Project TEAMS

ABOUT PROJECT TEAMS

Project TEAMS is a 5-year research project funded by the U.S. Department of Education, Jacob K. Javits Gifted and Talented Students Education Program (Award # S206A140012). It is housed at the Center on Disability Studies at the University of Hawai‘i at Manoa.

The overarching goal of Project TEAMS is to increase the number of high school students with disabilities (SWD), identified as “scientifically promising,” who (1) demonstrate high levels of science achievement and (2) intend to or actually enter a postsecondary STEM program.

WHO ARE TWICE-EXCEPTIONAL STUDENTS?

TEAMS stands for twice exceptional students achieving and matriculating in science, technology, engineering and mathematics (STEM). ‘Twice-exceptional’ students that this project serves are students who have disabilities, but also have potential in science to grow “scientifically promising.” The rationale for serving this population is based on the statistics and research showing the underrepresentation of SWD in gifted and talented education programs and in STEM fields. The project intends to understand how talented a student is and what his/her needs are to fulfill the potential and to provide an intervention to address his/her needs.

WHAT IS A TEAMS MODEL?

To address the needs of twice-exceptional students the Project TEAMS developed a TEAMS Model. It was built upon two evidence-based models: Renzulli Schoolwide Enrichment Model, effective for serving the needs of gifted and diverse learners, and the Pacific Alliance Model, effective for increasing the number of high school and college SWD entering, persisting in, and succeeding in STEM fields. The TEAMS 3-pronged model provides academic enrichment in science, mentoring on disability-related issues and STEM interest building, and college transition.

The project will evaluate the effectiveness of the TEAMS Model through a cluster-randomized trial. Therefore, participating schools will be randomly assigned into an intervention condition where students will receive the TEAMS Model intervention or a control condition where students will receive traditional homework support. These supports are provided after-school at participating high schools for 100 hours over 20 weeks during one academic year.

HOW LONG IS THE PROJECT?

Project TEAMS is a 5 year project, which began on October 1, 2014. During the project period, the research will take place for three school years during 2015-16, 2016-17, and 2017-18 academic years.

WHICH SCHOOLS ARE PARTICIPATING?

Project TEAMS will work with 24 high schools for three school years: 8 high schools on O‘ahu, 4 high schools on the Island of Hawai‘i, 4 high schools from New York, 4 high schools from Iowa, 2 high schools from the Commonwealth of the Northern Mariana Islands, and 2 high schools from American Samoa.
WHO ARE THE ELIGIBLE STUDENTS?

Every school year the project will recruit 20 new participants from each school, in total 1,440 juniors and seniors for three school years. Eligible students will be identified through the two-step process to broaden the participation of SWD in a gifted and talented program. In the first step, schools will find SWD (i.e., having an IEP or Section 504) who have received a grade of C or better in Biology I when they were in the 9th or 10th grade. In the second step, students screened from the first step will take the Multiple Intelligences Developmental Assessment Scales (MIDAS), and their parents and teachers will fill out the Scales of Identifying Gifted Students (SIGS) forms. These data will be used to identify eligible students: SWD having potential in science. The eligible students will be recruited to participate in Project TEAMS.

WHAT WILL THE INTERVENTION GROUP (TEAMS PROGRAM GROUP) STUDENTS DO?

Students at intervention group schools will work independently and also as a group at their school with mentors, afterschool for 2-3 hours, two times a week, for approximately 10 weeks each semester. Over the 20 weeks, students will receive the following support:

1. **Academic Enrichment in Science**: Students will create a self-learning profile using the online Renzulli Learning System and go deeper into science subjects for 4 hours per week (80 hours total). With the program and the learning profile, students will work on an independent science project, which they will present to their parents, teachers, Project TEAMS staff, and peers at the end of the 20-week program.

2. **Mentoring on Disability & STEM Topics**: Students will explore to understand more about their own disability and their interest in the STEM fields for 1 hour every other week as a group (10 hours total).

3. **College Transition**: Students will prepare for college by learning about admission process, college STEM programs, scholarship opportunities, etc., for 1 hour every other week as a group (10 hours total).

WHAT WILL THE CONTROL GROUP (HOMEWORK SUPPORT GROUP) STUDENTS DO?

Students at control group schools will also work with mentors after school for 2-3 hours, two times a week, for approximately 10 weeks each semester for one academic year. During the homework support, students can bring their own homework, and mentors will provide assistance as needed. If students do not have any homework, they can preview and study for any upcoming tests.

WHO ARE THE PROJECT TEAMS MENTORS?

Project TEAMS mentors are teachers or graduate school students who preferably have experience working with high school SWD. There will be a specific application and selection system for mentors, and all mentors will go through training before working with the students. Mentors in the intervention and control condition will receive different training.