

A workshop for teachers and students SE, 1 SST, 2 ECTS

> Prof. Dr. Peter Sullivan Monash University, Australia

December, 2<sup>nd</sup>: 10:00 – 19:00 December, 3<sup>rd</sup>: 9:00 – 13:00

## ALPEN-ADRIA-UNIVERSITÄT KLAGENFURT

IFF, Sterneckstraße 15, 9010 Klagenfurt room: S.2.07

# The Advantages of Using a Variety of Task Types when Teaching Mathematics

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#### Content

A project recently conducted in Australia explored the opportunities and constraints in using four types of mathematics tasks to support student learning. These types were those that used models to illustrate mathematical principles or concepts, those that used a realistic context to support mathematics learning, open-ended but content specific tasks, and multidisciplinary tasks. The workshop will explore the methodological issues associated with the research, will present examples of the types of tasks, and sequences of those types, and will present some of the results.

### **Objectives**

The objectives of the workshop are that the participants will:

- engage with some examples of the types of tasks and see how those tasks facilitate mathematics learning, and consider the advantages and disadvantages of each type of task;
- explore the methods and challenges in conducting and reporting classroom research.

#### **Methods/Didactics:**

The workshop will include active experiences with a range of mathematical tasks, discussion in groups on the ways that those tasks can support student learning, and consideration of the types of methods used in this project and the challenges in reporting on such research.

Die Seminarsprache ist Englisch.

Prof. Dr. Peter Sullivan has been teacher for ten years. Currently he is Professor of Science, Mathematics and Technology Education at Monash University (Australia). He is Editor-in-Chief of the Journal of Mathematics Teacher Education and the author of the first national curriculum-frameworks for mathematics in Australia.