Topic 9:



Topic 10:

1. The article gives many examples of the revealed differences between the way a novice recollects in formation and the way an expert does so. A few of these stuck out to me because these kinds of disparities were apparent between the two sets of answers for my expert/novice interviews. The two that stood out to me the most were:
   1. Effortless retrieval of relevant collected facts from memory. The novice in my interview definitely took much longer to begin explaining the concepts I answered about, and the responses were not very well detailed, and I found myself asking follow-up questions so that he would cover the spectrum of the question.
   2. Efficient integration of related ideas. One of my questions in the interview challenged both parties to come up with problems where the topic in question would be useful or could be applied. The expert had quick short responses and very specific examples of integration of the topic, but the novice’s explanation of his example ideas was very broad in such a way that some of the situations that would fall under his example would probably not find a good use.

The solution laid out for bringing more novices up to the expert level was to challenge the novices early on in their experience with a topic with more expert level problems that introduce new ideas in an implicit manner to force the students to apply the covered ideas while softly and quietly teaching the students new concepts.

1. Concept maps show connections that can be made when starting from one central idea and branching off into related concepts. There is no limit on how far these branches can reach or how many vertices there can be on a node.

With this is mind, the difference between a concept map drawn by and expert and that drawn by a novice is that you could expect the expert’s map to be larger and denser, and the number of common connections. Novice maps would contain fewer nodes and vertices, and there would be fewer paths that connect to the same destination node.