Reflection 4: Meaningful Gamification

2048 is a very commonly used gamified educational technology that works by either moving up, down, right, or left in order to match two of the same numbers together, creating higher and higher multiples of 2. The name, 2048, of the game alludes to one of the highest and most difficult numbers you can reach, although it is not the highest. This game contains various strengths and weaknesses, the latter which comes because of this technology being more an addictive game than a tool to learn math and the former inadvertently being due to the repetitive nature of the game.

The major strength of this game is how the user will be repeatedly multiplying the same numbers together to the point where they are basically forced to learn and/or memorize the multiples of 2. The game is fast paced, which promotes quick thinking and math skills that get refined with each round of the game. This game also develops other important learning skills such as problem solving as sometimes you need to stop and think of which direction will allow you to keep playing for longer and reach a higher number. The numbers come in the form of boxes that you need to move around and the more you play the game the more you learn the most efficient moves to make and the faster you will be able to think on your feet. Determining the best configurations and strategies is as important as mathematical knowledge when playing this game.

A weakness of this game, which lessens its value as an educational game is how fast paced and addictive it can get. A user can easily stop matching numbers together and learning what the product of that multiplication would be, and instead just think of the game as matching up identical shapes in order to progress and not fill up the big box in which the game takes place, which is when the person loses and game ends. Additionally, it is very likely this game could be the type to be very addicting in the beginning of the user’s experience with it but quickly lose its charm and become boring and repetitive. Since there is nothing more to do than move in 4 different directions, there isn’t many exciting things that can happen during the gameplay. This could become a feature that turns away longtime users who may have been obsessed if the person plays it enough and no longer finds anything interesting in the game. Also, since it only focuses on the repetitive multiplication of one number, at a certain point, there isn’t much for the user to learn that may be considered educational.