

Early Phase Competition -- Absolute Priority 3 (STEM)
Urban Arts Partnership
S411C210110

Game On: Teaching The AP CSP Through Game Design

ABSTRACT

Game On: Teaching The AP CSP Through Game Design

Urban Arts Partnership (UAP) proposes Game On: Teaching the AP CSP through Game Design. In the proposed project, we will develop Game On, a curriculum and pedagogical methodology using video game design to teach an Advanced Placement Computer Science Principles (AP CSP) course. This **Early Phase EIR** proposal responds to **Absolute Priorities 1 & 3** and **Competitive Preference Priorities 1 & 3**. This project will serve **2,400 Grade 10-12 students in 56 Title I schools** in New York City and in rural areas within North Carolina. It serves high need students, which we define as low-income students qualifying for free and reduced price lunch.

Based on UAP's prior work and existing research, Game On is designed to improve student learning in computer science (CS) through video game design. Through a blended professional learning model, CS teachers are supported in **teaching the AP CSP course** using Game On's rigorous curriculum and evidence-based pedagogical approach. During this year-long course, students learn to **design and develop their own video games**; in so doing, they gain the knowledge and skills required to **pass the AP CSP exam**.

Through Game On, students will increase computational thinking skills and proficiency in a programming language, growth mindset related to CS, and awareness of and interest in pursuing

STEM-related career paths. Teachers will demonstrate competency in teaching a game design-based AP CSP course. UAP will submit the Game On curriculum to the College Board for its endorsement of UAP as a provider of AP CSP Curricula and Pedagogical Support.

Game On is proposed in partnership with the **Brooklyn North NYCDOE Borough Office, the North Carolina Department of Public Instruction, and Unity Technologies**, with evaluation and dissemination conducted by **WestEd**.