How AI Might Drastically Change the Way Humans Become Experts

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1 May 2025

Arguably, the current revolution that society is facing could have been predicted. Artificial intelligence (AI) is transforming our daily lives with tools like Chat-GPT from OpenAI. This essay will examine how AI might drastically change the way humans can become experts in almost anything imaginable.

AI is capable of becoming an expert in almost any field. Examples of this are new, smaller LLMs that are mastering specific portions of the knowledge spectrum, such as AIs capable of mastering grammar, or LLMs specialised in answering maths questions. Intuitively, these smaller AI models can have a reduced size compared with the LLMs that aim to master many disciplines simultaneously. The technique is simple: you can retrain, or, as it is known in the field, "fine-tune," the general-knowledge AI with a smaller but specialised dataset. Furthermore, you could also distil the knowledge into a smaller AI model using a process called "distillation." Arguably, this entire procedure would cost less than a thousand pounds to develop.

Additionally, using techniques like reinforcement learning, it is possible to train the AI model to master teaching. Reinforcement learning has recently shown the capability to outperform traditional supervised methods. Although this method could be more expensive than traditional training methods, it can be omitted for a prototype stage.

Lastly, after having your expert trained in the field of interest, a company may offer a totally immersive experience. First, the customer must agree to disconnect from all personal technology. Then, they must enter an empty room with the AI as their only possible interaction. Whilst the company takes care of basic necessities for the customer, the AI would interact with them as much as they wish, without distractions. The service provider should ensure a space to sleep, access to the gym for a limited period, and access to social activities for a limited time. Outside these periods, and with total freedom, the customer could decide to either do nothing or interact with the specialised AI. Procrastination and the long, often unproductive working periods in our daily lives would be reduced, potentially encouraging human beings to focus on their education.

One disadvantage of this idea is that the broad range of dimensions a human can explore makes it difficult to find people who really want to master only one area for a long period of time.

Although this idea may need refinement, it has the potential to transform the educational system, allowing anyone, through interaction with an expert AI, to become a highly knowledgeable individual in a short period. Further analysis could address questions such as: How much advantage would this system have compared with traditional education? How much cheaper can this system be compared with traditional group methods?