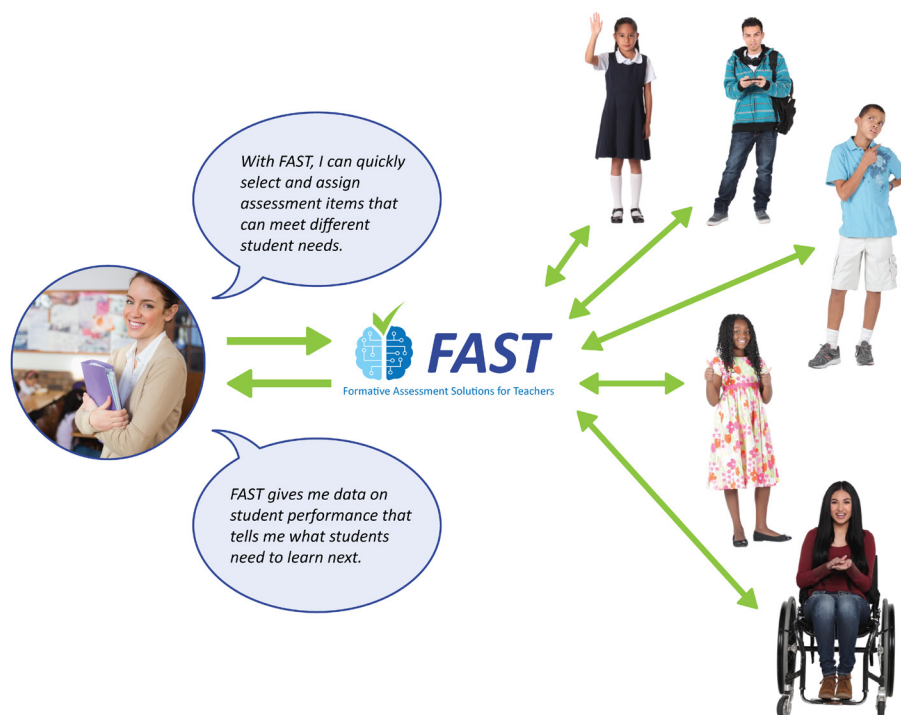


VITAL Prize Challenge

Formative Assessment Solutions for Teachers (FAST)

QIP made it to the semi-final round of the National Science Foundation's [VITAL Prize Challenge](#). The VITAL Prize Challenge empowers teams to develop innovative learning technologies for K-12 students. The QIP team submitted a product concept called Formative Assessment Solutions for Teachers (FAST). FAST has a system for teachers to find and assign items with targeted variability and a rich repository of interactive and adaptive formative assessment activities.



✓ Supports learner variability

- Teachers use FAST to select and assign assessment items that take student variability into account. These items are also mapped to academic standards of learning.
- FAST scores the assessment items and provides results to teachers with performance insights that help teachers decide what to teach next.
- Students can make choices as they respond to assessment items on context, feedback, and how they want to expand their knowledge.
- Our student-centered activities increased engagement and equity for underserved learners.
- The activities are also self-improving because item metadata expands with every interaction.
- Over time, FAST provides greater insights on relative item difficulty and item performance with historically underserved learners.

Our development process included a series of interviews with educators, administrators, and other stakeholders as part of a customer discovery phase to further refine our product solution. To make product decisions, we used an iterative learning engineering process that included co-design activities with input from key stakeholders and representative users. To advance to the semi-finals, we presented our proposed solution and business model to a panel of judges.

As semi-finalists, our team received \$20,000 in seed funding. With this funding, our team worked with an educational mentor and gathered feedback from diverse students to further our prototype concept, conduct feasibility testing, and begin initial development activities.