

Evaluation of Rocketship Students' Middle School Outcomes: First-Year Findings

Rocketship Education is a non-profit, national network of public elementary charter schools with the mission to close the racial and socioeconomic achievement gap through a “school model that combines personalized learning through technology, excellent teachers and leaders, and engaged parents.”¹ Rocketship emphasizes four core values for staff and students: respect, responsibility, persistence, and empathy. These values are integrated into instruction and expectations for student behavior. The founding families of each school collaboratively choose a fifth core value, reinforcing Rocketship’s emphasis on family engagement. These core values are designed to support students’ social-emotional development and create students’ ownership of their academic outcomes.

In 2014, Rocketship Education contracted with SRI Education to conduct a rigorous independent evaluation of the middle school readiness and success of Rocketship alumni and of their peers who did not attend Rocketship elementary schools. The evaluation is focusing on alumni of Rocketship elementary schools in the San Jose area who transitioned to middle school in the 2012–13, 2013–14, and 2014–15 school years.

SRI has completed and reported on the findings from the first year of the evaluation. The research team used a mixed-methods design encompassing analyses of student-level data, parent and student focus groups conducted in November and December 2014, and an online student survey administered in December 2014 and January 2015. The study sample comprised all middle school students attending one of seven charter middle schools in the San Jose area – both Rocketship alumni and a comparison group of non-Rocketship peers who had not attended Rocketship elementary schools. The team collected student-level middle school outcomes data for a total of 197 Rocketship alumni and 632 non-Rocketship peers. In addition, the team surveyed 720 Rocketship alumni and 1,243 non-Rocketship peers, achieving an overall response rate of 95%.

To compare middle school academic outcomes for Rocketship alumni and their non-Rocketship peers, SRI used a quasi-experimental design; the research team compared outcomes controlling for differences in students’ demographic characteristics using propensity score weighting and multiple linear regression. To compare noncognitive outcomes, academic aspirations, and satisfaction levels for Rocketship alumni and their non-Rocketship peers, the team analyzed differences in the two groups’ survey responses. The team triangulated these quantitative findings with the focus group data to better understand Rocketship alumni’s perceptions of their success in middle school.

¹ Rocketship Education. *Blasting to 20,000 Rocketeers*. (No year). Provided by Rocketship Education.

Background on Rocketship Education and Its Student Population

To understand Rocketship elementary schools' student population, SRI compared student-level data collected from Rocketship and publicly available demographic data for students attending noncharter public elementary schools in the neighboring San Jose Unified, Alum Rock Union Elementary, and Franklin-McKinley Elementary districts for the 2012–13 academic year. The data indicated that Rocketship students were more socioeconomically disadvantaged than students who attended nearby noncharter public elementary schools. Rocketship schools also served larger proportions of English learners (ELs) and Latino students.

Exhibit 1
Comparative Demographic Data for Rocketship Students
and Elementary Students in Neighboring Districts, 2012–13

District	Gender (%) (female)	Race (%)					FRPM eligible (%)	EL status (%)
		Asian	Latino	African American	White	Other		
Rocketship	51	10	84	2	2	2	88	68
Franklin- McKinley	49	31	60	2	2	5	69	54
Alum Rock	48	12	79	1	2	5	85	51
San Jose Unified	48	12	53	3	25	7	46	33

Sources: California Department of Education publicly available data for nearby noncharter public elementary schools and Rocketship Education for student-level data.

Note: FRPM = free or reduced-priced meals.

Key Findings

The following preliminary findings are based on the first year of data collection. In the next phase of the evaluation, the research team will collect student-level data for the 2014–15 academic year from each charter school and reanalyze the middle school outcomes data for the 2012–13, 2013–14, and 2014–15 years.

Overall, Rocketship students outperformed their peers in their first year of middle school; experienced smooth transitions to middle school; reported high levels of self-efficacy, motivation, and grit (i.e., persistence); and had long-term academic goals.

Middle School Academic Outcomes

- Controlling for differences in student demographic characteristics, the research team found that Rocketship alumni in their first year of middle school outperformed their non-Rocketship peers on the spring assessments (i.e., CST and NWEA MAP), particularly in mathematics.
- However, there were no statistically significant differences in any of the middle school outcomes for Rocketship alumni who were in their second year of middle school relative to their non-Rocketship peers.² In this first year of the evaluation, the sample size for Rocketship alumni who left the school 2 years ago was small. As a result, more data are needed to determine whether Rocketship alumni continue to outperform their peers 2 and 3 years into middle school.

Middle School Transition

- Rocketship alumni were more likely than their non-Rocketship peers to attribute their preparedness for middle school to their elementary school experience. For example, 90% of Rocketship alumni agreed or strongly agreed with the statement, “Elementary school prepared me to learn new things,” versus 79% of their non-Rocketship peers.
- Rocketship alumni were more likely than their non-Rocketship peers to have been involved in choosing their middle school. For example, 70% of Rocketship alumni agreed or strongly agreed with the statement, “I chose to go to this middle school,” versus 50% of their non-Rocketship peers.

Noncognitive Attitudes and Mindsets

- More than 90% of Rocketship alumni reported high motivation and grit (persistence); only about half, however, reported positive perceptions about their ability to learn and grow (i.e., growth mindset). Results were similar for their non-Rocketship peers.
- The majority of Rocketship alumni and their non-Rocketship peers reported that graduating from high school (92% and 91%, respectively) and college (95% and 91%, respectively) is very important to them.
- Rocketship alumni were also more likely than their non-Rocketship peers to report that someone at their elementary school talked with them about planning for high school and college: 65% of Rocketship alumni reported that a staff member at their elementary school talked with them about planning for college, compared with 49% of their non-Rocketship peers.

Next Steps for the Evaluation

SRI’s final report, expected in summer 2016, will describe further analyses of student achievement outcomes and the characteristics and behaviors associated with middle school success among Rocketship alumni.

² It is possible that with a larger sample size, differences would be statistically significant. Alternatively, Rocketship alumni’s academic advantage may decrease over time as they further experience the same instructional quality and classroom environments in middle school as their non-Rocketship peers. Further analyses will provide greater insight into Rocketship alumni and their performance over time.