SBA Performance Gains in Primary and Secondary District Cohorts 2005 – 2007

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APS PERFORMANCE GAINS IN PRIMARY AND SECONDARY DISTRICT COHORTS 2005 – 2007

BACKGROUND

NCLB Is a Status Model, Not a Growth Model

The No Child Left Behind Act (NCLB, Public Law 107-110, 2002) established ambitious goals for increasing student learning and attaining equity in the distribution of student performance. Under the law, schools must assure that all student groups show Adequate Yearly Progress (AYP) toward the goal of 100% proficient for every specified subgroup by the year 2014. Each year AYP percent proficient targets substantially increase for select subject areas to comply with the federal proficiency goal. For example, the math Annual Measurable Objective (AMO) for K-5 schools is 24% proficient for 2005, 28% for 2006, 33% for 2007…, 89% for 2013, 100% for 2014. Therefore, what is important is the current status of proficiency for students as a whole and for every identified student subgroup. Students who are below proficient (i.e., below grade level) will have to grow at a faster pace than their peers if they are to become proficient by 2014. Similarly, students who are far above proficient (i.e., above grade level) will not have to accelerate their growth to meet the needs of NCLB. Thus, status is the measure, but growth is the route students must take to become proficient, especially for struggling students.

In this report, two cohorts are examined to illustrate APS student proficiency gains in math and reading as measured by the New Mexico Standards Based Assessment (NMSBA). In order to identify the cohorts representing the District, only those students who attended regular and alternative APS schools and completed all three English language NMSBA in 2005, 2006 and 2007 are included. The primary level cohort consists of students who were tested in grade 3 in 2005, grade 4 in 2006 and grade in 5 2007. Similarly, the secondary level cohort consists of students who were tested in grade 6 in 2005, grade 7 in 2006 and grade 8 in 2007. To be clear, students transferring within APS are included in the cohorts provided they took the 3 successive assessments in the grades stated. Twenty percent of primary cohort students and 16% of secondary cohorts were tested in more than one APS site during the period (n = 1037, 808). Due to assessment equivalency issues, only the English NMSBA can be defensibly compared across those years. See Table 1 for the cohort demographic characteristics. While science is not included as part of AYP to date, science gain is reported in Tables 6 and 7.

Table 1. Demographics of primary and secondary cohorts from 2005, 2006 and 2007

NCLB subgroup	Primary cohort Grades 3, 4, 5	Secondary cohort Grades 6, 7, 8	Total
All Students	5,218	5,064	10,282
Females	2,557	2,544	5,101
Males	2,661	2,520	5,181
Anglo	1,819	1,825	3,644
African American	191	172	363
Hispanic	2,838	2,698	5,536
Asian	135	127	262
Native American	235	242	477
Economically Disadvantaged	3,377	3,045	6,422
Special Education	783	754	1,537
English Learners	1,152	894	2,046

COHORT MATH AND READING PROFICIENCY GROWTH 2005 - 2007

Two research questions were examined for this report:

- What performance growth did APS cohort students achieve on the New Mexico Standards Based Assessment from 2005 through 2007?
- Do cohort subgroups show progress toward closing the achievement gap on the NMSBA from 2005 through 2007?

Due to assessment equivalency issues, only the English NMSBA can be defensibly compared across those years. With results from the 2007 New Mexico Standards Based Assessment there are three successive years of comparable math and reading data for grades three through nine (2005, 2006, 2007). Beginning with 2007, eleventh grade NMSBA math and reading assessments are aligned with NM standards and are expected to be comparable to subsequent eleventh grade NMSBA administrations.

RESULTS

Research Question #1 *What performance gain did APS cohort students achieve on the New Mexico Standards Based Assessment from 2005 through 2007?*

The following are remarkable findings evident from the data. Subsequent pages in this report will present results by numbers, graphs and tables in an effort to illustrate findings from both research questions.

- The primary cohort exhibited negative gain in math proficiency
- The secondary cohort exhibited positive gain in math proficiency
- The primary cohort exhibited positive gain in reading proficiency
- The secondary cohort exhibited strong positive gain in reading proficiency
- Both primary and secondary cohorts exhibited negative gain in science proficiency

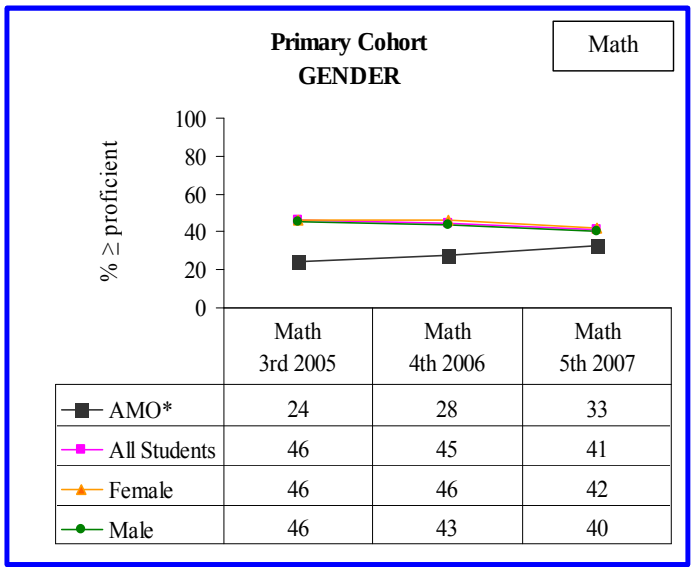
Research Question #2 *Do APS cohort subgroups show progress toward closing the achievement gap as measured by the NMSBA from 2005 - 2007?*

- Both elementary and middle school cohorts narrowed the reading achievement gap for Hispanic, Native American and African American subgroups as compared to Anglos
- The primary cohort narrowed the reading achievement gap for economically disadvantaged, special education and English learner subgroups as compared to Anglos
- The secondary cohort narrowed the reading achievement gap for economically disadvantaged and English learner subgroups as compared to Anglos
- Narrowing of the math achievement gap was not evident when cohort subgroups were compared to Anglos

The NCLB legislation requires that each state create standards, measures and assessments to demonstrate Adequate Yearly Progress toward achieving 100% proficient in reading and math by 2014 for every specified student subgroup. Since virtually each state approached the NCLB mandate in its own way, making comparisons among annual statewide assessment results is fraught with difficulty and inaccurate conclusions.

COHORT MATH AND READING PROFICIENCY BY GENDER

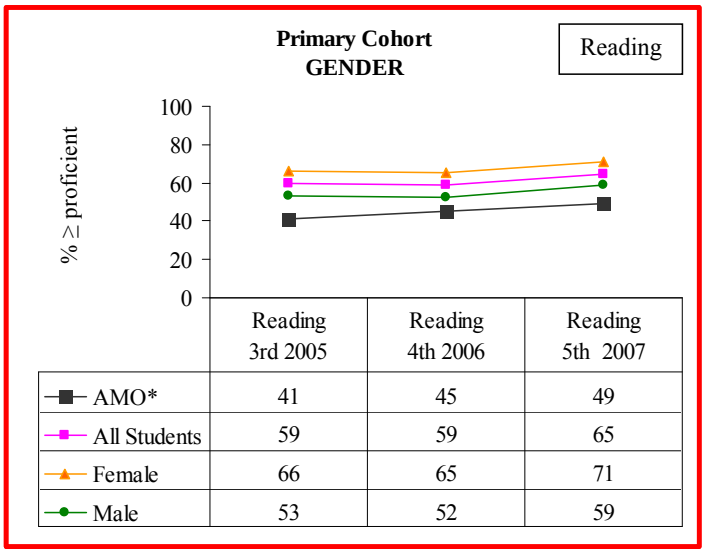
Figure 1. Math percent proficient by gender, primary cohort on NMSBA 2005 - 2007



	Math 3rd 2005	Math 4th 2006	Math 5th 2007
AMO*	24	28	33
All Students	46	45	41
Female	46	46	42
Male	46	43	40

The primary cohort as a whole performed above the state's Annual Measurable Objectives (AMO) in both math and reading for all three years. There was a downward trend in math proficiency of 5 points across all students, with males exhibiting a greater decline in percent proficient when compared to females (- 6 vs. - 4 percentage points). Math proficiency was approximately the same across for males and females. In reading proficiency, there was a 6 point gain in proficiency for all students. Females showed greater reading proficiency than males on the NMSBA (see Tables 2 and 4).

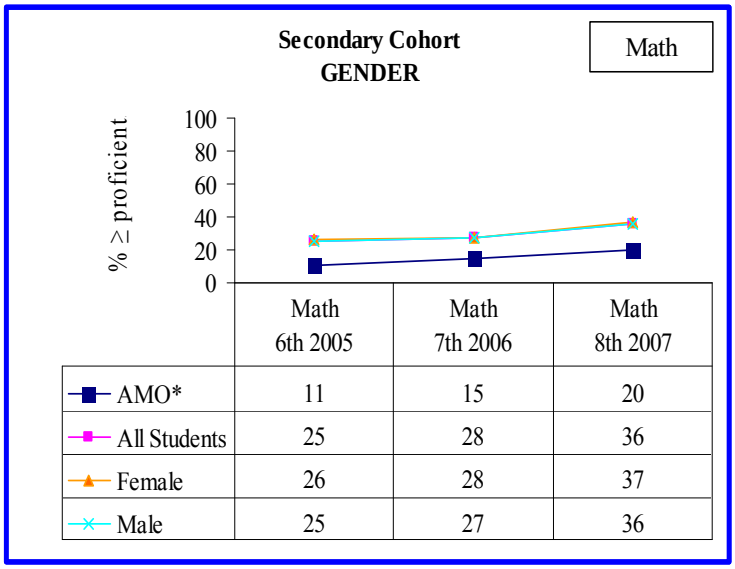
Figure 2. Reading percent proficient by gender, primary cohort NMSBA 2005 - 2007



	Reading 3rd 2005	Reading 4th 2006	Reading 5th 2007
AMO*	41	45	49
All Students	59	59	65
Female	66	65	71
Male	53	52	59

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

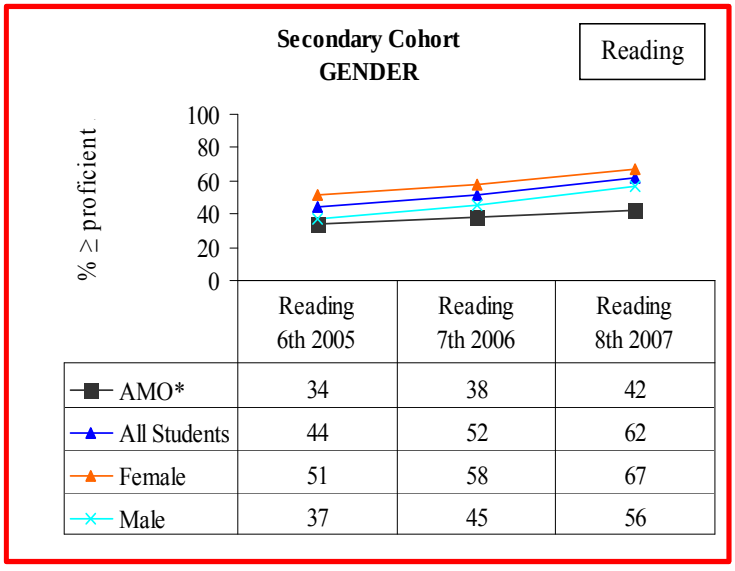
Figure 3. Math percent proficient by gender, secondary cohort NMSBA 2005 - 2007



	Math 6th 2005	Math 7th 2006	Math 8th 2007
AMO*	11	15	20
All Students	25	28	36
Female	26	28	37
Male	25	27	36

The secondary cohort as a whole performed above annual measurable objectives (AMO) in both math and reading in all three years. There was an upward trend in both math and reading for females and males. When comparing 2007 with 2005, math proficiency improved 11 percentage points overall. While both genders showed remarkable reading percent proficient gain, males improved more markedly (19% vs. 16%). Males lag behind females in reading. In addition to surpassing reading AMO*, the secondary cohort reading growth eclipsed the AMO* growth rate, e.g., AMO reading growth was 8 points while all students proficiency growth was 18 points from 2005 - 2007. Gender subgroups do not impact AYP (see Tables 3 and 5).

Figure 4. Reading percent proficient by gender, secondary cohort NMSBA 2005 - 2007

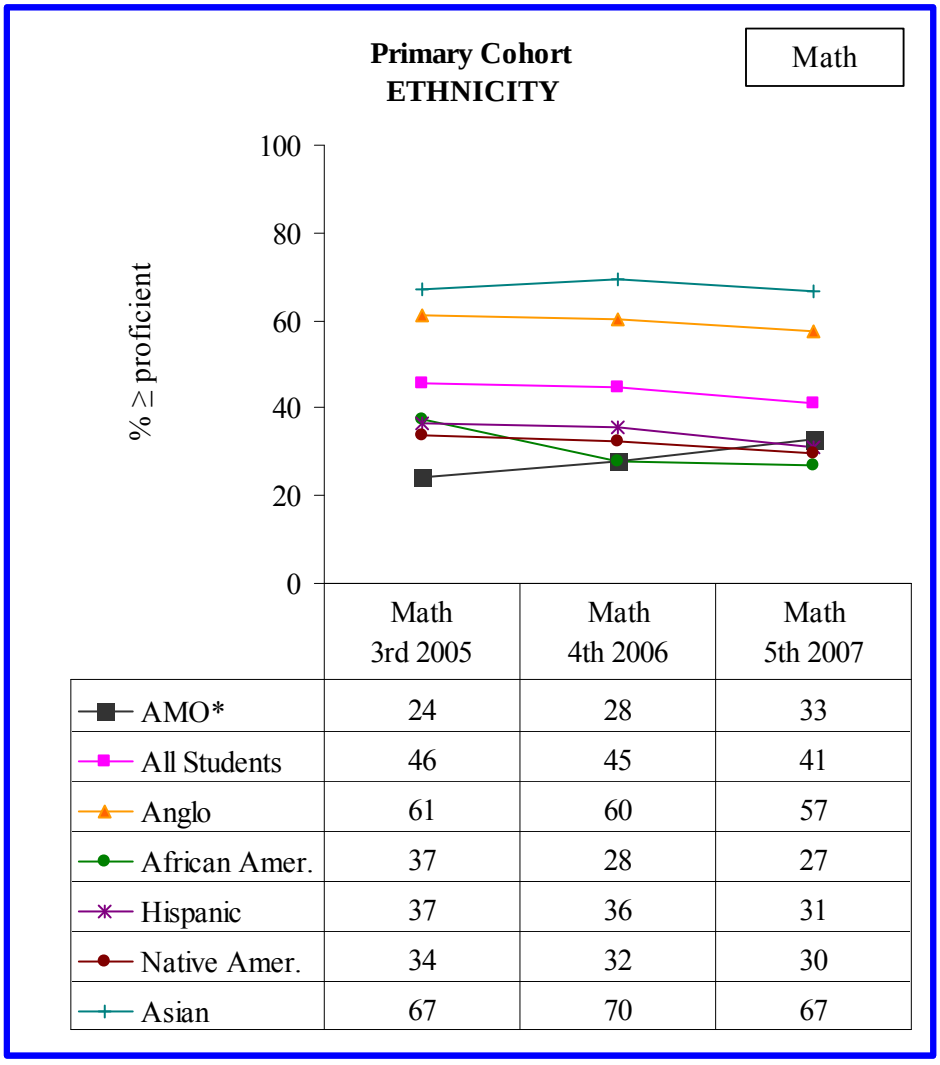


	Reading 6th 2005	Reading 7th 2006	Reading 8th 2007
AMO*	34	38	42
All Students	44	52	62
Female	51	58	67
Male	37	45	56

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

COHORT MATH AND READING PROFICIENCY BY ETHNICITY

Figure 5. Math percent proficient by ethnicity, primary cohort NMSBA 2005 - 2007

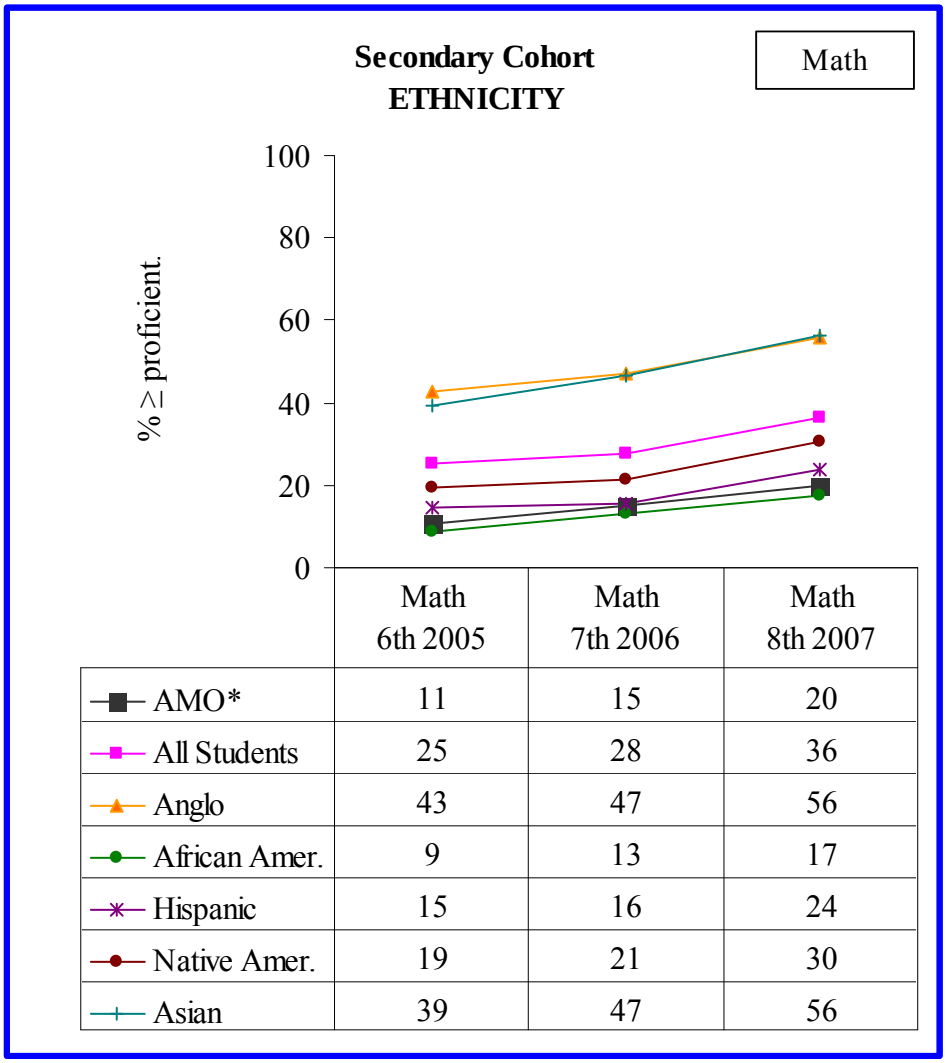


	Math 3rd 2005	Math 4th 2006	Math 5th 2007
AMO*	24	28	33
All Students	46	45	41
Anglo	61	60	57
African Amer.	37	28	27
Hispanic	37	36	31
Native Amer.	34	32	30
Asian	67	70	67

All primary cohort ethnic subgroups met AMO targets 2005 - 2006. African American, Hispanic and Native American subgroups failed to reach the 2007 AMO. A downward trend within the primary cohort was reflected across all ethnic subgroups in math excepting the Asian student cohort which showed no growth. Compared with the other NCLB ethnic subgroups, primary cohort African American students had the most pronounced decline of 10 percentage points in math from 2005 – 2007 (see Table 2). Narrowing of the math achievement gap was not evident when cohort subgroups were compared to Anglos.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure 6. Math percent proficient by ethnicity, secondary cohort NMSBA 2005 - 2007

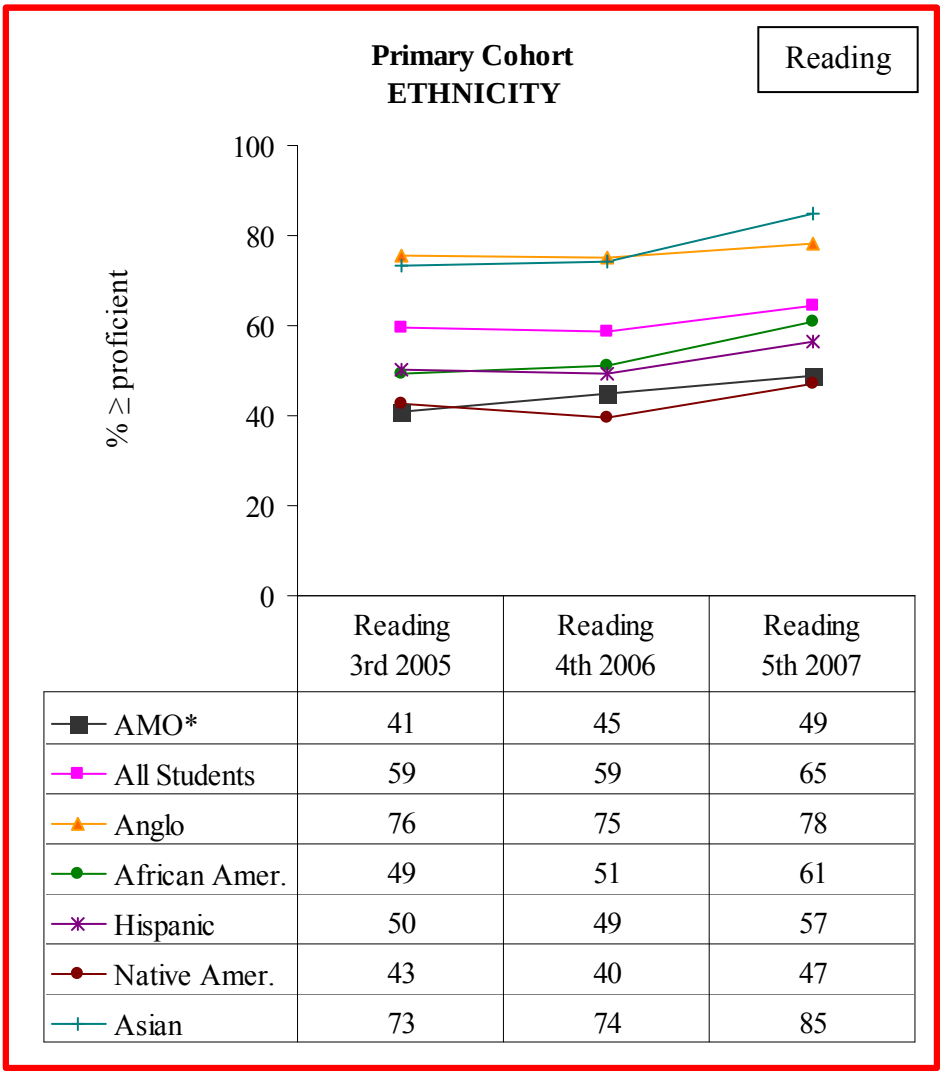


	Math 6th 2005	Math 7th 2006	Math 8th 2007
AMO*	11	15	20
All Students	25	28	36
Anglo	43	47	56
African Amer.	9	13	17
Hispanic	15	16	24
Native Amer.	19	21	30
Asian	39	47	56

Every secondary cohort ethnic subgroup showed positive growth in math proficiency across the three years. Only the African American subgroup failed to reach AMO goals. Hispanic and African American subgroups made comparable proficiency gains in math from 2005 – 2007. Native American math proficiency growth was 11 percentage points (see Table 3). Narrowing of the math achievement gap was not evident when cohort subgroups were compared to Anglos.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure 7. Reading percent proficient by ethnicity, primary cohort NMSBA 2005 - 2007

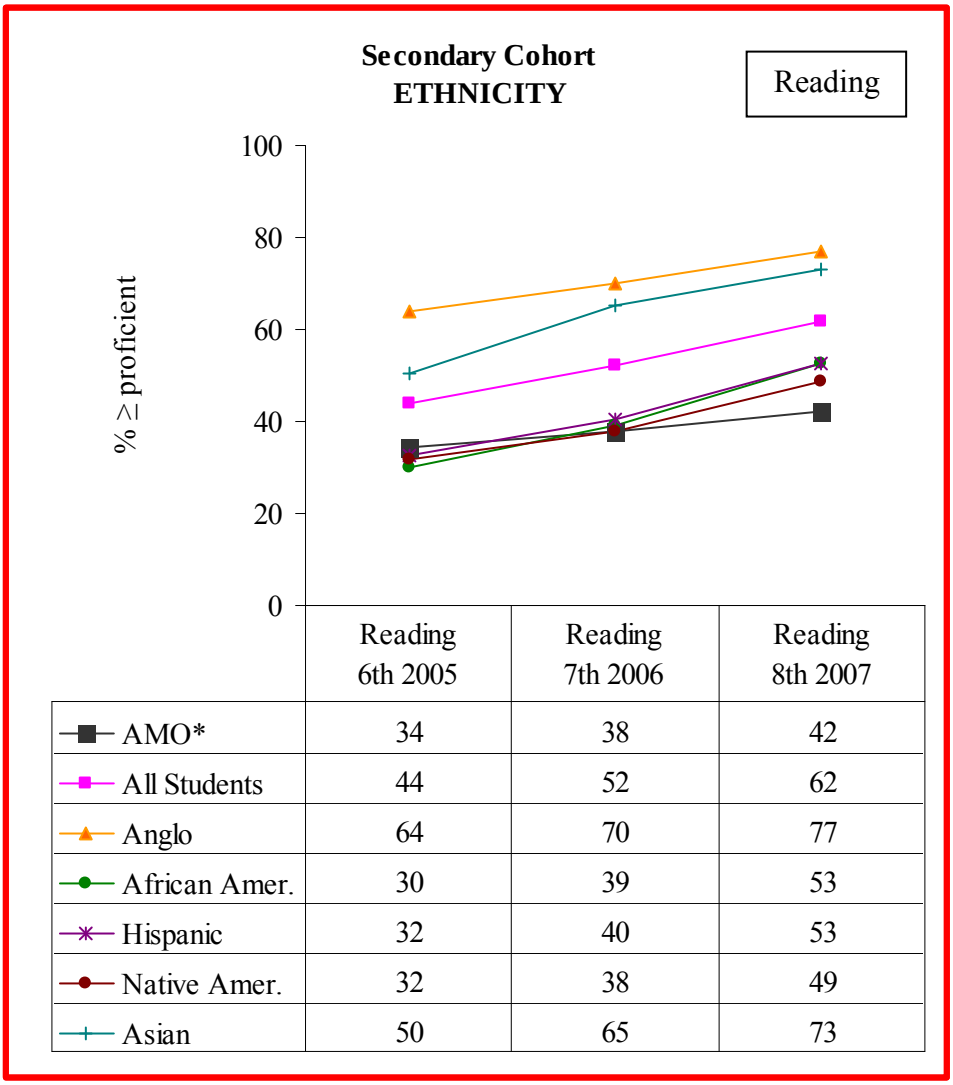


	Reading 3rd 2005	Reading 4th 2006	Reading 5th 2007
AMO*	41	45	49
All Students	59	59	65
Anglo	76	75	78
African Amer.	49	51	61
Hispanic	50	49	57
Native Amer.	43	40	47
Asian	73	74	85

Each primary cohort ethnic subgroup showed positive growth in reading proficiency from 2005 through 2007. When comparing proficiency percentage growth from 2005 – 2007, the performance gap appeared to be closing in elementary school reading percent proficient for African American (12), Hispanic (7) and Native American (4) subgroups compared to Anglo reading growth (2). All subgroups except Native American reached reading performance targets each year (see Table 4).

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure 8. Reading percent proficient by ethnicity, secondary cohort NMSBA 2005 - 2007



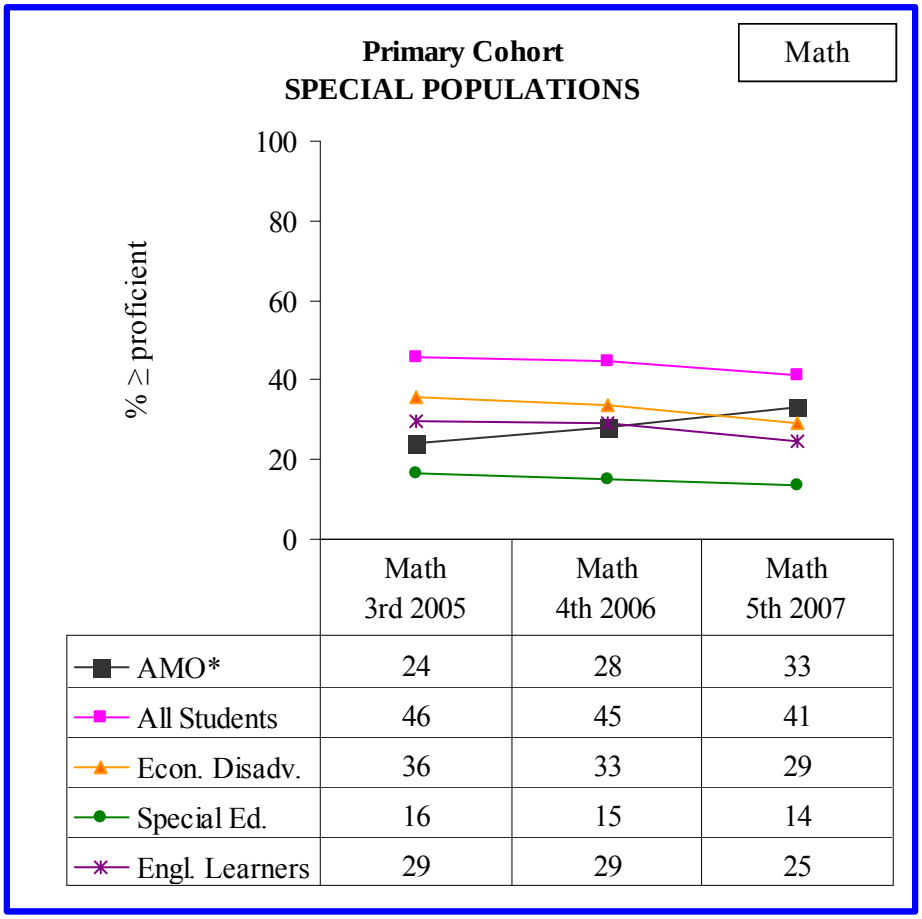
	Reading 6th 2005	Reading 7th 2006	Reading 8th 2007
AMO*	34	38	42
All Students	44	52	62
Anglo	64	70	77
African Amer.	30	39	53
Hispanic	32	40	53
Native Amer.	32	38	49
Asian	50	65	73

Like their elementary school counterparts, every middle school cohort ethnic subgroup showed positive growth in reading percent proficient from 2005 - 2007. Moreover, every ethnic subgroup reached their AMO target in both 2006 and 2007. When comparing growth in percent proficient from 2005 through 2007, the performance gap appeared to be closing in middle school reading for African American (23), Hispanic (21) and Native American (17) subgroups compared to Anglo reading growth (13). African American proficiency gain from 2005 – 2007 equaled that of the Asian cohort (see Table 5).

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

COHORT MATH AND READING PROFICIENCY BY SPECIAL POPULATION

Figure9. Math percent proficient by special population, primary cohort NMSBA 05 - 07

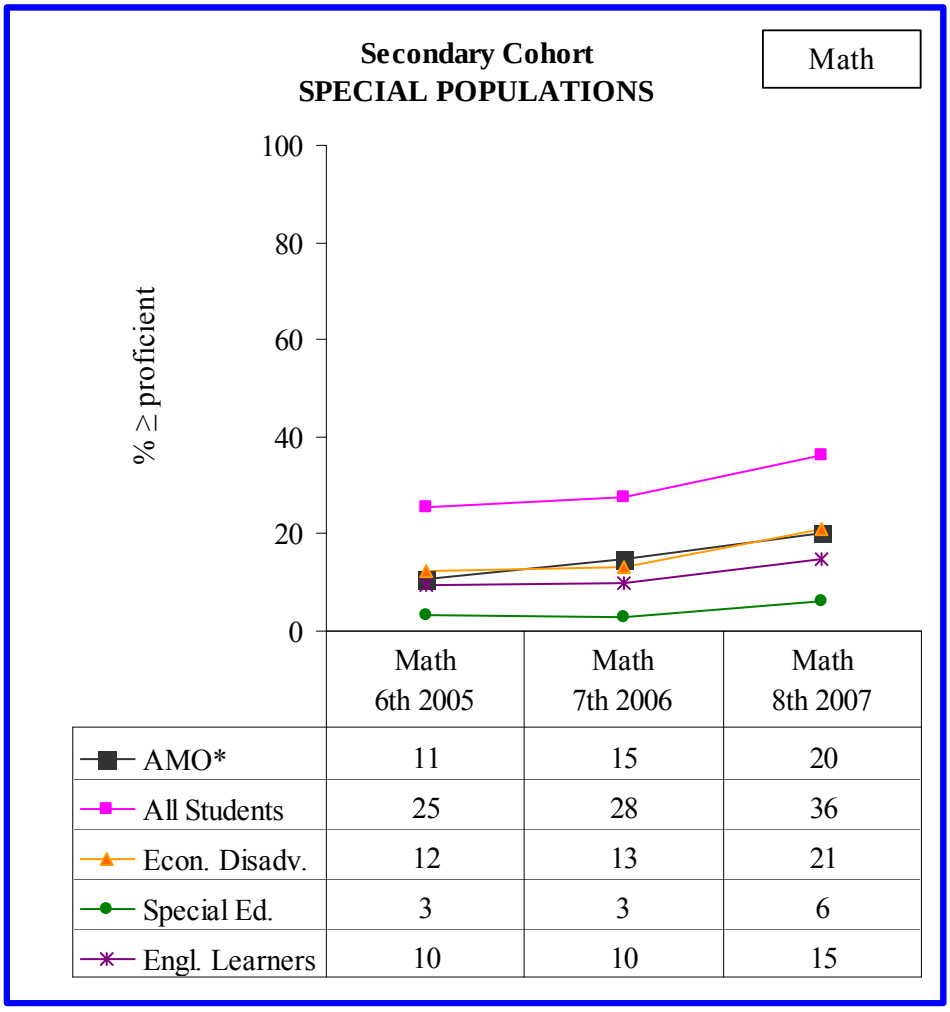


	Math 3rd 2005	Math 4th 2006	Math 5th 2007
AMO*	24	28	33
All Students	46	45	41
Econ. Disadv.	36	33	29
Special Ed.	16	15	14
Engl. Learners	29	29	25

There was a downward trend in math proficiency for primary cohort special population subgroups. Special education student performance remained relatively flat across the three years of NMSBA administration. Special education students and English learners exhibited less negative growth than the all students aggregate (see Table 2).

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure 10. Math percent proficient by special population, secondary cohort NMSBA 05 - 07

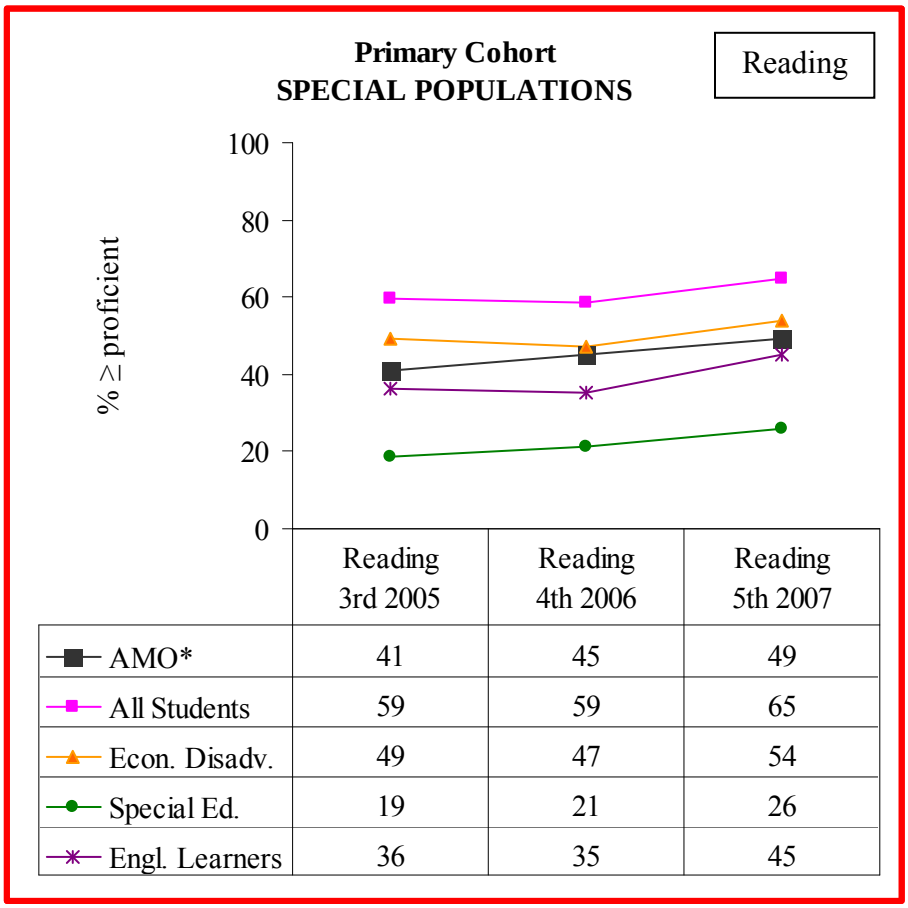


	Math 6th 2005	Math 7th 2006	Math 8th 2007
AMO*	11	15	20
All Students	25	28	36
Econ. Disadv.	12	13	21
Special Ed.	3	3	6
Engl. Learners	10	10	15

There was an upward trend in math proficiency for all secondary cohort special population subgroups. Economically disadvantaged student performance reached the AMO for 2007. Special education students are far less proficient than any other NCLB subgroup. This difference is most pronounced for middle school math performance (see Table 3).

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure 11. Reading percent proficient by special population, primary cohort NMSBA 05 - 07

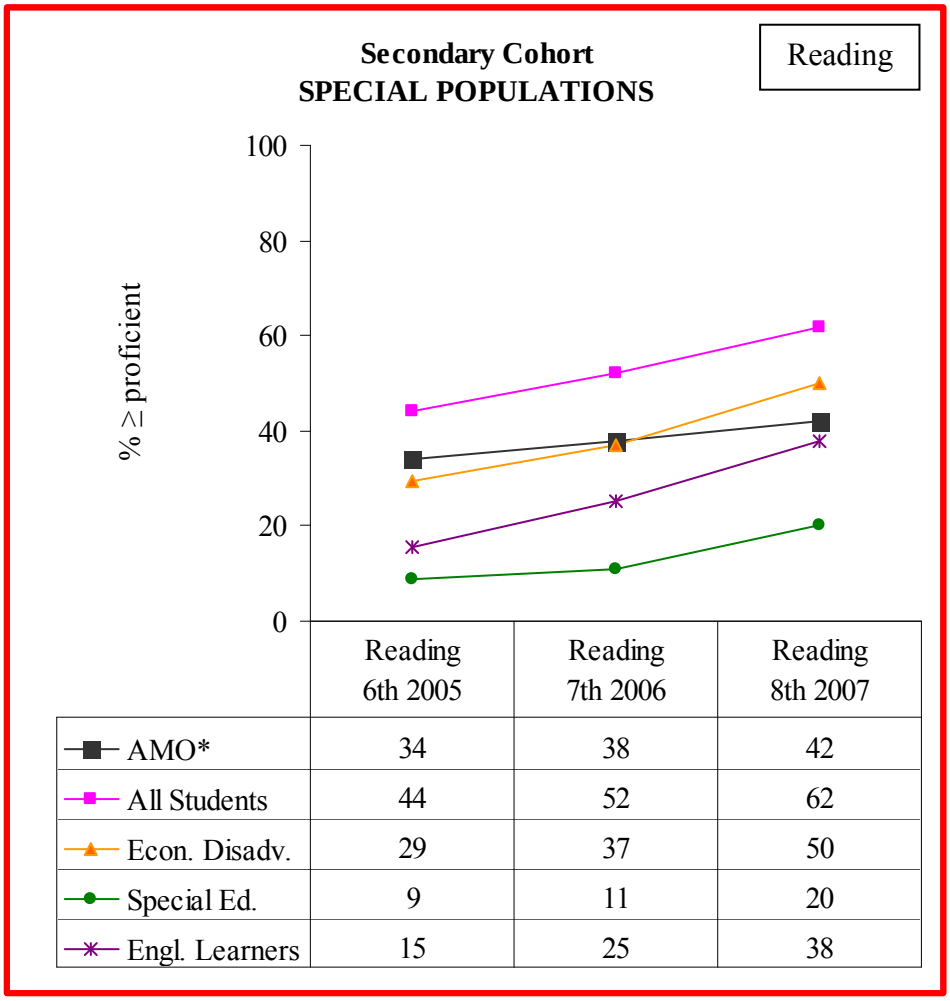


	Reading 3rd 2005	Reading 4th 2006	Reading 5th 2007
AMO*	41	45	49
All Students	59	59	65
Econ. Disadv.	49	47	54
Special Ed.	19	21	26
Engl. Learners	36	35	45

A positive reading proficiency growth trend was evident across all primary cohort special population subgroups. This trend equals or exceeds 2005-2007 gains shown by the general cohort population. Economically disadvantaged elementary students achieved their reading AMO in each of the three years reported (see Table 4).

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure12. Reading percent proficient by special population, secondary cohort NMSBA 05 - 07



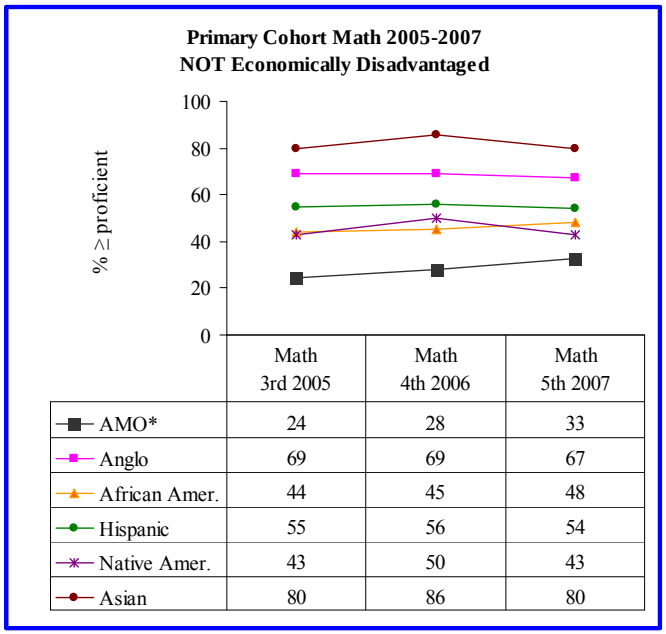
	Reading 6th 2005	Reading 7th 2006	Reading 8th 2007
AMO*	34	38	42
All Students	44	52	62
Econ. Disadv.	29	37	50
Special Ed.	9	11	20
Engl. Learners	15	25	38

A pronounced, positive reading proficiency growth trend was evident across all secondary cohort special population subgroups. This trend equals or exceeds 2005-2007 gains shown by the general cohort population in both the economically disadvantaged and English learner subgroups. Economically disadvantaged middle school students achieved their reading AMO in 2007 (see Table 5).

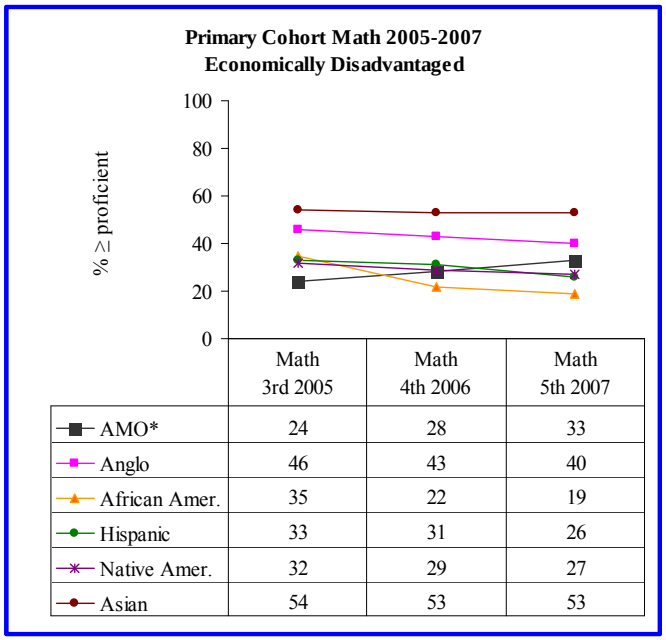
* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

IMPACT OF ECONOMIC DISADVANTAGE AND ETHNICITY ON COHORT PERFORMANCE

Figure13. Comparing math percent proficient by economic disadvantage and ethnicity primary cohort NMSBA 2005 - 2007



	Math 3rd 2005	Math 4th 2006	Math 5th 2007
AMO*	24	28	33
Anglo	69	69	67
African Amer.	44	45	48
Hispanic	55	56	54
Native Amer.	43	50	43
Asian	80	86	80

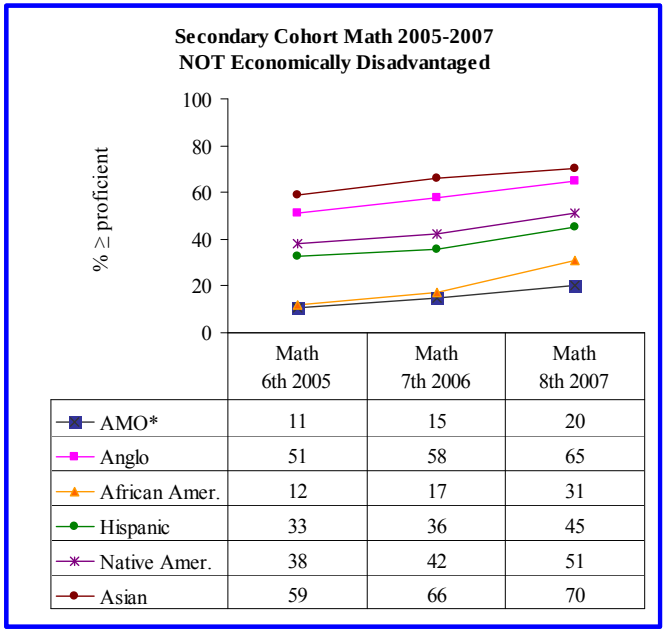


	Math 3rd 2005	Math 4th 2006	Math 5th 2007
AMO*	24	28	33
Anglo	46	43	40
African Amer.	35	22	19
Hispanic	33	31	26
Native Amer.	32	29	27
Asian	54	53	53

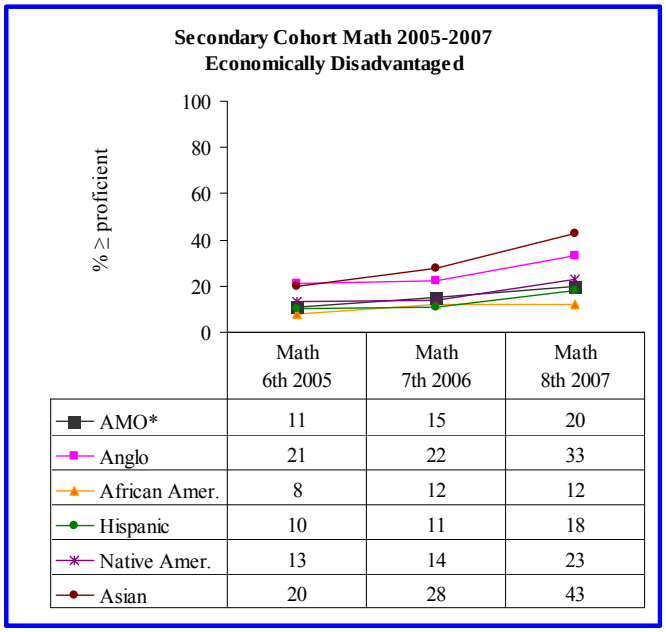
The NCLB legislation considers only a single predictor variable to determine academic success in relation to an AMO, i.e., identified ethnic subgroups. Considering two variables simultaneously reveals evidence of deeper relationship. When exploring economic disadvantage and ethnicity together, economic status was a more powerful predictor of academic performance than was ethnicity alone. In every ethnic subgroup, students not economically disadvantaged surpassed their associated AMO for math and reading; every non-disadvantaged ethnic subgroup made AYP. This was true for both cohorts each year. An economic status effect appeared to amplify the primary cohort's math performance meaning economically disadvantaged students fared worse in math proficiency across ethnic subgroups when compared to corresponding ethnic subgroup as a whole.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure14. Comparing math percent proficient by economic disadvantage and ethnicity secondary cohort NMSBA 2005 - 2007



	Math 6th 2005	Math 7th 2006	Math 8th 2007
AMO*	11	15	20
Anglo	51	58	65
African Amer.	12	17	31
Hispanic	33	36	45
Native Amer.	38	42	51
Asian	59	66	70

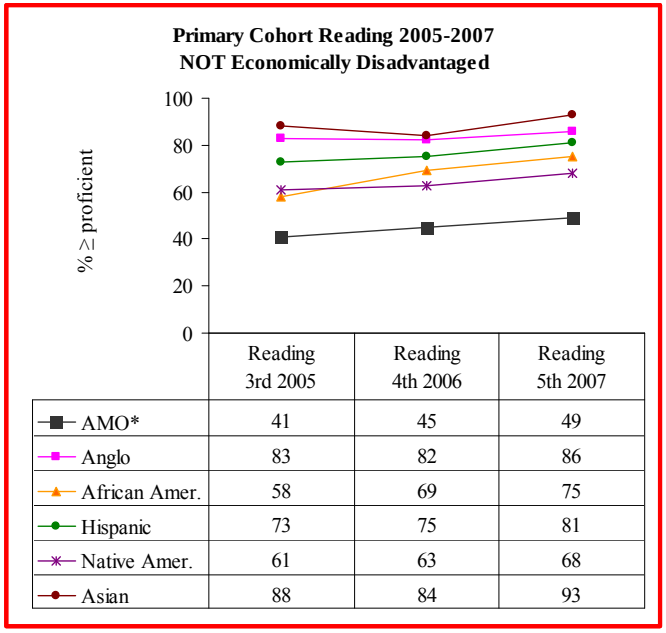


	Math 6th 2005	Math 7th 2006	Math 8th 2007
AMO*	11	15	20
Anglo	21	22	33
African Amer.	8	12	12
Hispanic	10	11	18
Native Amer.	13	14	23
Asian	20	28	43

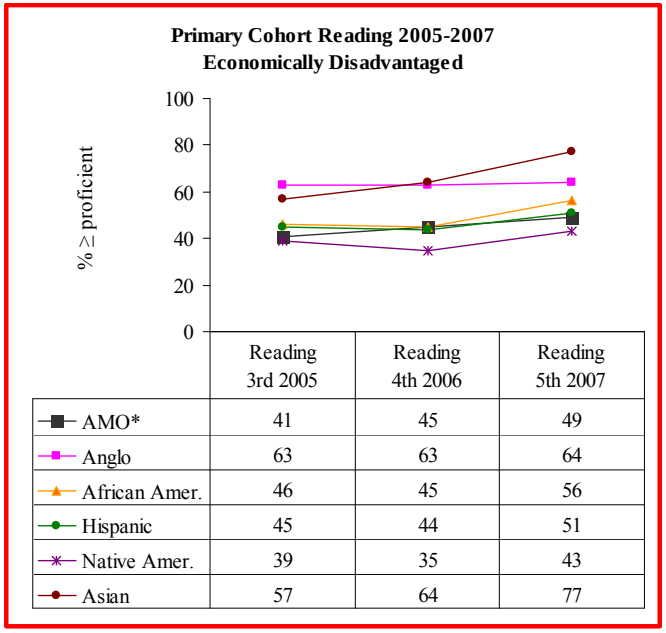
In every secondary cohort ethnic subgroup, students who were not economically disadvantaged surpassed their associated math AMO. For secondary cohorts in math, non-disadvantaged students had greater percent proficient when compared to their economically disadvantaged counterparts. While economically disadvantaged ethnicities showed overall growth in math, that growth was less than the improvement demonstrated by each corresponding ethnicity as a whole. Excepting Asians, a reverse trend was evident for non-disadvantaged ethnic subgroups; those not economically disadvantaged had greater math proficiency than each whole subgroup. Only the Asian non-disadvantaged subgroup showed a lower percentage point gain when compared to their entire cohort subgroup.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure15. Comparing reading percent proficient by economic disadvantage and ethnicity primary cohort NMSBA 2005 - 2007



	Reading 3rd 2005	Reading 4th 2006	Reading 5th 2007
AMO*	41	45	49
Anglo	83	82	86
African Amer.	58	69	75
Hispanic	73	75	81
Native Amer.	61	63	68
Asian	88	84	93

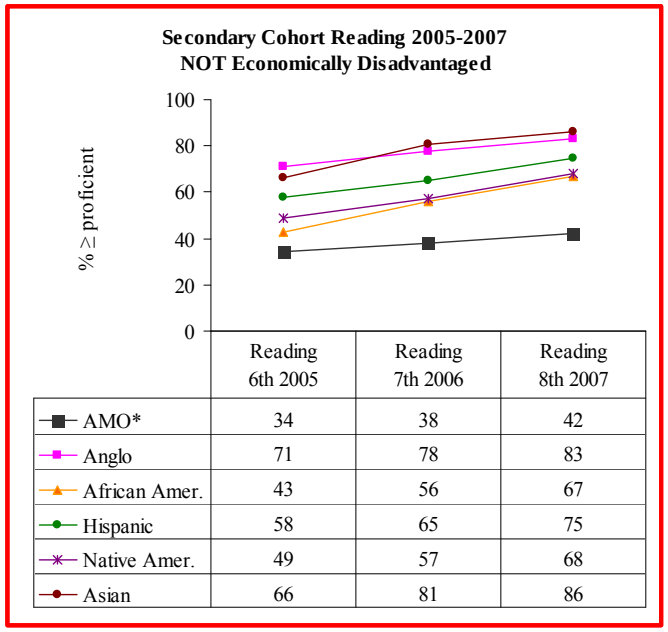


	Reading 3rd 2005	Reading 4th 2006	Reading 5th 2007
AMO*	41	45	49
Anglo	63	63	64
African Amer.	46	45	56
Hispanic	45	44	51
Native Amer.	39	35	43
Asian	57	64	77

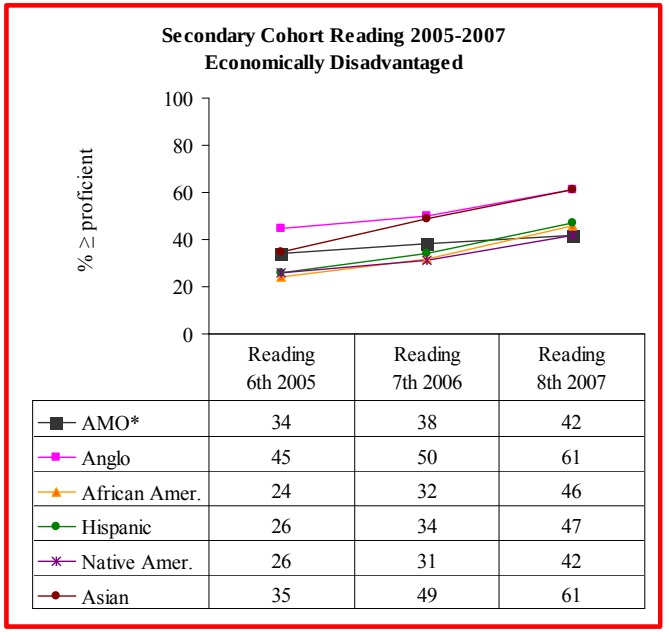
In every primary cohort ethnic subgroup, students not economically disadvantaged surpassed their associated reading AMO. Excepting Asians, economic status appeared to amplify the primary cohort's growth in reading. Economically disadvantaged students grew less over the 3 years while non-disadvantaged students improved more in reading when compared to their ethnic subgroup as a whole. While primary cohort Asian students' reading performance improved during 2005 – 2007, those economically disadvantaged grew 8 percentage points ahead of the entire Asian cohort and non-disadvantaged Asians grew 8 points less than all Asian cohorts.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Figure16. Comparing reading percent proficient by economic disadvantage and ethnicity secondary cohort NMSBA 2005 - 2007



	Reading 6th 2005	Reading 7th 2006	Reading 8th 2007
AMO*	34	38	42
Anglo	71	78	83
African Amer.	43	56	67
Hispanic	58	65	75
Native Amer.	49	57	68
Asian	66	81	86



	Reading 6th 2005	Reading 7th 2006	Reading 8th 2007
AMO*	34	38	42
Anglo	45	50	61
African Amer.	24	32	46
Hispanic	26	34	47
Native Amer.	26	31	42
Asian	35	49	61

In every secondary cohort ethnic subgroup, students not economically disadvantaged surpassed their associated reading AMO. Excepting Asians, economic status impacted the secondary cohort's growth in reading proficiency. Similar to the primary cohort, economically disadvantaged middle school students grew less over the 3 years while non-disadvantaged students improved more in reading when compared to their ethnic subgroup as a whole. While secondary cohort Asian students' reading performance improved during 2005 – 2007, those economically disadvantaged grew 3 percentage points ahead of the entire Asian cohort and non-disadvantaged Asians grew 3 points less than all Asian cohorts.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

COHORT PROFICIENCY GROWTH

Table 2. Math proficiency growth, primary cohort NMSBA 2005 - 2007

Primary Cohort Grades 3, 4, 5, 2005-2007	Math Growth % proficient 2005 - 2007	Math % proficient 3rd 2005	Math % proficient 4th 2006	Math % proficient 5th 2007
AMO*	8.9	24.1	28.0	33.0
All Students	-4.9	45.9	44.7	41.0
Females	-4.6	46.4	46.2	41.8
Males	-5.1	45.5	43.3	40.4
Anglo	-3.6	61.0	60.1	57.4
African American	-10.6	37.4	27.9	26.8
Hispanic	-5.5	36.6	35.8	31.1
Native American	-4.2	33.8	32.3	29.6
Asian	-0.5	67.2	69.6	66.7
Economically Disadvantaged	-6.5	35.7	33.4	29.2
Special Education	-2.5	16.3	15.2	13.8
English Learners	-4.9	29.4	28.9	24.5

Math performance across all primary cohort subgroups showed remarkable decline except the Asian subgroup proficiency which remained fairly flat. African Americans in the primary cohort exhibited most pronounced negative growth. Elementary school math proficiency moved from one subgroup failing to make AYP in 2005 to six subgroups missing the 2007 AMO*.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Table 3. Math proficiency growth, secondary cohort NMSBA 2005 - 2007

Secondary Cohort Grades 6, 7, 8, 2005-2007	Math Growth % proficient 2005 - 2007	Math % proficient 6th 2005	Math % proficient 7th 2006	Math % proficient 8th 2007
AMO*	9.4	10.6	15.0	20.0
All Students	10.9	25.3	27.5	36.2
Females	11.4	25.5	27.7	36.9
Males	10.3	25.3	27.4	35.6
Anglo	13.3	42.6	47.0	55.9
African American	8.6	8.8	13.0	17.4
Hispanic	8.9	14.6	15.5	23.5
Native American	11.0	19.4	21.1	30.4
Asian	16.9	39.4	46.7	56.3
Economically Disadvantaged	8.9	12.3	13.2	21.2
Special Education	3.1	3.3	2.8	6.4
English Learners	5.2	9.5	9.5	14.7

In contrast to their primary counterparts, the secondary cohort showed positive math performance growth across all NCLB subgroups. Hispanic and Native American subgroups surpassed the AMO every year. Native American math percent proficient exceeded the AMO* growth rate required by the New Mexico Public Education Department during the period (11 vs. 9.4). Narrowing of the math achievement gap was not evident when cohort subgroups were compared to Anglos.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Table 4. Reading proficiency growth, primary cohort NMSBA 2005 - 2007

Primary Cohort Grades 3, 4, 5, 2005-2007	Reading Growth % proficient 2005 - 2007	Reading % proficient 3rd 2005	Reading % proficient 4th 2006	Reading % proficient 5th 2007
AMO*	8.1	40.9	45.0	49.0
All Students	5.2	59.4	58.6	64.6
Females	5.1	65.9	65.2	71.0
Males	5.4	53.1	52.3	58.5
Anglo	2.6	75.7	75.2	78.3
African American	11.9	49.2	51.1	61.1
Hispanic	6.4	50.1	49.4	56.5
Native American	4.5	42.7	39.6	47.2
Asian	11.8	73.3	74.1	85.1
Economically Disadvantaged	5.4	48.5	47.3	53.9
Special Education	7.0	18.9	21.3	25.9
English Learners	8.1	36.4	35.2	44.5

The primary cohort showed positive growth in reading performance across all subgroups. Hispanic and African American subgroups surpassed the AMO every year. African American reading percent proficient exceeded the AMO* growth rate required by the New Mexico Public Education Department during the period (11.9 vs. 8.1). The elementary school cohort narrowed the reading achievement gap for Hispanic, Native American and African American subgroups as compared to reading growth for Anglos.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Table 5. Reading proficiency growth, secondary cohort NMSBA 2005 - 2007

Secondary Cohort Grades 6, 7, 8, 2005-2007	Reading Growth % proficient 2005 - 2007	Reading % proficient 6th 2005	Reading % proficient 7th 2006	Reading % proficient 8th 2007
AMO*	7.9	34.1	38.0	42.0
All Students	17.7	44.1	51.5	61.8
Females	15.7	51.4	58.1	67.1
Males	19.4	36.9	45.0	56.3
Anglo	12.9	63.9	70.0	76.8
African American	22.8	29.8	39.2	52.6
Hispanic	20.4	32.4	40.4	52.8
Native American	16.5	32.0	37.8	48.5
Asian	22.8	50.4	65.1	73.2
Economically Disadvantaged	20.1	29.4	36.9	49.5
Special Education	10.6	8.9	10.8	19.5
English Learners	22.3	15.4	25.3	37.7

Secondary cohort reading proficiency exhibited strong gains during 2005 – 2007. While six NCLB subgroups failed to reach the AMO target in 2005, only two subgroups were below that bar in 2007 (special education and English learners). When comparing 2005 – 2007 proficiency growth, the performance gap appeared to be closing in middle school reading for African American, Hispanic and Native American subgroups compared to Anglos. African American, Hispanic and Native American reading growth was more than two times the growth rate required by the New Mexico Public Education Department for middle school students.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Table 6. Science proficiency growth, primary cohort NMSBA 2005 - 2007

Primary Cohort Grades 3, 4, 5, 2005-2007	Science Growth % proficient 2005 - 2007	Science % proficient 3rd 2005	Science % proficient 4th 2005	Science % proficient 5th 2007
AMO*	-	none	none	none
All Students	-33.8	82.4	59.0	48.6
Females	-35.8	83.1	57.9	47.3
Males	-31.9	81.8	60.1	49.9
Anglo	-25.4	93.4	78.3	68.0
African American	-36.6	75.5	47.9	38.9
Hispanic	-39.1	76.1	48.4	37.0
Native American	-40.0	73.0	37.4	33.0
Asian	-21.4	89.5	73.3	68.1
Economically Disadvantaged	-41.1	75.9	46.8	34.8
Special Education	-39.1	60.8	35.6	21.7
English Learners	-39.3	65.1	36.9	25.8

Science proficiency as measured by the New Mexico Standards Based Assessment appeared to show decline across both primary and secondary cohorts in every subgroup. No science achievement targets have been specified by the Public Education Department to date. Science was not considered in determining Adequate Yearly Progress status (AYP) in New Mexico during the reported years.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)

Table 7. Science proficiency growth, secondary cohort NMSBA 2005 - 2007

Secondary Cohort Grades 6, 7, 8, 2005-2007	Science Growth % proficient 2005 - 2007	Science % proficient 6th 2005	Science % proficient 7th 2006	Science % proficient 8th 2007
AMO*	-	none	none	none
All Students	-7.5	33.1	26.7	25.6
Females	-6.9	30.3	25.7	23.4
Males	-8.3	36.2	27.9	27.9
Anglo	-9.7	54.0	47.0	44.3
African American	-6.8	19.2	13.4	12.4
Hispanic	-6.6	20.7	14.2	14.1
Native American	-9.2	21.3	17.0	12.1
Asian	2.1	37.3	37.3	39.4
Economically Disadvantaged	-6.0	18.0	12.6	12.0
Special Education	-1.6	6.8	4.5	5.2
English Learners	-0.6	8.5	5.6	7.9

CONCLUSIONS

This report presents proficiency data from the New Mexico Standards Based Assessment of APS students taking all three of the 2005, 2006 and 2007 test administrations. Only students in grade 3 or 6 in 2005 were included; they comprise the primary and secondary cohorts respectively. The standard reporting practice that employs a status model shows change from one year to another, e.g., 2006 third grade math proficiency compared to 2007 third grade math proficiency. Since different groups of students are compared from year to year in a status model, change can be discussed defensibly but not growth. Cohort results reveal growth since the same students are compared over time. Under current NCLB law a status model must be used to demonstrate student achievement yet a growth model can better indicate student learning.

In 2005 through 2007, the APS elementary cohort declined in math proficiency as measured by the NMSBA, while the secondary cohort showed substantial growth. Both cohorts had positive growth in reading proficiency over the three years. Both cohorts exhibited decline in science, although that result could partially be a function of the difficulty in equitably assessing true science knowledge across years.

When considering ethnicity in elementary and middle school cohorts, APS narrowed the reading achievement gap for Hispanic, Native American and African American students as compared to Anglo cohorts. Economic disadvantage was a more powerful predictor of academic success than was ethnicity. In every ethnic subgroup, students not economically disadvantaged surpassed their associated AMO for math and reading.

* Annual Measurable Objective, the New Mexico target for showing Adequate Yearly Progress (AYP)