

TECHNOLOGY FOR MANAGING PROFESSIONAL KNOWLEDGE OF FUTURE SOFTWARE DEVELOPERS

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ABSTRACT

This paper proposes and empirically tests a specific knowledge management technology aimed at stimulating creative and innovative performance of students in software development courses. The technology is based on a solo brainstorming method that provides students with external stimuli and exposes them to a large number of ideas over a short period of time. An empirical test was conducted using 16 volunteer student subjects. It reveals a highly beneficial effect of the technology on the participants' ability to specify requirements for a new software product. In particular, interaction with the technology resulted in a significant increase in the total number of ideas generated by the participants, as well as the number of relevant categories of issues addressed. These results suggest that the technology may be useful in facilitating learning and performance in informatics subjects involving creative thinking and problem solving.