



C² Pipeline



Enrichment Lesson Plans Overview

Enrichment Title	Explore It, Design It
Enrichment Idea	To promote the exploration of the engineering and science fields
Grant Alignments & Objectives Addressed	<ul style="list-style-type: none"> • 77% of regularly attending students will improve in teacher-rated homework completion and class participation • 85% of regularly participating students will report improvements in other school subjects • 85% of regularly participating students with room for improvement report that the program helped them in non-academic areas (e.g., leadership, peer relations, community service, sports skills, computer skills, drug/alcohol resistance, etc.)
Partner Alignment	<ul style="list-style-type: none"> • College of Engineering
Academic Subjects	<p>Core Academic Subjects: Science</p> <p>Auxiliary Academic Subjects: Technology & Engineering</p>
Standards to Address	<p>Next Generation Science Standards HS – PS2 – 3</p> <p>MI High School Content Expectations – Physics P1.1A P1.1B P1.1C P1.1E P1.1F P2.1E P2.2A P2.2F P3.1 P3.2 P3.4 P3.5</p>
Personal Enrichment Categories	<p>Students will participate in a variety of challenge that demonstrate engineering and science concepts while being enriched in the areas consistent with the 21st CCLC federal legislation, including:</p> <ol style="list-style-type: none"> 1. Technology Education
Life Skills	<ul style="list-style-type: none"> • Collaboration

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	<ul style="list-style-type: none"> • Problem Solving • Critical Thinking
Duration of Enrichment	8 week
# of Students & Staff Involved	15 students: 1 staff
Frequency of Enrichment	Meets 1 time per week
SUGGESTED ACTIVITIES If an activity is used that is not listed, please turn in the lesson plan with the ARS to the Site Coordinator who will forward it to the C2 office.	Activity: The Balancing Acrobat Activity: The Spinning Top Challenge Activity: The Straw Rocket Challenge Activity: The Paper Airplane Challenge Activity: The Gliders Challenge Activity: The Paper Bridge Challenge Activity: The Paper Tower Challenge Activity: The Ski Jump Challenge Activity: Slow Roll Challenge Activity: The Catapult Challenge* Activity: The Pick It Up Challenge* Activity: The Tower Challenge, Advanced* Activity: The Egg Drop Challenge* Activity: The Rat Trap Challenge* Activity: The Sink or Float Challenge* Activity: The Zip Line Challenge* Activity: Design a Super Dome *denotes more advanced activity options
Expected End Result/Product	Increased knowledge in science, physics and engineering terms Increased interest in the field of engineering
Connection(s) to Regular School Day	**See specific School Improvement Plans and Building Collaboration Guides to observe how this enrichment connects to the regular school day in each site This enrichment plan is directly aligned to the Next Generation Science Standards and Michigan High School Content Expectations - Physics

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Adult Family Member Literacy and Involvement	<ul style="list-style-type: none">• Each site will be encourage to invite families into programming to observe what is going on it the enrichment• Designs from the enrichment will be displayed at each of the sites during open houses and family events
Educational Research	
Additional Resources Used	

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