A Model Teacher-Scholar Program in Mathematics. Preliminary report.

We give a (preliminary) report on the development, implementation and evaluation of a model teacher-scholar program in secondary mathematics. The yearlong program consists of two junior/senior level research capstone courses. In the first course, Introduction to Research in Mathematics (offered in the spring), students explore several research topics (from the instructor’s main research interest/expertise areas) with emphasis on experimentation, conjecture, careful justification, and clear, precise reporting. The second course, Research in Mathematics II (offered in the fall), places emphasis on further examination of specific research topics and on writing and disseminating results.

The main objective of the program is to graduate teacher-scholars. Teacher-Scholars are highly qualified teachers who have experienced scholarship in mathematics in a setting that emphasizes the interconnections among theory, procedures and applications and who "develop habits of mind of a mathematical thinker" (CBMS, 2001).

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