Does the use of educational technology in personalized learning environments correlate with self-reported digital skills and beliefs of secondary-school students?

# Details

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## Sample

860 students (8th grade) from 31 Swiss schools

## Implications For Educators About

School innovation

# Abstract

In order to develop 21 st -century skills, especially with respect to digital technologies, students are supposed to know how to use digital technologies for learning and problem solving. In recent years, approaches to personalized learning have been considered to be particularly promising in this regard. A clearly defined concept of personalized learning is still lacking, however. Rather, it serves an umbrella term for educational approaches that try to do justice to the individual abilities, knowledge and learning needs of each student. Our study deals with theoretical dimensions of this multilayered concept and investigates the in-school use of digital technologies for personalized learning as reported by students in connection with their self-assessed digital skills and beliefs about the usefulness of ICT in learning. For this purpose, we have analyzed data from a survey of N = 860 students (8th grade) from 31 Swiss schools that have introduced personalized learning concepts. A structural equation model shows that increased reported use of digital technologies in learning environments that are characterized by open teaching methods is an important aspect of personalized learning because it has a positive effect on both self-reported digital skills and self-perceived ICT-related beliefs in learning. At the same time, the experienced freedom of choice in learning activities that include digital technologies, which is often considered a crucial dimension of personalized learning, has no significant effect.

# Outcome

Increased reported use ofdigital technologies in learning environments that are characterized by open teaching methods is an important aspect of personalized learning because it has a positive effect on both self-reported digital skills and self-perceived ICT-related beliefs in learning.