## The Shallows By Nicholas Carr

The Shallows discusses research about how our brains are influenced by our habits and the tools we use, as some types of thinking are strengthened and others are weakened with every social and technological advancement. Every tool imposes limitations even as it opens possibilities. The more we use it, the more we mold ourselves to its form and function.

The current extensive use of electronic screens and the volume of information on the internet have had the effect of changing our brains and thinking patterns into what is called "**The Juggler's Brain".** This is inhibiting our ability to concentrate and think deeply and creatively. Media molds what we see, how we see it and eventually it changes who we are as individuals and a society.

**Neuroplasticity:** Our brains are constantly changing in response to our experiences and behavior. Once we've wired new circuitry, we long to keep it activated. Routine activities become more efficient while unused circuits are pruned away.

What determines what we remember and what we forget? The key to memory consolidation is attentiveness. For a memory to persist, the incoming information must be thoroughly and deeply processed.

The offloading of memory to external data banks doesn't just threaten the depth and distinctiveness of the self. It threatens the depth and distinctiveness of the culture we all share. Net culture isn't youth culture; it's mainstream culture.

**Books encourage deep reading**, in which readers mentally simulate each new situation encountered in the narrative. Words strengthen ability to think abstractly.

When we go online, we enter an environment that promotes cursory reading, hurried and distracted thinking, and superficial learning. It's possible to think deeply while surfing the net, just as it's possible to think shallowly while reading a book, but that's not the type of thinking the technology encourages and rewards. Google's profits are tied directly to the speed of people's information intake. The last thing the company wants is to encourage leisurely reading or slow, concentrated thought. **Google is in the business of distraction.** 

Navigating the web requires a particularly intensive form of mental multitasking.

## Pros:

- Improve hand eye coordination
- Reflex response
- Processing visual cues
- May improve some fast paced problem solving skills
- Spurts of directed attention

## Cons

- Improving multitasking ability hampers ability to think deeply and creatively
- Less able to use inductive analysis, critical thinking, imagination, and reflection
- More likely to rely on conventional ideas and solutions rather than challenging them with original lines of thoughts
- Skillful at superficial level of learning. To be everywhere is to be nowhere.