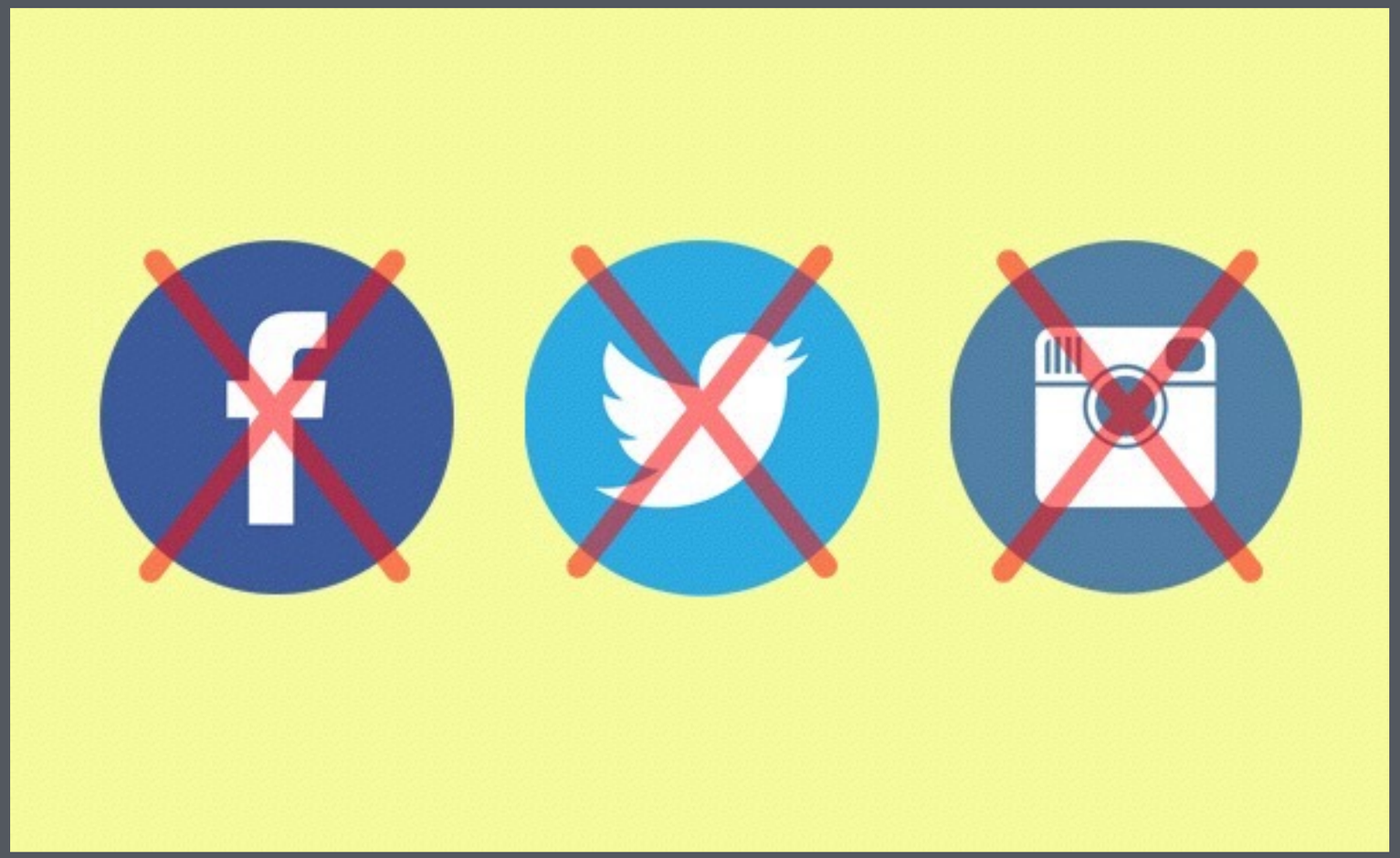
Welcome to

The Iron Yard

Work Hard And Love Each Other

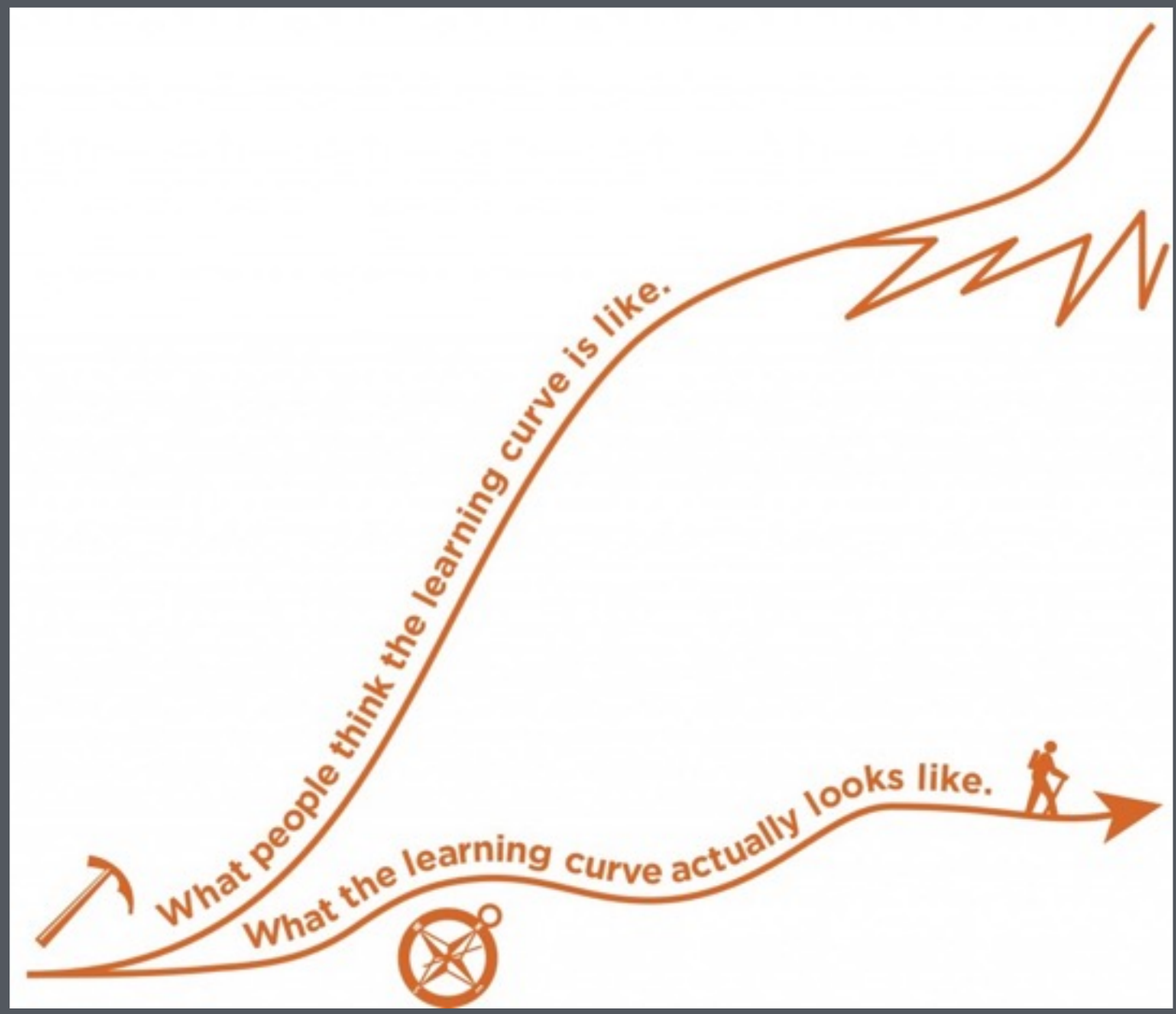


The Learning Curve

and a pep talk (sort of)

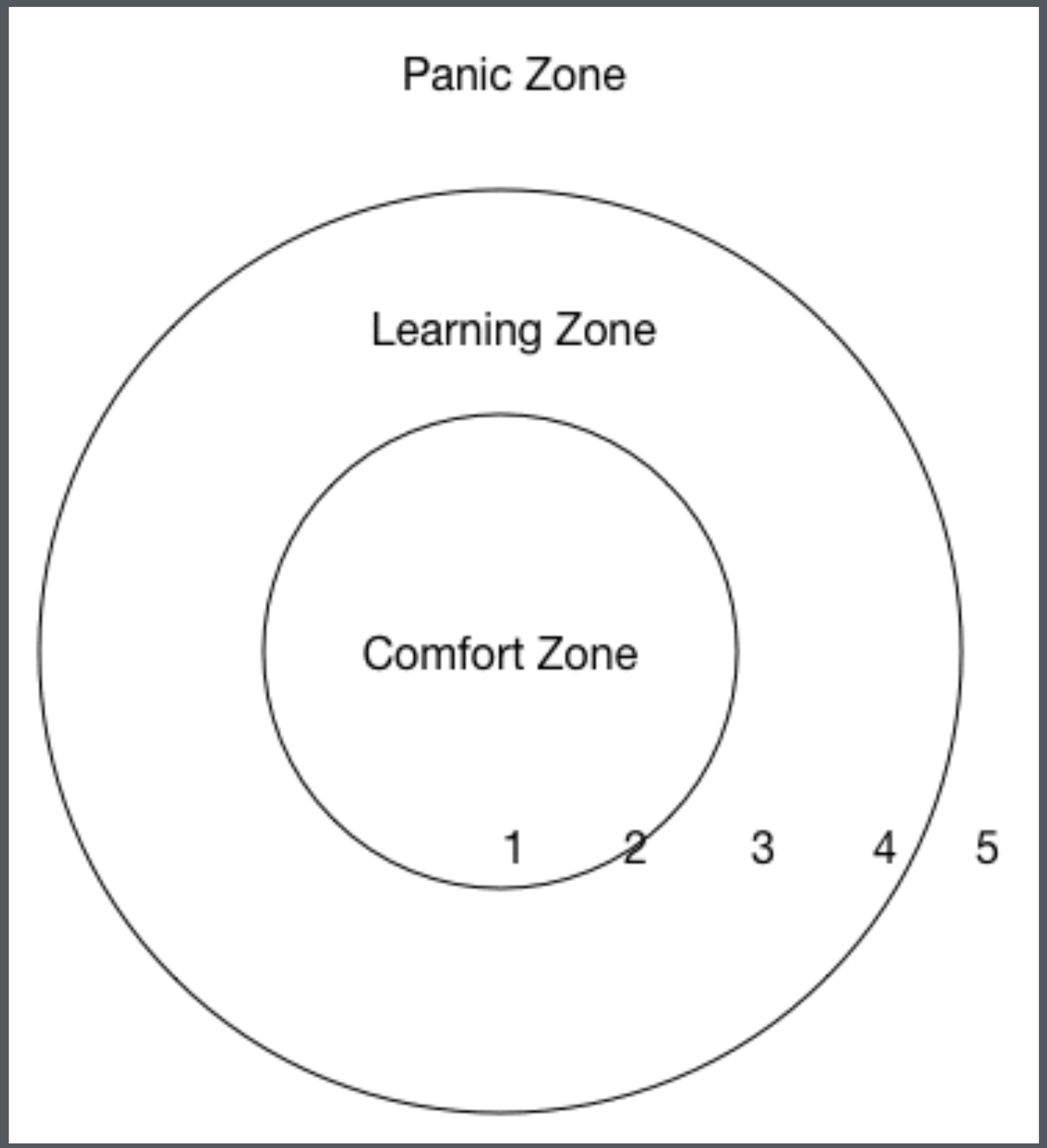
There is research suggesting that teaching the mechanism of how the brain grows when it's challenged increases performance

How To Learn



AT not Everest

Panic!


Panic Zone
Learning Zone
Comfort Zone
1
2
3
4
5

Effortful learning is longer lasting and more versatile.

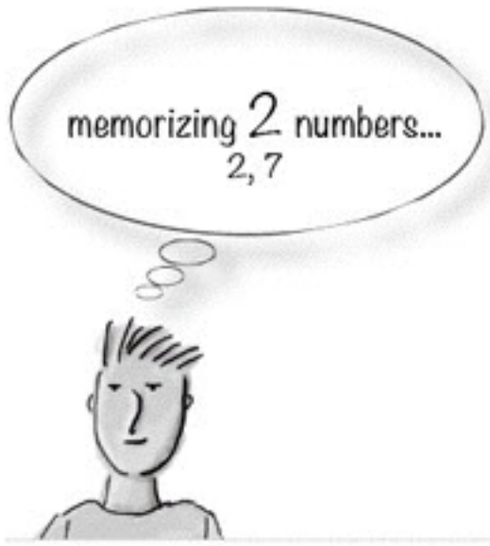
Will Power!

The Experiment

1. *"Memorize these numbers."*

Group A

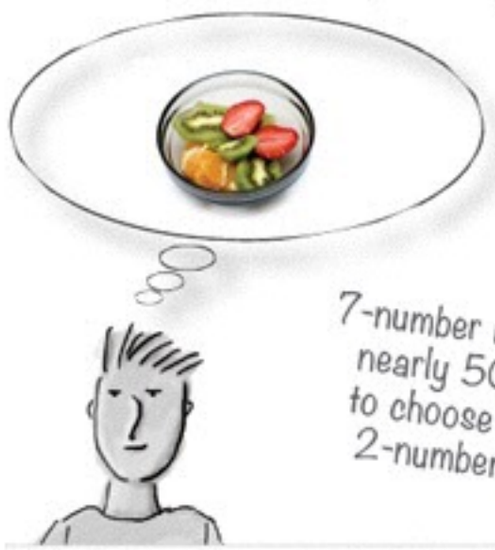
***two**-digit memorization task*

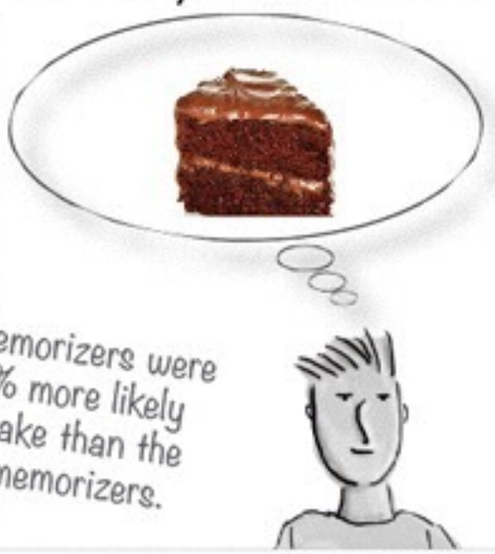


Group B

***seven**-digit memorization task*

2. *"We're done, thank-you. Would you like a snack?"*



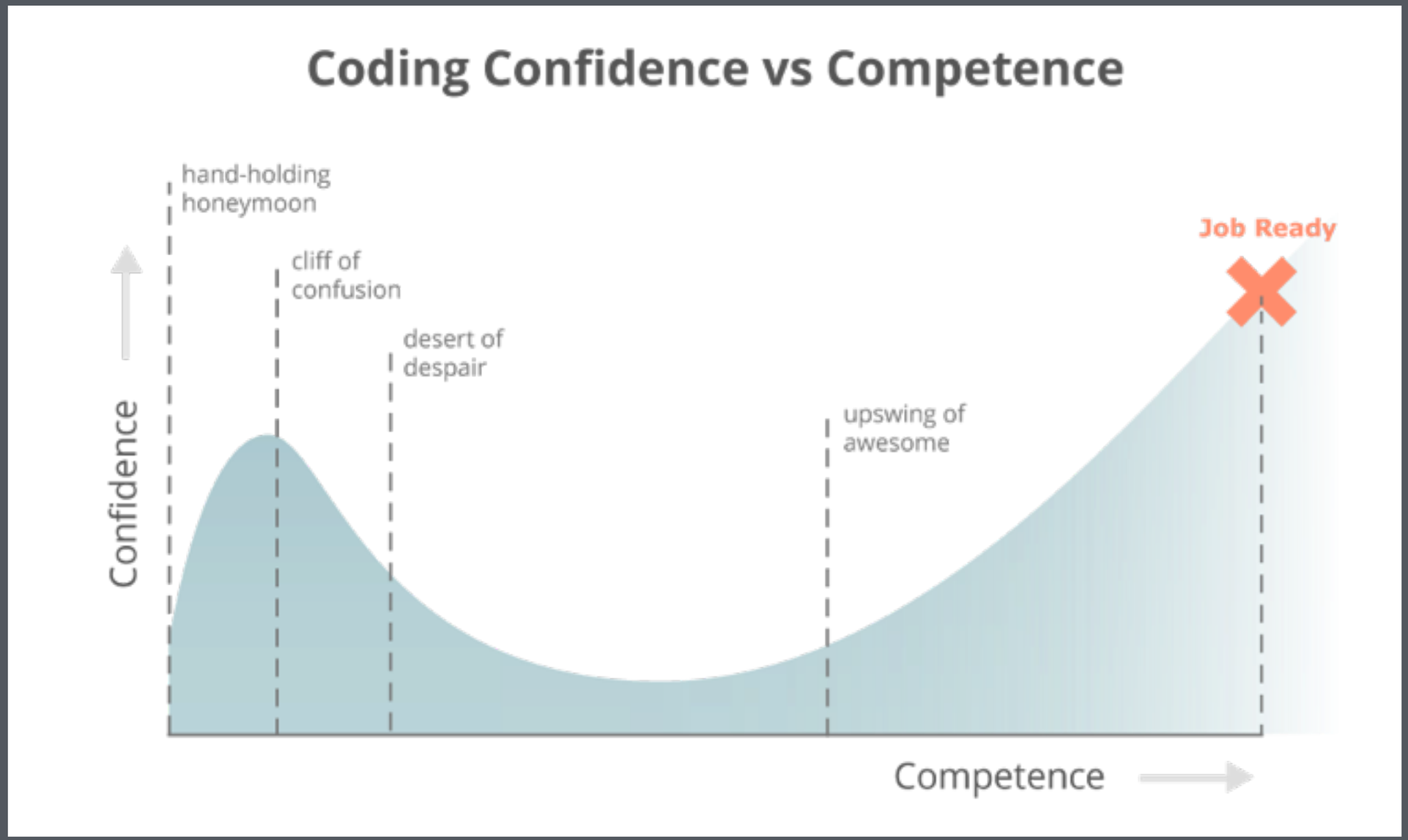


7-number memorizers were nearly 50% more likely to choose cake than the 2-number memorizers.

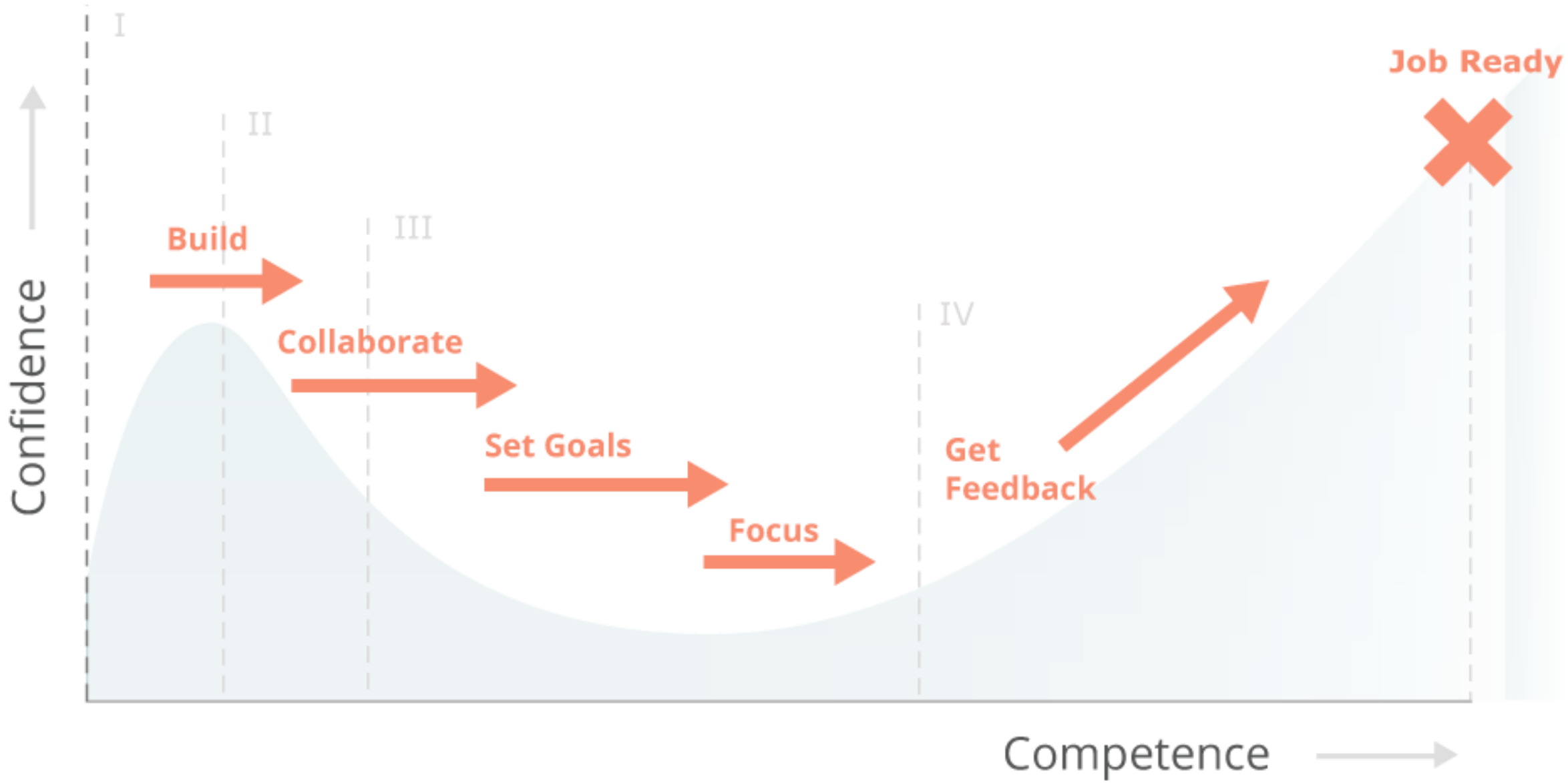
Exeriment in 1999, Baba Shiv and Alex Fedorikhin

Learning is built on the shoulders of habits

Cliffs and other scary things



http://www.vikingcodeschool.com/posts/why-learning-to-code-is-so-damn-hard



http://www.vikingcodeschool.com/posts/why-learning-to-code-is-so-damn-hard

Be aware of cognitive biases.

Test yourself.

Be aware of falsely perceived fluency.

Rereading and massed practice are a waste of time.

Retrieval interrupts forgetting and strengthens retrieval pathways.

Make retrieval harder with spaced repetition and interleaving.

Try to solve problems before you're taught how.

Learning styles are overrated.

Always aim to extract principles and rules.

This skill can be learned through interleaved and varied practice, and elaboration

Elaborate on newly gained knowledge

"If you're just engaging in mechanical repetition, ... you quickly hit the limit of what you can keep in mind. However, if you practice *elaboration*, there's no known limit to how much you can learn. Elaboration is the process of giving new material meaning by expressing it in your own words and connecting it with what you already know."

Build a mind palace

Put new knowledge into a *larger context*

People who learn to *extract the key ideas from new material and organize them into a mental model* and connect that model to prior knowledge who an advantage in learning complex mastery.

Intellectual ability isn't fixed.

Mindset, and learning, changes the brain

Stay Calm

Stress -> glucocorticoids, which decreases neuroplasticity.

How To Learn

- **- Stay out of your comfort zone**
- **- Learning is built on the shoulders of habits**
- **- Be aware of cognitive biases. Test yourself.**
- **- Be aware of falsely perceived fluency.**
- **- Retrieval interrupts forgetting and strengthens retrieval pathways.**
- **- Make retrieval harder with spaced repetition and interleaving.**
- **- Try to solve problems before you're taught how.**
- **- Learning styles are overrated.**
- **- Always aim to extract principles and rules.**
- **- Elaborate on newly gained knowledge**
- **- Build a mind palace**
- **- Intellectual ability isn't fixed.**
- **- Stay Calm**

One Last Thing!!

Collaborate!

To ask me a question, you need to come as a pair.

It CAN be done!