# Brain Plasticity

**Norman Doidge**

* Norman Doidge’s book “The Brain that Changes Itself is a book on neuroscience. It specifically talks about the neuroscience of neuroplasticity, where the brain rewires itself to carry out spatial tasks. [[1]](#footnote-1)
* The stories in Doidge’s book are unique as each story is based on a brain that has been damaged. These stories show the way Doidge’s team help these patients rewire their brain to help them get around with their daily lives. ­1
* “Plas­tic­ity can be summed up in a few suc­cinct state­ments all from chap­ter three – Redesign­ing the brain:
  + Neu­rons that fire together wire together.
  + Neu­rons that wire apart fire apart. This is also stated as Neu­rons out of sync fail to link.
  + Use it or lose it.”1

**Karen Steinbach**

* She is the Empower Reading Program Coordinator and Clinical Research Project Manager of the Learning Disabilities Research Program at SickKids.
* “Ms. Steinbach coordinates the roll-out of the Empower™ Reading program to school boards across Ontario, Canada and internationally and is a teacher trainer and mentor for Empower™ Reading. Ms. Steinbach regularly participates in presentations to parents, educators, and healthcare professionals.”[[2]](#footnote-2)

**Empower Reading Program**

* The Empower Reading Program was developed by Dr. Maureen W. Lovett. Her team, consisting of educators and psychology professionals in the Learning Disabilities Research Program at the SickKids hospital are teaching people of all ages with reading disabilities, the skills that are required for them to read.
* This program has been going on for 30 years and it has constituted successful programming for students with significant reading difficulties.

**Inspirational Pieces**

* Since Ms. Karen Steinbach requested that a game was to be made and it should teach the patients on how to make logical and spatial decision. I decided that I wanted to make a game much like the popular Trading Card Game called Yu-Gi-Oh.



* This is a game where the players must make logical decision in order to defeat their opponents in a turn-based card game, where the opponent uses monsters along with spells and traps to conquer the opposing deck and win the game!



* This is the basic layout that I would be using. This is the layout that is used in the Yu-Gi-Oh Duel Generation Android Game. As one can see here, the game is not too complicated for the brain, and over a period of time, the game can be enjoyed by almost anyone.



* When the game is to be played, the players would be arranging the cards in this manner, which will help the children’s logical (as to where to place the card) and spatial abilities (as to how to neatly place the card).

1. http://sharpbrains.com/blog/2008/11/12/neuroplasticity-and-the-brain-that-changes-itself/ [↑](#footnote-ref-1)
2. http://www.sickkids.ca/empower/Contactus/ContactUs.html [↑](#footnote-ref-2)