

## **SOLVING NATURALLY ARISING MATHEMATICAL PROBLEMS BROUGHT UP BY ADULT STUDENTS AT THE 2<sup>ND</sup> CHANCE SCHOOL WITH THE AID OF ICT**

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### **Abstract:**

Modern researchers state that there is not sufficient empirical data available on the ability of adult students to solve mathematical problems; much more work has to be done worldwide. This small empirical study is structured upon methods that are based on the principles of adult education, like the notions of numeracy, literacy and multi-literacy.

In our effort to further evoke the interest of our adult students, we asked them to bring to us any problems that they encountered in their everyday life which they thought could be solved using mathematics or science in general. In this article we present one such problem that was solved in the school's technology room in the form of a 2 hour activity. This activity involved the students working as groups using the dynamic geometry environment The Geometer's Sketchpad. We analyze the didactic methods that we followed with emphasis on the use of ICT and how these are linked to the theoretical model: Situated Practise, Overt Instruction, Critical Framing, Transformed Practise. We provide remarks at key points: where the students had to conjecture, how the use of dynamic geometry helped them to verify, what kind of results they obtained. There is an account on the actual students' comments at the end of the activity.

Students were able to use the geometry environment with some instruction by us. There was excellent group work and a good understanding of the final construction.

As a result of this and other similar activities, students in our school increased their sense of self value and evidently changed their state of how they view certain learning matters when helped by ICT. This is evident from their comments, as well as from the evaluation that followed in subsequent classes, where they were able to solve relevant problems.

### **Presenter:**

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