Overcoming Students’ Anxiety With Translation Problems via Polya.

The four step problem solving process outlined by George Polya is a simple yet thorough method of improving students’ abilities to solve problems. Requiring students to focus on each step of the process, especially the reflection stage, could increase their performance on translation tasks. A well known problem is examined to determine how looking back in the problem solving process can help students overcome translation difficulties. Results show that requiring students to formally go through each step of Polya’s process improves performance on translation tasks. The method was implemented because many students (preservice elementary school teachers) were stating they "couldn’t do" word problems. As a result of this intervention, the percent of students correctly answering similar translation tasks increased from 21 to 86 percent. It is through examining the reasonableness of a solution and connecting the solution to the original understanding of the problem that students can learn from their mistakes. (Received July 14, 2006)