

Project STEM READ-I **Board Report**



Project STEM READ-I

Board Report

BACKGROUND:

Many military-connected students arrive in the Coronado Unified School District with gaps in mathematics and reading knowledge and skills due to the transiency inherent in that unique population. Subject to frequent relocations, students often have significant credit deficiencies, low grades and test scores, social and emotional challenges, socio-economic disparity, and disengaged ownership of their own learning and future goals. For many, the incongruity of the rigorous Common Core State Standards (CCSS) in California versus standards of their previous states of residence presents additional difficulties and pressure. Lower scores on pre- and post- mastery assessments, as well as on formative benchmark assessments, are not uncommon for these students. Often, teachers' decisions to differentiate curriculum delivery to meet students where they are leads to lower self-esteem for the non-proficient students and frustration with the slower pace for advanced students. The primary goal of STEM READ-I is to provide targeted services for our military population in order to better prepare students for academic and vocational success by increasing STEM opportunities at the middle school level. Also, because we recognize that strong literacy skills are foundational to academic success, the secondary goal of this Project is to improve reading achievement for upper elementary students.

PROJECT OBJECTIVES AND ACTIVITIES:

The first focus of Project STEM READ-I is to increase STEM opportunities for military-connected students in grades 6-8 by providing new courses and curricula, a Makerspace, and robotics program. Our second focus is to improve achievement of military-connected students in grades 3-5 in reading, which is foundational for college and STEM career readiness through personalized instruction, curriculum, and research-based resources. Teachers' capacities will be increased by focused professional learning and opportunities to conference with students three times a year to build ongoing Personalized Education Plans. Our primary strategies in each area and related goals will include In-class Curriculum and Instruction Supports, In-class Technology Support, and Extra-curricular Activities to provide ongoing, meaningful direct services to students.

Project STEM READ-I Board Report

PROJECT GOALS AND EXPECTED OUTCOMES:

Goal 1: Goal 1 of STEM READ-I is to improve participation for military-connected grade 6-8 students in STEM related opportunities and activities. This results from the following strategies:

- Strategy 1: In-class curriculum and instruction support: Provide curriculum and supplies for grade 6 coding elective. Provide computer science curriculum and materials to be integrated in existing grades 7 and 8 STEM electives, and provide Makerspace to be used by grade 6-8 teachers.
- Strategy 2: Provide curriculum and supplies for a grade 6-8 robotics extracurricular activity.

Goal 2: Goal 2 of STEM READ-I is to improve academic achievement of military-connect grade 3-5 students in reading. This results from the following strategies:

- Strategy 1: In-class curriculum and instruction support: Implement with fidelity guided reading instruction in grades 3-5 and related professional learning for all grade 3-5 teachers. Implement a double dose of small group instruction for identified military-connected students who are near or below standards in reading. Academic Support teachers will work collaboratively and frequently with classroom teachers to plan double dose instruction, review data and ensure students' needs are met
- Strategy 2: In-class technology supports: Provide Measures of Academic Progress (MAP) and the following curricula, Compass Learning Pathblazer (CLP), Ticket 2 Read, and Raz-Kids. The data from MAP assessments and these web-based tutorial programs will be used for all grade 3-5 PEP conferences at 3 times per year with identified military-connected students..

Summary of Preparatory Activities in 2018-2019:

- Reading materials currently available in grades 3, 4, and 5 were examined, inventoried, and supplemented in preparation for implementing Guided Reading in the 2019-2020 year
- Locations of shared bookrooms (elementary schools) and makerspace (middle school) were identified
- Staff researched and visited existing makerspace programs at various locations within the county
- The existing robotics program at Coronado Middle School was reviewed
- Enrollment data, especially for targeted students, was collected for the purposes of providing baseline data
- Staffing needs to support implementation of strategies and subsequent funding sources to meet those needs were identified
- Professional Development needs to support implementation of the Project were identified