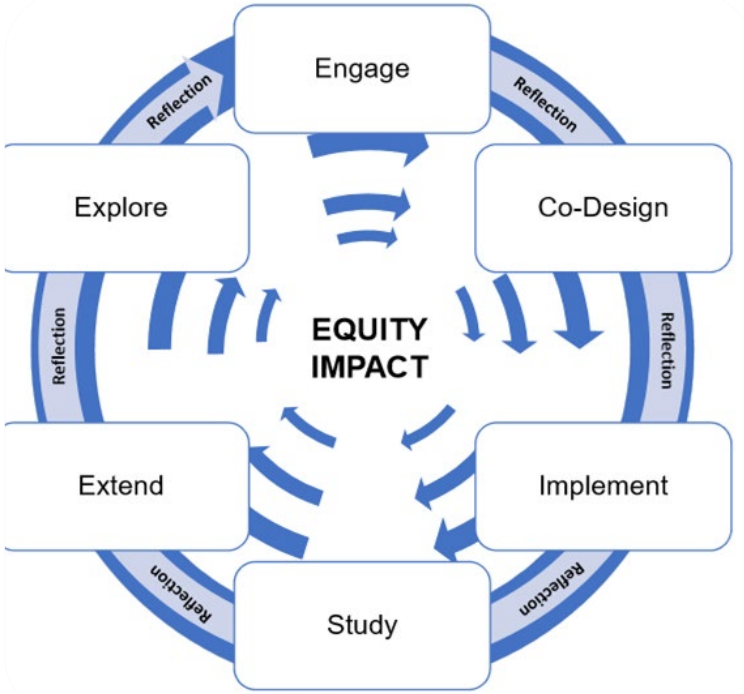
Intentional Teacher Recruitment and Retention: The Key to Achieving Diversity in STEM

- **Question:** How can we address the lack of diversity in STEM professions and improve the United States disappointing rankings in Math and Science compared to other developed countries?
- **Observations:** Very few Math and Science teachers are People of Color. Additionally, there are very few Hispanic and African American students enrolled in high school STEM classes, particularly those at the advanced level.
- **Research:** While approximately 50% of secondary students in public schools are Hispanic and African American, only 13% of Secondary Math and Science teachers are Hispanic or African American. Enrollment and success in advanced STEM classes at the secondary level corresponds with pursuit of a STEM degree at a higher education institutions
- **Goal:** Increased representation by People of Color as secondary Math and Science teachers as well as increased enrollment and success of Hispanic and African American students in advanced Math and Science courses.
- **Identified Obstacles:** Lack of recruitment and retention of highly qualified Math and Science teachers that are truly representative of the student population.
- **Proposed Solution:** Partnerships with HBCUs and public universities for job fairs/recruitment, P-Tech education programs, paid student teacher residencies, specific voluntary mentorship programs



The IEL Equity Impact Framework

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Why?

- According to the US Bureau of Labor and Statistics (2021), job growth in STEM sectors continue to outpace all other industries. Additionally, median wages in STEM occupations are more than twice those earned in non-STEM professions.
- Unfortunately, participation in the STEM workforce by African Americans and Hispanics consistently lag behind that of other racial groups (Pew Research, 2021).
- Success in high school math and science classes has been identified as a significant predictor of an individual's pursuit of STEM at the postsecondary level. Several recent studies have concluded that the presence of Black and Hispanic teachers in math and science classes results in greater academic success by minority students and increased likelihood of these students pursuing STEM degrees and occupations,

How?

- To recruit and retain high quality STEM teachers that are people of color, we recommend the following first steps:
  - Intentional recruitment of teachers through partnerships with Historically Black Colleges (HBCUs), public universities, and community colleges.
  - New teacher mentorship program featuring a diverse group of mentor teachers in STEM content areas.
  - Promotion of loan forgiveness programs such as teacher loan forgiveness and the Public Service Loan Forgiveness program (PSLF) as well as explicit guidance and assistance for new teachers wishing to pursue these types of programs.
  - Paid teacher residency programs in conjunction with P-Tech programs to encourage historically underrepresented students to pursue math and science teaching, and to ultimately return to serve in their own community schools.

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