

1106-97-372

Ellina Grigorieva* (egrigorieva@twu.edu), PO Box 425262, Denton, TX 76204. *Teaching Solving Complex Problems and Preparing Math Olympiad Winners.*

Teaching Solving Complex Math Problems and Preparing Math Olympiad Winners

The goal of this project is to prepare highly knowledgeable mathematics teachers nationwide and particularly in Texas. It is known that the mathematics preparation of high school students is not satisfactory in that prodigious students are not uniformly nurtured. The author adapted and implemented pedagogy and course materials designed specifically to address the issues above. Her method is based on showing students connection between different fields of mathematics and even different subjects. Recent trends in math education call for the increasing the number of math teachers. However, quantity does not mean quality. In response, one objective of this project is to develop a sequence of integrated courses for future teachers where students learn different methods of solving complex math problems, how to do proofs and also how to give this knowledge to their students and develop students interest in math not by playing games in the classrooms, but making math problems solving in the class as “addictive” as playing video games for some kids (Received August 25, 2014)