

RESEARCH BRIEF

RDA STAFF

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SUMMER INTERVENTION LONGITUDINAL COMPARISON

GROWTH COMPARISONS FOR THE 1999, 2000 AND 2002 YEARS

Introduction

Since the summer of 1999 Albuquerque Public Schools has offered summer reading interventions to second grade students who did not meet district reading standards. This research brief compares the reading growth of students participating in each of three summer interventions with comparable students who did not participate in the interventions.

1999 Summer Intervention (Mayor's Enriched Reading Instructional Team)

The first summer intervention was administered and funded by the City of Albuquerque in the summer of 1999. A total of 70 students (39 at Tomasita ES and 31 at Bel Air ES) participated in the summer intervention. At Tomasita the intervention was 7 weeks in duration while at Bel Air the intervention was 6 weeks in duration. Each site had a coordinator.

As a group, these 70 summer intervention (MERIT) students were compared to other second graders (n=4550) who also scored at or below second grade on the Analytical Reading Inventory (ARI) in the spring of 1999 but did not participate in the summer intervention.

Table 1

MERIT and Comparison Group ARI Mean Score and Free and Reduced Lunch (FRL) Participation Before Intervention

Students	Spring ARI Mean Score	FRL Participation
MERIT N=70	1.54	76%(54)
Comparison N=4550	2.15	62%(3610)

As can be seen in Table 1, MERIT students as a group scored below the second grade level while the comparison students scored slightly above the second grade level on the ARI at the end of the second grade before summer school. Along with that, 76% of MERIT students were receiving free and reduced lunch compared to 62% of comparison students.

Analysis and Findings

After adjusting for the differences between the two groups in ARI mean score and FRL participation, an analysis was performed comparing their relative performance on the Terra Nova reading subtest at the end of 3rd grade and at the end of 6th grade. At the end of 3rd grade the MERIT students outperformed the gains of comparison students by an average of 9.6 scale score points. However, from 4th through 6th grade the MERIT students gained an average of 10.4 fewer scale score points than non-intervention students. This would suggest that the 1999 summer intervention raised the reading performance gains of MERIT students for at least a year. By the end of 6th grade the comparison students' average reading performance gains exceeded those of MERIT students.

2000 Summer Intervention (Second Grade Academy)

Following the successful piloting of the MERIT program for second graders, APS attempted to replicate the program with a shorter 5-week session. The 2000 Summer Intervention had four sites: Atrisco, East San Jose, Hawthorne, and Mission. Each site had a site administrator. A total of 58 students finished the 5-week intervention.

Table 2

Intervention and Comparison Students by ARI Mean Score and Free and Reduced Lunch (FRL) Participation Before Intervention

Students	Spring ARI Mean Score	FRL Participation
Intervention N=58	1.67	74% (58)
Comparison N=3837	2.22	53% (2034)

As can be seen in Table 2 summer intervention students as a group scored below the second grade level while comparison students scored slightly above the second grade level on the ARI at the end of the regular school year. Along with that 74% of the intervention students were receiving free and reduced lunch as compared to 53% of comparison students.

Analysis and Findings

After adjusting for the differences between the two groups in ARI mean score and FRL participation an analysis was performed comparing their relative performance on the Terra Nova reading subtest at the end of 3rd grade. At the end of third grade there was no mean scale score difference between the intervention and comparison students on the reading subtest of the Terra Nova. One year after the intervention, students exiting second grade behind in reading were not distinguishable from students exiting second grade reading at grade level. This suggests that the summer program closed the gap for at least a year.

2002 Summer Intervention

In the summer of 2002 the 2nd Grade Academy intervention was expanded to include 6 sites: Atrisco, East San Jose, Eubank, Hawthorne, Mission and Painted Sky serving a total of 128 students. There were two site coordinators, each overseeing three sites.

Table 3

Intervention and Comparison Students by Spring ARI Mean Score and Free and Reduced Lunch (FRL) Participation Before Intervention

Students	Spring ARI Mean Scores	FRL Participation
Intervention N=128	1.54	58%
Comparison N=4126	2.35	47%

As can be seen in Table 3, intervention students were below grade level while comparison students were above grade level. At the same time there was a higher level of intervention student participation in free and reduced priced lunch.

Analysis and Findings

After adjusting for differences between the two groups in ARI mean scores and FRL participation, an analysis was performed comparing their relative performance on the Terra Nova reading subtest at the end of 3rd grade. At the end of third grade intervention students outperformed the gains of comparison students by an average of 7.2 scale score points. It appears then that, just as in 1999, the 2002 summer intervention produced dramatic gains for participating students over a one year period. Longitudinal analyses in coming years will tell if those gains were sustained.

Conclusions

The 2002 Second Grade Academy Intervention did well (7.2 scale score gain) in comparison to the 1999 Merit Program (10.4 scale score gain) when one considers that the 2002 intervention was 1 to 2 weeks shorter with twice as many sites.

However, it is of great concern to see that the 1999 Merit Program 10.4 scale score gain at the end of 3rd grade was lost for intervention students by the end of 6th grade relative to comparison students. It is also interesting to note that for the 2000 Summer Intervention, the first year of administration by APS, gains for intervention students were less dramatic but did at least pull them even with comparison students by the end of 3rd grade.

As students from the 2000 and 2002 interventions complete 6th grade it will be possible to more fully evaluate the sustainability of summer intervention gains. For now it appears that two of the three summer interventions in this research brief are successes. At the same time it appears that intervention gains may not be sustained over time. Possible explanations for this are:

1. Low performing economically disadvantaged students need continued interventions during subsequent summer sessions and/or during the school year.
2. The factors that caused low performing economically disadvantaged students to be behind initially, if not alleviated, will result in loss of intervention gains overtime.

3. The ideal instructional conditions provided by the summer intervention programs were not duplicated at the school level. Students in summer programs make substantial gains in an intense instructional intervention with a pupil teacher ratio of 6 to 1 and a three-hour daily literacy block.
4. The results of APS Summer Interventions mirror those of national research. Students in poverty who are academically behind can be brought to standards through brief intensive intervention. However, to sustain these gains over time students need enhanced school year instructional programs and profit from repeated interventions.