

AIMCORP STEM LAB

Suhan Asaigoli & Sanvi Asaigoli

Meet The Team

- **Suhan Asaigoli (Co-Founder):**
Morhead-Cain Scholar and Scott Carolina Scholar at UNC-Chapel Hill
- **Sanvi Asaigoli (Co-Founder):**
STEM Student at William G. Enloe High School



Overview



- **AIMCORP:** The Applied Innovation Movement is a 501c(3) non-profit organization based in North Carolina
- Specialized and focused in developing innovative solutions for improving accessibility and outcomes in STEM and education

Body of Work

**Collaborating with
community partners to
bridge gaps through
participatory design of
innovative solutions and
community impact**



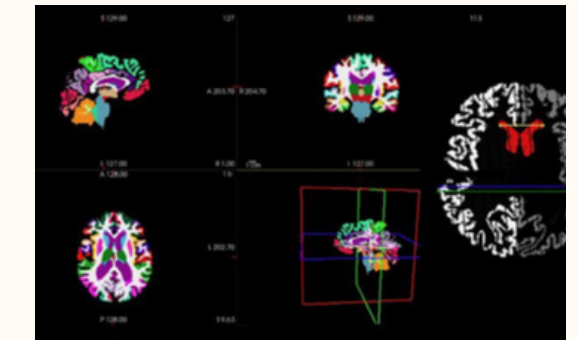
ED Toiletry Closet



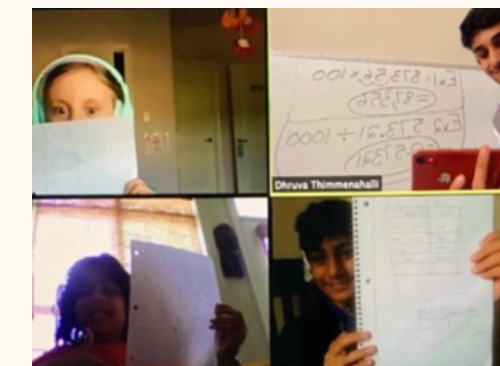
Capacity Development



International Outreach



Innovation Lab



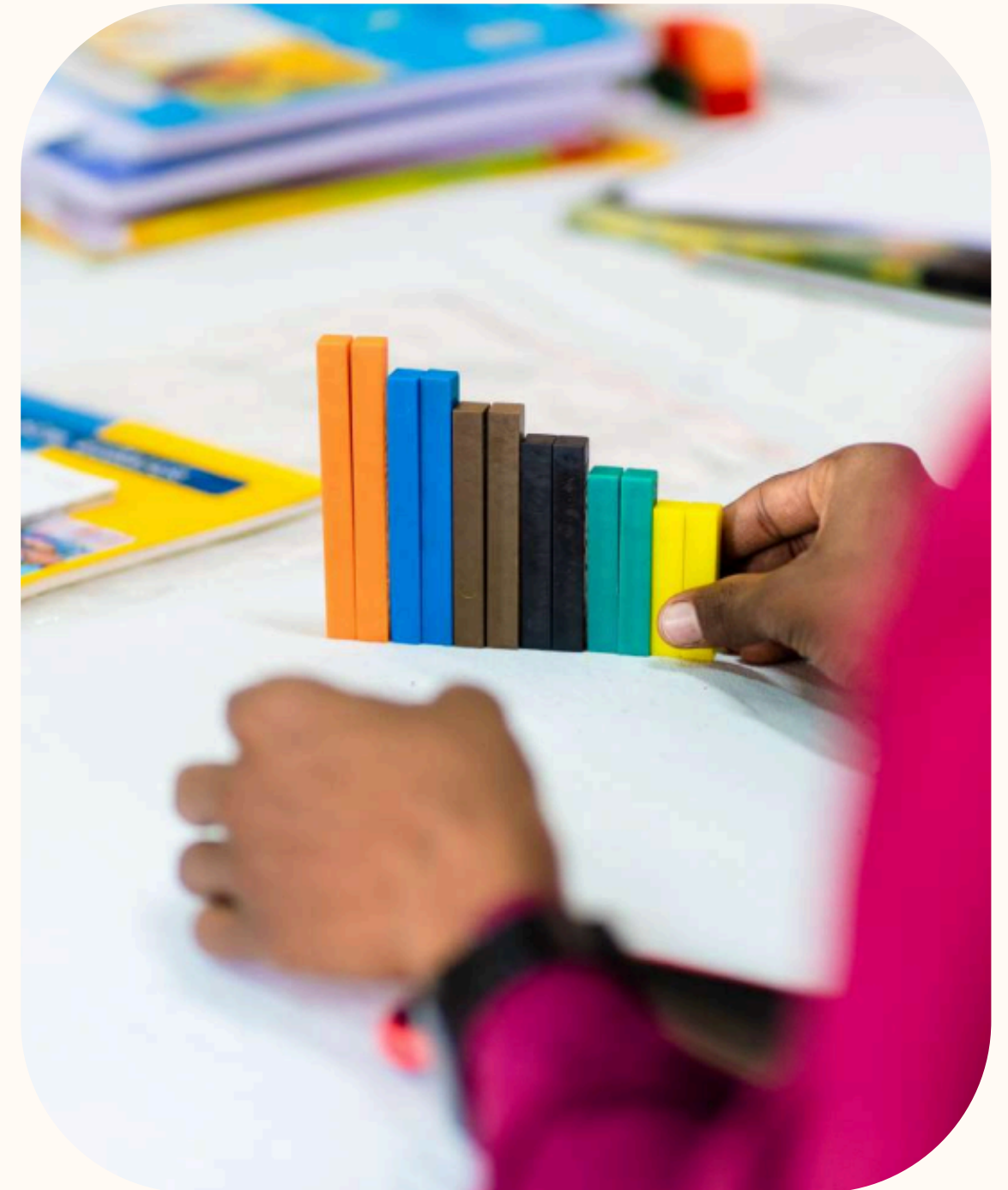
AIMCORP Coaching



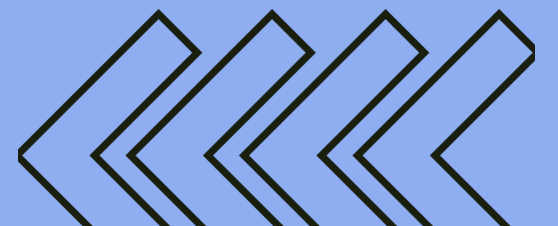
AIMCORP STEM Lab

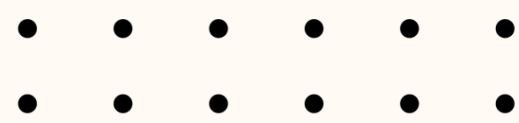
- **Mission:** Equip educators and students in Wake County with innovative teaching/learning tools to improve STEM outcomes.
- **Develop a program catered to students' and teachers' needs**
- **Hand it off to be reproducibly used for no cost**

Means: Using interactive literature proven pedagogical teaching tools/methods to provide new, innovative cost-effective, and sustainable methods of tackling the same standards.



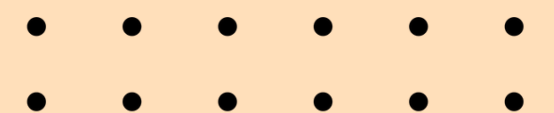
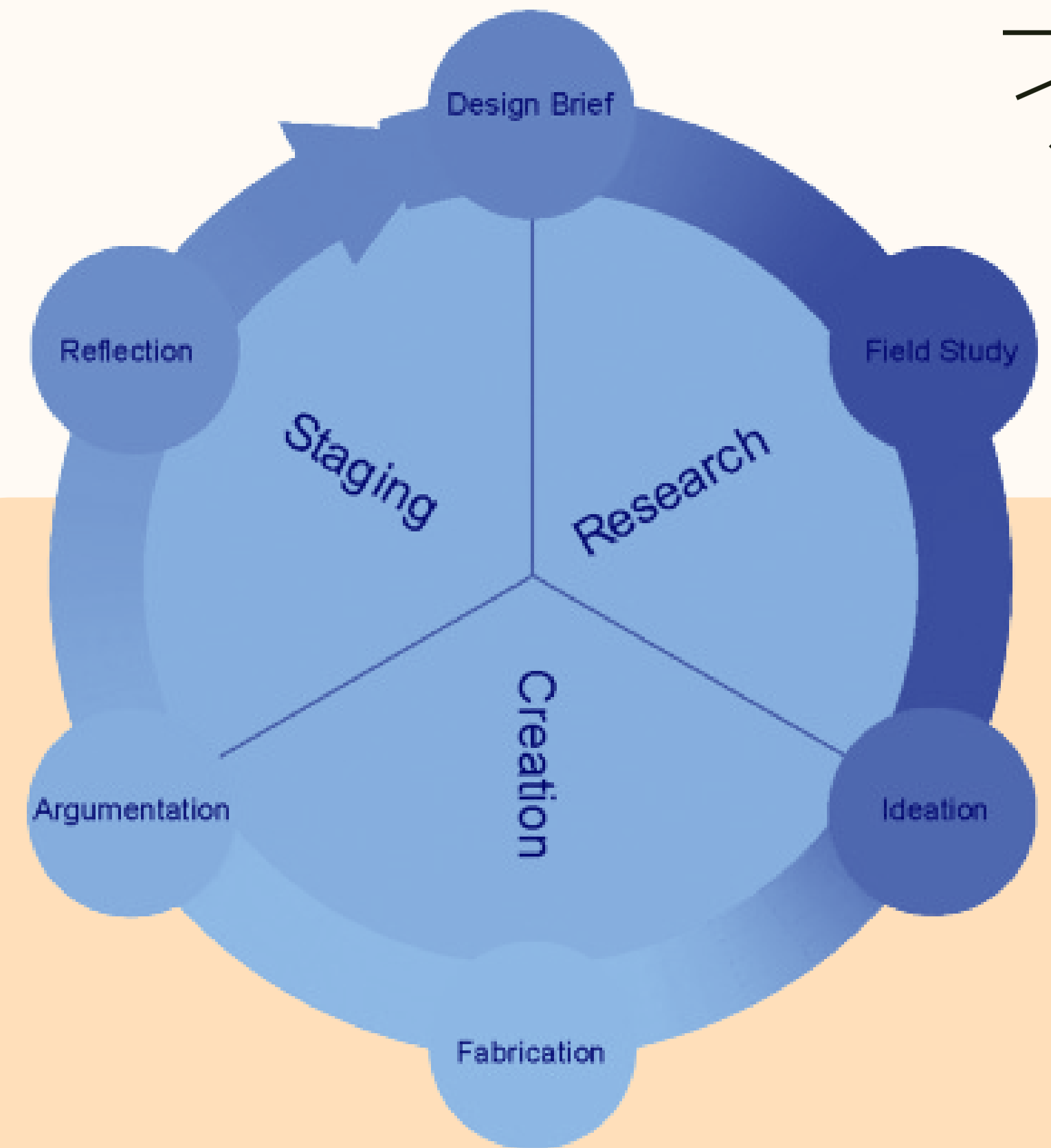
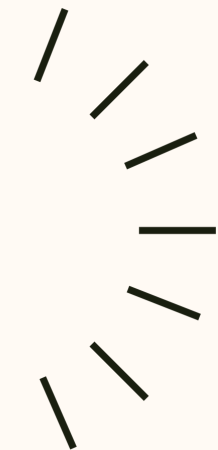
Akshara Foundation Report (2023)



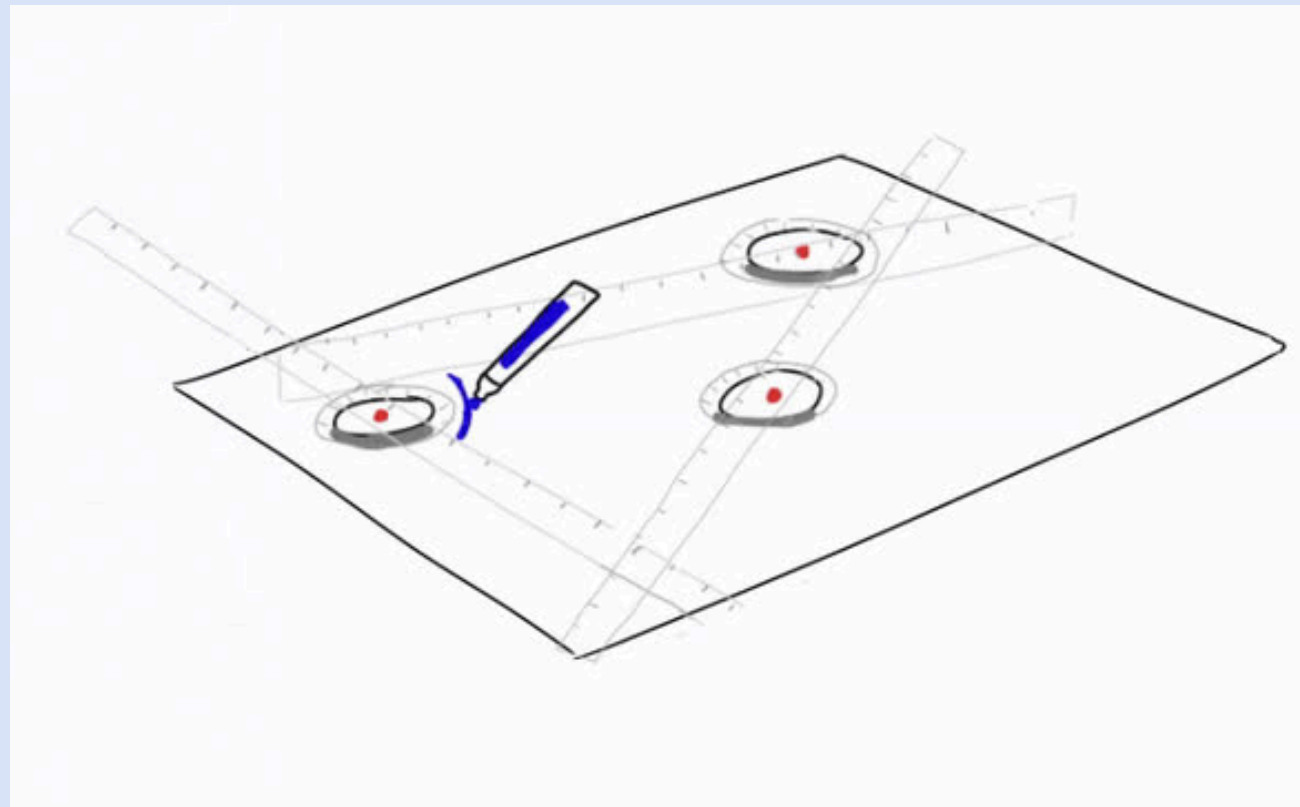


Methodology

- **Work with school administration/staff as consultants**
- **Needs assessment:** Identify gaps in working with faculty and means of creating more engagement, retention, and love for learning
- **Deliverable Ideation:** package curriculum into new tools supported by literature/research
 - **Physical:** Lab equipment, enrichment activities, tech accessibility
 - **Digital:** Gamified learning modules/project-based learning



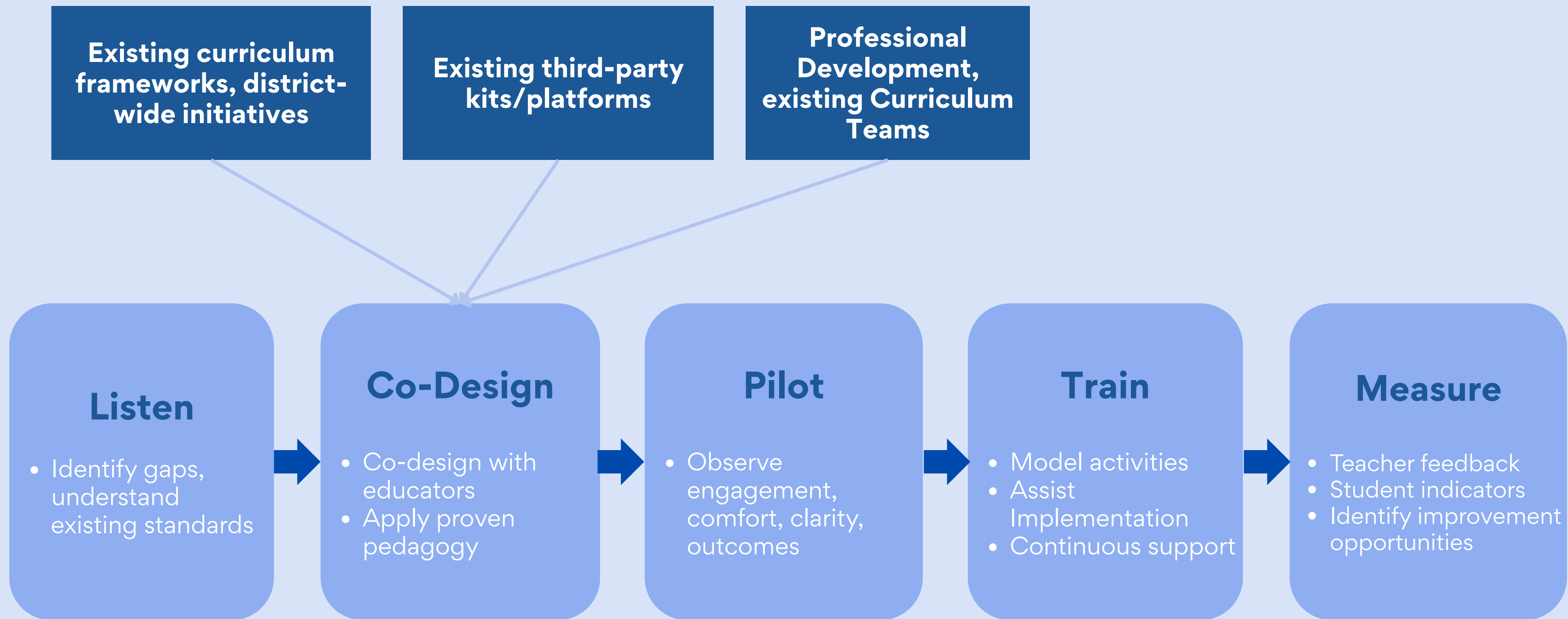
Prototype Example

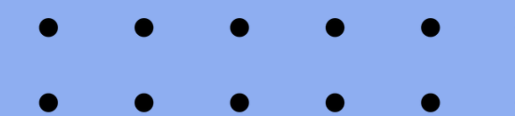


Goal: Create versatile physical/digital STEM tools can apply to a wide range of teaching concepts

Example: Magnetic whiteboard with rotating/moveable protractors and rulers for learning :

- Angles, transversals
- Trigonometry
- Triangle Geometry
 - Similarities, Proofs, Angles, Theorems, Classifications
- AP Physics (kinematics)





Student Outcomes

Objective: Improve learning objectives and outcomes

- EOG/EOC Scores, NC CheckIns, State curriculum standards
- **Engagement Metrics:** designing assessments pre/post activity surveys, tracking learning gains
- **Knowledge Retention:** incremental assessments
- **Skill Development:** rubrics for critical thinking (group and individual), problem solving, and collaboration skills

- Mastery of specific standards (e.g., NC Science Essential Standards)
- Growth toward EOG/EOC performance bands
- Performance on released/state-style test items
- **Metrics:**
 - % of students proficient per standard
 - Pre-unit vs. post-unit average score¹
 - Long term recall
 - Ability to apply concepts after time passed
 - Critical thinking
 - Problem solving

