

**Table 1**  
**Grade 9 Course Enrollment**  
**Cambridge Algebra Project, King Open Program**  
**(In project from 1989-1995)**

<b>Cohort No.</b>	<b>Number of Students Taking Math</b>	<b>Year in Grade 9</b>	<b>% in Pre Algebra Courses</b>	<b>% in Algebra I Courses</b>	<b>% Above Algebra I Course</b>
1	12	1991-92	0%	17%	83%
2	16	1992-93	6%	50%	44%
3	15	1993-94	0%	20%	80%
4	19	1994-95	0%	32%	68%
5	13	1995-96	8%	0%	92%
6	19	1996-97	0%	16%	84%
7	17	1997-98	0%	23%	76%

**Table 2**  
**Grade 8 and 9 Course Enrollment**  
**Cambridge Algebra Project**  
**King Open Students Compared to the District**

	<b>1991-92</b>		<b>1995-96</b>	
	<u>AP</u>	<u>District</u>	<u>AP</u>	<u>District</u>
<b>% Enrollment in Grade 8 Algebra</b>	100%	29%	100%	91%
<b>% Who proceed to Geometry</b>	44%	17%	92%	47%

**Table 3**  
**Teacher-Recommended 9th Grade HS Course for 1995-96 8th Grade Students:**  
**Cambridge Algebra Project**  
**King Open Students Compared to the District**

	<b>% enrolled in Geometry or above</b>	<b>% enrolled in Algebra I</b>
<b>All Students</b>	68%	32%
<b>All African -American Students</b>	56%	44%
<b>King Open Students</b>	84%	16%
<b>African-American King Open Students</b>	70%	30%

**Table 4**  
**High School Mathematics Course Enrollment of**  
**1997 & 1996 Graduates of the Dr. Martin Luther King, Jr. Academic Middle School,**  
**San Francisco**

1997 Graduates	Grade 8 (Middle School)			Grade 9 (High School)		
Math Course (n)	<u>King</u> (210)	<u>Demo Eq.</u> (187)	<u>District</u> (3394)	<u>King</u> (178)	<u>Demo Eq.</u> (163)	<u>District</u> (2978)
Pre-algebra	10%	10%	10%	0%	1%	1%
Algebra	90%	29%	33%	26%	36%	43%
IMP1-2*/Prob.Solv.				48%	23%	17%
Geometry				10%	2%	6%
Basic Math				13%	23%	21%
1996 Graduates	Grade 8 (Middle School)			Grade 9 (High School)		
Math Course (n)	<u>King</u> (171)	<u>Demo Eq.</u> (149)	<u>District</u> (4097)	<u>King</u> (148)	<u>Demo Eq.</u> (153)	<u>District</u> (4086)
Pre-algebra	10%	3%	2%	0%	0%	0%
Algebra	90%	24%	21%	41%	34%	34%
IMP 1-2/ProbSolv.*				15%	15%	14%
IMP 3-4				21%	2%	3%
Geometry				6%	5%	5%
Basic Math				18%	38%	27%
				Grade 10 (High School)		
(n)	<u>King</u> (136)	<u>Demo Eq.</u> (125)	<u>District</u> (3394)			
Algebra				17%	30%	23%
Adv.Algebra				6%	5%	5%
IMP 1-2				2%	5%	4%
IMP 3-8				30%	14%	11%
Geometry				34%	23%	33%
Basic Math				7%	10%	8%

\* IMP is the Integrated Mathematics Program, a reform mathematics college preparatory sequence; numbers indicate the semester in the eight-semester sequence.

**Table 5**  
**High School Course Enrollment of King Middle School Graduates,**  
**Compared to Other Middle Schools in San Francisco**

---

	Cohort 1 (1996)*		Cohort 5 (2000)**	
	King MS	non King	King MS	non King
<b>Grade 9 Courses</b>				
	<b>(n=148)</b>	<b>(n=4086)</b>	<b>(n=128)</b>	<b>(n=2611)</b>
Above Algebra I	27%	12%	20%	11%
Alg I or equiv.	55%	54%	80%	89%
Below Algebra I	17%	34%	0%	0%
 <b>Grade 10 Courses</b>				
	<b>(n=136)</b>	<b>(n=3394)</b>	<b>(n=166)</b>	<b>(n=2228)</b>
Above Geometry	21%	9%	20%	14%
Geom. or equiv.	51%	49%	75%	74%
Below Geometry	28%	42%	5%	12%

---

\*1996 data include some students who were taking two math courses.

\*\* 2000 data include only students who attended the same middle school gr 6-8.

Table 6

Jackson, MS, Public Schools  
High School Mathematics Course Enrollment  
in December 1997

HS Grade	General Math	Algebra 1	Geometry	Algebra 2	Trig.	Other
Grade 9 (n=2763)	20%	58%	18%	1%	0%	3%
Grade 10 (n=2116)	2%	33%	40%	22%	1%	2%

Table 7

Jackson, MS, Public Schools  
Grade 8 Algebra I Enrollment and Grade 9 Geometry Enrollment among Jackson Middle Schools <sup>1</sup>

School	% Minority Students	May-97			Dec-97		
		Total Grade 8 Enrollment	Grade 8 Algebra I Enrollment		Continuation to Grade 9 Geometry		
			n	%	n	% of grade 8	% of Alg.1
A-Brinkley	99%	184	75	41%	69	38%	92%
B	84%	350	109	31%	74	21%	68%
C	77%	244	59	24%	43	18%	73%
D	100%	288	68	24%	47	16%	69%
E	100%	129	30	23%	24	19%	80%
F	85%	215	45	21%	38	18%	84%
G	100%	247	50	20%	44	18%	88%
H	100%	180	34	19%	23	13%	68%
I	100%	283	41	14%	36	13%	88%
J	58%	209	21	10%	13	6%	62%

<sup>1</sup>The table shows data for the second cohort of Brinkley students, who began the project in grade 6 in 1994-95. This cohort received less of Moses' attention than did the first cohort, and may be a better test of the project's potential. Students took the Algebra Project in grade 6 and a non-AP math class in grade 7. Two teachers who had attended the two-week Algebra Project training taught the Algebra I classes from the district-mandated textbook, DC Heaths' *Algebra: an Integrated Approach*.

**Table 8**  
**Algebra Project and non-Algebra Project Districts in the Mississippi Delta**  
**Grade 6 Norm-Referenced Test Scores after 1-3 Years of Implementation in Grade 6**

<u>District</u>	<u>% FRE</u>	<u>1995-96 ITBS Math NCE</u>	<u>1995-96 ITBS %&lt;Q1</u>	<u>1995-96 Perf.Assess. Math</u>
<b><u>ALGEBRA PROJECT DISTRICTS</u></b>				
Shaw	86%	48.1	13.3	443.8
N. Bolivar	92%	49.9	19.7	443.9
Hollandale	95%	50.7	13.9	468.8
W. Tallahatchie	92%	48.2	17.9	435.3
Humphreys County	94%	48.2	28.7	419.2
Indianola	84%	44.8	30.0	428.8
Greenville	75%	49.4	22.6	464.8
<b>Mean</b>	<b>88%</b>	<b>48.47</b>	<b>20.87</b>	<b>443.51</b>
<b><u>NON-ALGEBRA PROJECT DISTRICTS</u></b>				
Mound Bayou	86%	49.7	20.9	488.7
Drew	82%	40.9	41.2	387.7
Quitman County	90%	41.7	37.7	451.1
Wilkinson County	88%	39.2	34.4	377.1
Jefferson County	95%	35.3	54.1	381.1
Tunica	86%	36.9	50.0	390.2
Claiborne County	86%	38.5	52.2	430.1
Sunflower County	89%	40.9	44.1	395.1
Holmes County	95%	43.5	39.1	415.3
<b>Mean</b>	<b>89%</b>	<b>40.73</b>	<b>41.52</b>	<b>412.93</b>

NOTE:

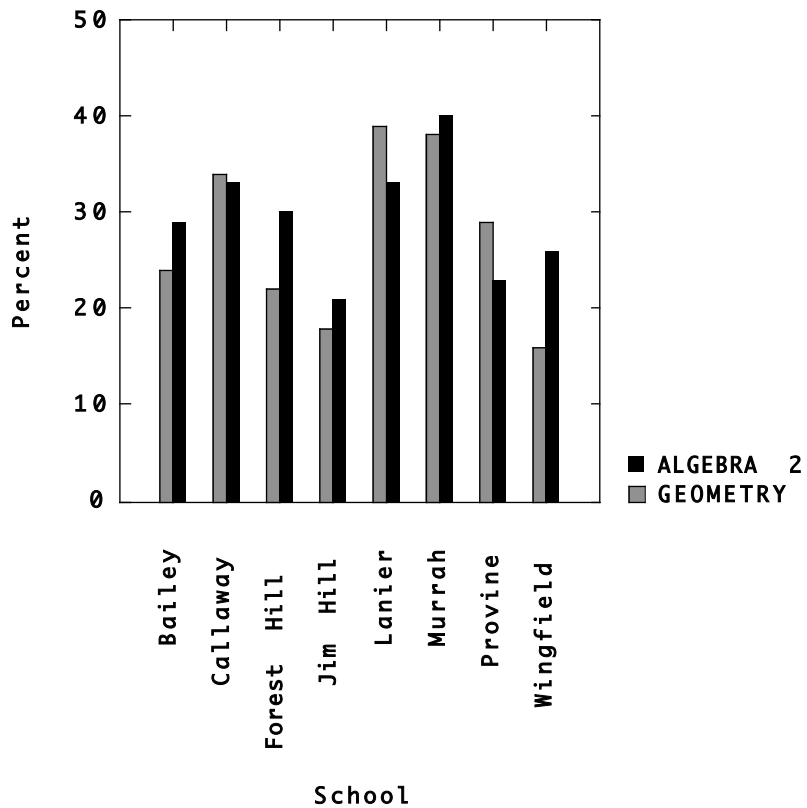
The Algebra Project was implemented in Grade 6 classrooms, along with Professional Development and Community Development. West Tallahatchie and Indianola also received services from the Algebra Project's youth program. The data show that fewer Algebra Project students performed in the lowest quartile on this norm-referenced tests than in nonAlgebra Project districts.

Table 9  
 Algebra Project High School Implementation at Lanier High School, Jackson, MS:  
 Enrollment in College Preparatory Mathematics Courses in Grades 9 and 10

	1995-96			1998-99			2001-02		
	(pre-Algebra Proj.)			(Year 3 of Algebra Proj.)			(Year 6 of Algebra Proj.)		
	Lanier HS			Lanier HS			Lanier HS		other HS
<b>GRADE 9 COURSES</b>									
Above Algebra I	1%			39%			22%		18%
Algebra I or equiv.	12%			38%			67%		45%
Below Algebra I	87%			22%			11%		37%
<b>GRADE 10 COURSES</b>									
Above Geometry	16%			33%			24%		23%
Geometry or equiv.	16%			40%			58%		39%
Below Geometry	68%			27%			18%		38%

**Table 10**  
**Enrollment in Major Mathematics Courses in 1998-99**  
**Jackson, MS**

<b>Grade 9</b>					
<u>High School</u>	<u>Total No.</u> <u>in</u> <u>Major</u> <u>Courses</u>	<u>%</u> <u>Pre-Alg</u>	<u>%</u> <u>Algebra 1</u>	<u>%</u> <u>Geometry</u>	<u>Total %</u>
Lanier	128	22%	38%	39%	99%
Bailey	113	31%	44%	24%	99%
Callaway	125	24%	41%	34%	99%
Forest Hill	146	32%	45%	22%	99%
Jim Hill	132	20%	39%	18%	77%
Murrah	130	32%	25%	38%	95%
Provine	167	33%	38%	29%	100%
Wingfield	119	28%	55%	16%	99%
(Average for nonLanier)		29%	41%	26%	
<b>Grade 10</b>					
	<u>Total No.</u> <u>in</u> <u>Major</u> <u>Courses</u>	<u>%</u> <u>Algebra 1</u>	<u>%</u> <u>Geometry</u>	<u>%</u> <u>Algebra 2</u>	<u>Total %</u>
Lanier	111	23%	40%	33%	96%
Bailey	83	23%	40%	29%	92%
Callaway	129	17%	46%	33%	96%
Forest Hill	151	28%	40%	30%	98%
Jim Hill	108	38%	24%	21%	83%
Murrah	154	16%	41%	40%	97%
Provine	156	24%	33%	23%	80%
Wingfield	80	28%	46%	26%	100%
(Average for nonLanier)		25%	39%	29%	



**Figure 1: Grade 9 enrollment in Geometry, and Grade 10 enrollment in Algebra 2, Jackson, MS High Schools, 1998-99**

Figure 1 compares Jackson high schools on the percentage of students enrolled in the more advanced mathematics sequence: grade 9 Geometry and grade 10 Algebra 2. The graph shows that the highest enrollments are at Lanier and Murrah High Schools, followed by Callaway.

Table 11  
Mississippi Algebra I Test, Spring 2003  
Lanier High School, Jackson, MS  
Total Scale Score

	Algebra Project Students	nonAlgebra Project Students
Number	106	87
Minimum Score	243	237
Maximum Score	375	375
Percent Passing	56%	38%
Mean Score	306.23	290.78*
SD	28.9	25.3

\*difference is statistically significant at p value of .0001

Table 12  
Mississippi Algebra I Test, Spring 2003  
Lanier High School, Jackson, MS  
Strands: No. of Items Correct

Assessment		Algebra Project Students			nonAlgebra Project Students			<u>Differences</u>
<u>Strand</u>	<u>No. of Items</u>	<u>n</u>	<u>mean</u>	<u>SD</u>	<u>n</u>	<u>mean</u>	<u>SD</u>	
Patterns	5	102	2.19	1.21	87	1.93	1.36	*
Equations	18	102	9.22	3.20	87	7.28	2.68	**
Polynomials	9	102	4.08	2.04	87	3.23	1.41	**
Formulas	10	102	4.47	1.80	87	3.81	1.75	**
Slope	8	102	3.33	1.51	87	3.39	1.58	
Probability	3	102	1.08	0.92	87	0.7	0.82	**
Open-ended (Equations)	4	88	0.75	1.23	78	0.62	1.04	na

\* p = .16

\*\* differences are statistically significant at level of p <.05 or greater.

na significance test not appropriate on this item