
HOW DO ESPECIALLY DESIGNED WORKSHEETS ASSIST STUDENTS TO SOLVE TUTORIAL PROBLEMS?

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In this study, we examined whether the provision of worksheets assisted students in solving tutorial problems. These worksheets give a step by step approach for solving some exercises from the tutorial sheets by, for example, furnishing diagrams and identifying variables. I recorded the behavior of the students during the tutorials, such as their engagement in discussion, listening, using media. The undergraduates are split in three units of study: Fundamental, Regular and Advanced. I focused on the topic of Waves and I observed a total of 87, 183 and 95 teams for the Fundamental, Regular and Advanced level respectively. Our observations indicate that the behavior of the students in the Advanced class is markedly different from that the other classes. Data analysis using the SOLO taxonomy, describing levels of increasing complexity in students' understanding of subjects, shows that students in the Fundamental classes were more engaged than the other classes. Furthermore, the Fundamental and Advanced classes have the same level of answering and the Regular class is a step behind. We will discuss the implications for the use of worksheets in teaching and learning.

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