# *Why Don't Students Like School?* by Daniel T. Willingham

**Think you might want to read this book?**
All educators should read this book. Cognitive Scientist Daniel Willingham uses Why Don't Students Like School? to pick apart the traditional concepts teachers are continually taught and explains them in simplistic detail. He organizes the book based upon a few concrete ideas that could forever alter the way you teach. For example, Willingham explains that factual knowledge is the foundation for all learning. Students must be taught the basic facts in order to think critically, comprehend, apply background knowledge, and even pass standardized assessments. Often teachers miss the importance of teaching facts because they are worried about lack of time and getting in higher-order thinking skills Normally, an outsider's interpretations of education are not well received because there are many elements of classroom teaching that are hard to understand as an outsider. However, Willingham empathizes and understands the battles educators face. Willingham's ideas on education make more sense than the works of experienced educators. Any teacher could read this book and walk away with practical ideas to incorporate into their teaching.

**What would Socrates ask?**

- Why is it difficult to make school enjoyable for students?
- Is imagination more important than learning?
- How can you relate how you learn to how your students learn?
- What makes someone intelligent?
- How can you make students remember what they did during the school day after the school day?
- What makes knowledge transfer?
- How can we encourage children to think?
- What makes children lose their curiosity as they get older?
- Instead of making work easier, is it possible to make thinking easier?
- How does memory play a part in critical thinking and problem-solving?
- What are the key influences in setting up deep learning?

**Research**

- "Research from cognitive science has shown that the sorts of skills that teachers want for students - such as the ability to analyze and to think critically - require extensive factual knowledge."

**Concepts**

- Drilling information can be beneficial
- Drill increases the amount we think about something
- We remember what we think about

- The more we remember, the increased likelihood we will transfer the knowledge
- You remember what you pay attention to. Always think about what an assignment or activity will make students think about because that is what they will remember
    - Wanting to remember is not enough, neither is repetition
    - Relevancy isn't enough for memory
    - Interest is not enough
    - It's about engagement
- Organize lessons like stories; Helps students comprehend
- Thinking about meaning helps memory
- We understand new ideas better when we relate them to things we already know: Schema
- Understanding new ideas is primarily a matter of getting the correct old ideas into working memory and rearranging them to make comparisons we had not before.
- Knowledge transfers when we have successfully applied old knowledge to a new problem
- Background knowledge shapes how we interpret information and what comes next.
- Classroom application: Provide examples and ask students to compare them
- Mindset
    - effort, not ability
    - Increase growth mindset
    - Intelligence is under our control
- The best way to improve teaching is to practice teaching.
- Experience means you are engaged, practice means you are trying to improve.
- Application: Keep a teaching diary

**Quotes from the author**

- "The brain is not designed for thinking. It is designed to save you from having to think" as "thinking is slow and unreliable."
- "Instead of making the work easier, is it possible to make the thinking easier?"
- "Thus, your memory is not a product of what you want to remember or what you try to remember; it's a product of what you think about."
- "Thus, background knowledge allows chunking, which makes more room in working memory, which makes it easier to relate ideas, and therefore to comprehend."
- "If you don't pay attention to something, you can't learn it!"

**Implement tomorrow?**

- Find ways to organize lessons into stories to increase memory/retention.
- Help students make processes more automatic so working memory space can be used for more complex tasks.
- Create interest in the middle of class (not just at the beginning) to increase memory and engagement.
- As teachers, always think about what an assignment or activity will make students think about because that is what they will remember.

**Organizations/schools working on answers**

- Daniel Willingham- Science and Education
- Jensen Learning Blog

- The Mindset Scholars Network

**Referenced books with the potential to impact leading and learning in education**

| Author(s) Last Name | Title |
|---|---|
| Heath & Heath | *Made to Stick* |
| Lang | *Small Teaching* |

**The applicability of this book to education is ….**