

“Is there an app for that too?” – new learning opportunities for children with smartphones, tablets and co.

Learning with mobile media such as iPads or smartphones is at present one of the most-discussed developments in the area of e-learning. The emergence of touchscreen devices and the range of apps (applications) available offer potential both for informal learning and for use in kindergartens and schools.

Munich, July 2012 – More and more children and young people in Germany have or wish to have a smartphone or a tablet computer. Already current figures from the Medienpädagogischer Forschungsverbund Südwest (Media Education Research Association Southwest) show that children have a broad repertoire of mobile media at their disposal: thus one in four German families with preschool children has a tablet PC in the home. One in four adolescents between 12 and 19 has a smartphone in his or her personal possession, and on average 22 apps installed on it. For 2012 the industry association BITKOM in Germany expects smartphone sales to rise by 35%, and tablet computer sales by 29%. In a current prognosis, Microsoft assumes that mobile use of the Internet with smartphones and tablets will overtake Internet use on desktop PCs from 2014 worldwide. Given these rapid changes in the media worlds of adolescents, it is worth asking whether mobile media might also offer them learning opportunities.

In the USA, the digital mobile learning revolution is already in full swing. Thus Apple is in the process of taking the US education system and the textbook market by storm: there are already around 1.5 million iPads in use in educational institutions. In cooperation with American publishers, Apple sells digital “textbooks” for iPads, which are intended to replace traditional textbooks. A free app is used to support interactive elements such as 2D or 3D animations, diagrams or image galleries, which can be accessed directly from the book. The corporation’s intention is obvious: to get an iPad into as many schoolbags as possible. A recent analysis of the educational apps available from Apple, carried out by the Joan Ganz Cooney Center, also shows a clear sales strategy: thus 80% of the commercial educational apps which Apple offers in the USA are targeted at children; 72% of the top-selling apps in this category are aimed at the age group of primary and preschool children. South Korea is also paving the way for the digital knowledge society: thus from 2014 all books for primary school students will be available on tablets, notebooks or smartphones, and the aim is that by 2015 teaching resources for all school levels will only be provided in digital form.

In Germany there have as yet only been a relatively small number of pilot projects on the use of mobile media in kindergartens or schools. And German textbook publishers are only just starting to build up a portfolio of educational apps; this includes, for example, miniprograms for smartphones, to practice vocabulary, look up maths formulae, practice mental arithmetic or answer questions on German history. For very small children there are already “I Spy” books, games, drawing programs or “self-reading” interactive books for tablets.

Preliminary field reports from German kindergartens and schools in which the iPad is being tested for its suitability as a learning resource show that mobile media are used enthusiastically by children, and not just for play, but also for learning. From the point of view of a constructivist didactics, mobile media are particularly suited to this – at least in theory – because learning is understood here as an active, self-directed and social process. Thus some German experts already see the tablet as the future of the computer, and as a key tool for learning in the 21st century. The empirical research evidence is still sparse, however: at the moment there is no study in Germany which is able to give scientific proof of successful learning outcomes in children and adolescents. Preliminary results of evaluations of German pilot projects in schools are not to be expected before the end of this year.

The feedback already received from kindergarten and school teachers is mainly positive, however. Many of them report that even preschool children can handle the devices and the apps effortlessly and intuitively. Operating an iPad by communicating with gestures is obviously easier for children than handling a computer mouse; the latter requires good hand-eye coordination, and, furthermore, the hand is moving on a different surface than the cursor on the user interface of a PC. This is confirmed by US studies by Sesame Workshop, which have been able to demonstrate not just that preschool children interact intuitively with touchscreen media, but also that they show high levels of motivation and attention when working with educational apps. Moreover, preliminary scholarly research findings indicate that “touching” objects can boost children’s learning process, e.g. when learning to count.

Overall, experts see mobile-media-based learning for children as offering potential mainly as an individualized learning experience, accessible anytime and anywhere. Tablets and smartphones close the gap between formal and informal learning environments, and can also facilitate self-directed and self-organized learning, alone or in groups, at home or at school. At the same time, however, there are already warnings about an “app gap”, analogous to the digital divide: as current figures from the USA prove, children from socially disadvantaged and low-income families in particular are already being left behind when it comes to access to mobile media and their educational potential.

Contact:

Heike vom Orde,
International Central Institute for Youth and Educational Television,
ph.: 089/5900-2086, Internet: www.izi.de,
Heike.Orde@br.de

If you no longer wish to receive press releases from us, please send a brief email to izi@br.de