Abstract

In our knowledge society learning is a very important and broad topic that includes several unsolved questions. Among them the transfer of novices into experts remains elusive. The paper shows that the cognitive elements and mental models needed for the expert execution of a task or skill can be used in cooperation with suitable exercises and intelligent e-learning systems to obtain a faster and more robust transfer of novices into experts. The paper also discusses the role of mental models and how can they be obtained from human experts. It also includes a state-space methodology to know the obtained place for the apprentice within the transfer process and how to move him optimally towards the final or expert state. A particular example for decision making by using an intelligent e-learning system simulating a private Medical Centre is included and the obtained results for more than five years are assessed.
Intelligent E-learning Systems and the Transfer of Novices into Experts

Kleinmutz, B. J. Wiley
1228-1233.

**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Transfer of Novices into Experts  
Neocampus.