

The role of tacit knowledge on expertise

Expertise, in my own words can be defined as the performance of an act in a particular domain effortlessly. Here effortlessly means that little insignificant effort which is required to do an act as compared to when it was introduced for the first time. It has been shown by many psychometric tests that experts have such quality not because they are gifted with talent, but because of the time and practice they put into the domain. Also, the level of performance in the field of expertise cannot be transferred to other fields. This means that expertise is achieved by explicit learning (empiricism).

Does this mean that anybody can become an expert given the necessary learning, experience and practice? or there are other factors which contribute towards it. Tacit knowledge is the knowledge gained which is understood or implied without explicitly stating it in a formal way. According to Ericsson, it is seen that given a challenging problem, experts select the relevant information and encode it in special representations in working memory that allow planning, evaluation and reasoning about alternative courses of action. This clearly means that some innate characters are also responsible for expertness. For e.g. if two children are given same amount of training for violin learning and one turns out to be better than another, it means that the innate capabilities play a role at the initial level. These capabilities are native to the person and differ among person to person. This nativism may contain areas like tacit knowledge, physical ability, intelligence etc. and based on the domain of expertise, there contribution may vary. For e.g. sports or singing is more physical demanding whereas coding a program is more intellectual demanding.

The alternate course of action can be seen as taking a path in which minor cognitive algorithmic steps are skipped and the conclusion is made rapidly. This means that part of the cognition process is being done subconsciously. This is possible if we have gained lots of experience and done lots of practice rather than based on tacit knowledge or implicit learning.

References:

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