	5
Grade 8		7	7	9

For the exceeds category the percentage of students was higher and the changes over time were more pronounced. The patterns were similar to the meets and exceeds category, with most quasi-cohorts showing an increase in the percentage of students in exceeds from the 6th to 7th grade and a subsequent decrease from 7th to 8th grade. For example, in reading, the quasi-cohort in 6th grade in 2005 increased from 16 to 18 percent in exceeds and then declined back to 16 percent in 8th grade (see Table 16). In mathematics, however, most cohorts experienced a decrease in the percentage of students in the exceeds category (see Table 17). For example, the cohort that began as 6th graders in 2005 experienced a decline of 5 points in the percentage of students exceeding the standard by 8th grade. The cohort that began as 6th graders in 2006 declined by 10 percentage points by the time the students were in 8th grade.

Table 16: Percentage of students in exceeds category, reading

Kyrene District AIMS Reading				
	2005	2006	2007	2008
Grade 6	16	11	16	
Grade 7	17	18	20	19
Grade 8		12	16	15

Table 17: Percentage of students in exceeds category, mathematics

Kyrene District AIMS Mathematics				
	2005	2006	2007	2008
Grade 6	38	38	43	
Grade 7	31	38	40	38
Grade 8		29	33	28

Reduce the number of disciplinary referrals

The Kyrene Elementary School District collects disciplinary data on 22 different types of infractions. In collaboration with the K-8 committee, a subset of infractions was selected as model outcomes. The infractions were selected because they were considered the most likely to be influenced by the changes initiated by the model.

For each of the infractions, district officials reported the annual number of referrals for the academic years 2004-05 to 2007-08. There were a number of changes to either the referral categories, the referral definitions and data collection methods, which resulted in the loss of longitudinal data and the researchers’ inability to examine changes in student behavior over time. As a result of these multiple changes, Table 18 shows some dramatic swings in the numbers of referrals but the patterns should not be attributed to the implementation of the model. Consistent longitudinal data are essential in order to evaluate changes in disciplinary referrals over time.

Table 18: Changes in the number of disciplinary referrals, 2004-05 to 2007-08

	2004-05		2005-06		2006-07		2007-08	
	#	%	#	%	#	%	#	%
Class Disturbance	781		976	20	987	1	1856	88
Disorderly Conduct	192		127	-34	135	6	0	-100
Inappropriate Behavior	110		39	-65	101	159	200	98
Disrespect/Defiance	625		286	-54	1068	273	1131	6
Tardy	370		165	-55	274	66	343	25

Maintain a high level of teacher professional satisfaction

Another important outcome measure of the model is the maintenance of a high degree of teacher professional satisfaction. This indicator was measured with the use of a survey developed by the researcher in collaboration with district staff. In addition to questions about professional satisfaction, the survey included questions on other themes that were of interest to the district staff. The full results for the questions related to the additional themes have been reported elsewhere.¹

In 2006, the survey results indicated a high level of professional satisfaction among Kyrene middle school teachers. According to the 2008 results, the district has achieved the program outcome goal to “maintain the high level of teacher professional satisfaction” among middle school teachers. In most cases, the degree of teacher satisfaction increased from 2006 to 2008 (see Table 19).

Table 19: Comparison between 2006 and 2008 teacher professional satisfaction survey:

Percent of Teachers who Agree or Strongly Agree	2006	2008
Kyrene schools are a good place to teach.	80.8	86.6
In Kyrene, I feel like I can make a difference with students.	89.2	87.0
In Kyrene, I am treated like a professional.	63.6	70.6
I enjoy teaching at a Kyrene school.	84.1	89.2

“Cost savings” as a result of the model

One of the expected benefits of the model was the “cost savings” that would result from the change in staffing practices required by the model. To measure the “cost savings” associated with the implementation of the model, district officials provided an annual estimate of teacher staffing for the academic years 2004-05 through 2008-09. The annual estimates included the number of teachers,

¹ For a complete analysis, see the report *Kyrene Middle School Evaluation: Professional Satisfaction 2008*

broken out by school, the categories (Core and Exploratory), and the total teacher compensation for each year based on average costs for salary and benefits. The researcher verified the calculations of the annual estimates but did not verify the underlying data used to carry out the calculations (see Appendix B for the cost savings calculations).

Because the money “saved” by the model was, in reality, reallocated to other purposes and not “saved” in the traditional sense, the researcher asked district officials to identify a large expenditure for which dollars “saved” in total teacher compensation were used.

Compared to the 2004-05 levels, staffing allocations decreased by approximately 10 teachers in 2008-09 at an estimated cumulative savings of \$1.4 million. These “savings” were used to help meet the annual increases in teacher compensation of \$2.4 million in 2007-08 and \$2.7 million in 2008-09 for all teachers in the district.

Conclusion

To date, the Kyrene middle school model has shown a few isolated increases and some decreases in student achievement as students progress through the middle school years. The inconsistent pattern observed in the percentage of students meeting or exceeding the standards parallels the pattern seen in the statewide results and was likely a reflection of a statewide test effect rather than the instruction of Kyrene middle school teachers under the model. The district assessments, used in the evaluation to confirm the AIMS findings, also showed mixed results with a decline in reading performance and an increase in mathematics performance as students progressed through middle school.

The variability, or achievement gap between the highest and lowest performing schools in the district, did increase from 2004-05 to 2007-08 on AIMS reading but decreased on the district mathematics assessment. The decreases are consistent with the goal that all schools experience an advantage in student achievement. The increases between schools on student academic achievement indicate that some of the increases in student performance may be coming at the expense of equity of instruction across district schools.

With regard to the non-academic outcomes, Kyrene middle school teachers have a high degree of professional satisfaction, a characteristic that was unchanged by the introduction of the model. Satisfaction was already high in 2005-06 and improved in most areas in 2007-08. While from a financial perspective, there is evidence that the model provided some “cost savings” to the district as a result of fewer teachers, this “savings” was used to fund increases in teacher benefits.

One important limitation encountered in this evaluation was the inability to measure the extent to which student disciplinary referrals decreased (or did not) since the adoption of the model. Changes in how data were collected and how infractions were categorized make it very difficult to assess the impact, if any, of the model. Consistency in how data are defined and collected is critically important if the goal is to measure outcomes over time and, to conduct any future evaluation, the district must maintain consistency in its measurement instruments.

One important factor to consider when evaluating the impact of the model on student achievement is that organizational changes are often less influential on academic achievement than changes in teaching and learning. The model changed the organizational structure around instruction by changing staffing patterns and class intervals, but it did not attempt to directly alter how teachers teach, other than through professional development. Organizational changes can make a difference, but it is unlikely to be of great magnitude compared to instructional changes.

Also, the district should consider the potential mismatch between the instructional objectives of the model and the outcome measure (AIMS and the Kyrene District Assessment). An important purpose of the longer class periods was to provide more time for extended lessons such as laboratories and demonstration projects. The benefits of these activities may not be captured well on a paper and pencil, multiple-choice assessment.

Finally, the Kyrene district administration, governing board and community should be congratulated on conducting a program evaluation. The level of detail available to these groups about the model is rare among school districts and has prompted excellent discussions as well as enlightened decision-making.

Appendix A

School Reports

AIMS Reading

District

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	85	85	86	
Grade 7	87	88	86	87
Grade 8		84	85	84

Kyrene Akimel A-AI Middle School

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	83	88	84	
Grade 7	91	84	86	89
Grade 8		91	86	87

Kyrene Altadena Middle School

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	91	89	94	
Grade 7	89	93	91	94
Grade 8		90	93	93

Kyrene Aprende Middle School

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	82	85	89	
Grade 7	88	88	88	89
Grade 8		82	83	88

Kyrene Centennial Middle School

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	82	79	85	
Grade 7	87	81	83	85
Grade 8		83	80	78

Kyrene del Pueblo Middle School

Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	91	88	87	
Grade 7	91	93	88	87
Grade 8		85	87	82

Communication Arts

District

Percent Proficient

	2005	2006	2007	2008
Grade 6	64	58	63	
Grade 7	62	60	61	57
Grade 8		57	56	56

Kyrene Akimel A-AI Middle School

Percent Proficient

	2005	2006	2007	2008
Grade 6	64	53	60	
Grade 7	69	56	52	50
Grade 8		68	53	53

Kyrene Altadena Middle School

Percent Proficient

	2005	2006	2007	2008
Grade 6	75	70	79	
Grade 7	68	71	76	74
Grade 8		69	69	69

Kyrene Aprende Middle School

Percent Proficient

	2005	2006	2007	2008
Grade 6	62	55	62	
Grade 7	55	62	62	62
Grade 8		51	59	61

Kyrene Centennial Middle School

Percent Proficient

	2005	2006	2007	2008
Grade 6	57	51	56	
Grade 7	62	50	56	53
Grade 8		55	52	48

Kyrene del Pueblo Middle School

Percent Proficient

	2005	2006	2007	2008
Grade 6	69	66	68	
Grade 7	66	65	62	59
Grade 8		53	59	58

Kyrene Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	84	81	77	
Grade 7	82	86	83	79
Grade 8		75	79	77

Kyrene Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	60	52	52	
Grade 7	53	56	61	47
Grade 8		46	48	49

AIMS Mathematics

District
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	84	83	86	
Grade 7	86	91	89	88
Grade 8		82	84	81

Mathematics

District
Percent Proficient

	2005	2006	2007	2008
Grade 6	57	57	57	
Grade 7	61	63	63	62
Grade 8		65	58	64

Kyrene Akimel A-AI Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	82	88	88	
Grade 7	89	90	90	91
Grade 8		88	83	84

Kyrene Akimel A-AI Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	54	59	59	
Grade 7	64	57	61	61
Grade 8		69	54	66

Kyrene Altadena Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	91	90	92	
Grade 7	85	95	94	93
Grade 8		91	91	90

Kyrene Altadena Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	72	70	69	
Grade 7	63	73	72	77
Grade 8		71	69	74

Kyrene Aprende Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	82	85	86	
Grade 7	88	91	89	92
Grade 8		82	85	84

Kyrene Aprende Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	57	56	67	
Grade 7	62	68	69	73
Grade 8		64	61	69

Kyrene Centennial Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	77	71	84	
Grade 7	84	88	86	83
Grade 8		78	78	71

Kyrene Centennial Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	43	42	44	
Grade 7	58	55	57	52
Grade 8		58	46	52

Kyrene del Pueblo Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	88	86	89	
Grade 7	89	96	92	89
Grade 8		82	88	83

Kyrene del Pueblo Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	63	64	59	
Grade 7	60	70	69	63
Grade 8		69	63	70

Kyrene Middle School
Percent Meets & Exceeds

	2005	2006	2007	2008
Grade 6	82	78	74	
Grade 7	81	90	87	79
Grade 8		73	78	72

Kyrene Middle School
Percent Proficient

	2005	2006	2007	2008
Grade 6	54	55	45	
Grade 7	57	56	53	48
Grade 8		56	52	53

AIMS Reading

District
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	3	2	3	
Grade 7	2	2	2	3
Grade 8		3	3	4

AIMS Mathematics

District
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	6	6	7	
Grade 7	4	3	4	5
Grade 8		7	7	9

Kyrene Akimel A-AI Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	3	1	2	
Grade 7	1	3	3	2
Grade 8		3	3	3

Kyrene Akimel A-AI Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	6	4	3	
Grade 7	3	3	3	4
Grade 8		4	6	7

Kyrene Altadena Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	1	1	2	
Grade 7	2	0	0	1
Grade 8		2	2	1

Kyrene Altadena Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	2	4	4	
Grade 7	5	1	1	3
Grade 8		4	4	3

Kyrene Aprende Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	2	2	2	
Grade 7	3	1	2	2
Grade 8		4	3	4

Kyrene Aprende Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	7	6	6	
Grade 7	4	4	4	3
Grade 8		5	7	7

Kyrene Centennial Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	4	4	2	
Grade 7	3	4	2	4
Grade 8		3	5	6

Kyrene Centennial Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	9	11	7	
Grade 7	6	6	5	6
Grade 8		10	11	15

Kyrene del Pueblo Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	1	1	3	
Grade 7	1	0	2	3
Grade 8		2	1	3

Kyrene del Pueblo Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	3	4	7	
Grade 7	2	1	2	2
Grade 8		9	4	8

Kyrene Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	4	4	7	
Grade 7	3	2	5	6
Grade 8		3	4	7

Kyrene Middle School
Percent Falls Far Below

	2005	2006	2007	2008
Grade 6	7	7	15	
Grade 7	5	3	5	10
Grade 8		9	9	13

AIMS Reading

District
Percent Exceeds

	2005	2006	2007	2008
Grade 6	16	11	16	
Grade 7	17	18	20	19
Grade 8		12	16	15

AIMS Mathematics

District
Percent Exceeds

	2005	2006	2007	2008
Grade 6	38	38	43	
Grade 7	31	38	40	38
Grade 8		29	33	28

Kyrene Akimel A-AI Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	12	10	13	
Grade 7	18	14	14	17
Grade 8		14	13	12

Kyrene Akimel A-AI Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	31	38	39	
Grade 7	32	30	33	36
Grade 8		30	27	25

Kyrene Altadena Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	20	15	22	
Grade 7	21	22	26	23
Grade 8		14	22	22

Kyrene Altadena Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	52	44	59	
Grade 7	31	50	46	52
Grade 8		39	45	37

Kyrene Aprende Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	14	10	20	
Grade 7	15	21	22	24
Grade 8		13	16	15

Kyrene Aprende Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	42	39	45	
Grade 7	35	39	42	42
Grade 8		29	35	29

Kyrene Centennial Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	15	8	14	
Grade 7	14	15	20	17
Grade 8		12	14	11

Kyrene Centennial Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	26	31	34	
Grade 7	30	31	38	31
Grade 8		24	26	21

Kyrene del Pueblo Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	17	13	17	
Grade 7	22	18	23	19
Grade 8		12	15	15

Kyrene del Pueblo Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	38	40	46	
Grade 7	35	42	44	35
Grade 8		29	36	32

Kyrene Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	18	9	11	
Grade 7	14	18	17	13
Grade 8		8	15	14

Kyrene Middle School
Percent Exceeds

	2005	2006	2007	2008
Grade 6	36	38	34	
Grade 7	22	37	39	30
Grade 8		23	26	24

Appendix B

Cost Savings Calculations

