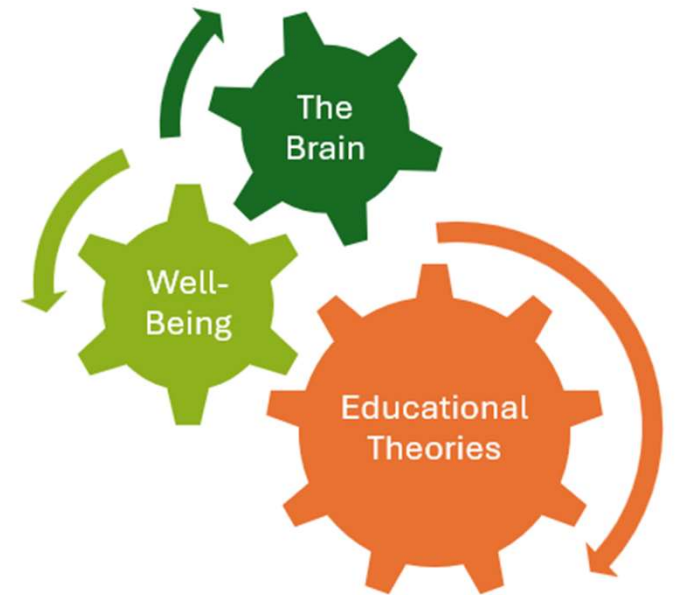


Interdisciplinary Application of Positive Psychology, Neuroscience and Educational Theories

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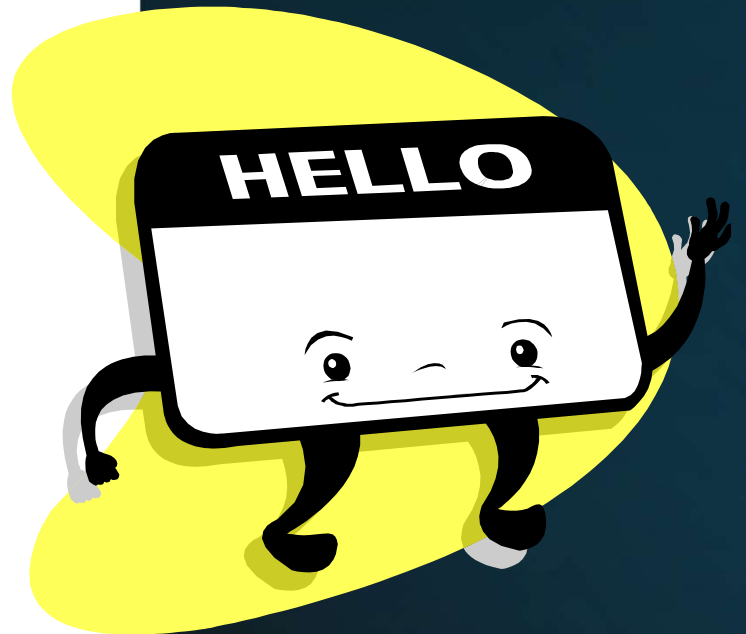
Positive Teaching

Speaker

- **Think of a time when you were “at your best” when teaching.**
- Describe the class, your students, what you did, and why you think you at were at their best (or your students were at their best).
- 3-4 minutes

Listener

- Be a good listener.
- Listen again for strengths.
- When the story is finished, help the speaker savor it.
- Tell the speaker what strengths you heard in the story.
- 3-4 minutes



Which Would You Choose?

Red Cape: You can stop bad things



Green cape: You can grow good things.





Comments heard in the hallway!

- Students are lazy
- Students are getting dumber and dumber
- Students don't care about the class
- Students just want to know what is on the test
- Students want an easy "A"
- Students want to be entertained

Green Cape Approach

You can grow good things



HAPPINESS, HOPE, HUBER

My Background



In a Nutshell

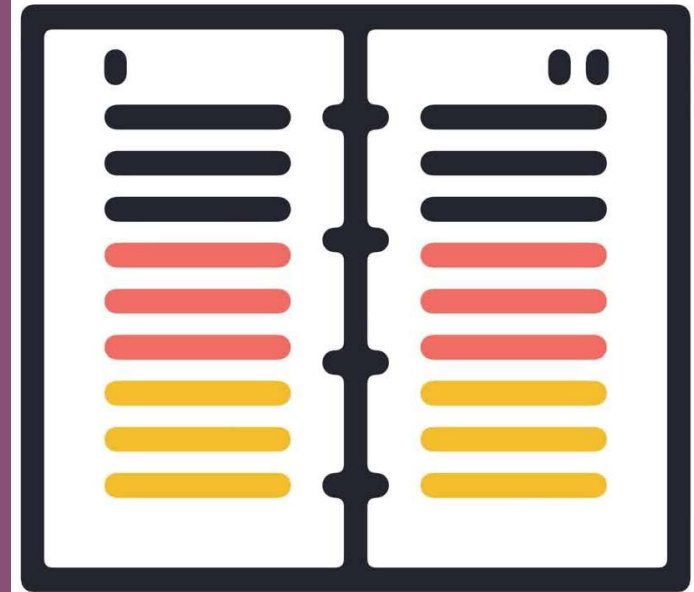
The shift in education is from a teaching paradigm to a learning paradigm.

It's not about us, but it's about them.

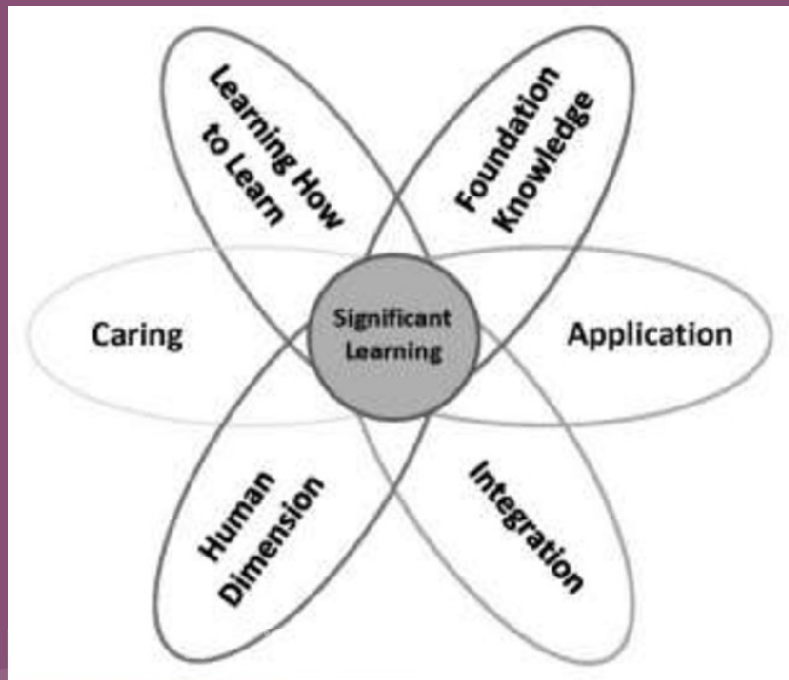


Agenda

- Educational Theories
- Positive Psychology
- Neuroscience of Learning
- Transformational Ideas
- Integrating Insights into Teaching Practice



Educational Theories



Dee Fink's 6 Dimensions of Learning – Focus on the human dimension and caring to foster prosocial behaviors.

- **Human Dimension** – fostering connection and engagement.
- **Caring** – caring about the material and each other.

Expanding Educational Theories

- **Challenge-Support Ratio:** Importance of balancing **challenging students** and providing **adequate support**.
- **Self-Efficacy & Self-Determination Theory:** How belief in one's abilities and **autonomy** contribute to motivation.
- **The Paradox of Choice** – too much choice, however, can overwhelm students.



Growth Mindset and Learning

- **Fixed vs. Flexible Mindset:**
 - Emphasize **growth** over static abilities—students can improve with effort.
- **Perry's Theory of Intellectual Maturity:**
 - Transition from **dualism to multiplicity to relativism**—students seeing the world and their knowledge in more nuanced ways.



Experiential Co-Learning

Learning from Each Other:

- **Student co-learning:** Involves students learning from each other but also the challenges related to their stage of intellectual development.
- **Experiential co-learning:** Students learn from professionals, clients, and grantees. Allow students to ask their own questions to foster active participation.

Positive Psychology: Key Concepts

PERMA

- Model proposed by Seligman, representing Positive emotions, Engagement, Relationships, Meaning, and Accomplishment.



Zero Point

Languishing
Mental Illness

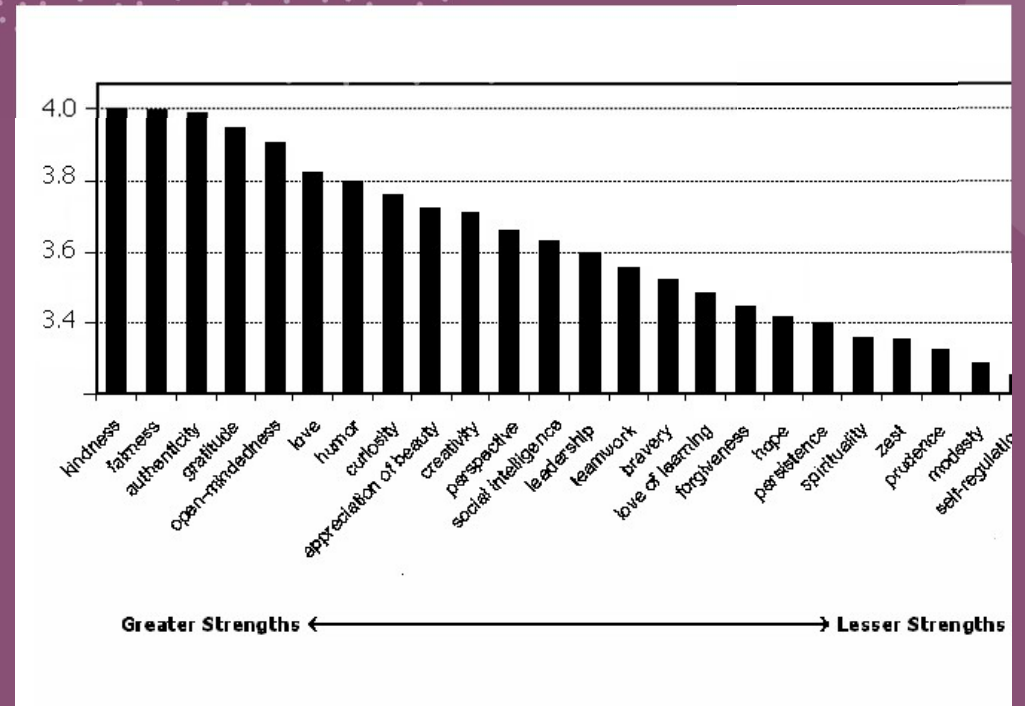


Flourishing
Mental Health

Emphasis on Strengths

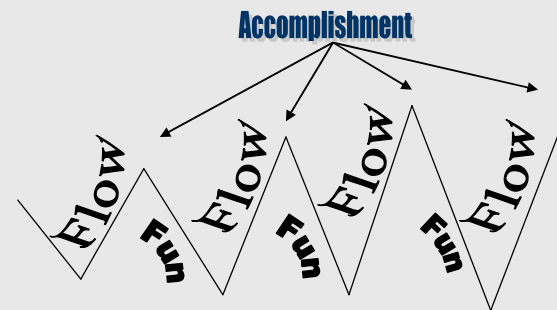
Strengths-Based Learning:

- Fostering motivation by focusing on **what students are best at.**



In the Zone

- Flow occurs separate from emotion; it occurs when individuals are totally absorbed in their work with no thought or feelings present – even though afterwards they will say “that was fun”
- Flow can only be achieved when deploying one’s highest strengths to meet challenges, thereby facilitating learning.



Resilience & Mental Health

Resilience:

- How **bouncing** back from setbacks is a core skill for academic and personal success.

Stress as a Precursor to Mental Illness:

- Understanding the role of stress and its potential negative impacts if not managed.



Neuroscience of Learning

Fight vs. Flight Response:

- Emotional and **stress responses** impact cognitive processing and learning.

Repetition & Learning:

- How **repetition is essential** for learning but involves frustration and setbacks.

Positive Emotional Responses

- **“We only think about the things we care about”**
 - emotional engagement increase learning.



The Myth of the “Average” Learner



MBE Secrets!

Learning is not linear

Forgetting is part of learning

We learn in context

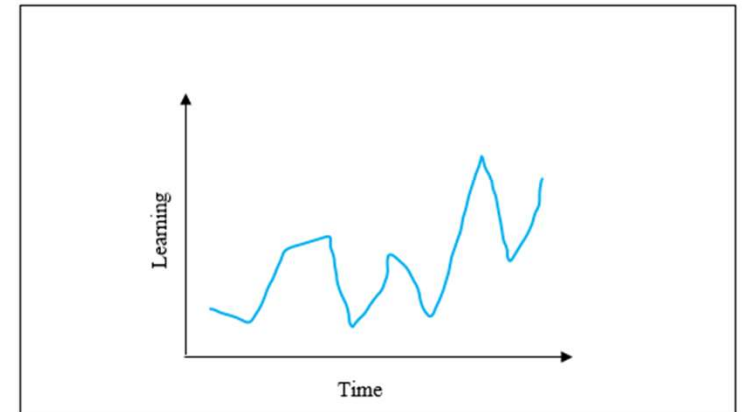


Figure 1: Non-linear Learning

Situated Cognition Theory

- Learning is Embedded in Activity – Knowledge is gained through real-world experiences.
- Learning is Social and Collaborative – Interactions help shape understanding.
- Context Matters – Knowledge is tied to specific settings and tasks.
- Legitimate Peripheral Participation – Novices become experts through guided engagement.

How We Learn: The Brain's Role

Your brain is like a city, and neurons are the workers.

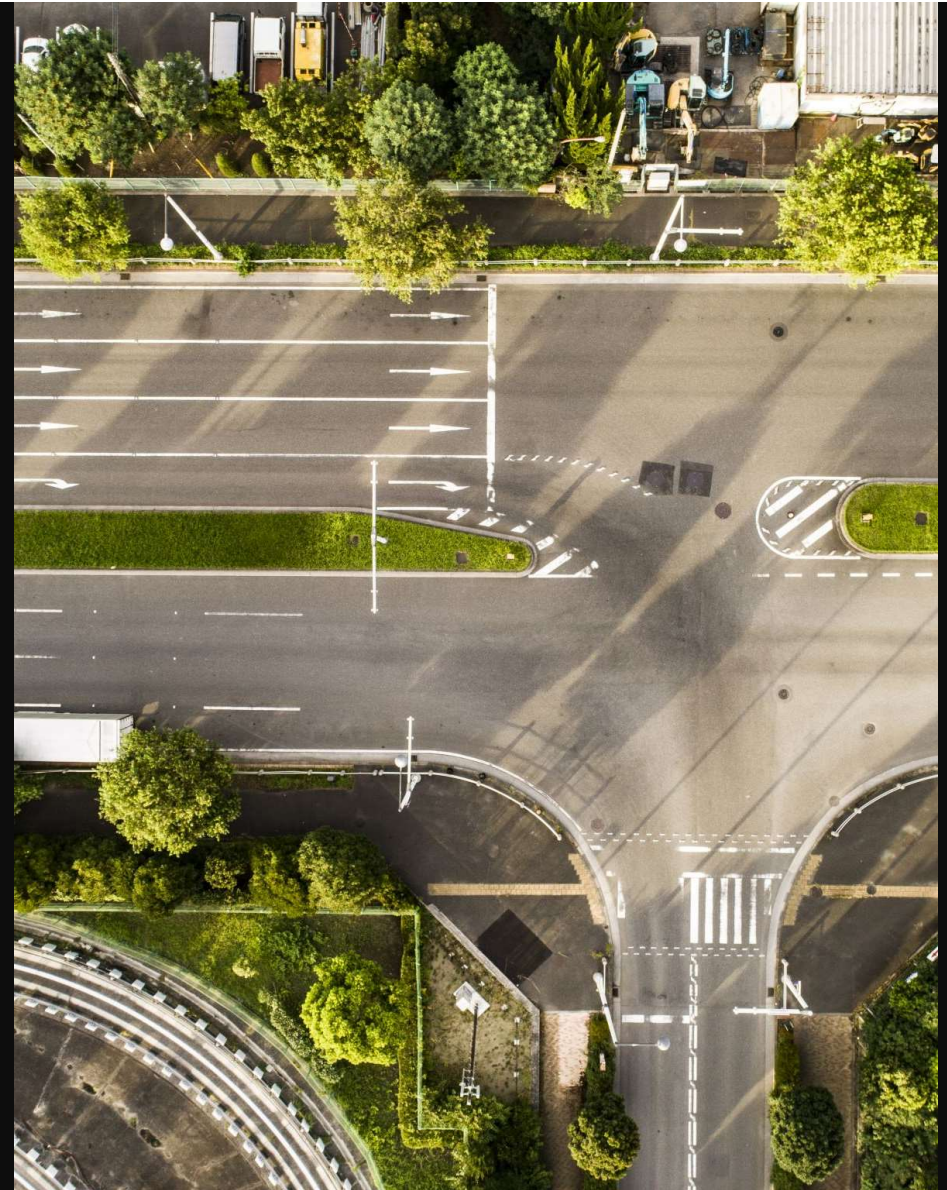
The workers hold bits of information and talk to each other and build roads, but they must also find each other and sometimes they get mixed up.

Practice makes perfect and the roads become stronger (i.e., adding more lanes to a highway).

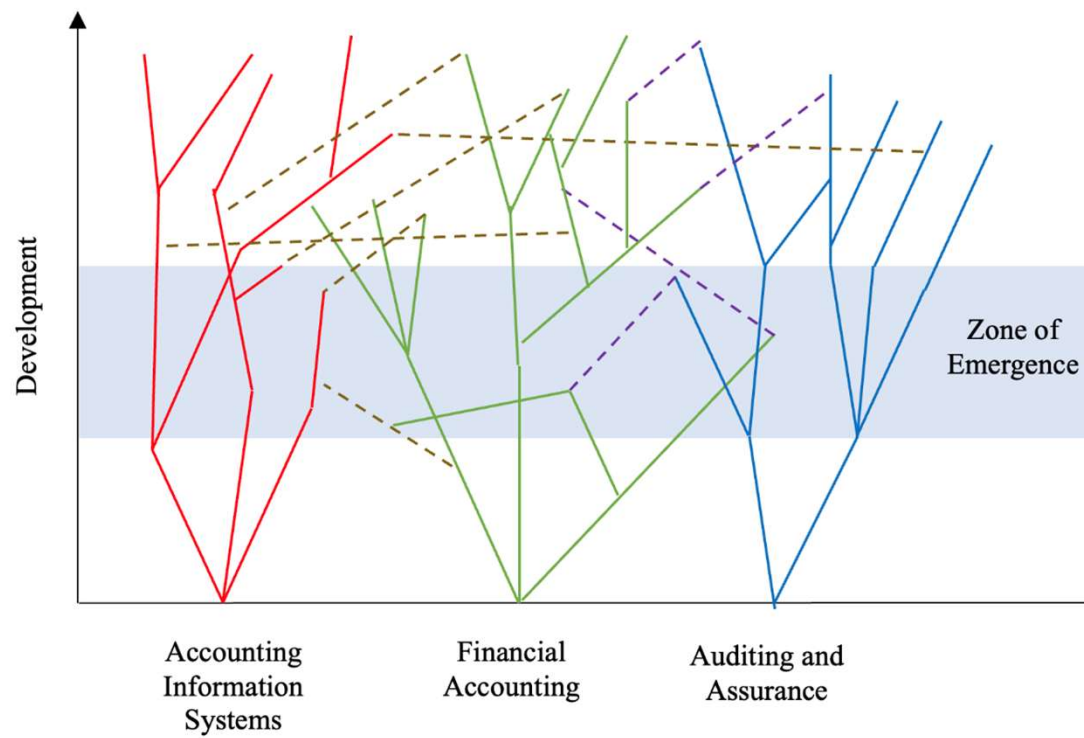
As you learn more, practice more, your brain builds more connections.

If you keep learning and practice, you can become an expert (10,000 hours).

Deliberate practice with a mentor can accelerate learning!



How We Learn



Neuroaccounting

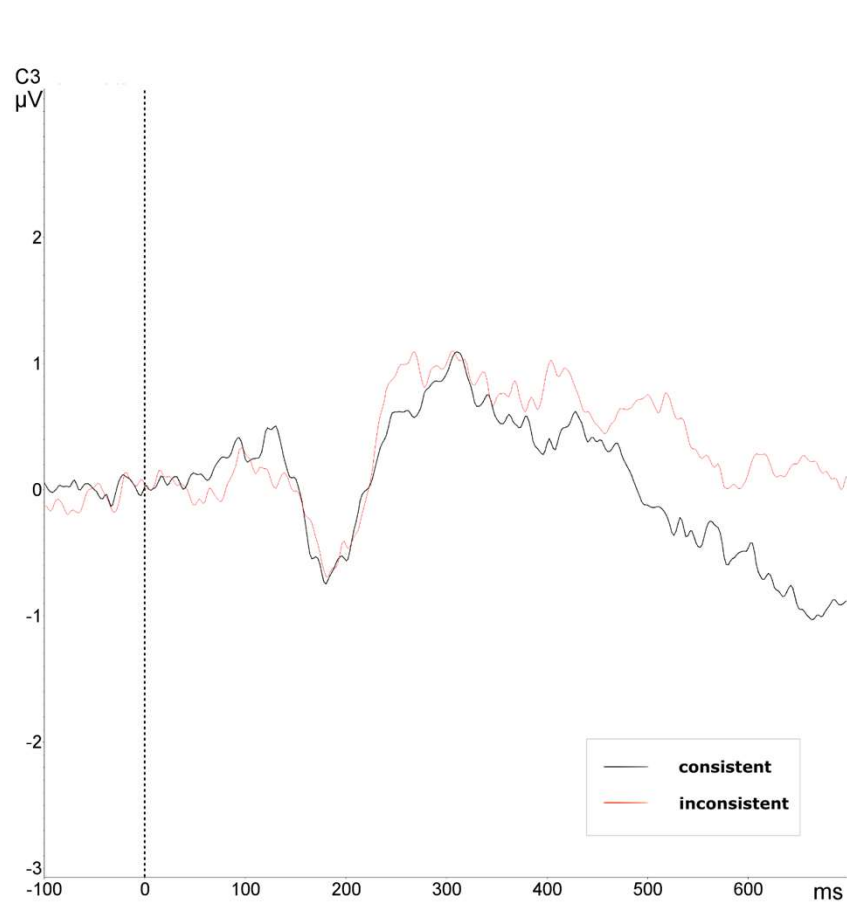
- A Ruse:
- Presented with a vocabulary memorization task to the participant.
- We measuring the difference in responses of novices and expert learners.
- Vocabulary categorized as assets, liabilities, income statement, and balance sheet accounts.

EEG Response:

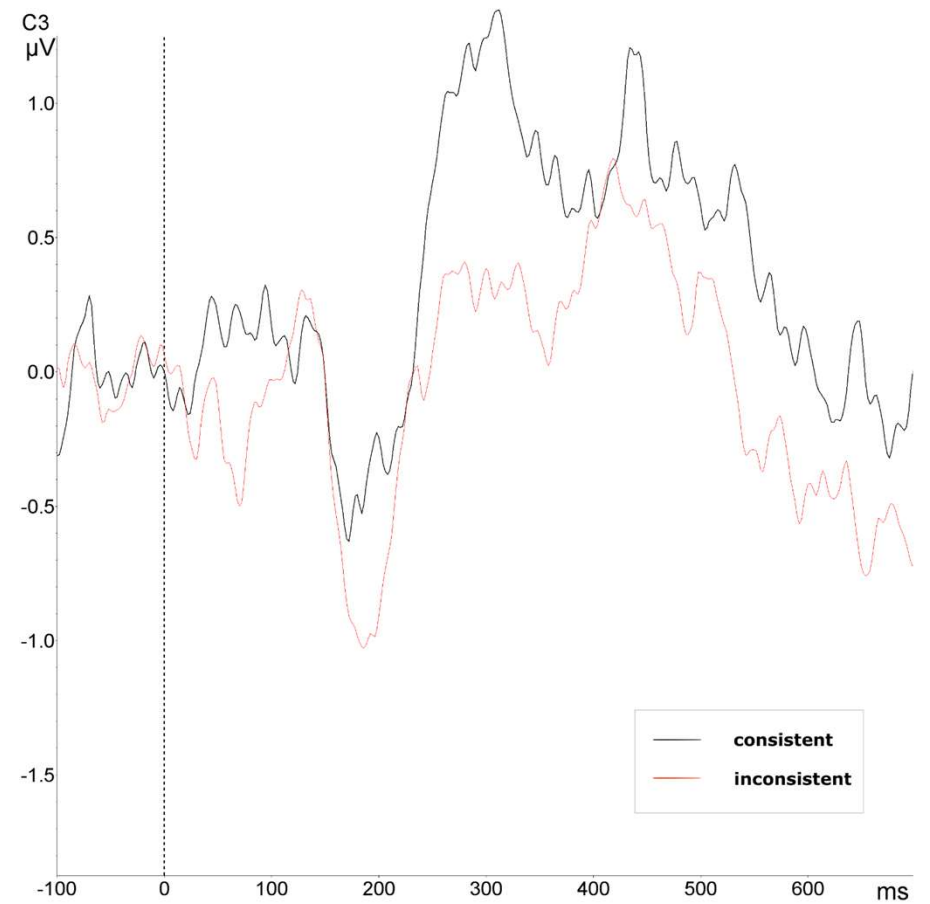
- There was an N300 response from the expert group, but not the novice group.



N300 response at electrode C3

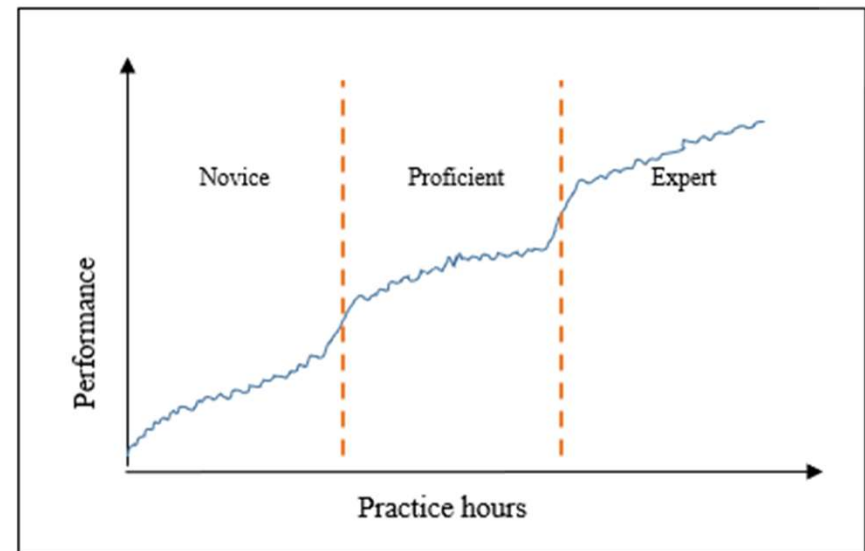


Novice group



Expert group

What happens when learning steps are eliminated by AI?



Practice since introduction to knowledge domain

Physical Limitations: The 4-Minute Mile

4:00 Roger Bannister

1954

2025

3:45 Jakob Ingebrigsten