Building STEAM 4 All Impact Report, 2025-26 Prepared for Synopsys Foundation | September 2026

INTRODUCTION

The $15,000 grant made by the Synopsys Foundation to the Beaverton Education Foundation (BEF) helped advance K-12 STEAM education across all Beaverton public schools. Overall, we were able to serve 34,000 students—about 85% of all students in the Beaverton School District last year—with STEAM activities reaching at least 20,000 of them. We are happy to highlight BEF's Building STEAM 4 All in this impact report for the 2025-26 school year.

BOOSTING MATH ACHIEVEMENT

BEF integrated STEAM principles including hands-on learning, experiential, teamwork and problem solving to boost math performance among K-3 students attending Title I schools as well as at four low socio-economic status middle schools last year.

Need: While Beaverton's 40% proficiency rate for 8th-grade math outperforms the Oregon state average of 29%, the broader reality is that Oregon's 8th graders recently ranked 40th out of 50 states. The majority of middle schoolers are not meeting state grade-level expectations, creating a substantial barrier to academic success, on-time graduation, and transition into STEAM careers. This need for intervention is most critical for our historically underserved students, as proficiency rates fall to 14% for Hispanic/Latino students, 13% for Black/African American students, and 23% for those living in poverty. Additionally, this current cohort of 5th-7th grade students were among the most impacted by pandemic-related remote learning as they spent their earliest years learning from home.

K-3 Pilot Program: We launched a new approach to support foundational numeracy among the lowest performing young students in the district. In the first year of this three-year pilot program, we worked with three Title I elementary schools: Barnes, Kinnaman, and Vose. These schools are among the worst performing schools in terms of student math achievement. At Barnes, only 15% of third graders are considered proficient in math based on state test scores. Our approach is to test a whole-school approach to math proficiency which primarily focused on training classroom teachers in best practices in math education, emphasizing use of hands-on materials, small group learning, and helping teachers better understand where their students are falling short.

- **"I loved the modeling of teaching the instructors did. It was 'real life' in the classroom and was refreshing to watch how they navigated moments of meeting students where**

they were and setting expectations." ~ *Annie Browning, Barnes*

- **"Slowing down and promoting deeper understanding of concepts is so much more important than moving along on the curriculum**." ~ *Barbara Perez, Barnes*

Following from the training, BEF equipped classrooms with essential math supplies to support hands-on learning such as Wipebooks, subitizing cards, ten-sided dice, and number lines. Teachers were able to access 1:1 support to put practices into place, and will receive follow up training this fall. Another three Title I elementaries will join the initiative this year.

Middle School Math Intervention: To address the needs of Beaverton's struggling math students, BEF partnered with Conestoga, Five Oaks, Mountain View, and Whitford Middle Schools to offer targeted math intervention classes during the daily "What I Need" (WIN) period, serving 462 sixth and seventh graders who trailed grade-level expectations. BEF used grant funds to supply tactile learning materials, such as manipulatives, and collaborative technologies, such as Wipebooks, to help students grasp abstract concepts.

> **"Having concrete representational materials helps fill in knowledge gaps that students developed in elementary school. These materials provided hands-on learning to make learning real**." ~ Lanie Toth, Whitford MS. She further noted that 77% of her students made progress toward proficiency in most recent tests.

These tools give students different ways to understand concepts.

> "**When I sit with students to talk about volume and surface area, we can get out materials and build the shapes, while discussing what they noticed. Students loved it.**" ~ Helen Chandler, Mountain View MS

At Highland Park MS, math intervention was delivered through an after-school Math Club, with 25 students per session and 60 over the entire year. The teacher noted that students were able to work collaboratively, helping each other through tough math concepts.

> "**Their camaraderie spilled over into the hallways with lots of high-fives, creating a welcoming environment for students who previously felt discouraged about math.**" ~ Mikaela Vanderperren, Highland Park MS

HANDS-ON, PROJECT-BASED LEARNING IN STEAM

Funds granted for the Building STEAM 4 All Initiative empowered teachers to develop innovative, project-based challenges to implement in their classrooms. A few highlights of innovative investments made last school year:

STEM Kits for Title I Schools/Lending Library: Each week all 17,000 students in elementary schools go to a "tech special" class taught by a dedicated instructor, known as a "TIA." This year we increased availability of science and technology related tools at four Title I schools, serving 2,523 students. We also expanded resources in the Lending Library which supports 20-30 schools each year and between 15,000-

18,000 students.

Solar Power & Circuitry Sustainability Unit (10 Middle Schools): The middle school science Teacher on Special Assignment (TOSA) designed and piloted a new curriculum integrated into the 8th-grade sustainability unit across Beaverton. Tying together Tribal History/Shared History, career learning, and Oregon energy production, the lessons culminated in an open-ended project where 1,300 students used circuits and solar power to build functioning water fountains.

> **"Teachers often struggle to put together an engaging, student-centered unit for 8th graders at the end of the year. This project-based unit provides relevant, hands-on learning with an open-ended project to engage every student."** ~ Melody Childers, Beaverton School District Science Teacher on Special Assignment

Level Up Computer Science (Southridge High School): At Southridge High School, BEF helped 50 introductory computer science students gain access to GDevelop, an accessible game design platform that runs on district-issued Chromebooks and supports programming in multiple world languages. This initiative successfully broadened access to the CTE Computer Science Pathway and arranged for students to earn dual credits with Portland Community College for this course next year.

> **"Something I really like about GDevelop is how simple the process is to build the different aspects of games. You can access Piskel directly to make assets, and you don't need to know too much code to get all the behaviors to work."** ~ Student

Middle School Science Fair (six schools): Over two years, BEF has invested in changing the culture at two middle schools, bringing back the school-wide science fair after a long absence. At Meadow Park and Mountain View, the expectations have shifted so that every student is expected to participate. Top projects from there and other middle schools move on to a district-wide fair.

> **"Seeing the creativity and variety of [science fair] projects was truly inspiring and left us feeling excited about the next generation and the innovations they will bring."** ~ Parents of a Five Oaks Middle School

CAREER CONNECTED LEARNING

Another way BEF harnesses private support is in career connected learning, specifically supporting the pipeline of students into Career Technical Education (CTE) pathways such as the trades or manufacturing.

- **Trades Exploration (Upgrade Program):** Upgrade is a special Beaverton program that supports 8th graders considered most at risk of dropping out in high school. As part of their year-long class, we pushed in to take students on field trips to three high school CTE sites so that they could learn more about staying in school to prepare for higher paying careers that don't require a four-year college degree. The 75 students, who are mostly lower-income and from diverse backgrounds, completed hands-on projects at CTE Construction, Manufacturing, and Auto Tech program sites.

- **Soggy Regatta (Southridge & Mountain View High Schools):** A culminating engineering challenge where students design and build cardboard boats to row across a 25m pool, wrapping up two years of learning engineering principles. The event also includes judges from the engineering industry.

  "**They may not build a boat again in their engineering careers, but the fundamental concepts are there.**" ~ Madi Schick, CTE Coordinator, Beaverton School District

- **Construction College & Career Fairs (Aloha High School):** BEF helped 40 students who had not been able to take part in CTE programs attend trades-focused career fairs to learn about future career training options.

  "**This visit provided them options for the future, which helps them stay connected and more engaged in school**." ~ Lawrence Gillespie, Aloha HS School Counselor

LOOKING AHEAD: ENGINEERING THE FUTURE TOGETHER

The immediate successes of this past year, from a sixth grader suddenly finding math "easy" to high schoolers realizing a future for themselves in the trades, are a direct result of Synopsys Foundation's partnership with BEF. Synopsys' support contributes to building the confidence, technical aptitude, and critical thinking skills that Beaverton

Beaverton Education Foundation has been supporting students and teachers in Beaverton schools since 1988.

We raise money to provide hands-on, innovative, academic programs and projects. These innovations go beyond normal school funding to ensure students have an opportunity to learn, thrive, and reach their highest potential.

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