

# Advanced Placement Calculus and Statistics at Traverse City High Schools

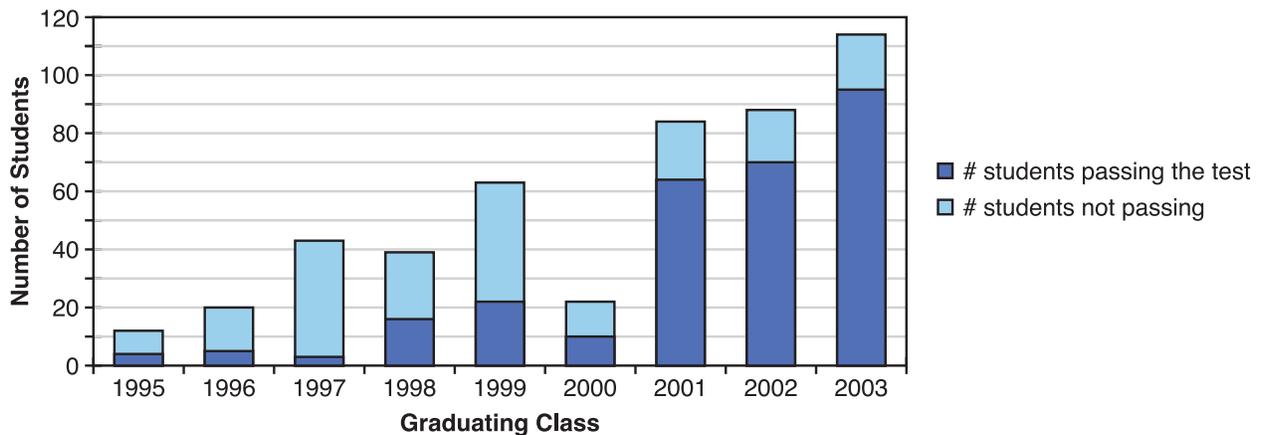
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Traverse City High Schools  
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When Traverse City Area Public Schools chose to implement K-12 Standards-based curriculum reform, it was decided that coherence and articulation could best be achieved through the use of NSF-funded programs. *Investigations in Number, Data, and Space* (K-5) developed by TERC, *Connected Mathematics* (6-8) developed by the Connected Mathematics Project (CMP), and *Contemporary Mathematics in Context* (9-12) developed by the Core-Plus Mathematics Project (CPMP).

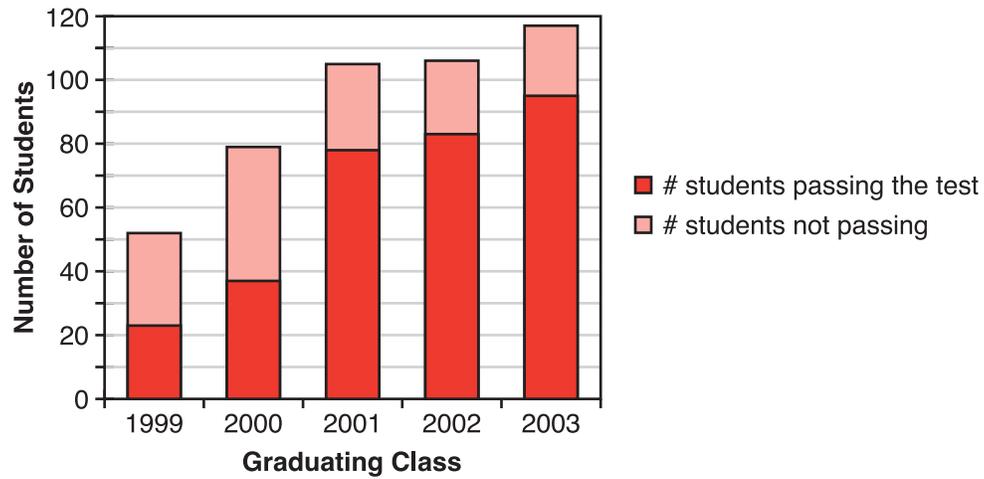
The 2001 AP Calculus results reported below are from students who had completed seventh and eighth grade CMP courses and an accelerated version of CPMP courses in grades nine through eleven. (None of those students had any experience with *Investigations* as elementary school students. Some students completed selected CMP units as sixth graders since there were seven pilot sites in the district that year.) Prior to 2000-2001, seniors taking AP Calculus had completed selected CPMP units since a few students in the graduating class of 1998 were part of the CPMP pilot during tenth grade.

Two of the district's math steering committee goals were to improve AP Calculus scores in the district and to successfully implement an Advanced Placement Statistics course. Paul Foerster's text, *Calculus: Concepts and Applications* was used for the AP Calculus course and *The Practice of Statistics* by Yates, Moore, and McCabe was used for the AP Statistics course. The graphs below show district wide results for Advanced Placement Calculus from 1995 to 2003 and for Advanced Placement Statistics from 1999 to 2003.

Advanced Placement AB Calculus Results



### Advanced Placement Statistics Results



The Traverse City district is continuously looking for ways to improve programs. It is important to recognize the evolution of the delivery of the curriculum. It is equally important to know that the mathematics program continues to evolve as teachers become more proficient with the content in the units and more comfortable with the pedagogical changes required to implement the curriculum well.