

INVESTIGATING THE WAYS OF REDUCING THE GAP BETWEEN THE SCHOOL AND UNIVERSITY MATHEMATICS: AN INTERNATIONAL STUDY

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The purpose of this study is to analyse responses of university lecturers worldwide to a short questionnaire concerning the transition period between the school and university mathematics. This period can be hard for many students. Even students with good marks in the school mathematics experience psychological difficulties at university and sometimes fail the first year university mathematics. Often the pass rate in the first year university mathematics is around 50%. This study involves many university mathematics lecturers from different countries. An across countries approach was chosen to reduce the differences in cultures, curricula and education systems. The questionnaire includes the following 3 questions:

Question 1. What do you think are the reasons for the gap between the school and university mathematics?

Question 2. What is your Department doing to reduce the gap?

Question 3. In your opinion what else can be done to make the transition period smoother?

In this study, practice was selected as the basis for the research framework and, it was decided 'to follow conventional wisdom as understood by the people who are stakeholders in the practice' (Zevenbergen R, Begg A, 1999).

It is an ongoing project. To date we received responses from 55 colleagues from 21 countries. Here we will present classification of the responses to the three questions and brief statistics. We plan to present the detailed qualitative analysis of the responses in the form of a full paper at the next PME conference. In the full paper we will acknowledge all collaborators for their valuable contribution to the study.

References

Zevenbergen R, Begg A (1999) Theoretical framework in educational research in Coll RK et al (Eds) Same Papers. New Zealand, 170-185.