

The STEM Early College Expansion Partnership (SECEP)



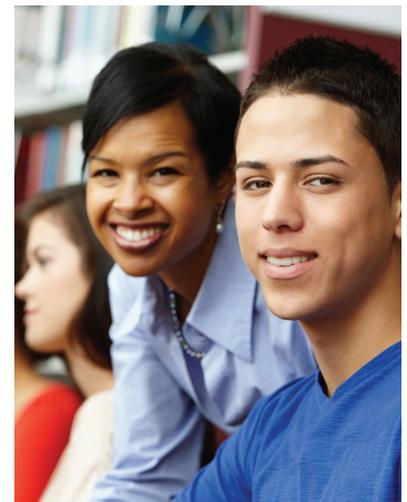
Proposes to improve STEM education in participating school districts in Michigan and Connecticut by increasing high quality professional development for teachers in STEM subjects. Over five years SECEP will:

- Improve STEM education for 22,000 high need middle and high school students, decreasing drop-out rates and boosting college enrollment.
- Improve underrepresented populations' access to STEM careers by increasing the number of students enrolling in dual credit STEM courses and pursuing postsecondary credentials.

The Early College model significantly increases the success of underrepresented and high-need students. SECEP will scale STEM Early College designs that significantly increase the success of underrepresented and high-need students in demanding college-preparatory programs of study by:

- Implementing the STEM Early College design which includes a rigorous college-ready curriculum combined with extensive academic and personal supports from peers and adults to help students achieve success in college preparatory and college courses, with an emphasis on STEM fields of study.
- Delivering professional development and coaching to improve the effectiveness of STEM teachers through activities that build STEM and pedagogical content knowledge. SECEP will provide support for collaborative learning and using strategies such as problem-based learning, and project-based learning.
- Developing school, district, and college partnerships to fully implement the STEM Early College design. SECEP will help district leadership align current professional development programs, school improvement initiatives, and resources with schools' implementation of the EC model. In addition, SECEP will assist schools to form strong partnerships with institutions of higher education.

Project Partners



Expected Results:

SECEP anticipates the following outcomes over the five-year grant period:



- A total of 22,000 students served by schools adopting the STEM ECHS design
- 70-80 secondary and postsecondary teachers trained in and utilizing STEM ECHS content, pedagogical content knowledge, and curriculum and instructional strategies
- 85% of teachers who have been completed SECEP professional development report ability and confidence to apply STEM content and pedagogical content knowledge in the classroom
- At least a 10 percentage point increase in students taking and succeeding in core college preparatory courses
- At least a 10 percentage point higher rate of graduation than comparison group students
- 90% of students will earn college credit; at least 60% of high school graduates will complete two STEM college courses as part of a pathway transferable to postsecondary credentials
- A 50% increase in students who evidence an interest in STEM and pursuing a STEM career
- A blueprint for district-wide STEM ECHS expansion that can be used by other LEAs, particularly in regions with demographic characteristics similar to the two regions.

Participating Districts:

BRIDGEPORT PUBLIC SCHOOLS

Changing Futures and Achieving Excellence Together



Genesee Intermediate School District
LEADERSHIP ♦ SERVICE ♦ INNOVATION



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