

2009 Success Academy Science Outcomes

Did participation in the 2009 Success Academy benefit students' FCAT scores?

Introduction. District wide, students' FCAT science levels on the 2009 test tended to be at or below their 2008 reading FCAT levels. Specifically, of students who in 2008 scored at Level 1 in reading, 76% scored at Level 1 in science on the 2009 test. Also, of students who scored at level 2 in the 2008 reading test, 85% scored at Levels 1 or 2 in science on the 2009 test. This strong association between reading and science test outcomes suggests that students, who perform better on the science test than on their prior reading test, could be considered to be students who performed "better than expected" and gives us a way of gauging science outcomes.

Methods. The FCAT science levels of students who participated in the 2009 Success Academy for 6 or more days were compared to the FCAT Science levels of students at the same schools who did not participate in the Academy. Students were compared within prior FCAT reading level. In other words, participants whose last prior FCAT reading scores were at Level 1 were compared to non-participants who had also placed at Level 1 on their last FCAT reading test.

Results: "Better than Expected." Results indicated that a higher percentage of participants (26%) than non-participants (18%) at FCAT reading Level 1 placed at Level 2 or above on the FCAT science. The difference in percentages was statistically significant (*Pearson's Chi-Square* = 9.05; *df* = 1, 959; *p* = .003). A higher percentage of participants (17%) than non-participants (15%) who had previously scored at Level 2 in reading scored at Level 3 or higher in science. However, the difference was not statistically significant (*Pearson's Chi-Square* = .188; *df* = 1, 638; *p* = ns). ***These results mean that only participants at reading Level 1 performed better than reading Level 1 non-participants.***

Results: Attendance Days and Science Score. Partialling out the 2008 FCAT reading scores, students' FCAT science scores were significantly (*p* = .002), albeit mildly (*r* = .12), associated with increased attendance. ***This means that, students who had better attendance performed better than students who attended fewer days.***

Results: Matched Participants and non-Participants. Eleventh grade participants¹ (*n* = 558) were matched to eleventh grade non-participants (*n* = 505) on prior FCAT reading level, gender, race/ethnicity, primary exceptionality, and ESOL level. Analyses on the two groups' FCAT science scores indicated that participants scored higher (*mean* = 279, *SD* = 48.5) than non-participants (*mean* = 269, *SD* = 45.85). ***The 10 point difference in the average scores of the two groups was statistically significant.***

Conclusion. Although the difference between the two groups was modest, 11th graders who participated in the Academy scored better than non-participants on the science FCAT. Students at the lowest reading level may have benefitted most from participation.

¹ There were not enough fifth grade non-participants from which to draw comparison matches.