

CLOSING THE GAP

BETWEEN HUMAN PERFORMANCE AND TECHNOLOGY CAPABILITY

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CHANGING FACE OF WAR



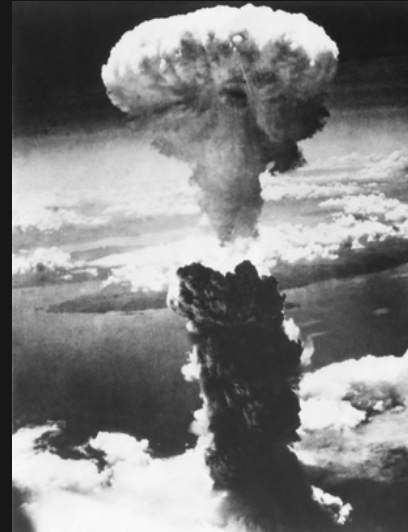
Pre-Industrial



Industrial



Nuclear



Contemporary



Technology Interface

Mass Maneuver

Individual Action

Cognitive Workload

Individual flexibility, adaptability, efficiency & effectiveness = Flexible, adaptable, efficient & effective learning



COGNITIVE CHALLENGES

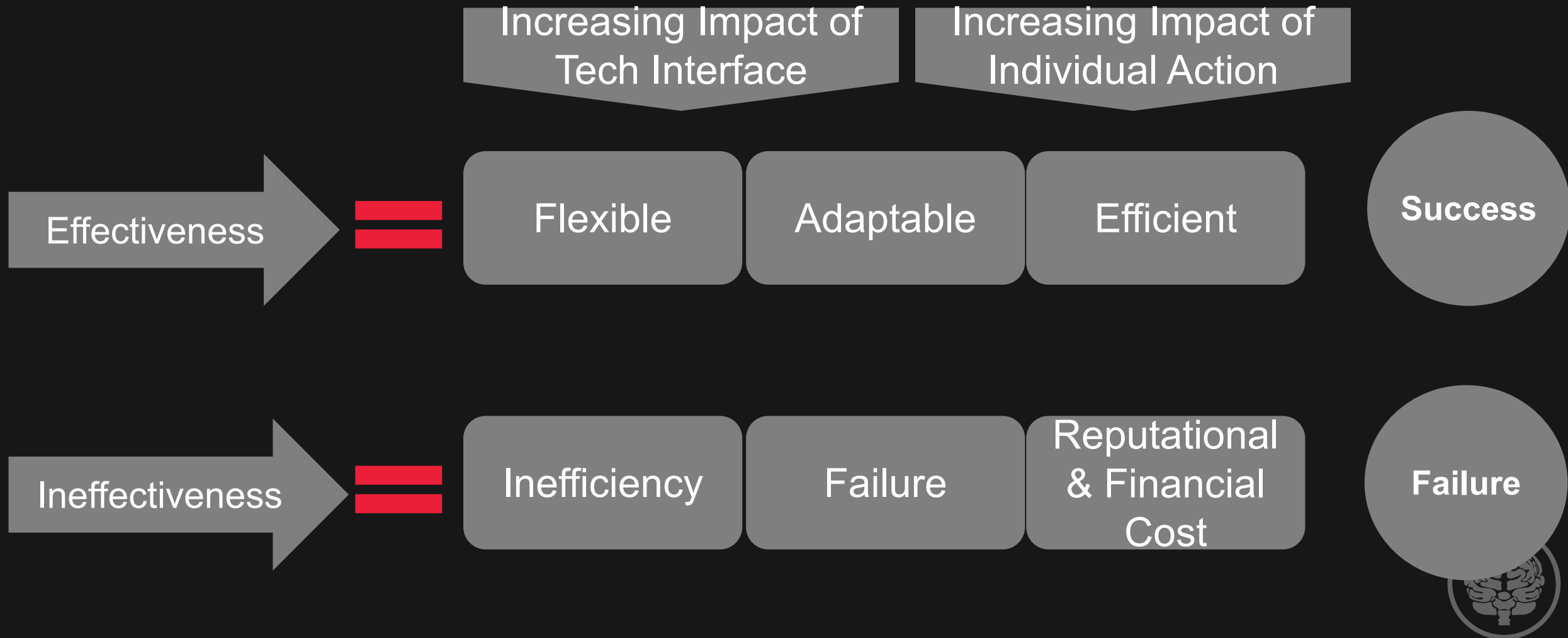


NEW AREAS OF HIGH COGNITIVE LEARNING IN THE MILITARY

- ISR
- TAC
- UAV Operators
- Intelligence Analysts
- Cyber
- Force protection (especially medical first and second aid)



DRIVERS OF THE LEARNING CHALLENGE



WHAT IS ADAPTIVE LEARNING?

Adaptive learning, like much in L&D, is not well defined.
It is used to describe two different things:

Adaptive Curricula

What topics/courses/
competencies are
relevant to you?

Adaptive Instruction

How can we help you
learn?





WHAT IS ADAPTIVE LEARNING?

Or, to use an analogy:

Adaptive Curricula

Where do you want go?

Adaptive Instruction

What's the best way to
get there?

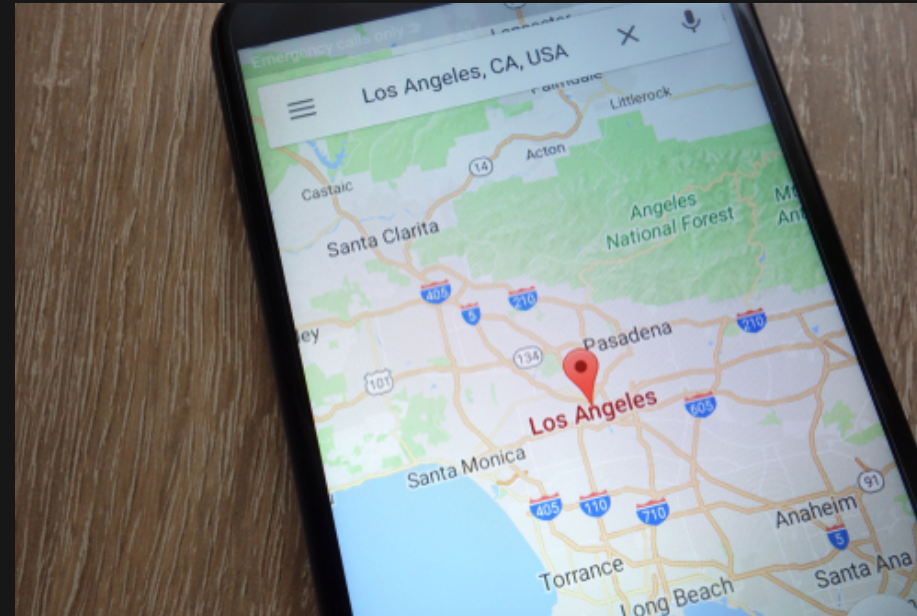




HOW TO GET THERE



Traditional e-Learning



Adaptive Learning



AUTOMATICITY

area9



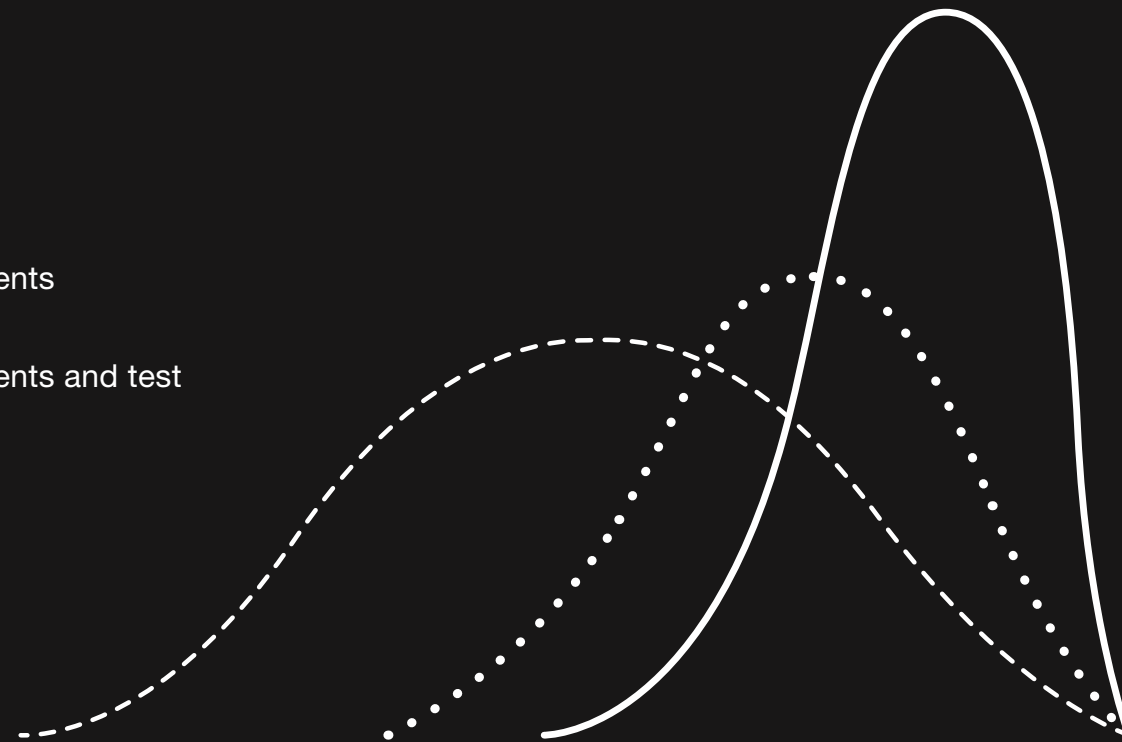
Automaticity is the ability to do things without occupying the mind with the low-level details required, allowing it to become an automatic response pattern or habit. It is usually the result of learning, repetition, and practice.





BLOOM'S 2-SIGMA PROBLEM

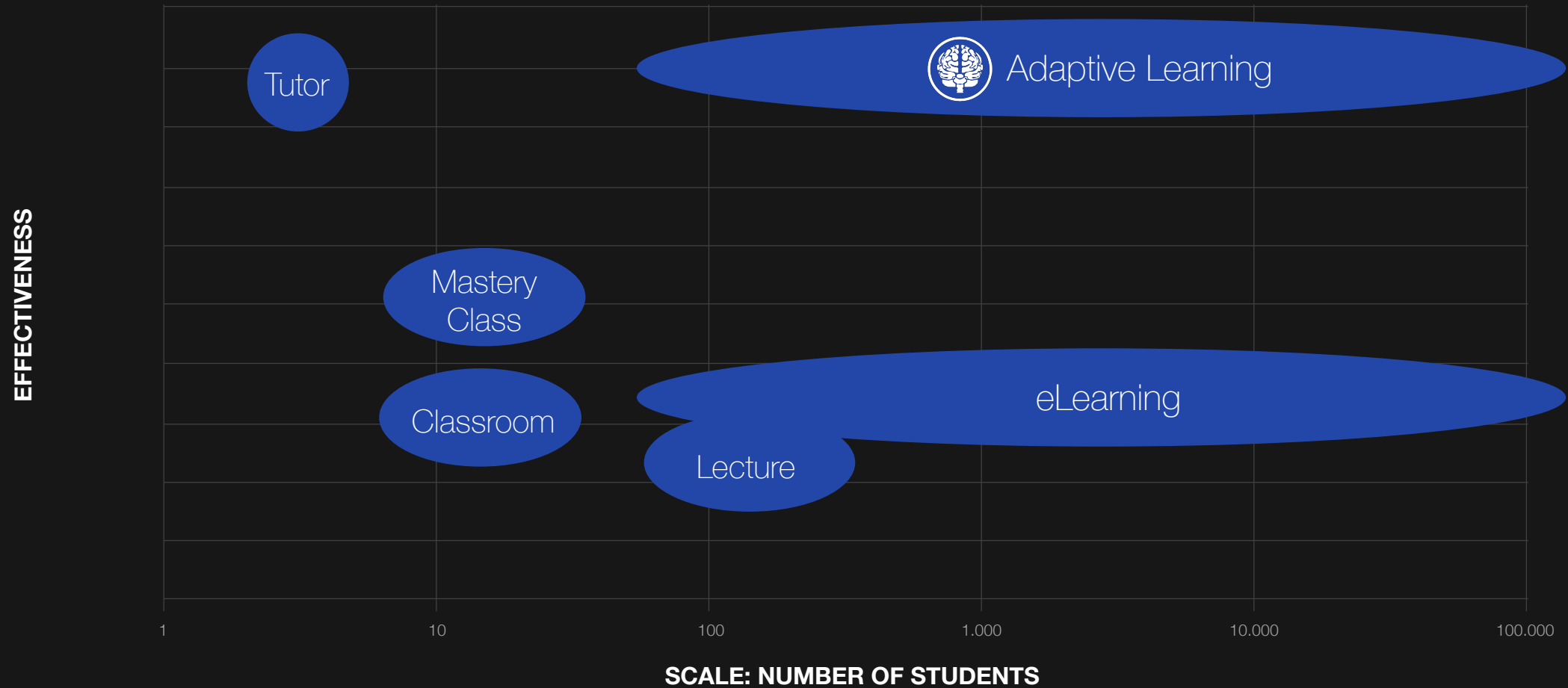
- Class teaching with many students
- ... Class teaching with many students and test
- ~ Personal guidance



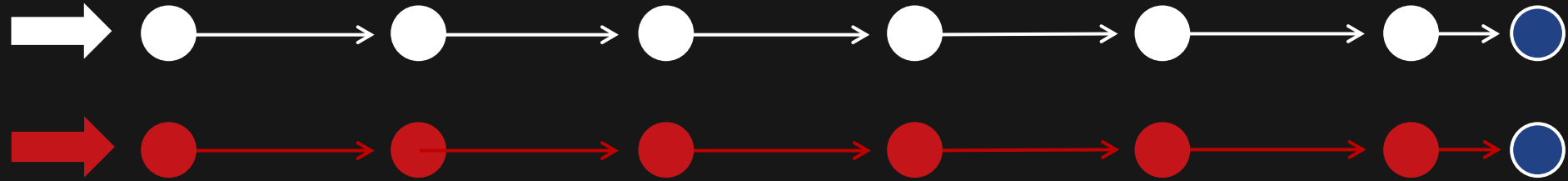
SUMMATIVE PERFORMANCE RESULTS



WHY ADAPTIVE?

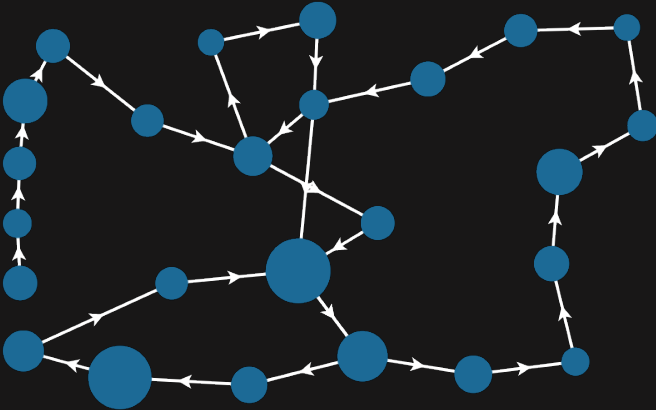


Traditional Teaching





UNIQUE PATHS TO PROFICIENCY



Learner 1

100% proficient

8m 25s

88% correct

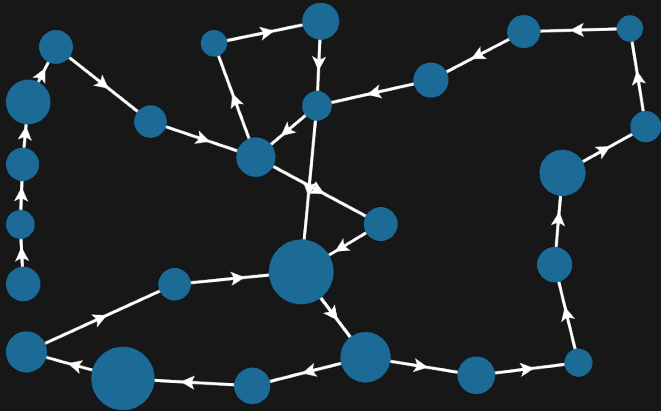
9% consciously incompetent

3% unconsciously incompetent

Data from Feb 2019 from telecommunications company, technical training course



UNIQUE PATHS TO PROFICIENCY



Learner 1

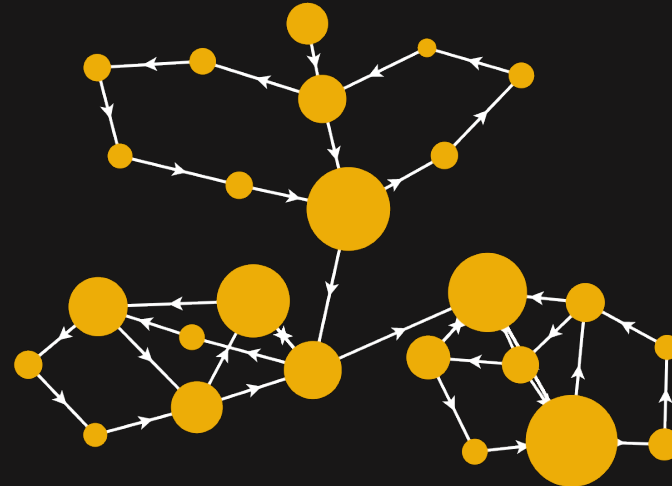
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8m 25s

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Learner 2

100% proficient

19m 39s

52% correct

7% consciously incompetent

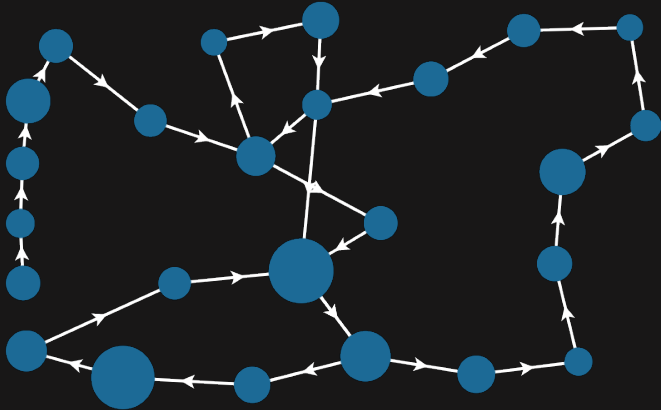
41% unconsciously incompetent

Data from Feb 2019 from telecommunications company, technical training course





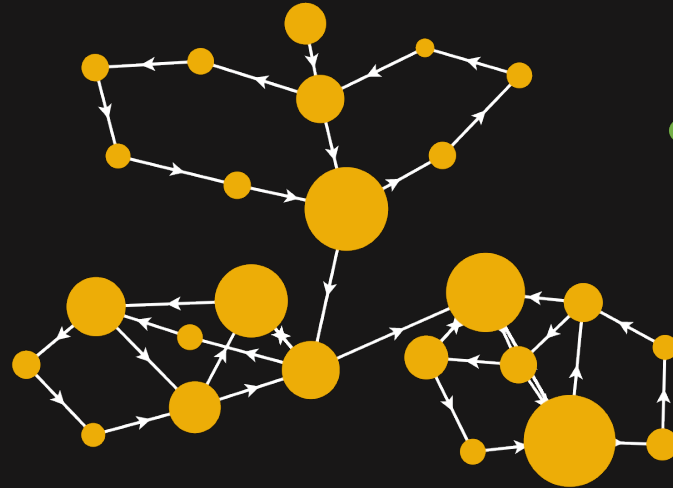
UNIQUE PATHS TO PROFICIENCY



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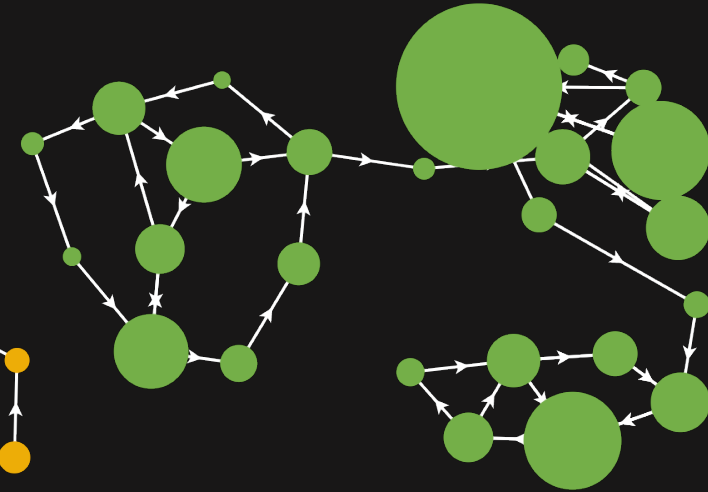
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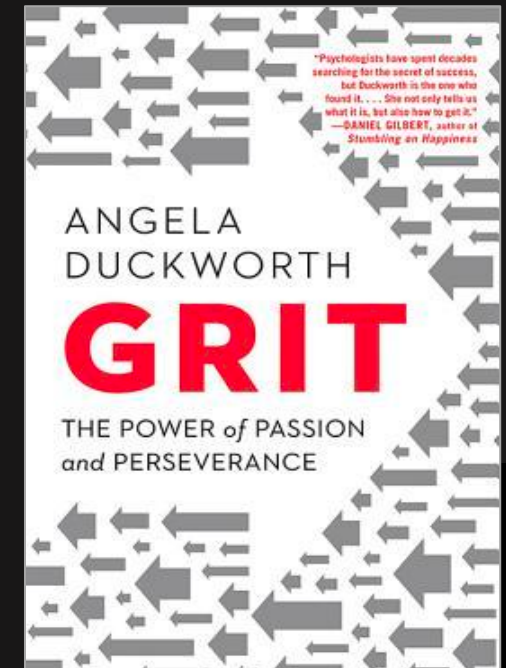
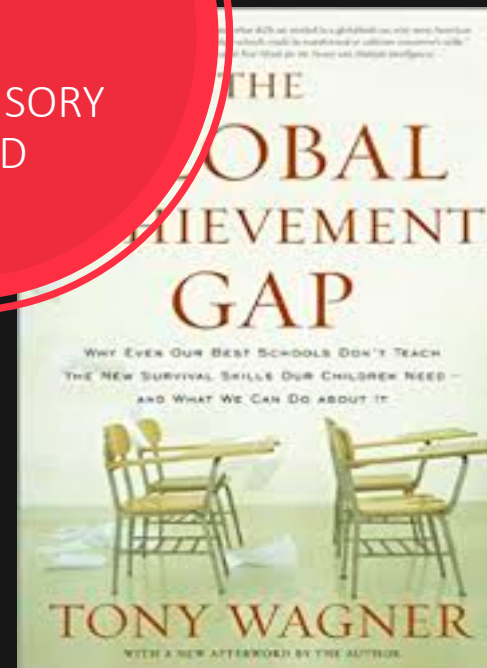
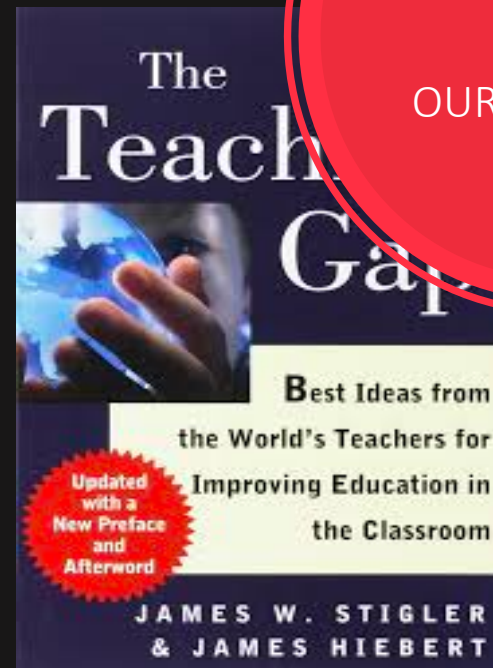
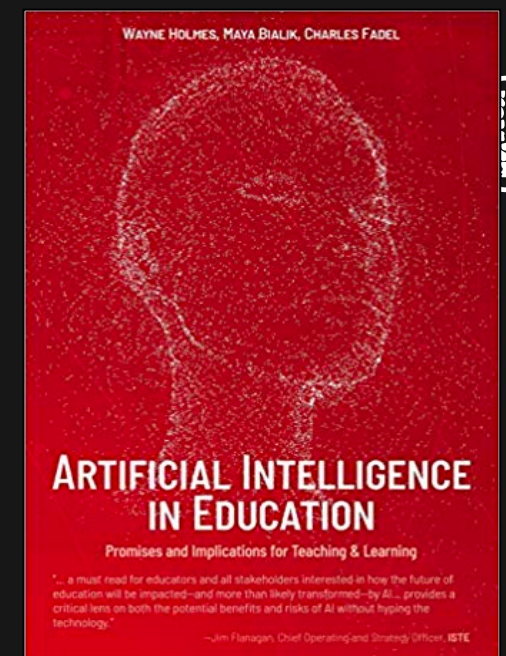
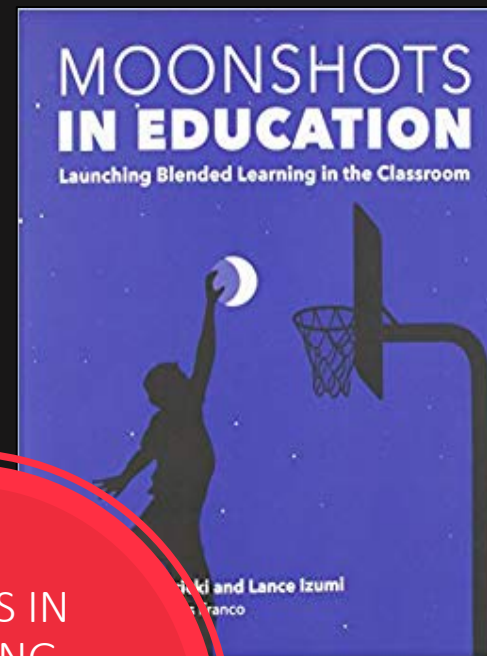
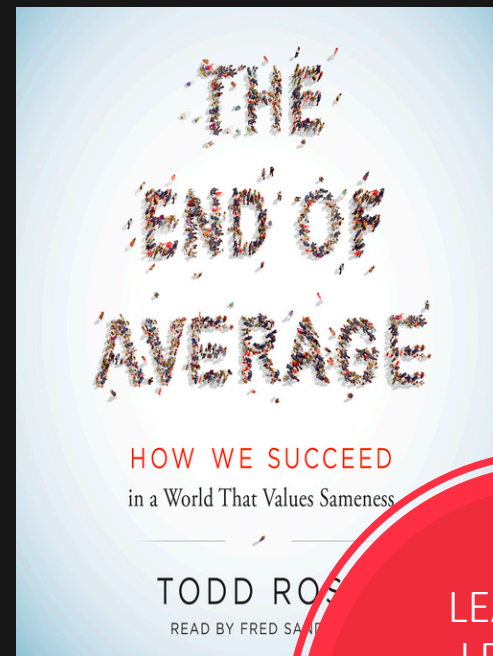
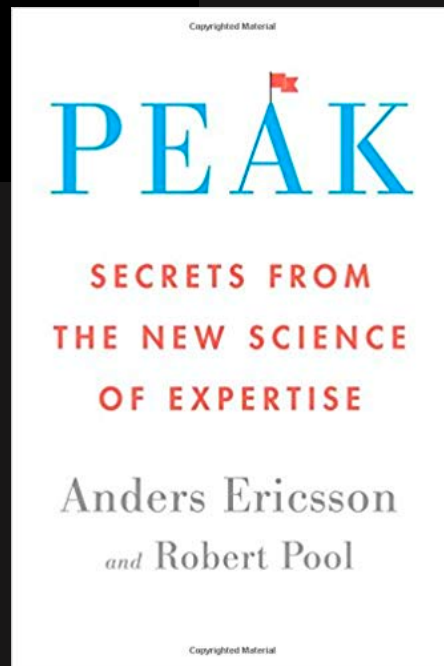


Learner 3

100% proficient
33m 40s

47% correct
29% consciously incompetent
24% unconsciously incompetent





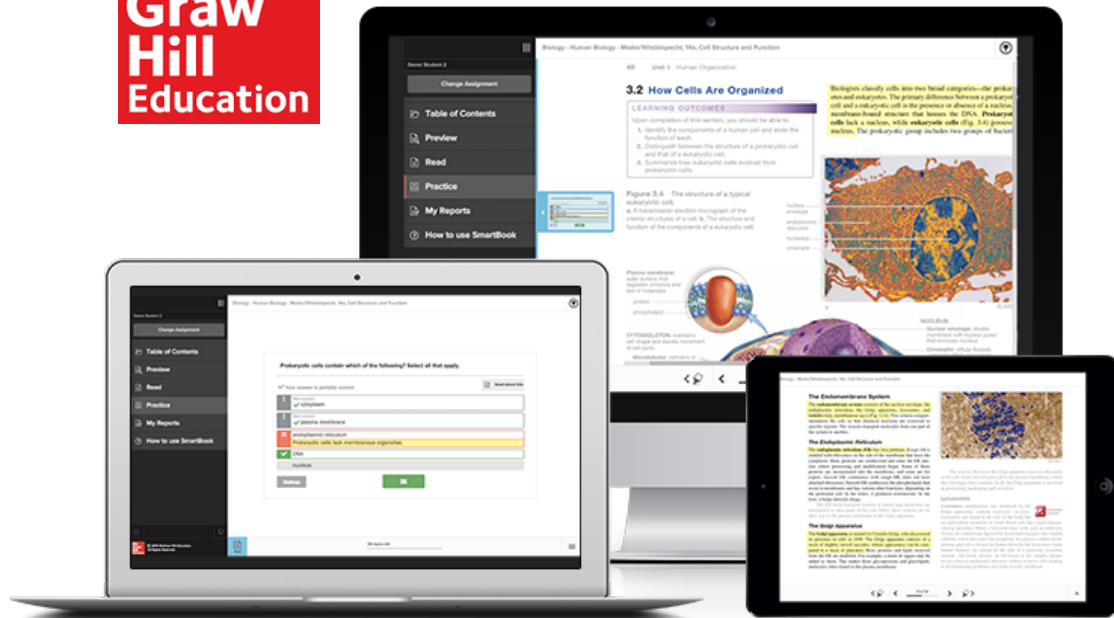
LEADERS IN
LEARNING

OUR ADVISORY
BOARD

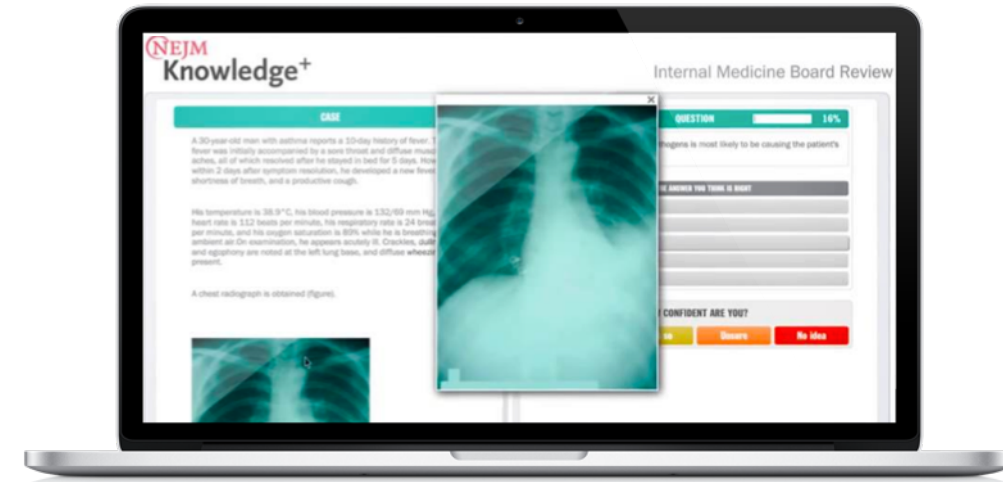
THE EVOLUTION OF ADAPTIVE LEARNING



SMARTBOOK®

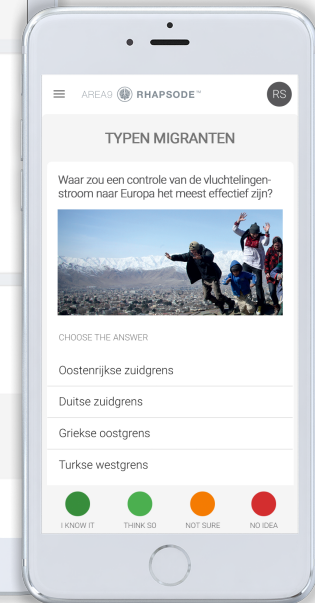
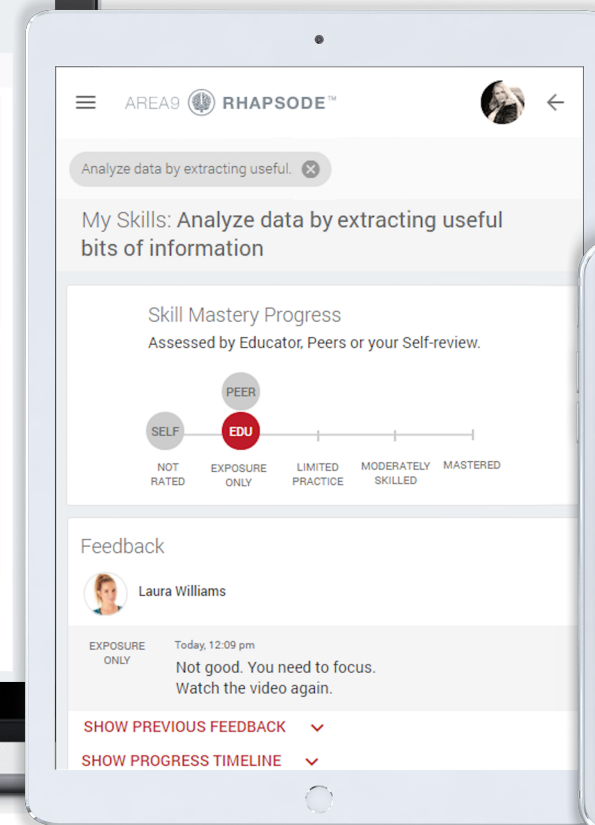
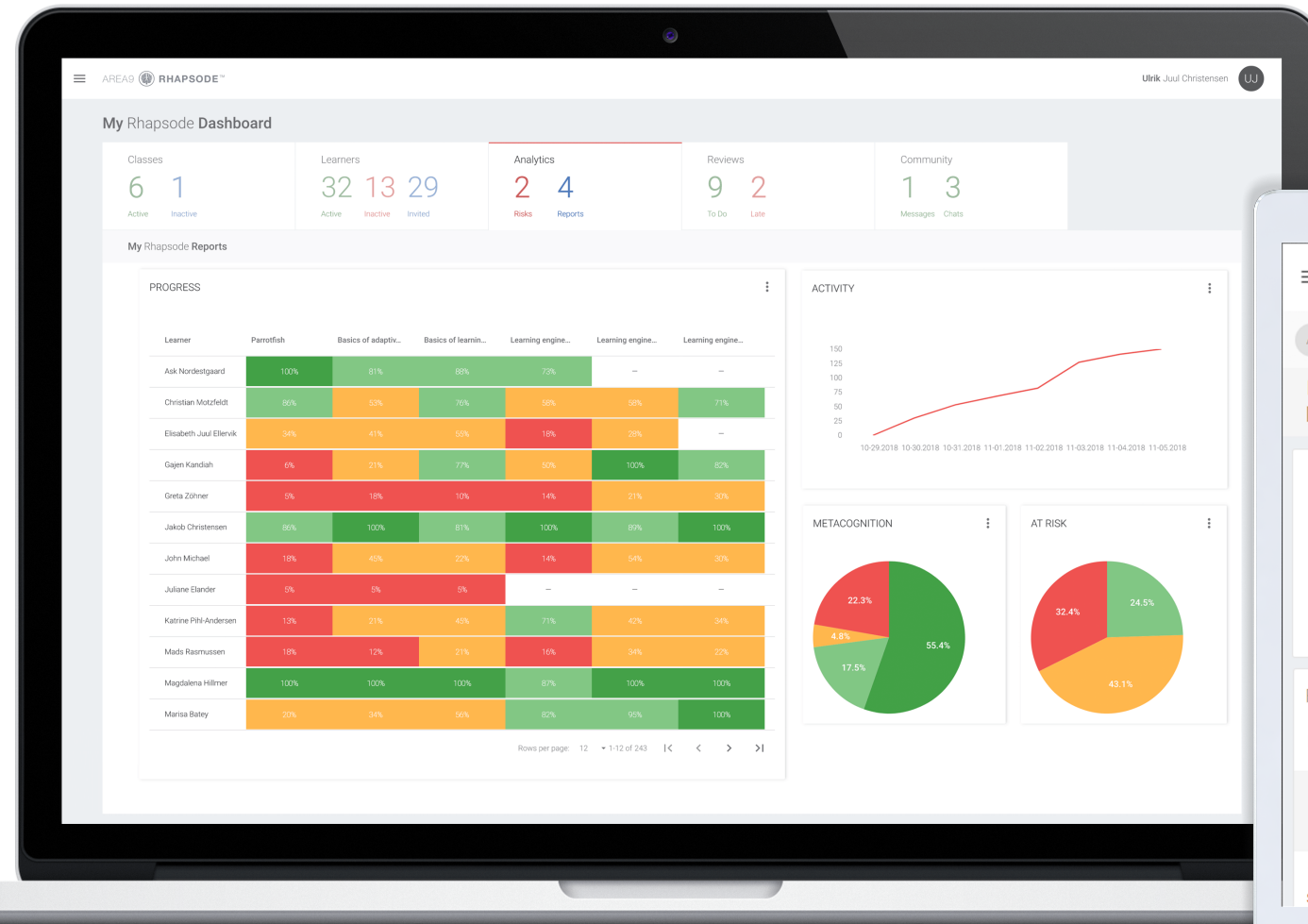


NEJM
Knowledge+

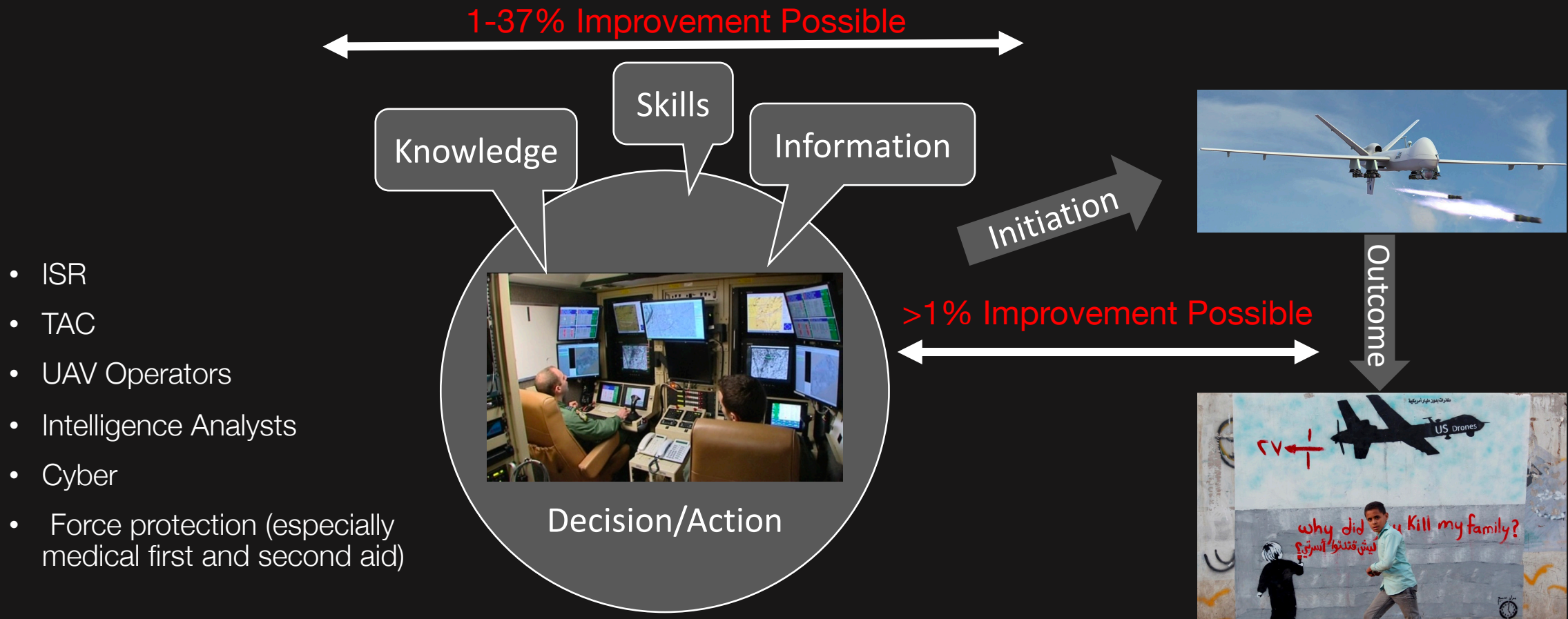


Over **20 years of research** in human factors, learning science and computer science
Has powered the learning of over **20m students** in over **2,000 products**, that have collected
billions of learning data-points





HOW AREA9 LYCEUM CAPABILITY ADDRESSES DEFENSE AND SECURITY CHALLENGES



SUMMARY & CONCLUSIONS

WHAT IS ADAPTIVE LEARNING?

- An online delivery method that **automatically adjusts to the needs of each learner.**
- Recreates at scale the **optimal teaching approach of a one-on-one personal tutor.**
- Uses proven data analytics and intelligent technologies to **adjust in real-time** to deliver an optimal experience.



SUMMARY & CONCLUSIONS

OUTCOMES

- Compared to traditional online or classroom training:
 - **Cuts training time in half**
 - Creates higher **proficiency**
- Uncovers and fixes **unconscious incompetence**
- Reduces **boredom and frustration**
- **Improves Accuracy and Consistency of Outcomes**
 - **Especially in High Cognitive Situations**

Delivers Forces
that are:

Flexible

Adaptable

Efficient





Thank you

Visit our stand #ID33



Multiple Award Winning Technology

