



**ALBUQUERQUE  
PUBLIC SCHOOLS**

# **Impact of Summer School on the Fall Benchmark Assessment**

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## Impact of Summer School on the Fall Benchmark Assessment

This brief compares 2008 summer school participants' Fall 2008 scores on A2L, the district's benchmark assessment, with those of their comparison group, similar non-participating students. Background information about the 2008 summer school program can be found in the published report, "Summer School Evaluation: 2008."<sup>1</sup>

For both summer school participants and the comparison group, only students who were less than proficient on the Spring 2008 administration of A2L in reading or math are included. For the purposes of this report, students are divided by school level as well as performance on the Spring 2008 administration of A2L, those that were 'nearing proficiency' (with scores between 41 and 60) and those that were 'beginning steps' (with scores of 40 or below).

Importantly, the limitations to these analyses that make it very hard to judge summer school effectiveness by these means. First, the outcome measures, Fall A2L scores, are less likely to show improvement for summer school participants than an assessment that more closely matches the content of summer school instruction. The assessments cover standards for the school year *following* summer school's (remedial) focus. It is unlikely that most of the material covered in summer school is reflected on the assessments. In addition, for middle school reading and elementary school reading and math, A2L covers the entire year's curriculum, much more than can be covered in the 20-25 days of summer school. (For middle school math, the Fall A2L is narrowly focused on the standards to be covered in the first trimester of the school year. It is still unlikely to reflect the material covered in summer school.) In addition, we cannot use A2L to measure growth or change since the assessment differs in content from the previous year's A2L. This limitation has the likely effect of underestimating the effectiveness of summer school.

Second, the division of students into the treatment (summer school participation) and the comparison group is not clean. CELSA lacks complete information on summer school participation. Students who attended summer school but for whatever reason did not take the summer A2L are incorrectly grouped with the comparison group. In addition, all students who took the summer A2L are assumed to have completed the entire program, though some may have received little summer school instruction due to many absences.<sup>2</sup> Finally, some students may participate in private tutoring or other interventions which are not accounted for in these analyses; and these other interventions are more likely to be present among non-participants. Again, this limitation has the likely effect of underestimating summer school's effectiveness.

Third, selection bias is undoubtedly an issue for these analyses. Because the number of eligible students exceeds the number of summer school openings available, schools have some choice in targeting particular students to enroll; and families are not compelled to enroll their eligible

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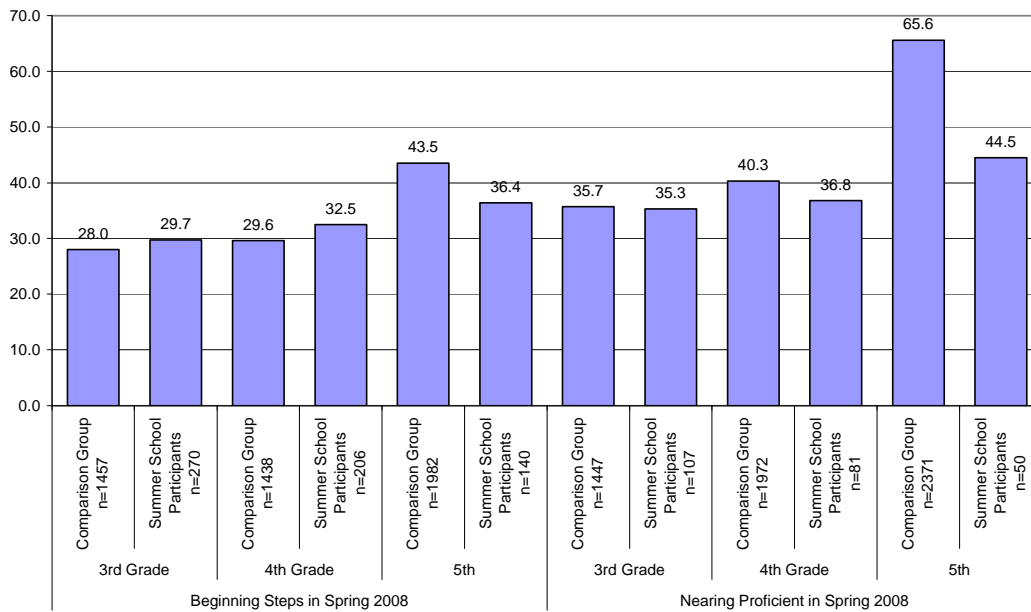
<sup>1</sup> Carrillo, N. 2009. "Summer School Evaluation: 2008." This report can be found on line at [http://www.rda.aps.edu/RDA/Documents/Publications/08\\_09/](http://www.rda.aps.edu/RDA/Documents/Publications/08_09/).

<sup>2</sup> APS' process for tracking attendance is the Student Information System. Due to the lack of CELSA staff time and more important priorities, neither elementary nor middle school students were scheduled into their summer school courses in the system in 2008. Attendance was kept on paper, but this information is not attached to student test records and is not readily available. Students with many summer school absences (excused or unexcused) are incorrectly grouped with those completing the entire program.

children. Consequently, there are likely to be differences between summer school and comparison group students *a priori*. For instance, schools may target students they consider to be either ‘the lowest of the low’ or particularly difficult to help during the regular school year. These analyses do partly compensate for this issue by dividing students into ‘beginning step’ and ‘nearing proficiency’ performance categories, but cannot completely capture possible differences in the academic abilities of summer school participants and non-participants. It is likely that students in the lower ends of these categories may be more likely to be targeted for summer school participation, as some anecdotal information suggests. This selection bias would have the effect of underestimating the impact of summer school. On the other hand, some schools may wish to target students who need just a little assistance. It may also be true that more stable families are likely to enroll their children in summer school – those with reliable transportation and predictable summer schedules; and these family dynamics are likely to help students’ abilities to learn over the summer. The impact of selection bias is thus unknowable.

Figures 1 and 2 compare Fall 2008 reading and math A2L scores for grades 3 through 5. For the most part, averages are very close between the summer school and comparison groups for reading, with one exception, as seen in Figure 1. In general, 5<sup>th</sup> grade summer school participants score lower than non-participants. The difference is particularly notable among those who were nearing proficiency in reading. This could well be due to selection bias. That is, nearing proficient students attending summer school may in fact be less academically prepared than those not attending.

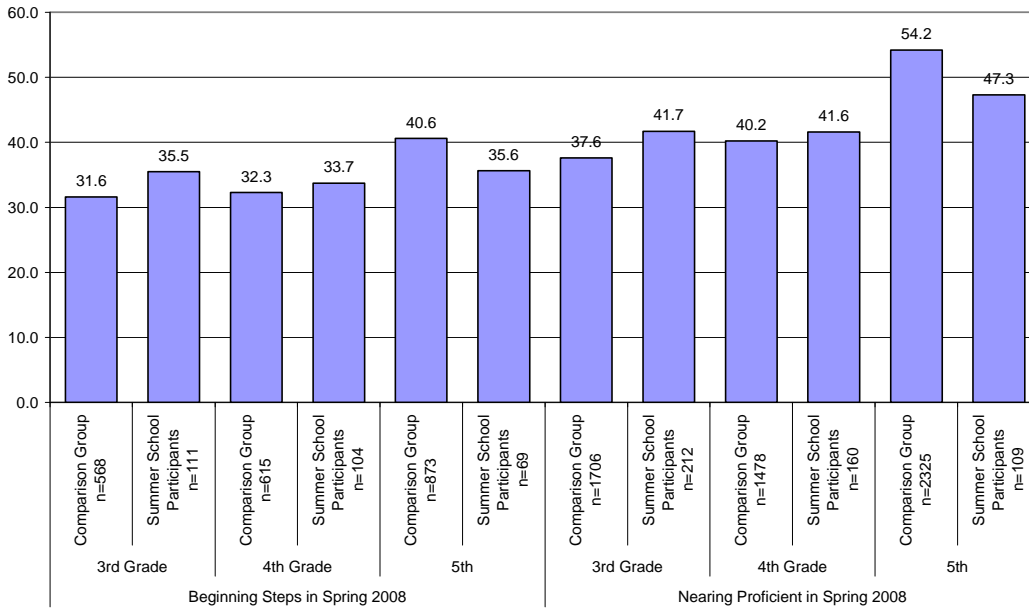
**Figure 1: Average Fall 2008 A2L Reading Scores for ES Summer School and Comparison Group Students**



We see a very similar story regarding math among elementary school students. For the most part, only quite minor differences exist between Fall A2L scores of summer school participants and

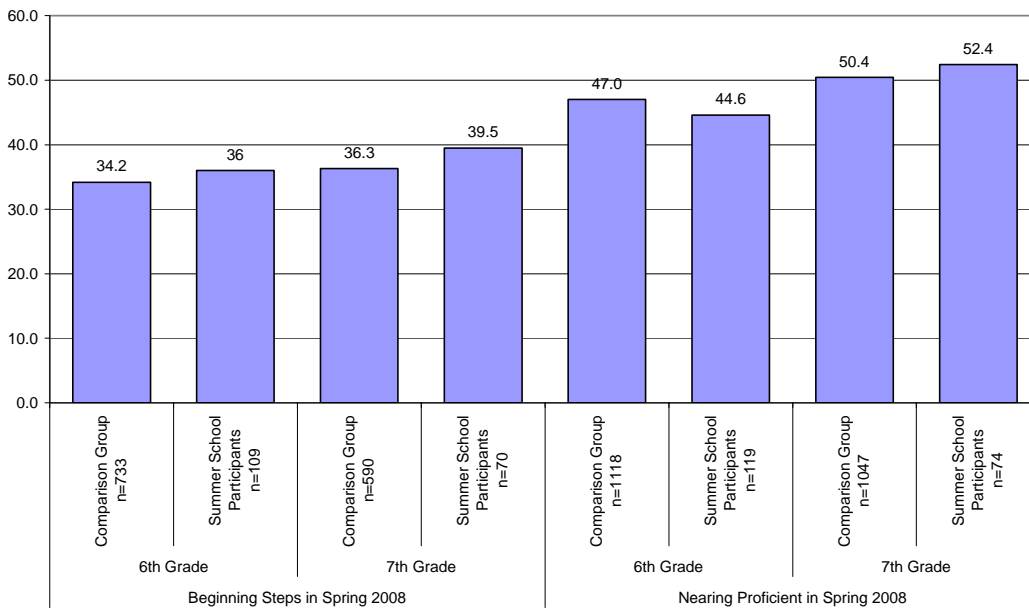
their peers. However, fifth grade summer school participants score lower than non-participants, especially among those who were nearing proficiency in math the previous spring.

**Figure 2: Average Fall 2008 Math A2L Scores for ES Summer School and Comparison Group Students**

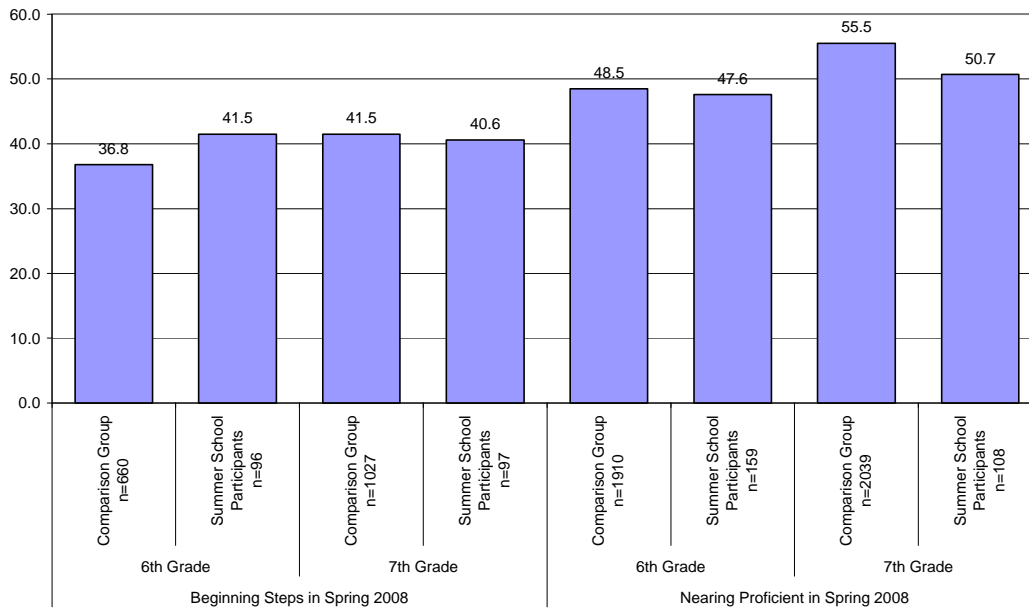


Figures 3 and 4 repeat these analyses for middle school grades 6 and 7. Averages are quite similar between the two groups for both reading and math.

**Figure 3: Average Fall 2008 A2L Reading Scores for MS Summer School and Comparison Group Students**



**Figure 4: Average Fall 2008 A2L Math Scores for MS Summer School and Comparison Group Students**



### **Conclusion**

These analyses suggest that students who participate in summer school are not benefiting more from the next grade instruction than their peers who do not participate. As has been referenced in the limitations, though, the findings presented here may be a function of selection bias, invalid treatment/comparison group assignments, and/or the outcome measure itself. Even if these findings are valid, other analyses do suggest summer school students make growth during the summer school intervention on the standards of the previous year.<sup>3</sup>

The maturity of the summer school program is an important consideration. Instructional intervention may have a remedial or preparatory focus; and this is the first year that the APS summer school has adopted a preparatory focus. Making that curricular transition requires some time and significant teacher professional development. As the program matures and as the analysis process matures with it, it is likely that the summer school program's preparatory focus will be more evident in students' immediate and long-term academic gains.

CELSA may use these results, along with other research findings, to help plan upcoming summer school programs by guiding the process of materials selection, teacher professional development. In addition, assessment and research staff should work closely with CELSA to design more appropriate measures of both short-term and long-term effectiveness.

<sup>3</sup> Carrillo, N. 2009. "Summer School Evaluation: 2008." This report can be found on line at [http://www.rda.aps.edu/RDA/Documents/Publications/08\\_09/](http://www.rda.aps.edu/RDA/Documents/Publications/08_09/).