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The Human Mind As General Problem Solver HENRY GURR, USC-Aiken — Since leaving U Cal Irvine Neutrino Research, I have been a University Physics Teacher, and an Informal Researcher Of Human Functionality. My talk will share what I discovered about the best ways to learn, many of which are regularities that are to be expected from the Neuronal Network Properties announced in the publications of physicist John Joseph Hopfield. Hopfield's Model of mammalian brain-body, provides solid instructive understanding of how best Learn, Solve Problems, Live! With it we understand many otherwise puzzling features of our intellect! Examples Why 1) Analogies and metaphors powerful in class instruction, ditto poems. 2) Best learning done in physical (Hands-On) situations with tight immediate dynamical feedback such as seen in learning to ride bike, drive car, speak language, etc. 3) Some of the best learning happens in seeming random exploration, bump around, trial and error. 4) Scientific discoveries happen, with no apparent effort, at odd moments. 5) Important discoveries DEPEND on considerable frustrating effort, then Flash of Insight AHA EURIKA.

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