**FORMATIVE ASSIGNMENT: WIGGINS**

The most impressive thing about Hidden in Plain Sight was Wiggins' 'What we most likely fail to do is what programs start out really needed: the cognitive skills to imagine abstracise processes applied to abject, and we're not going to be able to do anything about it. I thought it was important because they know to focus on what to teach and to train for future programmers, but they still don't. However, I think learning the programming language and background knowledge of computer is essential.

After reading this, I thought about what programmers really need. It's because 'creativity' is necessary for the arts, and I never thought it would be used scientifically. I thought that being creative was a way to rely on 'sense’; i.e exercise imagination. So, I didn't think it was necessary for the most rational and logical science.

But as I looked at the clothes, toys, and even food that robots painted, or 3D printers, I thought creativity was necessary in any field. In particular, abstract methods and results felt important in programming. Programming is like turning a language into a visible object. However, imagining and drawing and making it real is not simply about ordering and executing a computer in language. For example, if I want to make a flying car, I am not just going to put wings on the car, but I am going to study the basic structure of the car, the principles of the engine, and then I am going to use my creativity to simulate various methods, and then I am going to make a simple model and experiment. But, of course, it is actually going to be more complicated and it is hard to understand and apply these abstract methods and concepts.

Therefore, to learn programming properly, I believe that myself needs to think a lot about creative thinking, add my imagination to the abstract concepts, and develop the ability to translate this into language.

In conclusion, I realized that science is not just an area of exploration by scary, boring 'nerds', but a fun area of fundamental questions and curiosity that produces really valuable results in the world.