Best Practices Presentation

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**Title:** Creative Discussions or Memorization? Maybe Both? (on the example of teaching Computer Science)

**Abstract**
We all strive to be creative in our teaching, but there is often not enough time to make all the topics creative fun. So sometimes, we teach memorization first, understanding later. We do it, but we often do it without seriously analyzing which topics to "sacrifice" to memorization. In this talk, we use simple mathematical models of learning to come up with relevant recommendations: Namely, all the topics form a dependency graph, and if we do not have enough time to allow students to treat all topics with equal creativity, then the most reasonable topics for memorization first are the ones in the critical path of this dependency graph.