Project Description:
CSU-DH will implement an innovative, nontraditional, credential pathway that is an exceptional approach to providing teachers from nontraditional preparation and certification routes or pathways to serve in traditionally underserved LEAs. APPLE will create an accelerated, nontraditional credential pathway using the university intern option, which is infrequently used to earn multiple-subject (elementary) credentials. APPLE will help fill an acute need for elementary and STEM middle school teachers in LAUSD. The 168,000 students enrolled in LAUSD LD South and LD East are primarily low-income (90%) and of color (85% Latino, 11% African American). APPLE’s design is based on two studies that are supported by moderate evidence and meet What Works Clearinghouse standards. APPLE will recruit aspiring teachers who are demographically like the students they will teach to increase achievement and retention. The project will provide a) stipends for summer training to attract talented aspiring teachers regardless of income; b) foundational courses, observation and practice teaching before full-time teaching as university interns; c) substantial support from instructional coaches and on-site mentors during their intern year while they earn a preliminary credential; and d) ongoing support through a two-year induction as they earn a full credential. Also, APPLE will offer micro-credentials across multiple districts to increase the skills of in-service educators in cutting-edge STEM topics.

Project Expected Outcomes:
- Recruit, support, prepare and retain high-quality K-8 teachers with STEM expertise in high-need schools in partner LEAs. Outcome: Prepare 150 teachers in 3 years and 200 in 5 years. Achievement in math and science for students of APPLE teachers will exceed that of students of comparison teachers.
- Increase the STEM expertise of educators and school leaders in high-need K-8 schools in computer science and other cutting-edge STEM topics via micro-credentials. Outcome: 680 educators complete at least one micro-credential in 3 years; 950 in 5 years.
- 3. APPLE strategies documented as best practices that are replicable in other settings are disseminated. Outcome: Best practices in recruitment, training, mentorship, and induction are identified and disseminated broadly.

Project Special Features:
Unique features include extensive clinical experiences in CSUDH’s innovative Lab School and CSUDH’s mobile fabrication laboratories that bring state-of-the-art STEM technology to schools for hands-on student learning. The project will recruit aspiring teachers who demonstrate math or science content knowledge that exceeds that of a typical elementary teacher and aligns with expert recommendations. Our novel approach will enable them to earn a multiple-subject credential to teach in K-6, plus a supplementary authorization in math or science or a single-subject foundational math credential to teach grades 7-8. b) In-service educators can earn a micro-credential in computer science to add an
authorization to their credential to teach computer science. APPLE candidates will strengthen their own social-emotional skills and learn how to build these in their students through year-long training and practice, following guidelines from the Collaborative for Academic, Social and Emotional Learning. APPLE will promote equity in education by preparing highly qualified new teachers and increasing STEM teaching skills for educators in schools located in Qualified Opportunity Zones.

**Project Partners:**
Los Angeles Unified School District (LAUSD), Local District East and Local District South