

**MCHAMP:** Memphis  
 Cooperative Highly Accelerated  
 Mathematics Program

September 6, 2011—April 23, 2012



School student corrects homework during class, a Memphis High School AP teacher oversees the study lab on Thursday after school. There are 120 hours of contact time with this program.

**Outcomes:**

100% of the student evaluations stated that the quick pace and challenge of the class was something they enjoyed. They appreciated the “college experience” of meeting only once a week and being responsible for their learning. 100% stated that the program helped them understand the importance of doing well in academically challenging high school courses. 100% stated that the MSU faculty involved in this program helped them understand how to prepare for college. 100% of the students rated the program excellent.

Parent commented, “ My daughter was challenged for the first time! She learned to ask for help which is a huge step for her. Time management was also learned this year. She had to buckle down and dig deep. We are very proud of her and appreciate everything about the program.” “My son truly developed as part of this program beyond just his math skills. He had to learn/improve his study habit, and was in class with kids of all ages but all with academic strength.”

**Additional Significant Information**

This is the second year of the MCHAMP program. The local support of MCHAMP is a direction reflection on its success. This program has lead to a second outreach program for 2012-2013 in Lapeer county. Students completing MCHAMP will have the opportunity to take MTH 152H fall semester and MTH 153H spring semester at Memphis High School.

**Contact Information**

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**Audience:**

MCHAMP had twenty-nine (29) participants. Twelve (12) female, seventeen (17) male. The program is held in St. Clair county in an underserved school district. Students must meet the following minimum academic requirements: ACT Math: 21 and ACT Composite: 23 or SAT Math: 530 and SAT Total: 1010. Two (2) students are in seventh grade, twelve (12) students are in eighth grade, eleven (11) students are in ninth grade, and four (4) students are in tenth grade.

**Funding:**

MCHAMP is funded by tuition which is \$1,000 per year. Students who qualify for free or reduced lunch can apply for a scholarship to cover 50% of the tuition. This funding is provided by the Dorothy Lawshe Endowment. One student received this scholarship in 2011-2012. Two students from Lapeer County had their tuition paid by their school district.

**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.
- \* Provide curriculum options not available in this underserved area.

Students completing MCHAMP are expected to return to their home school and take AP calculus. They should then consider dual enrolling at their local university or college for additional math coursework.

**Description;**Year I of CHAMP covers Algebra I and Algebra II Year II and a unit of Statistics. CHAMP Year II covers Geometry a standard pre-calculus course of Trigonometry, Analytic Geometry, College Algebra and a brief introduction to calculus concepts. Students attend class Tuesday for 2 1/2 hours of instruction. All classes are instructed by a full time Michigan State University mathematics professor. Class size is limited to 20 students. Additional study sessions are held Thursday after school at Memphis High The MSU math professors provided instruction to two groups of students. A Memphis High



