

Further information

Experiences

The proposed experiments are a selection of a collection, published in the E-Book *Experimente zum Funktionsbegriffserwerb* from Astrid Beckmann published in German by Aulis, Köln/ Germany (see picture below). The experiments are tested in school in different classes and with students of different abilities and qualifications. Our experiences show that especially lower achievers should be pushed by impulses and formulated tasks. Higher achievers can work with open tasks. In any case: Important is a reflexion and connection between the experiment, the extra-mathematical and the formal components. Please read the publications of the ScienceMath-group (see ScienceMath-Website).

Literature

Beckmann, A. & Litz, A. (2005). Learning the concept of function through experimental activities. In: Beckmann, A. & Michelsen, C., Sriraman, B. (ed.): Proceedings of the First Int. Symp. of Math and its Connections to the Arts and Sciences. Hildesheim, Berlin (Franzbecker), S. 215-226

Beckmann, A. & Michelsen, C. & Sriraman, B. (2005). Research considerations for interdisciplinary work on mathematics and its connections to the arts and sciences. In: Beckmann, A. & Michelsen, C., Sriraman, B. (ed.): Proceedings of the First Int. Symp. of Math and its Connections to the Arts and Sciences. Hildesheim, Berlin (Franzbecker), S. 1-6

Beckmann, A. (2007). Non-linear functions in secondary school of lower qualification level (German Hauptschule) In: The Montana Mathematics Enthusiast, vol 14, no 2, June 2007

Michelsen, C. (2007). Promoting students' interests in mathematics and science through interdisciplinary activities. In: Michelsen, C. & Beckmann, A. & Sriraman, B. (ed.) Proceedings of the Second Int. Symp. of Math and its Connections to the Arts and Sciences, Odense

Beckmann, A. (2007). Mathematical literacy through scientific themes and methods, In: Michelsen, C. & Beckmann, A. & Sriraman, B. (ed.) Proceedings of the Second Int. Symp. of Math and its Connections to the Arts and Sciences, Odense

And:

Beckmann, A. (2006). Experimente zum Funktionsbegriffserwerb, Köln (Aulis)

