Early-Phase Competition Absolute Priority 3 (STEM) Urban Arts Partnership

S411C230153

Creative Coders: Middle School CS Pathways Through Game Design

| Applicant Name: Urban Arts Partnership |
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| Project Title: Creative Coders: Middle School CS Pathways Through Game Design |
| Type of Grant Requested: Early-Phase |
| Absolute Priorities the Project Addresses: (select all that apply) |
| ☑ Absolute Priority 1 Demonstrate a Rationale (Early), Moderate (Mid), Strong (Expansion) |
| ☐ Absolute Priority 2 Field-Initiated Innovations—General |
| ☑ Absolute Priority 3 Promoting STEM Education |
| □ Absolute Priority 4 Meeting Student Social, Emotional, and Academic Needs |
| ☐ Absolute Priority 5 Educator Recruitment and Retention |
| Competitive Preference Priorities the Project Addresses: (select all that apply) |
| ☑ Competitive Preference Priority 1— Promoting Equity in Student Access to Educational Resources and |
| Opportunities: Implementers and Partners |
| ☐ Competitive Preference Priority 2—Supporting a Diverse Educator Workforce and Professional Growth |
| to Strengthen Student Learning |

Total number of students to be served by the project: 3,450

Grade level(s) to be served by the project: Middle school (6th-8th grades)

Definition of high-need students: Students in Title 1 schools.

Brief description of project activities: In New York and California, this project will build, establish the efficacy, and disseminate study findings of Creative Coders, a game-based middle school computer science (CS) course designed to support CS engagement and learning, particularly for high-need students.

Summary of project objectives and expected outcomes: The project will: (1) create and test strategies to enhance the adoption, use, and sustainability of Creative Coders; (2) implement and evaluate the efficacy; and (3) disseminate findings and track scaling.

Summary of how the project is innovative: Urban Arts will use materials and learning from its School of Interactive Arts program to create an engaging, game-based, middle school CS course using Minecraft tools.

Other studies related to the proposed project: There are studies of the effectiveness of similar Urban Arts programs from which this builds (Casciano, 2021).

Proposed implementation sites: 72 middle schools in New York and California.