



Accelerate to Excellence: A to E

Garfield STEM Magnet Middle School

Engage and Reflect: Case Study Reflection Template 2

Telling Your Story

Standards 3 Theme and Curriculum Fidelity & Standard 4: Professional Development

Standard 3: Theme & Curriculum Fidelity

The school's magnet theme is integrated into all subjects, monitored, differentiated, articulated between grades, and is innovative, relevant, and ensures student preparation beyond high school.

1. The Strength

- a. *Introduce with "Quote Kicker" or an interesting question or data point*

Garfield STEM "makes things work and makes things work better" and it has taken many different iterations of our work to get there. We want to help our students "change the world."

- b. *Share an insight about how your linchpin action lead to your success story*

When we started using the Core Mindset graphic, everyone seemed to start understanding the theme better. As we all implement the theme, students and families start using it as well in all their classes and activities... not just the science or math classes.

- c. *Note how the linchpin action that lead to your success aligns to the MSA Pillars*

Staying true to our theme of Engineering the Future, aligns directly with Standard 5 (teaching and learning focuses on theme) and the MSA Pillar of High Quality Instructional systems.

2. The Challenge

- a. *Tell a bit about your school and program*

Our school is a North Valley legacy where generations of families have come to our school. It opened in 1951. As a neighborhood school, attendance was slowing down. Our STEM focus will bring families together from all over our city. In 2015, Garfield became Garfield STEM with a focus on PBL, Project Lead the Way and collaborative engagement practices. Garfield STEM was included in the Engineering



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the Future Grant in 2017. Initiative focuses included national Magnet school certification, Design Process, Engineering and Learning Habits of Mind, etc.

b. Point to a past significant event that illustrates the need for the linchpin action

In the late 2000s/early 2010s, Garfield's enrollment continued to decline to 200/300 students. Garfield was a school with over 600 students and had decreased to under 300 students. There was a need to re-imagine the school to create a more vibrant and viable long term future. The district's Office of Innovation looked at several different low enrollment middle schools, Garfield and Hayes, to become STEM schools. Work was being done at both schools, focused on Project Based Learning training for all teachers. There was also a focus on Project Lead the Way training for teachers to offer that as an option in Science class. Then the school was offered a part of the ETF Grant to create a STEM pathway in the North Valley.

3. *The Thinking*

a. Indicate how you used data or information to guide your decision making

The initial data was the lowering enrollment trends that had been seen over a number of years. Anecdotally, the school had a "rough" reputation and some families often would choose other schools but other families would remain because of the generational status of the school in the community. Low scores in reading and math showed the need to provide students with support they would get from being in a STEM school to help prepare them for future careers and increase student achievement. District support and resources were very welcome to the school to help with this transition.

b. Share how you decided to turn the weakness(es) into strength(s)

The spirit of "making things work and making things work better" eventually became the rallying cry for the school. Beginning with "building scholars and compassionate citizens," the school revised its mission statement and vision multiple times through a supportive administration, Instructional Council, staff, and parents. Hosting STEM, Open House/Showcase nights, concerts paired up with the athletic events has increased attendance/parent involvement.



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Offering food at events has also increased attendance.

Garfield also hosts robotics competitions, leading to more interest from the community. Eventually, this iterative process used the Engineering the Future core model of “Making Things Work” through using the Design Process, Engineering and Learning Habits of Mind, Project Based Learning, and Project Lead the Way. These were not initiatives just typically thought of STEM classes like Science and Math but were across all the content areas at Garfield.

4. The Lesson Learned

a. *Discuss the complications or barriers you encountered during your journey*

Because of several different factors like a well-earned school’s reputation, teacher retention was a serious factor for three or four years and this made it difficult to gain traction and stability for the STEM transformation to take hold across the school. Teacher turnover, due to numerous factors including; change in administration, change to a STEM school, moving to a block schedule, and then moving away from a block schedule, and student behavior resulted in hiring between 4-11 new teachers every year in a school with approximately 33 teachers on staff. The building was built in 1951 and has had limited updates structurally. Family engagement and participation has been limited. There is a good turn out for sporting events and music performances, but the STEM events, open houses had less turnout. School culture and student behavior has been difficult to change at Garfield. Perception of Garfield being a failing school has impacted student enrollment, and teacher recruitment. One of the goals to address this barrier was to create the Pillar Pals which helped focus the magnet school work, especially in a newly created sixth pillar, School Culture. This pillar focused on the reputation of the school and the difficulty with some of the challenges for teachers. A new focus on restorative practices and hiring a Restorative Practices Coordinator was part of this work to create a more positive school culture with greatly reduced numbers of suspensions and days missed for learning because of behavior. Teaching students to learn how to make amends when they make mistakes and learning how their actions impact other



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students or teachers will help create a more academically focused learning environment.

- b. Highlight the opportunities and the linchpin (time, people, materials, facilities, funding) you leveraged*

The original time frame included Project Based Learning training for all teachers with Dr. Tim Kubik; Project Lead the Way training and classroom implementation for a small group of Science teachers; retaining a strong core of teachers beyond them staying a year or less; and the Instructional Council has transformed into a high functioning, very collaborative, shared leadership body to make thoughtful and informed decisions about the implementation of the STEM theme. The Community School aspect of the school's identity has also gone through a growth process to greater support the STEM theme through after school activities. It has also created more support for families to meet their most immediate needs like food, clothes, shot clinics, and referrals for other critical needs. The Engineering the Future grant has also provided crucial funding for coaching for teachers, purchasing of computers and other technology for the infrastructure of the school, and the essential and expensive training for teachers to create collaborative environments for students like Project Lead the Way, Project Based Learning, Kagan Cooperative Structures, and Win Win Discipline. Also, the teachers and staff are open to innovative ideas for teaching, to take chances to grow in their practices, and collaborate with their colleagues to transform learning.

5. **The Impact**

- a. Underscore how the linchpin action had positive impact on your students*

The enrollment numbers stopped going down overall. The school has begun each of the last 4 years around 400 students and while that number fluctuates due to a high number of families who move several times during a school year, the number of students who choose Garfield in the neighborhood or through transfers has increased. In fact, Garfield exceeded its recruitment goal in the most recent WestEd evaluation by over 100%. The reputation of the school is in the process of being



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transformed and there is a different perception of the school that we are noticing. Project Lead the Way brought new ways to learn in Project Based Learning engaging students in hands on science curriculum. Restorative practices will only continue to help with that and families will see Garfield as a school of choice that not only meets the academic needs of their students but also the social emotional ones, too. The school has a technology infrastructure that students have access to that other school do not have. The knowledge they are learning is preparing them for college well before they leave high school.

b. Explain why you think your linchpin action could help other magnet programs

Going through this process and understanding how to help transform a similar community with at-risk students is something that could benefit other magnet schools with similar circumstances. The staff, teachers, and administrators who have gone through these trials and iterations have learned a great deal about “making things work and making things work better” for students.

6. **The Next Step**

a. Recommend bold next steps, new concepts, and future strategies

Projects that really become part of the community, that positively impact their neighborhood, maybe even students making money from their project. Positive media coverage of the students’ projects and the hallways filled with authentic student work and the fruits of their labor.

PBL’s give teachers an opportunity to engage students in challenging lessons that include cross curricular partnerships with staff and community partners. Continue professional development- Train more teachers in PLTW, continue PBL, continue ETF 101, staff follow-up theme trainings. Retain community partners and work on a procedure for onboarding new partners Training office staff in ETF pathway and mission Designate a person as a Magnet Coordinator, Engage parents with social media reviews, and get positive testimonials that leave an encouraging digital footprint for interested parents who may be looking at our school as an option, strengthen and redefine PTA/PTO presence,



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7. *The Conclusion*

- a. *Reinstate the main point of your success story with linchpin action and success story*
- b. What does it mean to “make things work and make things work better?” It means much more to this school than a platitude but it is an authentic and meaningful mindset to help guide the work of the STEM theme implementation. It’s about adding depth and layers to the a new history of the school and its relationship with its community while bringing in new families and students. It’s about learning from challenges and using the Design Process as a real life experiment for school transformation. There’s a new pride in the school and it is self-motivating because success makes it more likely and willing to continue to take chances. When you conquer a fear, students and staff become more confident. The possibilities become endless!