

Yonkers SMART Start Initiative
April 2021 - March 2022

Goal: To introduce one hundred 7th and 8th grade teachers to inquiry-based approaches to STEM, and to support school-based teams in designing and implementing rich, technology-infused projects that benefit from the Yonkers City School District's newly established Technology Center. The project work will integrate digital tools and equipment in alignment to the grant's Year 1 topic of focus: fabrication and 3D printing. Concurrent work with leaders will support the sustainability of the initiative over time.

Project Activities

1. *Online Summer Institute*
 - 1.1. Introductory Summer Institute focused on inquiry-based approaches to STEM. Four-day Institute, 5 hours/day.

2. *Hybrid Online Project Planning and Implementation Series*
 - 2.1. *In-person sessions.* Technology Center walkthrough and in-person sessions to introduce 3D printing and other fabrication tools, to design a mini project in grade level teams, and to align with instructional and curricular goals.
 - 2.2. *Asynchronous assignment/project planning.* Teachers will engage in scaffolded project planning and reflection tasks.
 - 2.3. *Project implementation support (at the Technology Center).* CTSC will be on-site at the Technology Center over the course of 8 days to support project implementation. The YCSD Director of Science will provide supplemental coaching on-site.

3. *Culminating Reflection*

Teachers will engage in a culminating reflection to report on the implementation of projects and to reflect on student learning, and ways of moving the work forward into subsequent school years. 3 hours after school, preferably at the Technology Center.

4. *Leadership Components*
 - 4.1. Interim session with administrators to discuss progress and structural supports for the work.

Budget

Activities, 4/21 - 3/22	Unit Price	Units	Cost
Online Summer Institute, 100 people	\$5,000/Institute Day	4 Institute Days	\$20,000
In-Person after school sessions at the Technology Center, 100 people	\$3,000/session	4 Sessions	\$12,000
Site visits to the Technology Center to support implementation	\$1,500/visit	8 Visits	\$12,000
In-person reflection session at the Technology Center, after school, 100 teachers	\$3,000/session	1 Session	\$3,000
Leadership Session	\$3,000/session	1 Session	\$3,000
			\$50,000

Assumptions:

- Technology will be in place
- Technology will be maintained and supported
- Teachers will be recruited by others and committed
- Documentation/Reporting will be taken care of by others

To make this possible, we see a simple design: 4 days of summer institute, followed by 8 trips to the Technology Center where teachers will plan a learning experience (mini project) for students, support on site during implementation, followed by a reflection section to lay the foundation for project-based learning PD to come in a future grant. Leadership sessions will also be provided, to insure some building commitment and support for teachers who want to continue to work with the Technology Center.