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*The Cube of Shame: The Use of Algorithms to Change a Rubik's Cube*

The purpose of this research project was to devise four algorithms to solve a Rubik's Cube from a pattern. The researcher's hypothesis was that she would devise algorithms that subjects could follow and solve the Rubik's Cube. The researcher made algorithms by recording each step in explicit detail that made the first two algorithms. Then, the researcher broke the complex algorithms into short, simplistic algorithms. With the finished algorithms the researcher tested them on random people and recorded the success rate. In the first complex algorithm that the researcher created there was a success rate of 100% when tested on six random subjects. After making this complex algorithm into a short-hand notation, the success rate was 67% and failure rate was 33%. For the second complex algorithm that the researcher created, there was a success rate of 83% and a failure rate of 17%. This algorithm was also made into short-hand notation and had a success rate of 17% and a failure rate of 83%. Overall, the hypothesis was accepted. The researcher was able to devise four algorithms that subjects followed to completion. However the last algorithm in short-hand notation did have a high failure rate but the complex version had a very high success rate. The short-hand notation would need some additional editing and a key to be more effective.