

*Adequate Yearly Progress (AYP)
and Massachusetts
Comprehensive Assessment
System (MCAS)*

Arlington Public Schools

MCAS Analysis

2011

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Preface

- District scores include the scores of students in out-of-district placements.
- Scores are reported as Advanced + Proficient = A+P
- Presentation will examine the following data:
 - District grade level performance
 - Cohort performance
 - High Needs Student results
 - Growth data
- Adequate Yearly Progress results

District 2011 MCAS Overview

- Arlington is overall a high achieving district with moderate to very high student growth
- The vast majority of district grade level scores are in the top 20% in the state.
- Students consistently score well above the state average on all measures of achievement.

Arlington Public Schools Ranking on 2011 MCAS

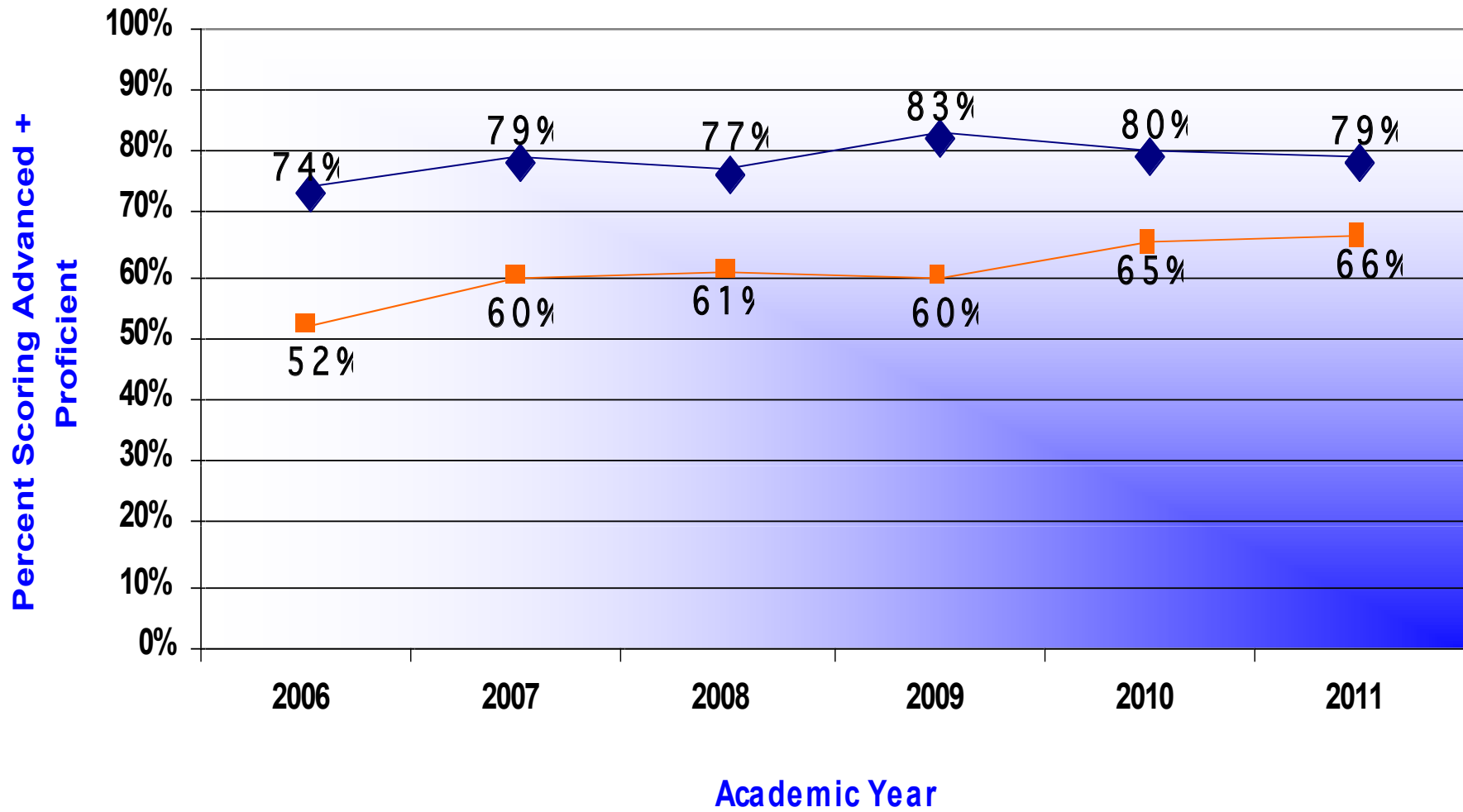
| Grade Level | ELA Rank | % (top) | Math Rank | % (top) | Science Rank | % (top) |
|--------------------|-----------------|----------------|------------------|----------------|---------------------|----------------|
| 3 | 34/301 | 11% | 56/301 | 19% | | |
| 4 | 35/303 | 12% | 47/304 | 16% | | |
| 5 | 22/306 | 7% | 45/306 | 15% | 17/306 | 6% |
| 6 | 113/556 | 20% | 97/556 | 17% | | |
| 7 | 17/468 | 4% | 154/469 | 33% | | |
| 8 | 68/468 | 15% | 55/468 | 12% | 31/468 | 6% |
| 10 | 33/356 | 9% | 41/358 | 11% | 98/346 | 31% |

District Mathematics 2011

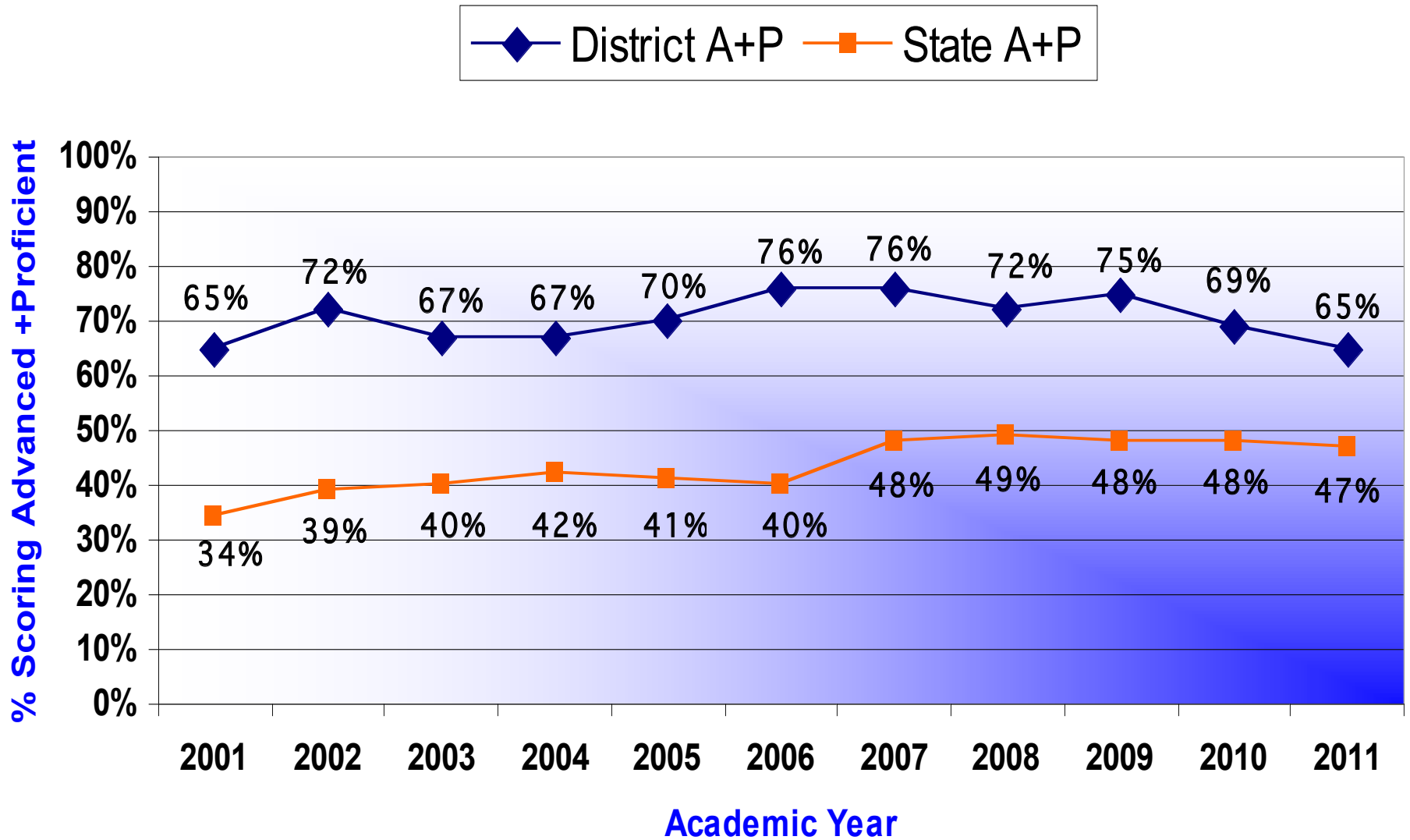
APS students perform 6-24% above
state averages

APS 2006-2011 Grade 3 Math: Percent Proficient or Advanced

◆ District A+P % ■ State A+P%

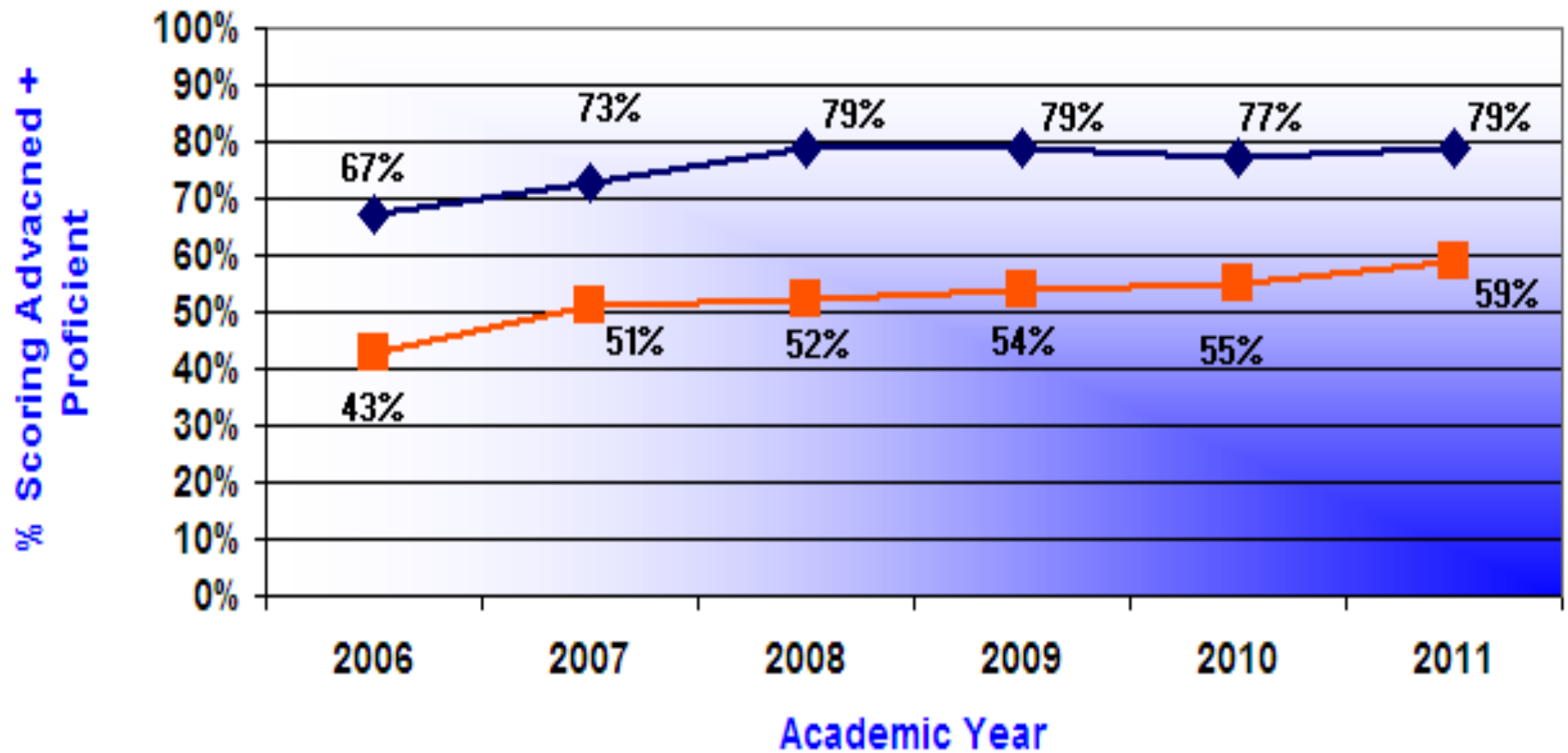


APS 2001-2011 Grade 4 Mathematics: Percent Proficient + Advanced

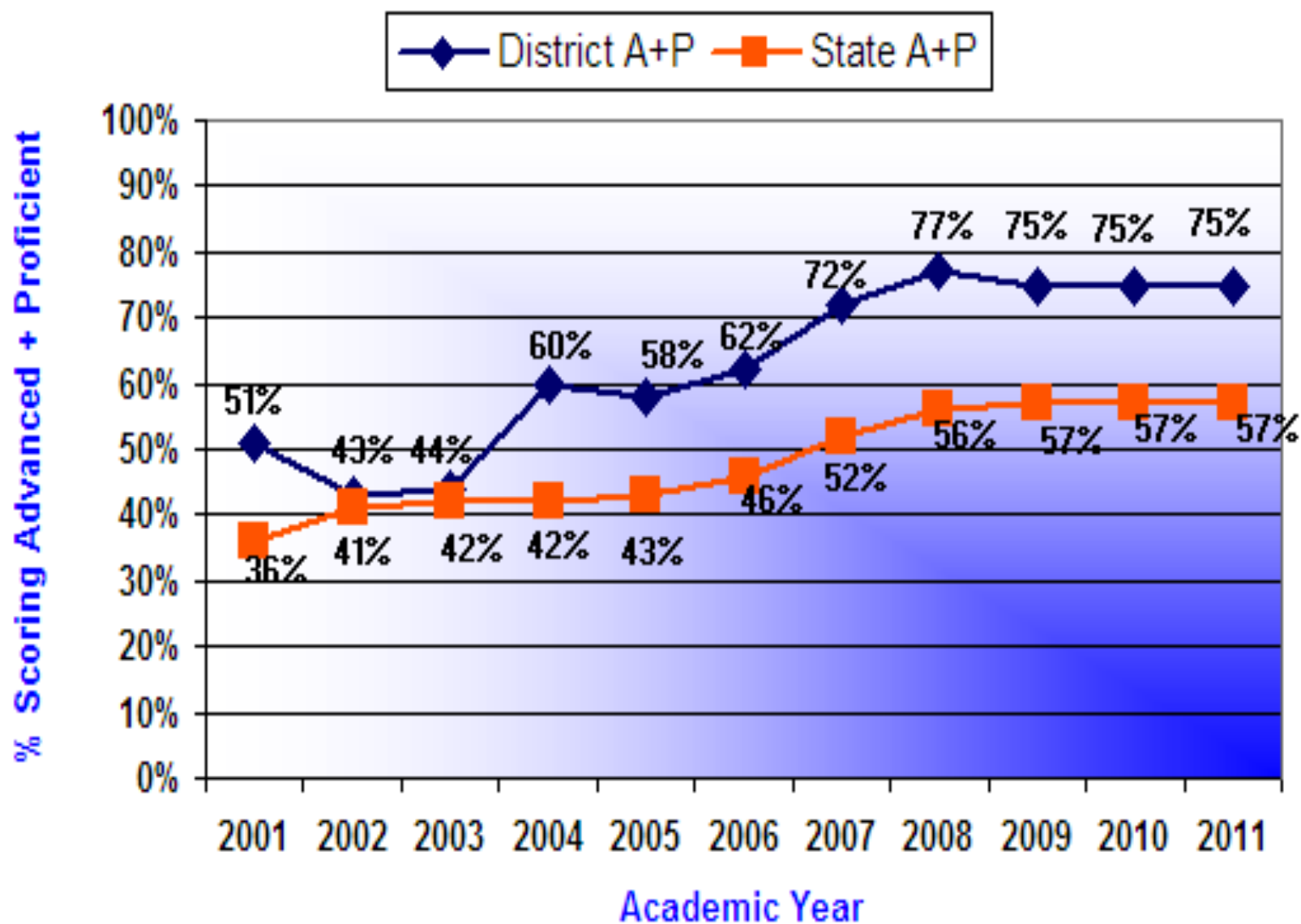


APS 2006-2011 Grade 5 Mathematics: Percent Proficient + Advanced

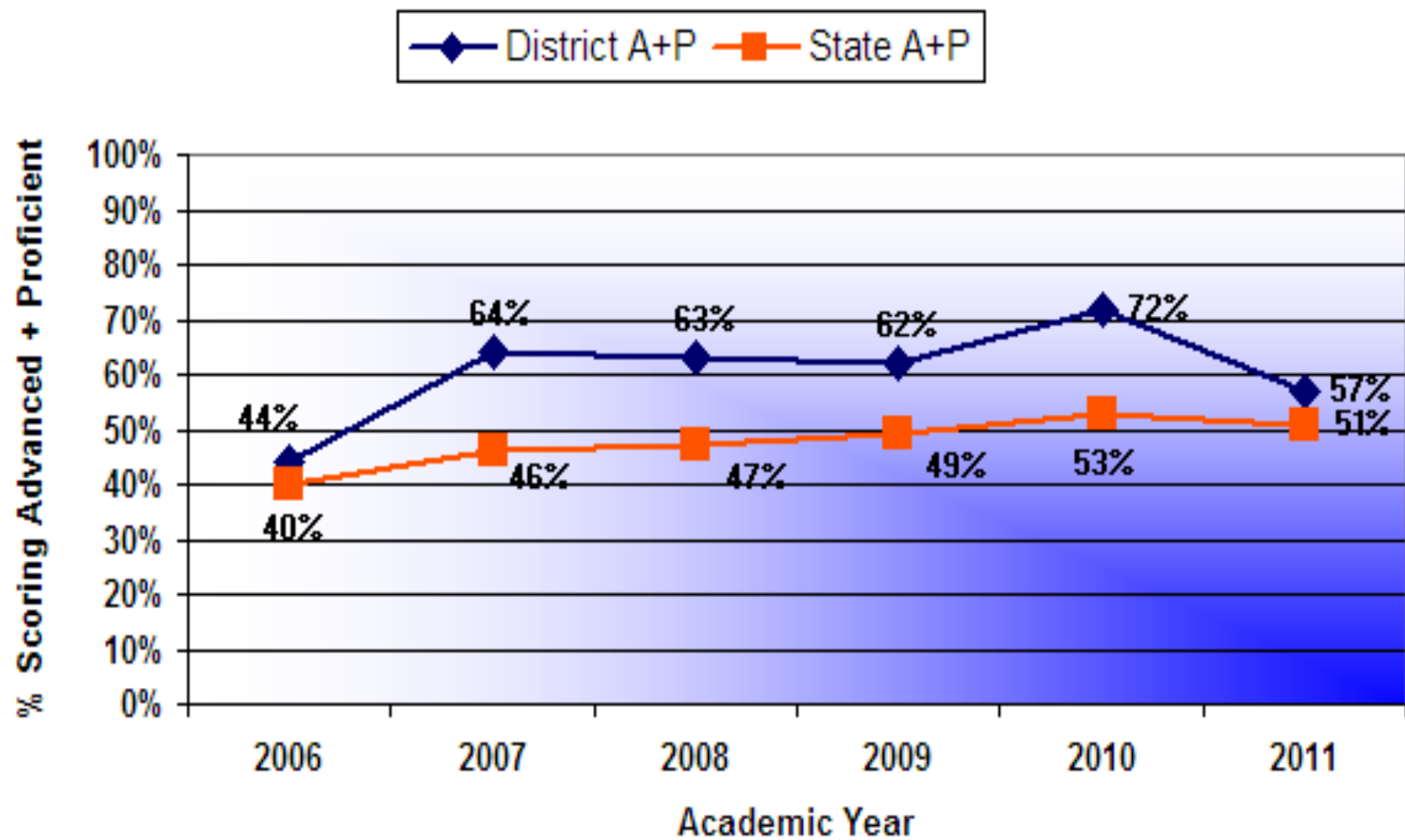
◆ District A+P ■ State A+P



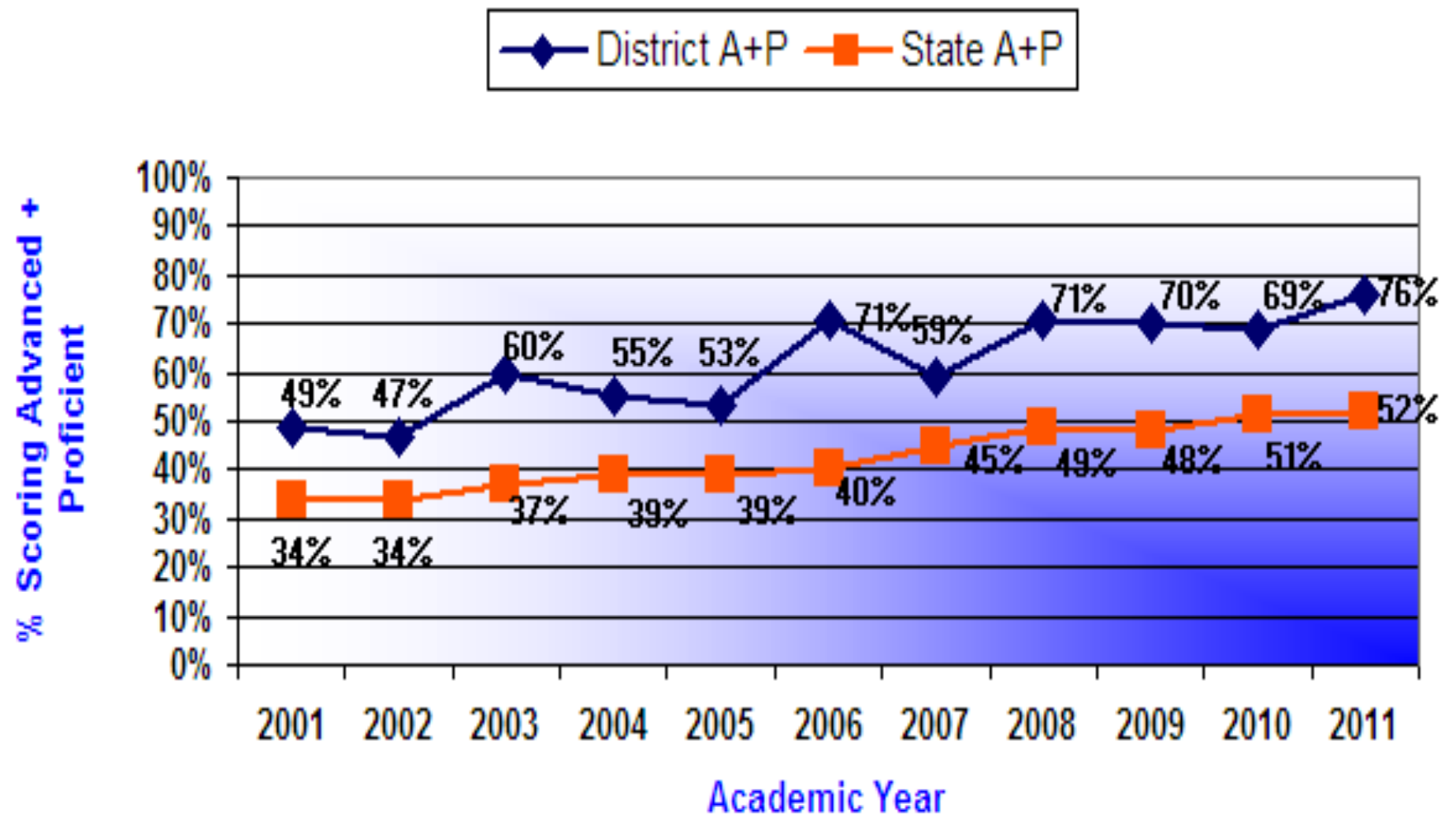
APS 2001-2011 Grade 6 Mathematics: Percent Proficient + Advanced



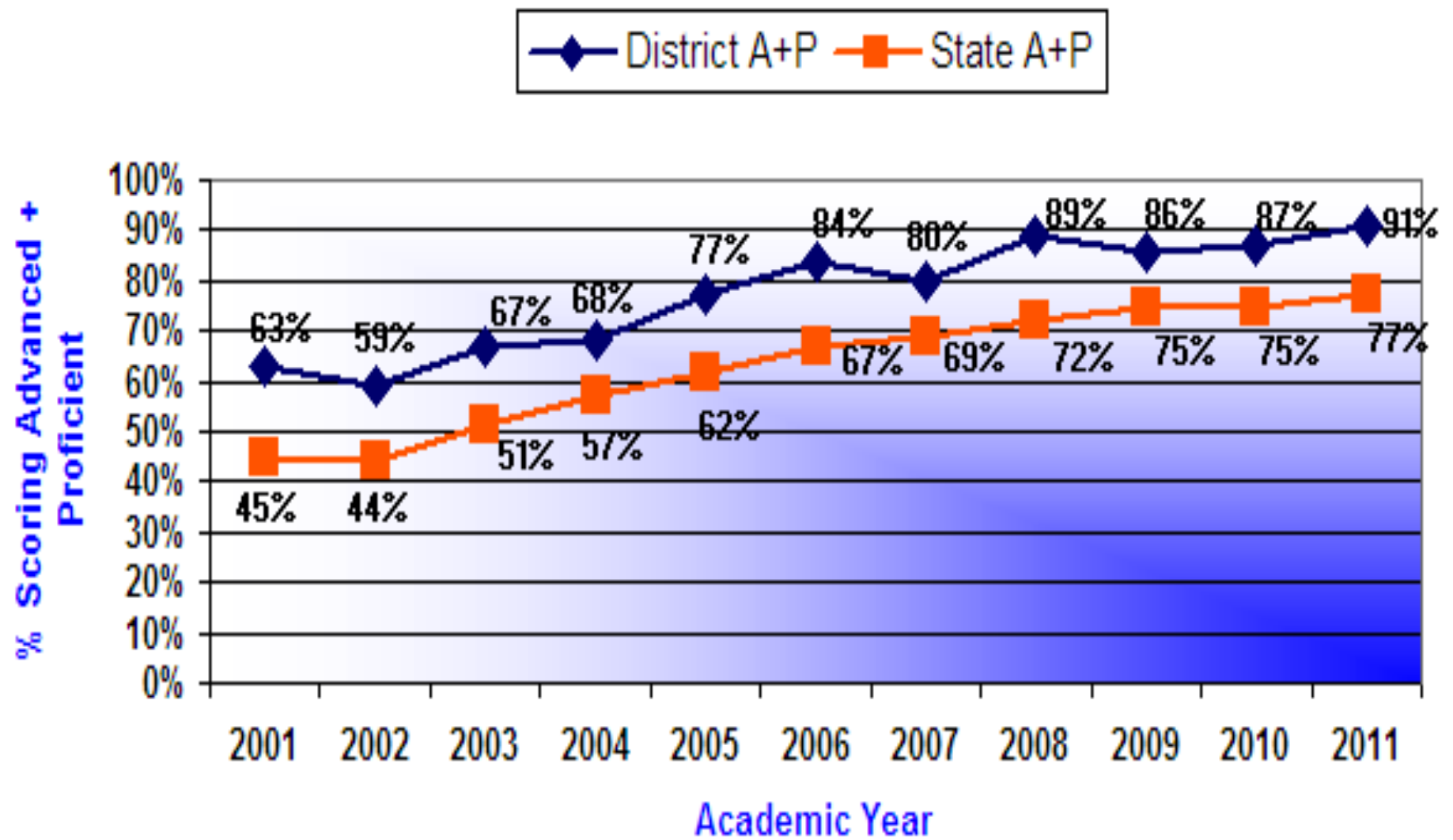
APS 2006-2011 Grade 7 Mathematics: Percent Proficient + Advanced



APS 2001-2011 Grade 8 Mathematics: Percent Proficient + Advanced



APS 2001-2011 Grade 10 Mathematics: Percent Proficient + Advanced



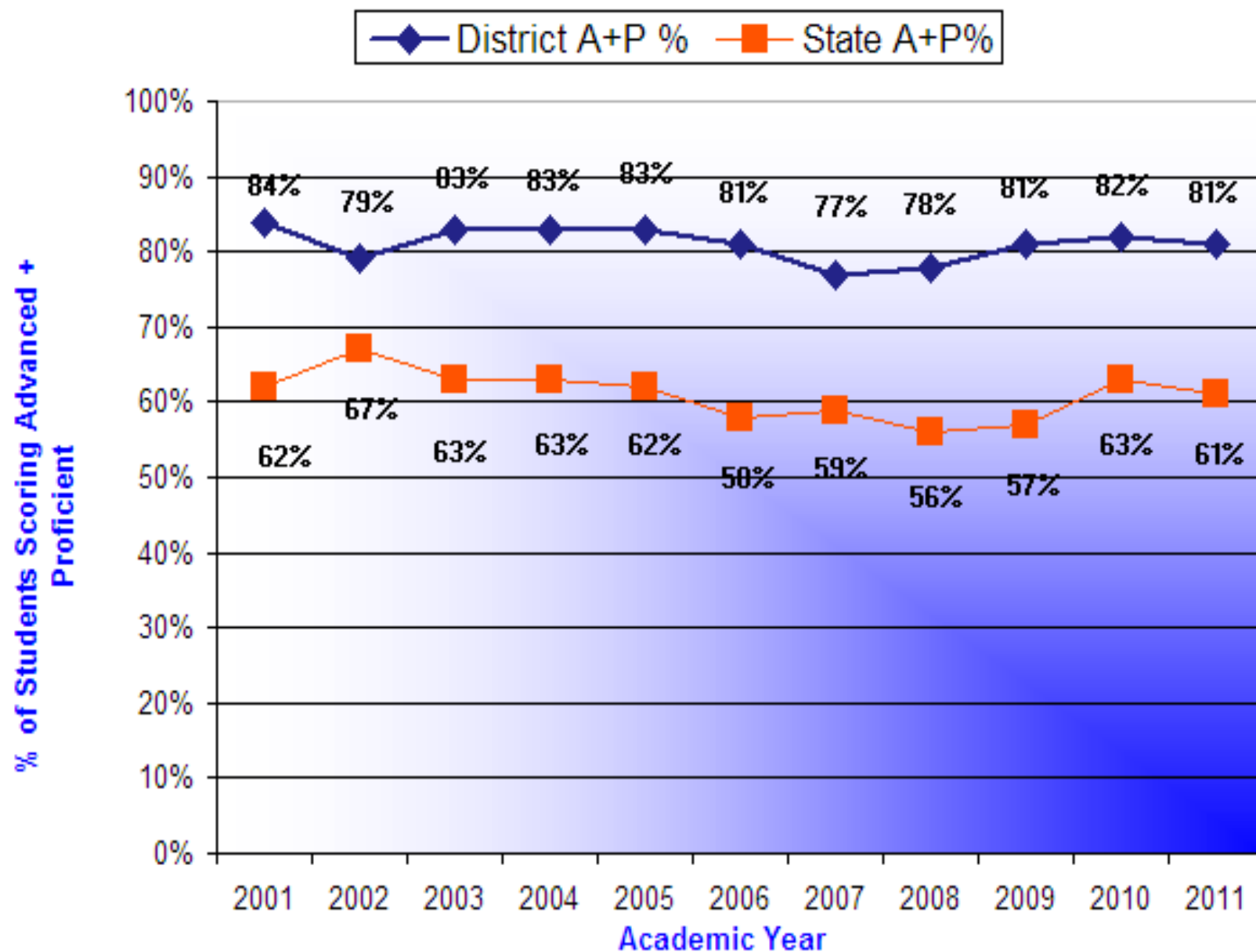
2011 Math Summary Highlights

- Brackett ranked top 5% in Gr. 4
- Stratton ranked top 5% in Gr. 5
- Notable gain in A & P scores in Gr. 10
- 72% Advanced in Gr. 10

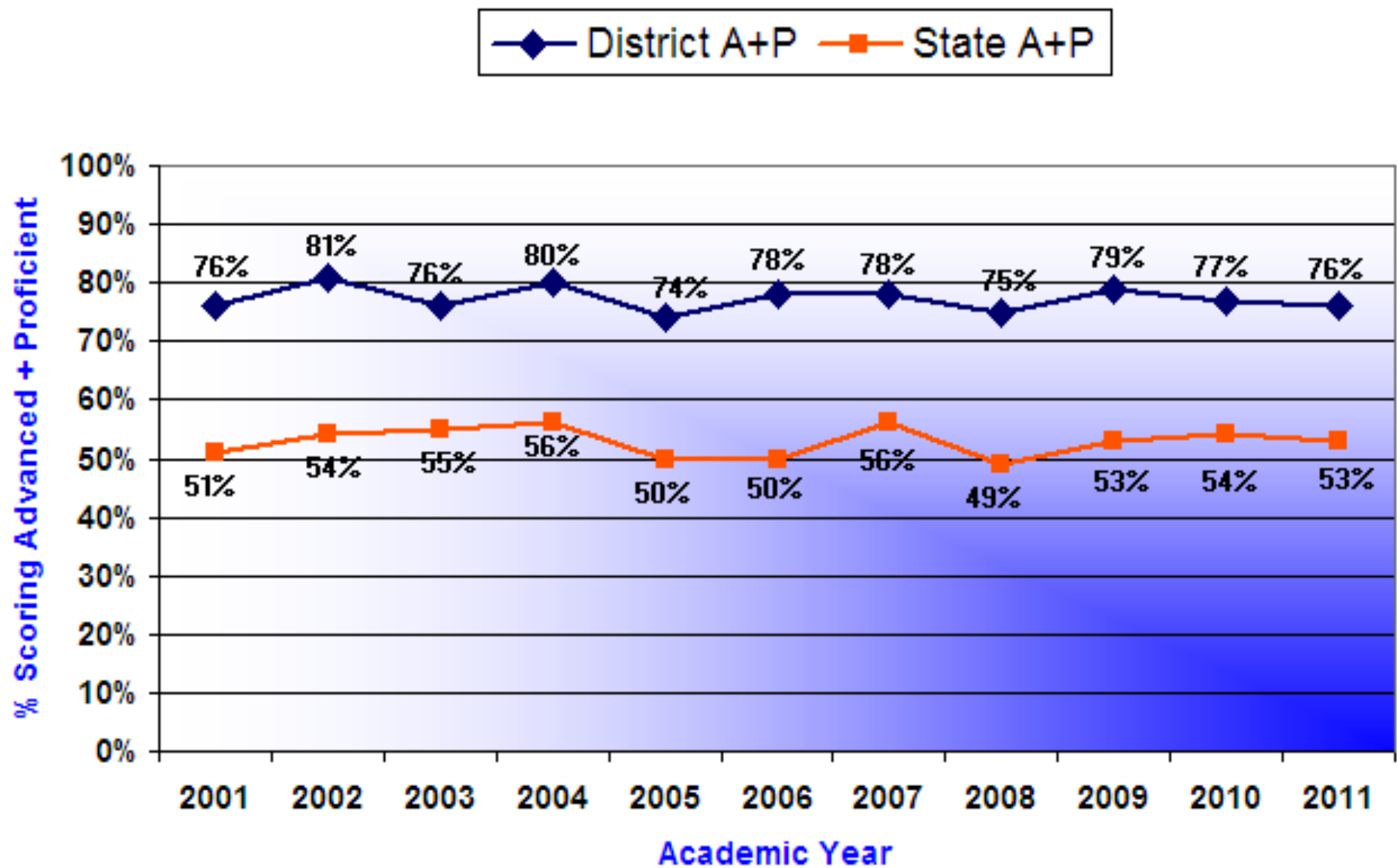
2011 District ELA

Historically at every grade level, APS students consistently score 20-23% above state averages and are making continuous improvement.

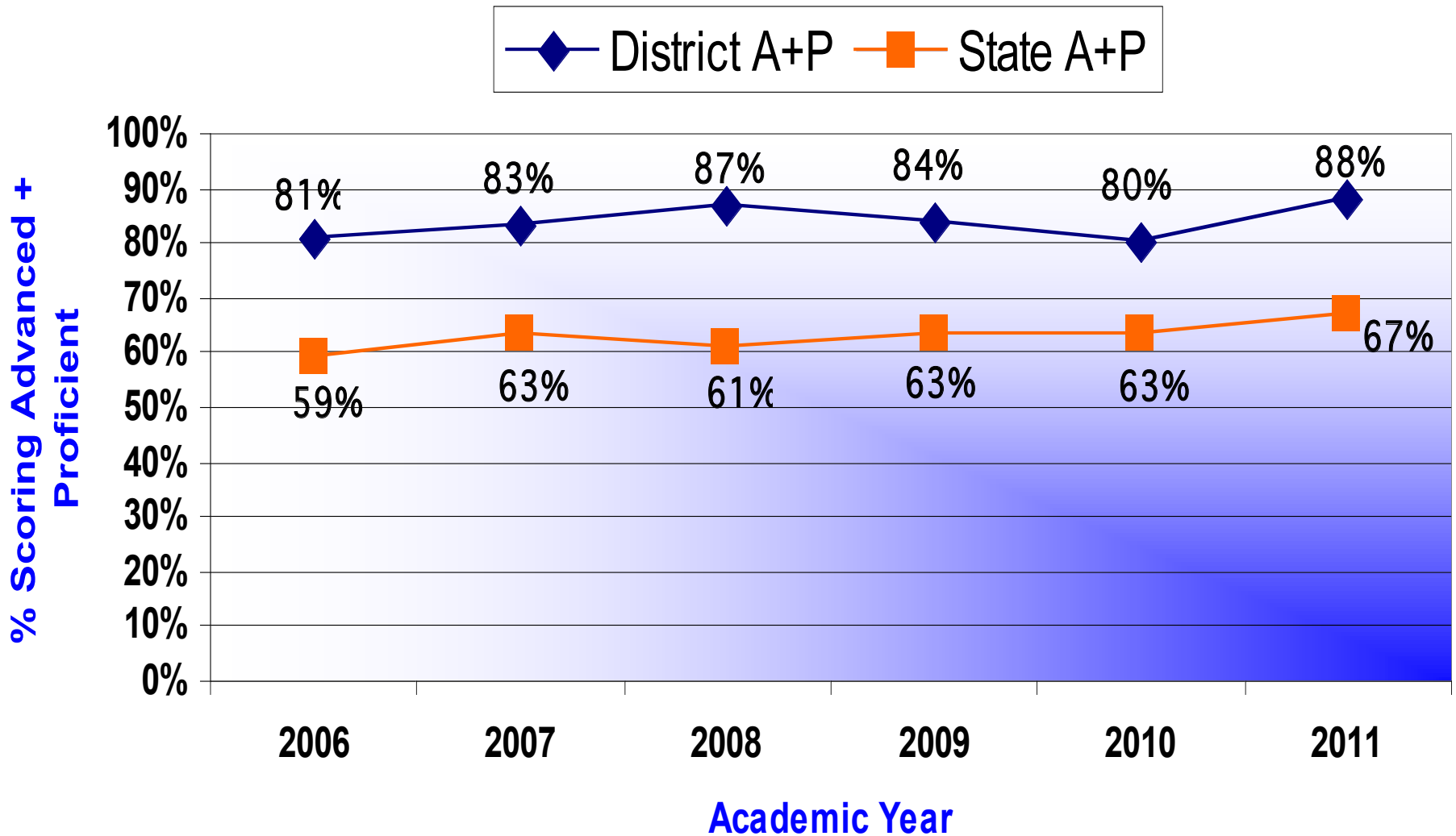
APS 2001-2011 Grade 3 ELA: Percent Proficient or Advanced



APS 2001-2011 Grade 4 ELA: Percent Proficient or Advanced

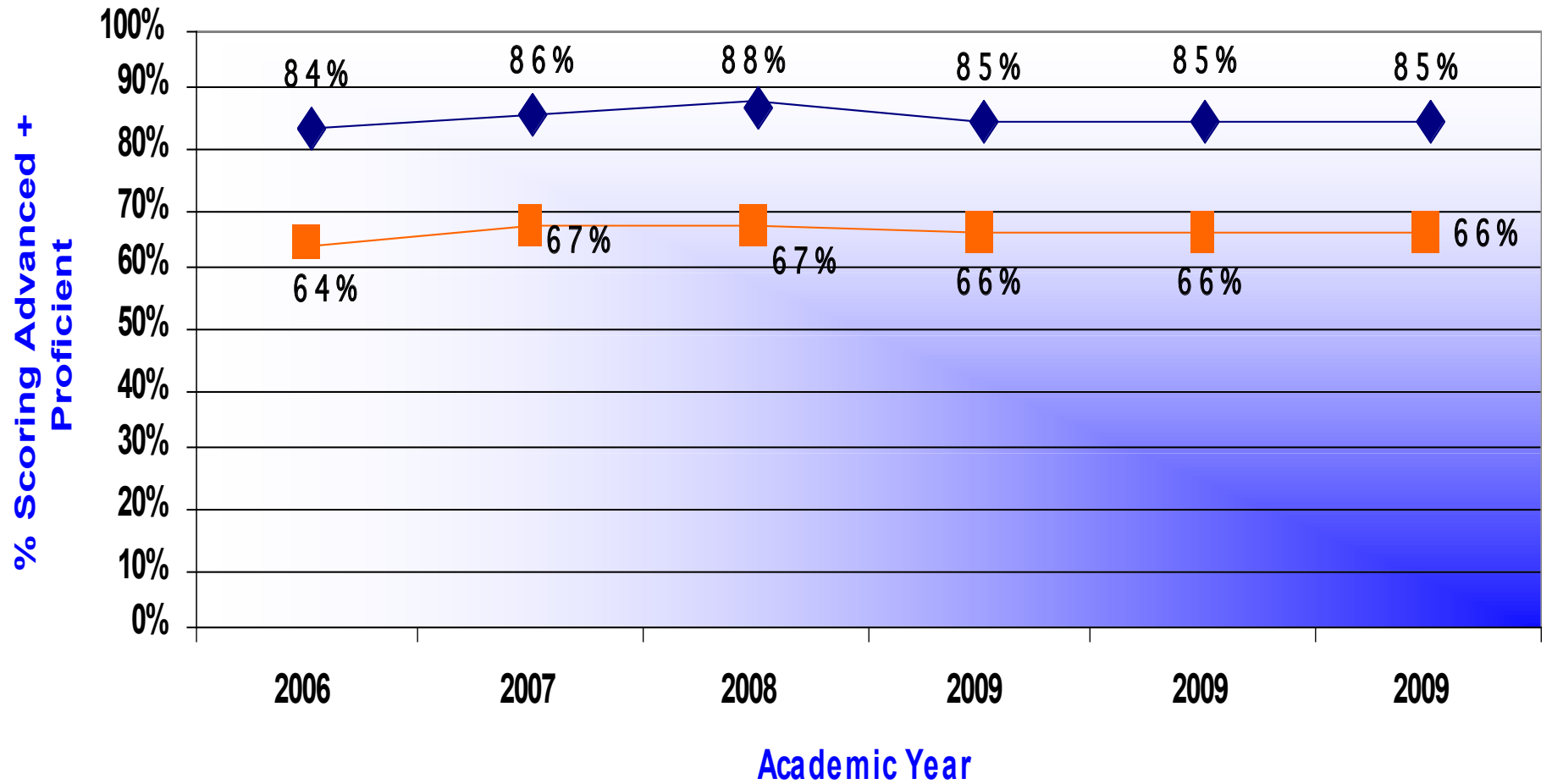


APS 2006-2011 Grade 5 ELA: Percent Proficient + Advanced

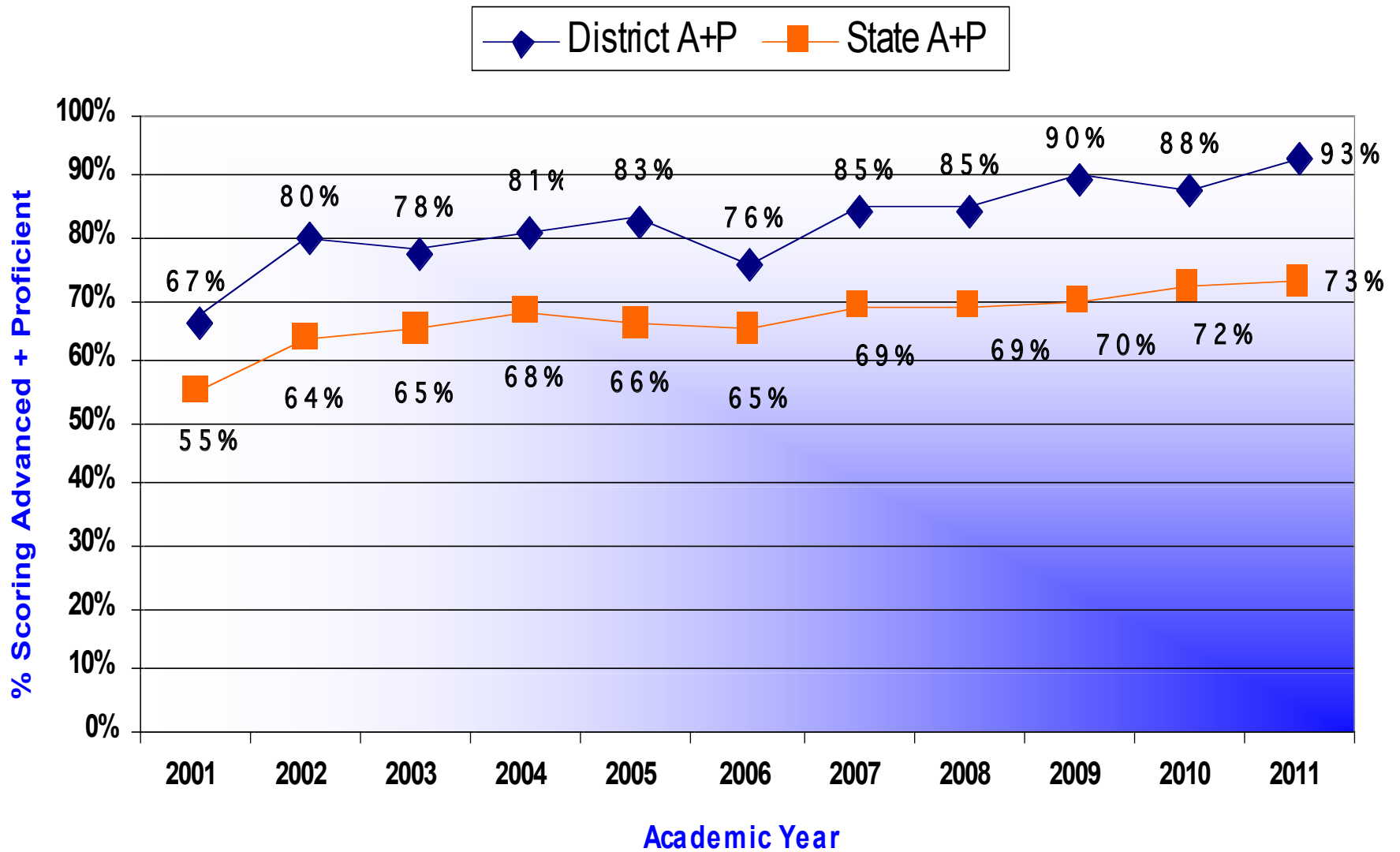


APS 2006-2011 Grade 6 ELA: Percent Proficient + Advanced

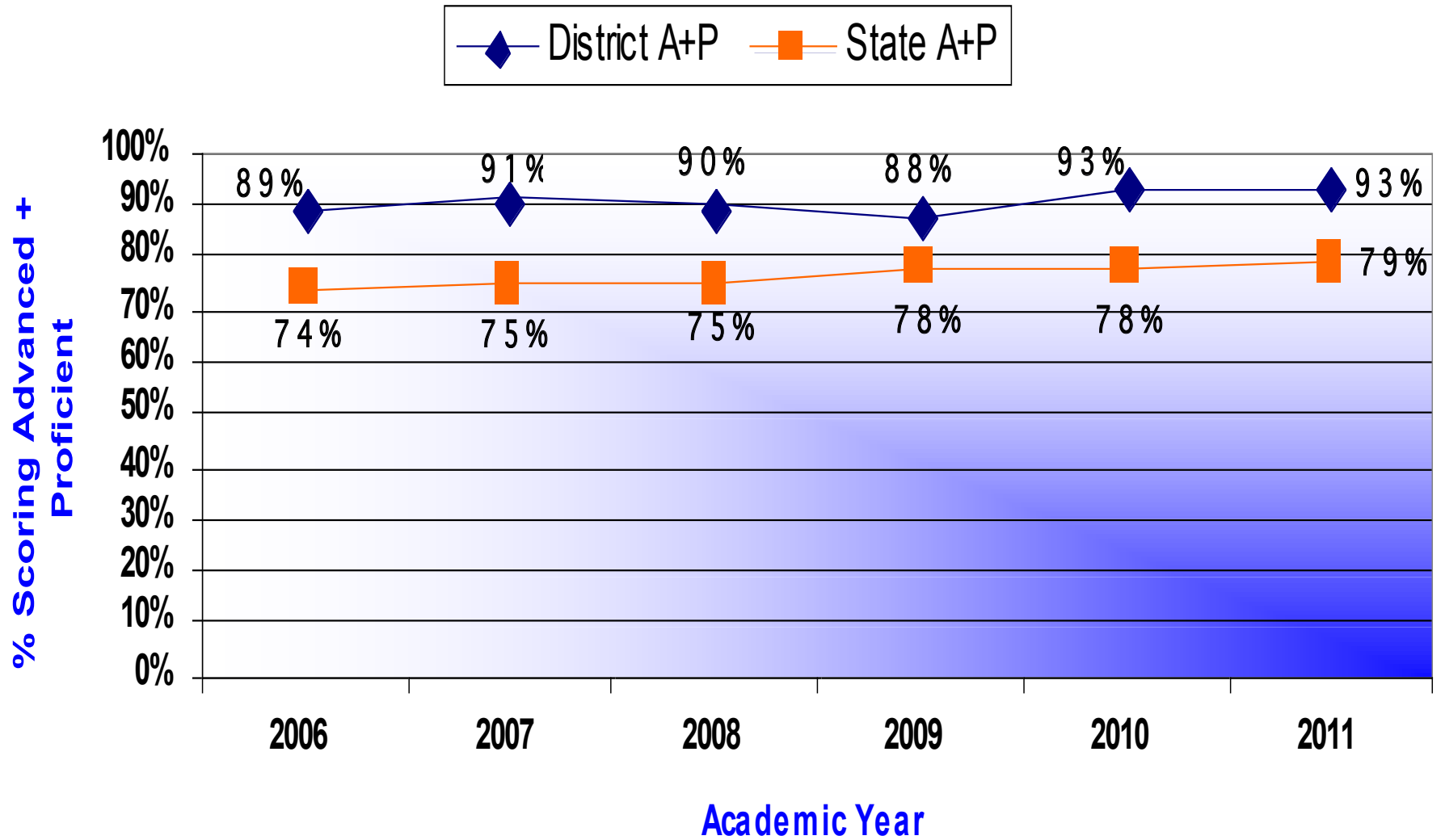
◆ District A+P ■ State A+P



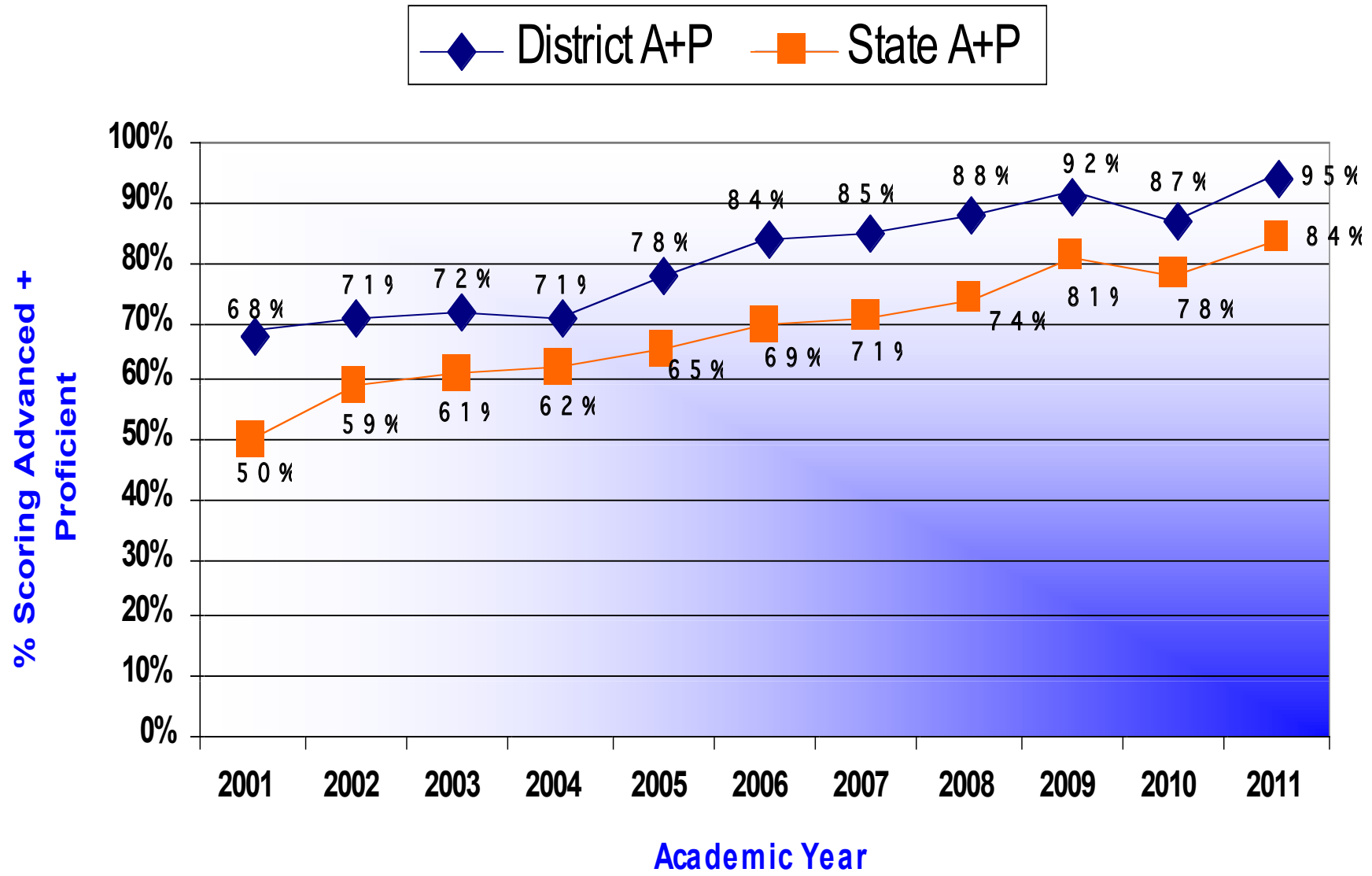
APS 2001-2011 Grade 7 ELA: Percent Proficient + Advanced



APS 2006-2011 Grade 8 ELA: Percent Proficient + Advanced



APS 2001-2011 Grade 10 ELA: Percent Proficient + Advanced



APS Reading/ELA

Percentage of Students Scoring Advanced

| | Gr. 3 | | Gr. 4* | | Gr. 5 | | Gr. 6 | | Gr. 7* | | Gr. 8 | | Gr. 10* | |
|--------------------------------|----------|-------|----------|-------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|----------------|
| | District | State | District | State | District | State | District | State | District | State | District | State | District | State |
| 2006 | 35% | 18% | 19% | 8% | 30% | 15% | 20% | 10% | 10% | 10% | 23% | 12% | 39% | 16% |
| 2007 | 26% | 14% | 24% | 10% | 31% | 15% | 21% | 9% | 16% | 9% | 29% | 12% | 41% | 22% |
| 2008 | 37% | 15% | 18% | 8% | 30% | 13% | 32% | 15% | 24% | 12% | 23% | 12% | 48% | 23% |
| 2009 | 27% | 12% | 31% | 11% | 37% | 15% | 31% | 16% | 25% | 14% | 35% | 15% | 54% | 29% |
| 2010 | 29% | 14% | 33% | 11% | 43% | 16% | 30% | 15% | 23% | 11% | 42% | 17% | 53% | 26% |
| 2011 | 22% | 11% | 20% | 10% | 40% | 17% | 39% | 17% | 36% | 14% | 45% | 20% | 62% | 33% |
| % increase over 5 years | | | | | <10% | <2% | <19% | <7% | <26% | <4% | <22% | <8% | <23% | <17% |

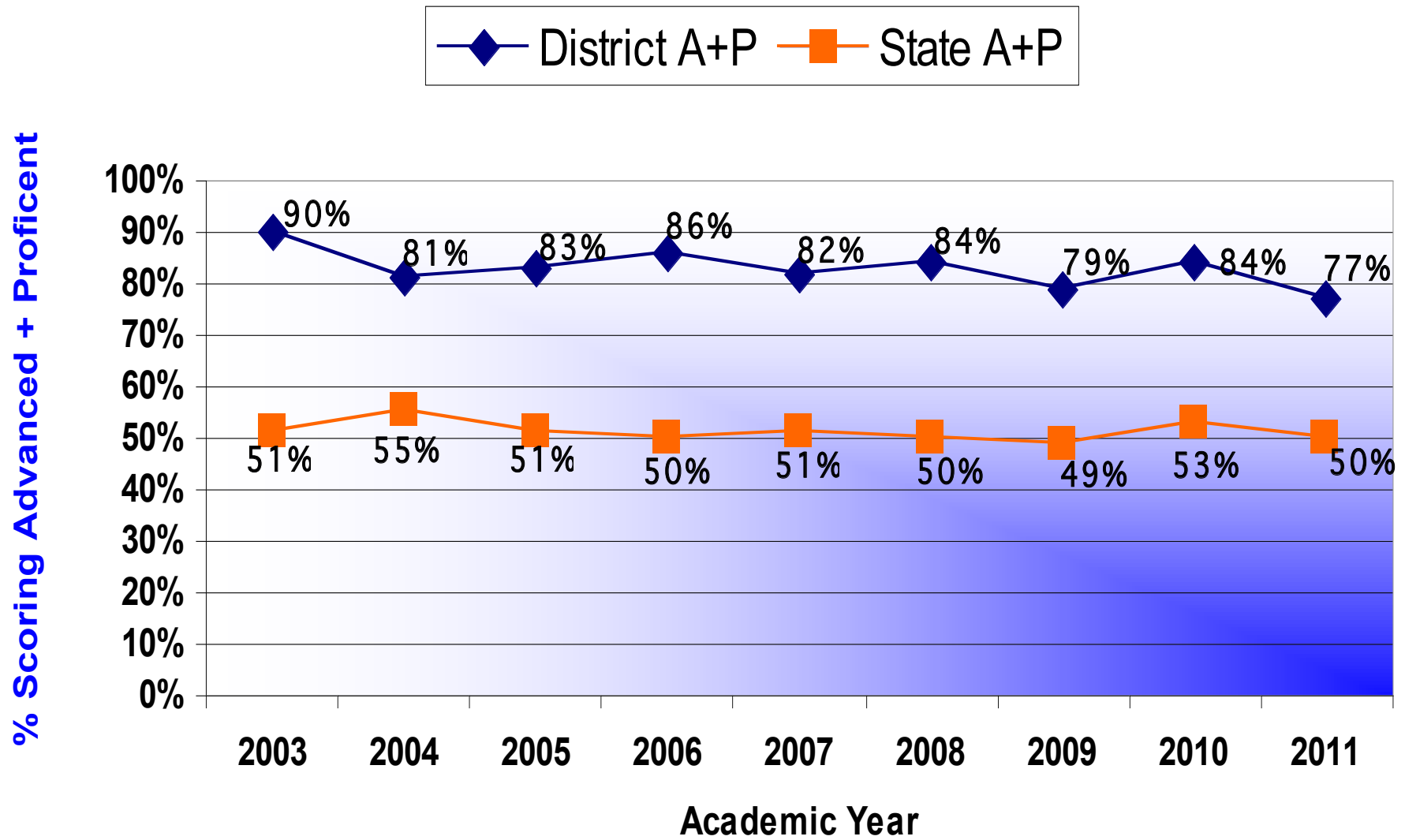
2011 ELA Summary Highlights

- Stratton ranked 11th in the state in Gr. 3
- Dallin ranked 5th in the state in Gr. 5
- Brackett ranked 14th in the state in Gr. 5
- OMS ranked 17th in the state in Gr. 7
- Notable gains in grades 5, 7, & 10
- Increase in students scoring “Advanced” has grown significantly over the last five years

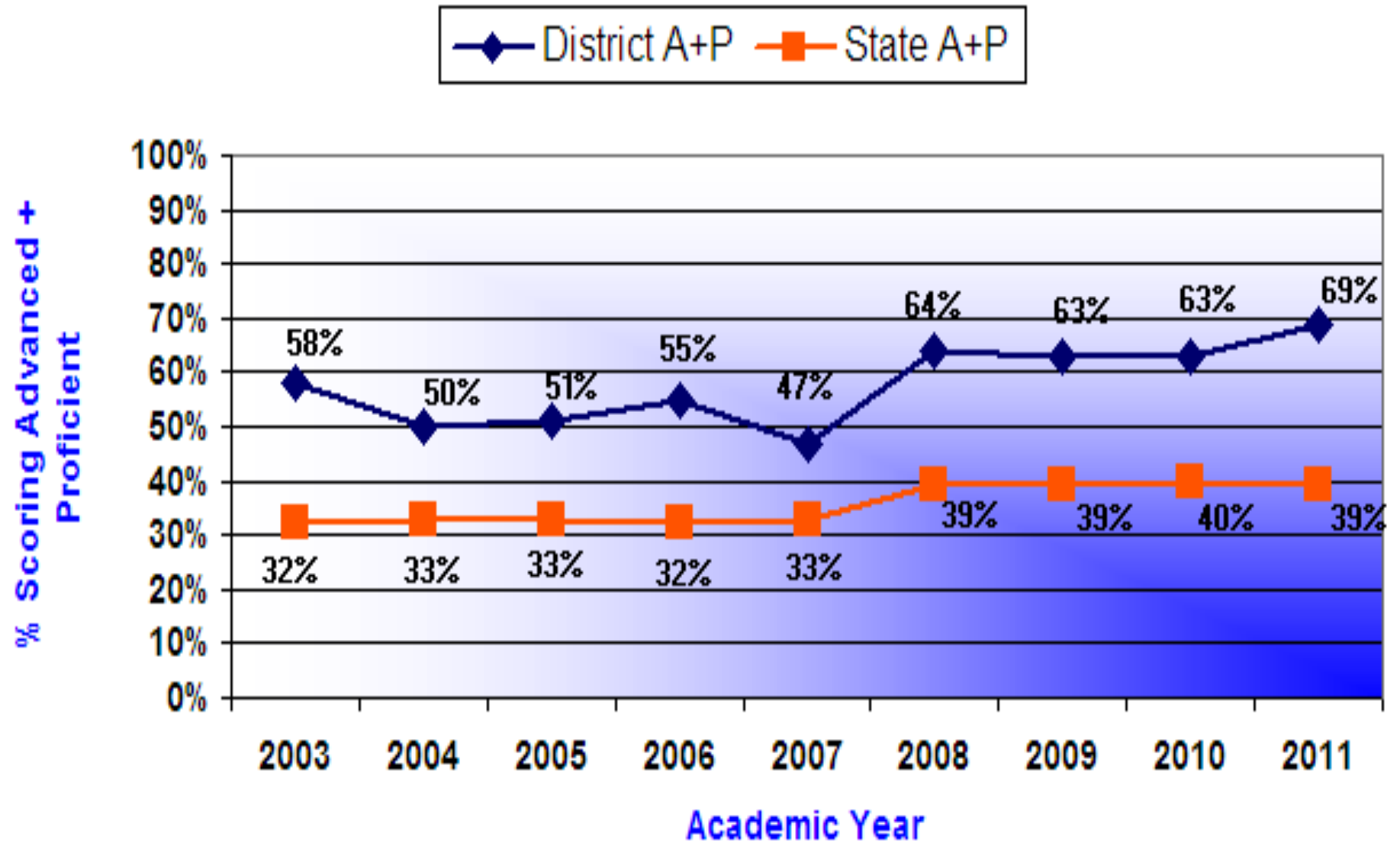
District Science
2011

APS students perform 15-30% above state averages

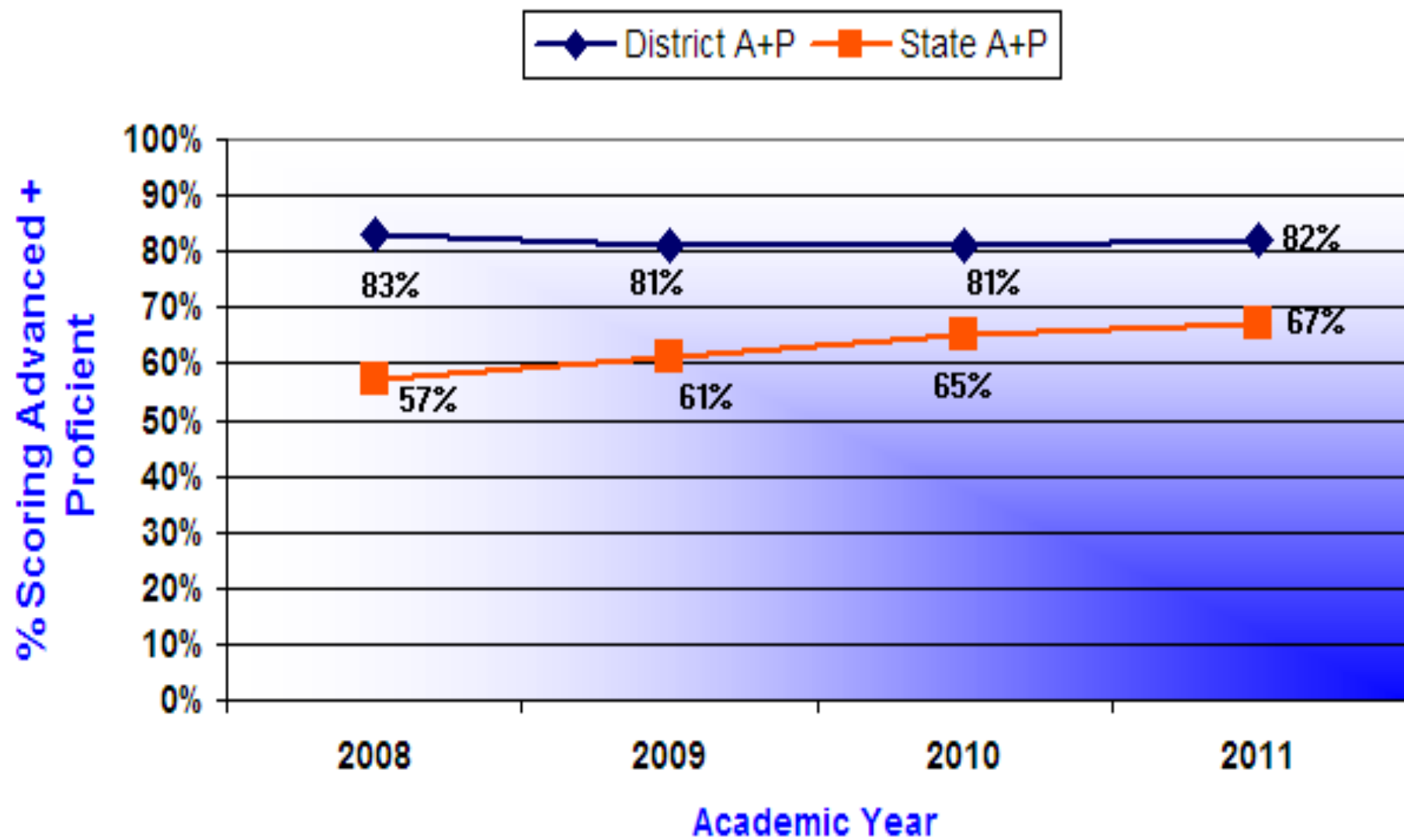
APS 2003-2011 Grade 5 Science: Percent Proficient + Advanced



APS 2003-2011 Grade 8 Science: Percent Proficient + Advanced



APS 2008-2011 Grade 10 Science: Percent Proficient + Advanced



2011 Science Summary

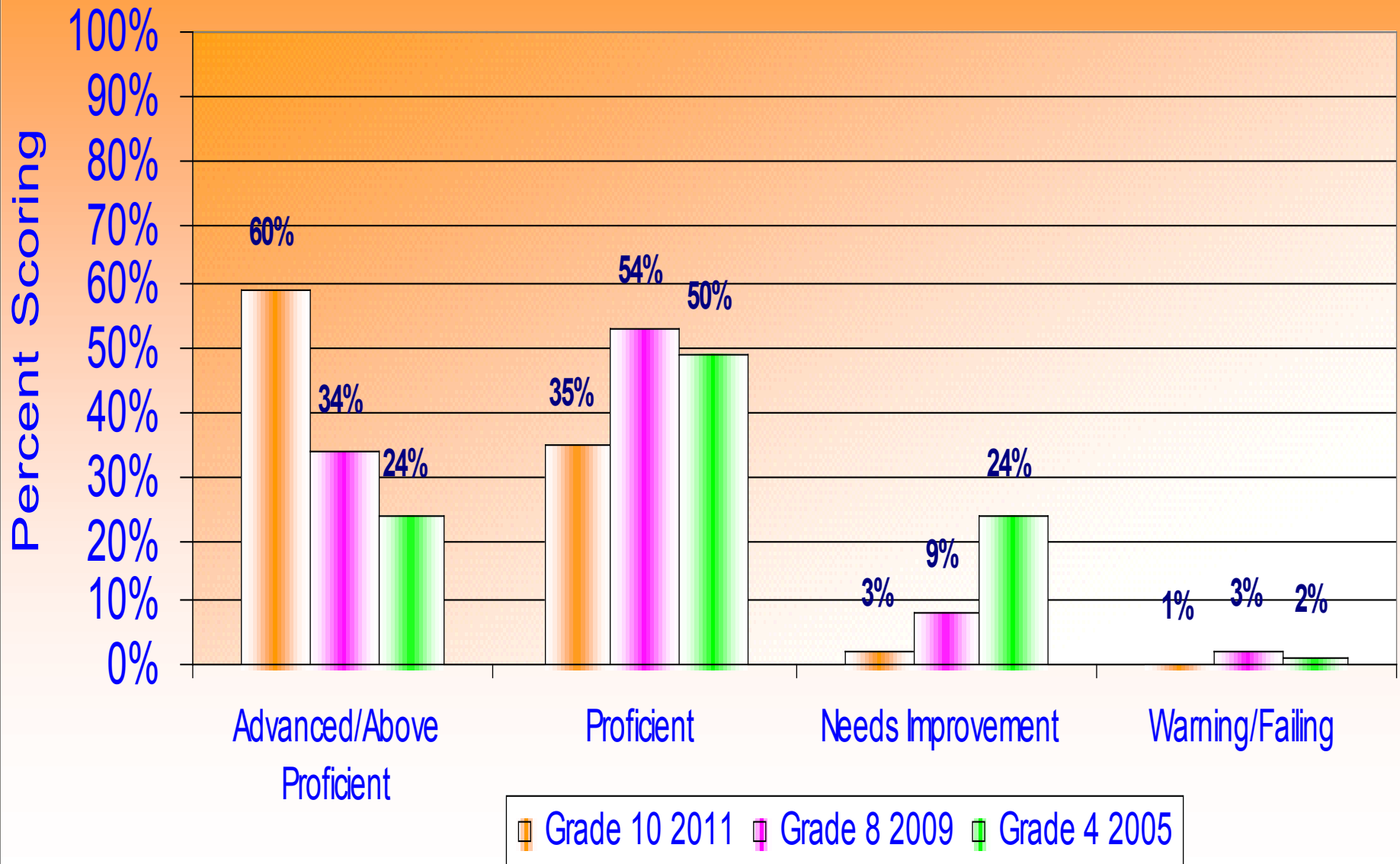
Highlights

- Brackett ranked 6th in state in Gr. 5
- Bishop ranked 12th in state in Gr. 5
- Dallin top 5% in state Gr. 5.
- Hardy top 4% in state Gr. 5
- Peirce top 7% in state Gr. 5
- Stratton top 9% in state Gr. 5
- OMS top 7% in state in Gr. 8
- Gr. 10 improvement in A + P & A

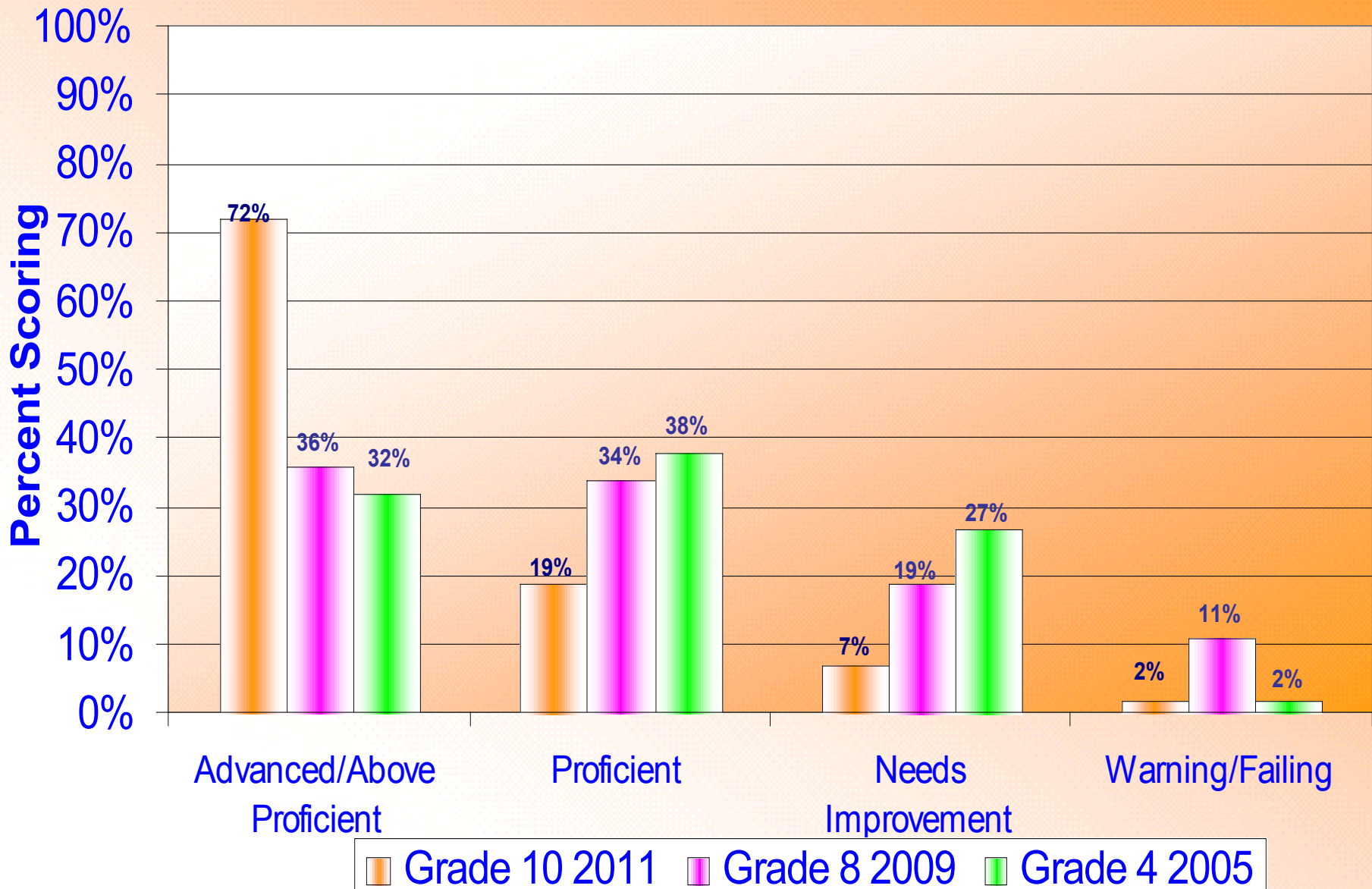
2011 Cohort Summary Data

- APS cohorts perform well beginning in the early grades, while their scores show marked improvement by high school.
- There is a notable trend towards increased students scoring Advanced.
- All AHS students passed MCAS in 2011.

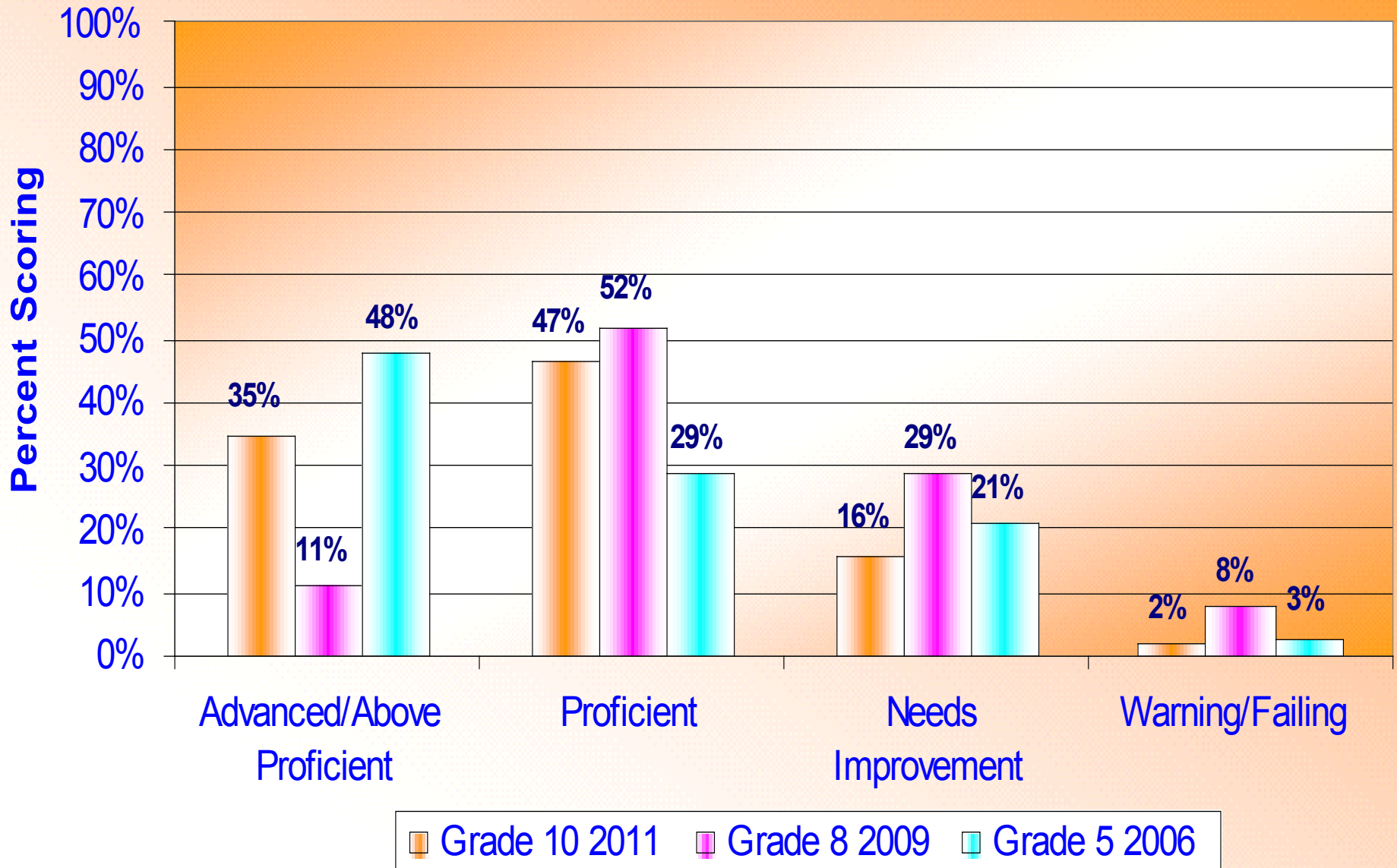
Current Grade 11 Cohort ELA MCAS Results Over Time



Current Grade 11 Cohort: Math MCAS Results Over Time



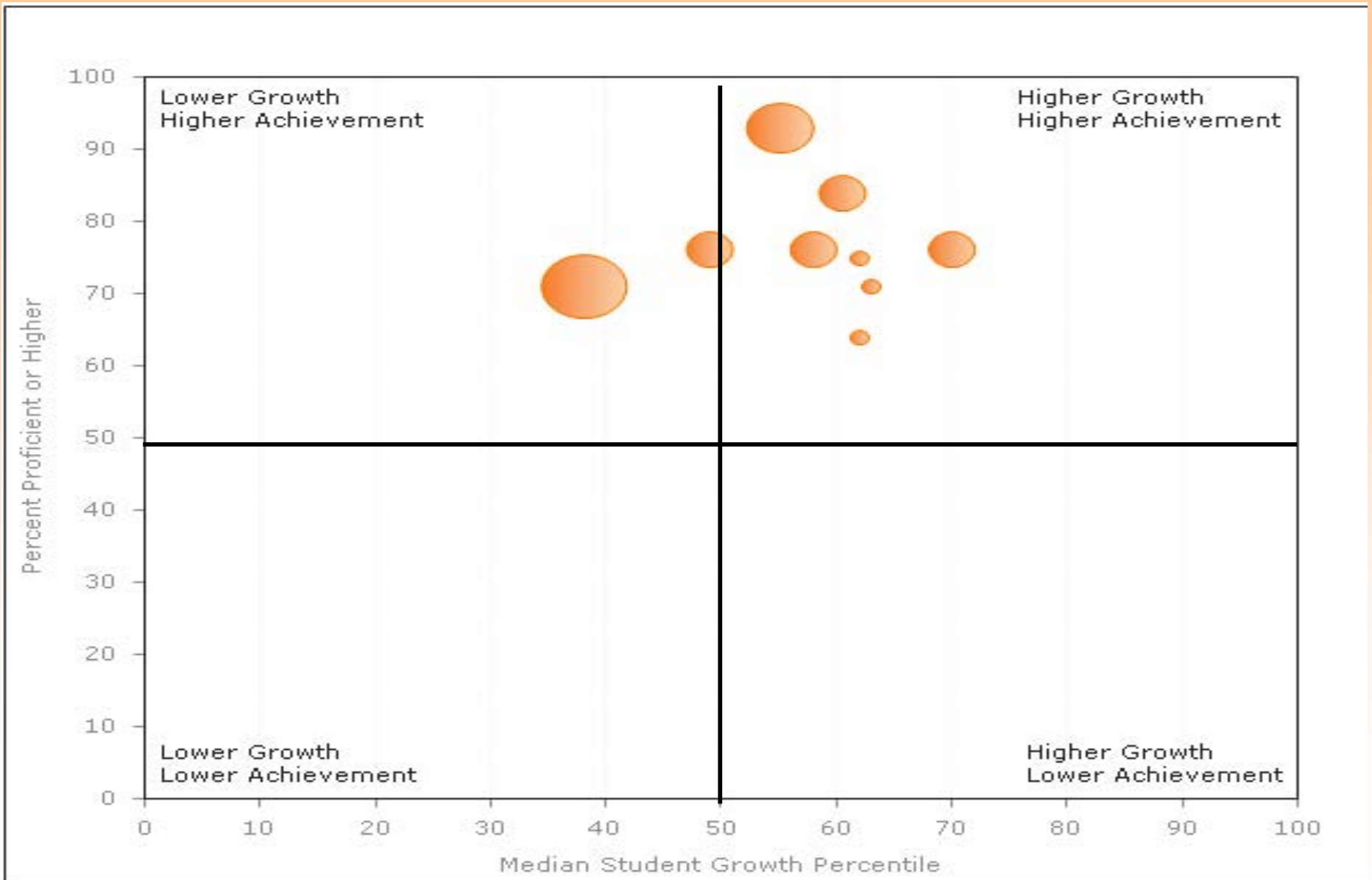
Current Grade 11 Cohort Science MCAS Results Over Time



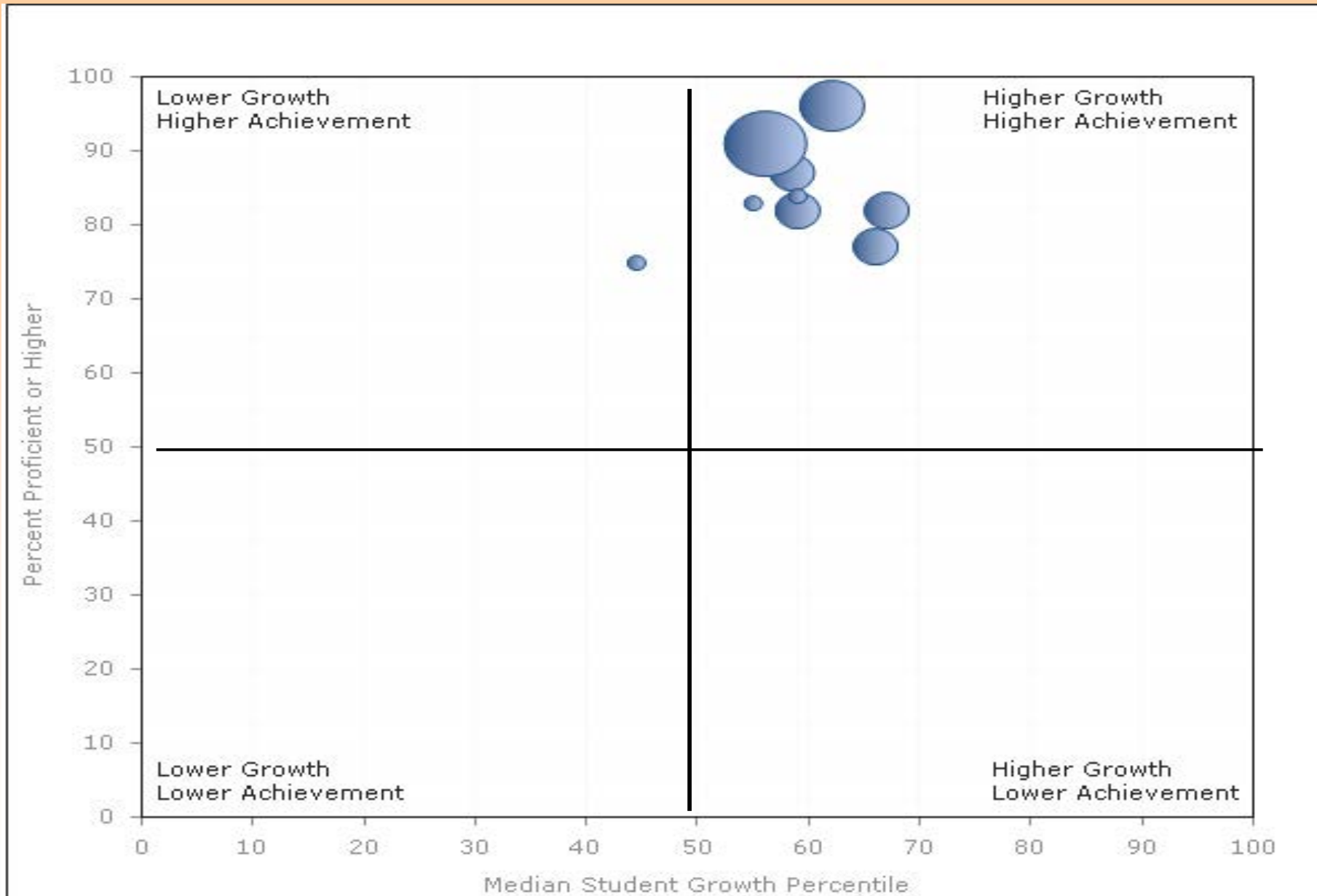
District MCAS 2011 Growth Data

High achievement coupled with moderate to very high growth is evident at all grade levels in ELA and Math.

Growth Data: Math All Grades



Growth Data: ELA All Grades



2011 Mathematics MCAS Achievement and Growth for Comparable Districts

| District | Median SGP | N Students (SGP) | % Proficient or Higher | N Students (Perf. Level) | % Low Income |
|-----------|------------|------------------|------------------------|--------------------------|--------------|
| Arlington | 49 | 2,016 | 74 | 2,550 | 12 |
| Belmont | 58 | 1,626 | 81 | 2,074 | 6 |
| Brookline | 64 | 2,439 | 81 | 3,210 | 13 |
| Lexington | 64 | 2,796 | 87 | 3,508 | 6 |
| Natick | 52 | 2,041 | 76 | 2,584 | 9 |
| Needham | 56 | 2,433 | 79 | 3,002 | 7 |
| Newton | 61 | 4,895 | 81 | 6,332 | 10 |
| Wayland | 62 | 1,237 | 80 | 1,497 | 7 |
| Wellesley | 59 | 2,141 | 76 | 2,708 | 4 |
| Weston | 51 | 1,041 | 81 | 1,276 | 4 |

Massachusetts Department of Elementary and Secondary Education
Education Data Warehouse

2011 English Language Arts MCAS Achievement and Growth for Comparable Districts

| District | Median SGP | N Students (SGP) | % Proficient or Higher | N Students (Perf. Level) | % Low Income |
|-----------|------------|------------------|------------------------|--------------------------|--------------|
| Arlington | 59 | 2,006 | 87 | 2,540 | 12 |
| Belmont | 64 | 1,628 | 90 | 2,075 | 6 |
| Brookline | 57 | 2,429 | 84 | 3,195 | 13 |
| Lexington | 65 | 2,785 | 91 | 3,495 | 6 |
| Natick | 52 | 2,048 | 83 | 2,583 | 9 |
| Needham | 58 | 2,439 | 86 | 3,002 | 7 |
| Newton | 60 | 4,890 | 86 | 6,313 | 10 |
| Wayland | 62 | 1,230 | 89 | 1,490 | 7 |
| Wellesley | 54 | 2,127 | 88 | 2,700 | 4 |
| Weston | 52 | 1,041 | 89 | 1,274 | 4 |

Massachusetts Department of Elementary and Secondary Education
Education Data Warehouse

2011 District High Need Students

Overall the achievement gap persists but narrows dramatically for Arlington's High Needs students over the years.

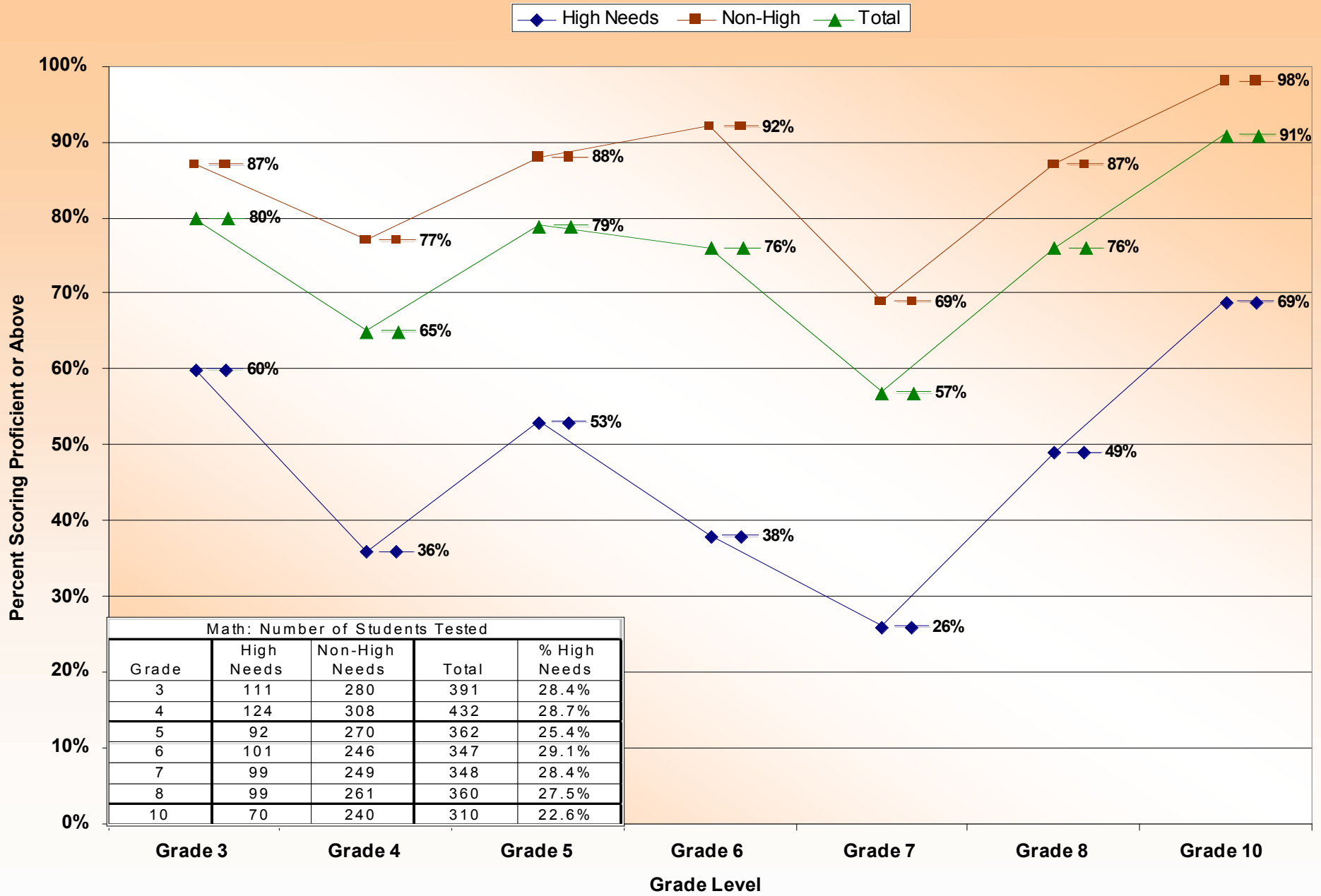
High Needs Group Includes Students:

- On an IEP, and/or
- Identified as LEP or FLEP, and/or
- Eligible for free/reduced lunch

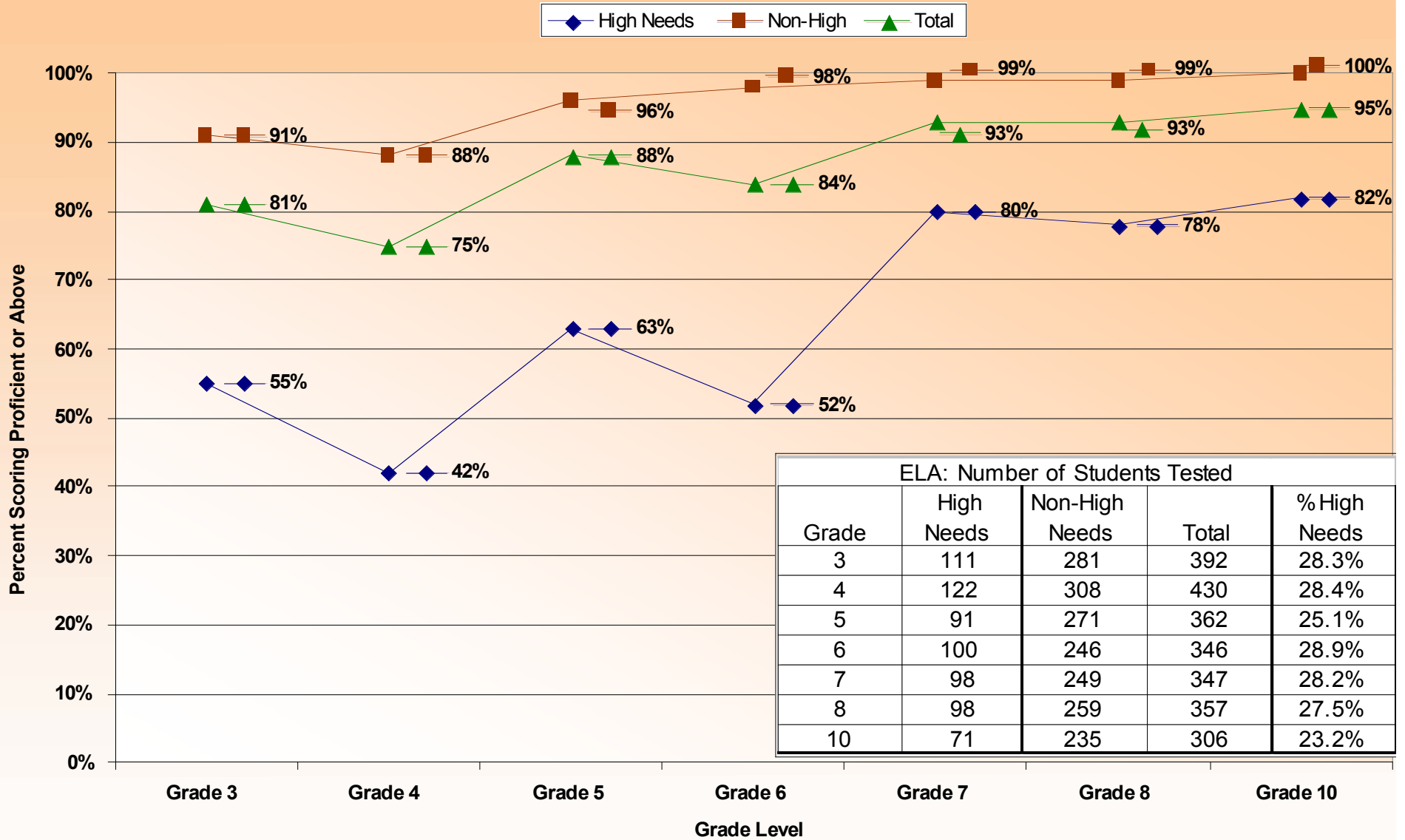
APS High Needs Students.....

- Make up approximately 27% of the total population of students.
- Have an achievement gap that varies between 20-38 percentage points.
- Narrow the achievement gap as they go through the system showing value added by instruction in APS.

2011 Mathematics MCAS:APS Students Reaching Proficiency



2011 ELA MCAS: APS Students Reaching Proficiency



AYP: Adequate Yearly Progress

- NCLB law requires that all school districts measure the progress of all students in the Aggregate as well as in Subgroups: special education, Limited English Proficiency, and race/ethnicity.
- AYP in ELA and Math is based on meeting or exceeding targets in:
 - ✓ Participation in MCAS
 - ✓ Performance
 - ✓ Improvement
 - ✓ Attendance or graduation.

AYP: Adequate Yearly Progress

- If individual schools or districts do not meet one or more of the aggregate and/or Subgroup improvement targets set by the state in ELA and Math for 2 years in a row, that school or district is assigned an NCLB Improvement Status.

District AYP History

| | | Adequate Yearly Progress History | | | | | | | | NCLB Accountability Status |
|------|---------------|----------------------------------|------|------|------|------|------|------|------|--------------------------------|
| | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | |
| ELA | Aggregate | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Improvement Year 1 - Subgroups |
| | All Subgroups | Yes | No | Yes | Yes | Yes | No | No | Yes | |
| MATH | Aggregate | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No Status |
| | All Subgroups | Yes | No | Yes | Yes | Yes | Yes | No | Yes | |

A district is newly identified for improvement if it fails to make AYP in the same subject area and all grade-spans, for students in the aggregate or any subgroup, for two consecutive years. A district will have no accountability status if it makes AYP in the same subject area for at least one grade-span for two consecutive years.

Arlington - 2011 Accountability Data



District: Arlington (00100000)
Title I District: Yes
Accountability & Assistance Level: Level 2

2011 Adequate Yearly Progress (AYP) Data - Summary

[Summary Data](#) | [Detailed Data](#)

| | NCLB Accountability Status | Improvement Rating |
|-----------------------|--|------------------------------------|
| ENGLISH LANGUAGE ARTS | Improvement Year 1 - Subgroups | On Target |
| MATHEMATICS | No Status | No Change |

District AYP Status: ELA

| ENGLISH LANGUAGE ARTS | | | | | |
|-----------------------|---------------|------|------|------|--|
| Grade Spans | | 2009 | 2010 | 2011 | 2011 Subgroups Not Making AYP |
| Grades 3-5 | Aggregate | Yes | Yes | No | Asian/Pac Islander -Special Education -Low Income -F/LEP - |
| | All Subgroups | No | No | No | |
| Grades 6-8 | Aggregate | Yes | Yes | Yes | |
| | All Subgroups | No | No | Yes | |
| Grades 9-12 | Aggregate | Yes | Yes | Yes | |
| | All Subgroups | No | No | Yes | |

District AYP Status: Mathematics

| MATHEMATICS | | | | | |
|-------------|---------------|------|------|------|---|
| Grade Spans | | 2009 | 2010 | 2011 | 2011 Subgroups Not Making AYP |
| Grades 3-5 | Aggregate | Yes | Yes | No | Asian/Pac Islander -White -Special Education -Low Income - |
| | All Subgroups | Yes | No | No | |
| Grades 6-8 | Aggregate | Yes | Yes | No | Asian/Pac Islander -White -Special Education -Low Income -Hispanic/Latino - |
| | All Subgroups | No | No | No | |
| Grades 9-12 | Aggregate | Yes | Yes | Yes | |
| | All Subgroups | Yes | No | Yes | |

NCLB Improvement Status

- Majority of our schools met AYP and/or are “On Target” for improvement for the year.
- As we approach 2014 and the NCLB target of 100% proficient and advanced gets closer, it becomes increasingly more difficult to make AYP targets for performance and improvement.

2011 School AYP Status

Schools that made AYP in **ELA** and **Math**:

- ✓ **Arlington High School**
- ✓ **Brackett Elementary School**
- ✓ **Hardy Elementary School**
- ✓ **Thompson Elementary School**

2011 School AYP Status

Schools that made significant improvement and change from 2010, exceeding target in **ELA** and/or **Math**:

- ✓ **Arlington High School – ELA**
- ✓ **OMS – ELA –SpEd**
- ✓ **Dallin - ELA**
- ✓ **Hardy School –ELA & Math**
- ✓ **Thompson School – ELA & Math**

AYP District and School Improvement Status

- **District** – Improvement Year 1 ELA-Subgroups
- **Ottoson**
 - ELA Improvement Yr. 2 – Subgroup (Low Income)
 - Math Restructuring Year 2 – Subgroups
- **Thompson**
 - ELA Improvement Year 2 - Subgroups

State NCLB Waiver Request

- In 2011 the NCLB federal metric identified 81 % of Massachusetts schools and 90 % of districts as not making AYP even though at the same time, Massachusetts 4th and 8th graders outscored their peers in the other 49 states on the National Assessment of Educational Progress (NAEP) in reading and mathematics for the fourth consecutive time.
- NCLB's rising targets toward its requirement that ALL students score Proficient or above in ELA and Math by 2014 have made the federal metric misleading and not helpful in identifying schools and districts most in need of intervention.

Summary Points

- Areas of Overall Improvement:
 - Gr. 5, 7, 10 ELA achievement
 - Increase in Advanced students in ELA
 - Gr. 8 & 10 Math achievement
 - Gr.5 & 8 Science achievement
- Areas in Need of Improvement:
 - Overall growth in Math
 - Gr. 4 & 7 Math achievement
 - Gr. 4 ELA -Writing topic development

Next Steps: Math

- Continue building content expertise for new teachers, ELL and special educators.
- Identify and increase math tutoring for all High Needs students (Title 1)
- AMC “Math Practice Guides” for K-1
- Gr. 3 Revised TERC math program professional development and implementation
- Peirce pilot to increase math practice using *Symphony* program for Gr.3-5.

Next Steps: Math

- Progress monitoring High Needs students with Scantron program at OMS & AHS
- Pilot same teacher for math class and math support at OMS
- CLTs data focus in Gr. 6-8 math
- Grades 6 Math, Special Education, and Math Support teachers
 - ✓ Increased common planning time
 - ✓ Ongoing collaborative professional development

Next Steps: ELA

- RazKids reading program for tiered instruction K-3
- Progress monitoring using Scantron for Gr. 6-12 special education, reading & math intervention students
- Targeted reading intervention for all Warning, most Needs Improvement, and targeted SLC students in Gr. K-8.
- OMS reading program expansion
- Expanded teaching and assessing Open Response Questions (Gr. 3-8)

Next Steps: ELA

- CLT on OR questions for special education students in Gr. 8
- Continue to expand & implement Lucy Calkins writing program in grade 3, 4, & 5 to address topic development
- History Alive resources and professional development in grade 4 & 5 for non-fiction reading and writing
- Elementary TA training in reading program

Next Steps: Science

- Content institutes for Elementary teachers
- Engineering introduced and integrated into Gr. 1 & 2 curriculum
- Common end of the year assessments
- Monitoring of specific students in Subgroups
- More rigorous course selection in science encouraged for Subgroup students

2011 MCAS data shows that APS students are achieving and growing at high levels over time regardless of their entry point into the schools and their special circumstances.

*High Achievement and Growth for
ALL Students Require
Continued.....*

- **High standards for all students** coupled with appropriate supports and approaches to ensure success.
- Ongoing **Collaboration** among special educators, ELL, METCO, support personnel, administrators, department chairs and classroom teachers to share expertise and knowledge as well as Professional Development.
- **Support** for students.

Presentation References

Massachusetts Department of Elementary and Secondary Education School District Profiles:

<http://profiles.doe.mass.edu/profiles/general.aspx?topNavId=1&orgcode=00100000&orgtypecode=5&>

Massachusetts Department of Elementary and Secondary Education Statewide Reports:

http://profiles.doe.mass.edu/state_report/mcas.aspx

Massachusetts Department of Elementary and Secondary Education Data Warehouse (EDW):

<https://www4.doemass.org/auth/Login>