



CHAMP The Cooperative Highly Accelerate Math Program 2009-2010

Audience

Fifty-three (53) students grades 7—10 participated in the CHAMP Program. Thirty (30) students were in CHAMP Year I, twenty-three (23) were in CHAMP Year II. Eligibility criteria for CHAMP is SAT Math score of 530 and a Total score of 1010, ACT Math score of 21 and a Composite score of 23.

Funding

The CHAMP program receives \$2,000 from the W.B. and Candace Thoman Foundation to provide a counselor. The Dart Foundation provides \$17,500 to keep tuition costs down. Student tuition is used to support the remaining program costs. Support from the MSU Mathematics Department provides four professors for 2 1/2 hours of instruction each Thursday afternoon.

Objectives

This program seeks to

- * identify 6th—8th grade students who reason extremely well mathematically;
- * develop their mathematical potential through classroom use of appropriate curriculum and instructional pacing commensurate with their abilities;
- * Demonstrate that, with careful joint planning and coordination, existing community resources and multiple school systems can cooperate to meet successfully the needs of highly gifted students within the framework of the regular school day.

Description

Year I of CHAMP include Algebra I the first semester, Algebra II the second semester. Year II CHAMP is Geometry the first semester, second semester is a standard pre-calculus course of Trigonometry, Analytic Geometry, College Algebra and a brief introduction to calculus concepts. Students attend class Wednesday afternoon from 1:00—3:30. All classes are instructed by Michigan State University mathematics professors. Class size is limited to 15—19 students. Additional study sessions are held Sunday afternoons and Tuesday evenings in Wells Hall. Students also have access to LON-CAPA and the MSU Math Forum for 24/7 online assistance.

Qualifying students attending school within the surrounding counties of Clinton, Eaton, Ingham and Shiawassee counties are invited to apply for CHAMP. Forty-seven (47) students applied for CHAMP Year 1, thirty (30) were accepted into the program.

A prep session is held the last week in August, bringing students to campus to set up their MSU e-mail and NetID and a walk through campus to their classroom.

Contact time: 135 hours

Impacts

Students completing CHAMP cite time management and developing study skills as two outcomes they didn't expect while learning mathematical concepts. Many felt that these two assets would prove beneficial when attending college. Students also felt that the accelerated pace of the program was very valuable. They strongly agreed that having their math ability challenged was a positive aspect of the program and that they would not have had this experience in their

home school mathematics class. 100% of the Year I and Year II CHAMP students rated their learning experience as excellent. In 2009 there were ten (10) former CHAMP students dual enrolled at Michigan State University. These students enter MSU enrolling in MTH 152H, MTH 234 or MTH 235.

100% of the parents of students in CHAMP Year I and Year II responded that they were pleased with the quality of the program and that 100% were pleased to have their child in the program. 100% of the parents disagreed that their child's home school work suffered or that their child felt pressured in the CHAMP program.

In 2009, the CHAMP curriculum was aligned with the Michigan Department of Education's High School Curriculum Expectations. A unit of statistics was added to the Algebra I course which allows students to complete the statistics requirements online.

A survey of 110 former CHAMP students, graduating from 2000-2010:

- * 45% completed an AP Math Course
- * 9% enrolled in a university dual enrollment math course
- * 34% completed an AP math course and completed a dual enrollment math course
- * 12% did not take math courses after CHAMP
- * 85% of the dual enrollment students took one math course
- * 45% of the dual enrollment students enrolled in more than one math course

Additional Significant Information

This is the twenty-fourth (24) year of the CHAMP program, beginning in in 1986 with a class of 14 students. While numbers have fluctuated, the program has continued to provide a solid mathematical learning experience for capable students. In 1986, 1 student was female, 13 were male. In fall 2008, 50% of the CHAMP I class was male, 50% was female. In fall 2009, 71% of the CHAMP I class was male, 29% female. The majority of the students are from Ingham county with other participants from Shiawassee, Eaton, and Clinton counties bring urban and rural students together to the MSU campus.

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