

Meeting: 1003, Atlanta, Georgia, MAA CP K1, MAA Session on Countering “I Can’t Do Math”: Strategies for Teaching Under-Prepared, Math-Anxious Students

1003-K1-148 **Greisy Winicki Landman*** (greisyw@csupomona.edu), Dept of Mathematics, California State Polytechnic Univ., Pomona, 3801 W.Temple Ave., Pomona, CA 91768. *“I may not be able to do math but I certainly can play”*. Preliminary report.

In the framework of lower division mathematics courses I try to use problems called ‘mathematical games’. Games are, in general, situations that release anxiety and promote active involvement in the task presented. The primary joy of playing these games does not rely on the knowledge of algorithms or rules, making them appropriate for under-prepared or math-anxious students. While the students play a game, they are encouraged to keep record of their moves and to look for generalizations by looking for patterns within the collection of winning numbers. Their willingness to win may lead them to look for strategies and to test their conjectures. This meaningful way to review mathematical concepts and techniques seems to be a non-intimidating means to reach math-anxious students and to expose them to profound ideas like conditional statements in a relevant manner for them. Another by-product of playing a game is that the players are asked to verbalize their ideas and also to justify their conjectures, making them natural processes of the mathematics lesson. During this session I will show some strategy games connected with sequences, analyze the mathematics involved in them and the way they may be implemented. (Received August 12, 2004)