

LOEWE Research Cluster Desirable Difficulties in Learning



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Desirable Difficulties in Learning: Cognitive Mechanisms, Developmental Preconditions, and Effective Implementation in Class

Easily learned and quickly forgotten? Studies in cognitive psychology with adults have shown that newly acquired knowledge lasts longer and is more easily transferred to new contexts if learning processes are deliberately made more difficult. Does that apply to children, too? What cognitive mechanisms and developmental preconditions determine the effectiveness of such learning difficulties? Researchers from the fields of psychology and educational science are exploring those questions in the LOEWE research cluster “Desirable Difficulties” for learning in mathematics and natural sciences. They also wish to study the extent to which learning difficulties – such as the temporal distribution of practice or the alternation of various topics during learning – can be deliberately used in educational contexts to enhance retention of what is learnt.



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LOCATIONS

Kassel

SUBJECT AREAS

General Psychology
Developmental Psychology
Psychological Diagnostics
Social Psychology
Educational Psychology
Didactics of Mathematics
Didactics of Biology
Empirical School and Teaching Research

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LOEWE and ProLOEWE

Since 2008 the German federal state of Hessen has been promoting outstanding research initiatives through its own excellence programme, LOEWE. To date, 11 LOEWE research centres and 35 LOEWE research clusters have been selected in a competitive process to receive funding.

ProLOEWE is the LOEWE research initiatives network: their common aim is to provide information about their activities, speed up access to their research and intensify their cooperation. The website www.proloewe.de/en provides an overview of the LOEWE research initiatives.