Driving Retention:
Using Technology to Support Learning Science

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Driving Retention

Using Technology to Support Learning Science

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Why are we here?

"People are generally going about learning in the wrong ways."

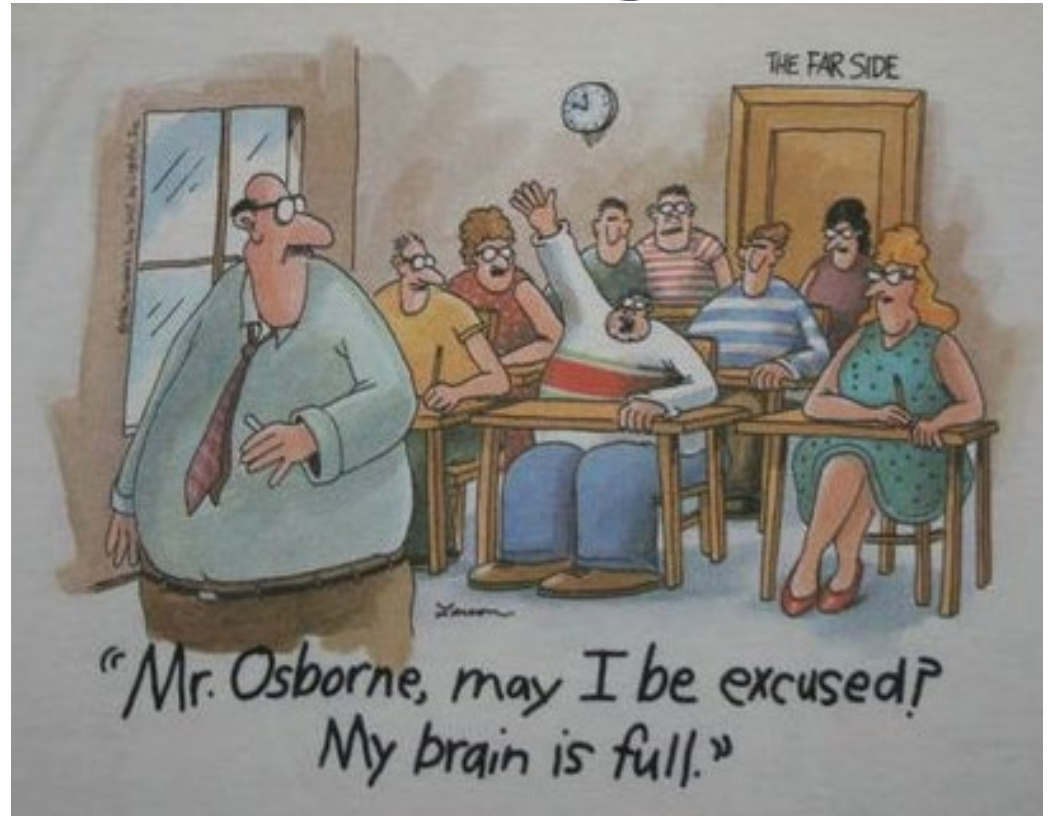Make It Stick
2014 - Brown, Roediger, McDaniel

Challenges to Training

- Low "Knowledge Check" interactivity
- Limited hand-on experience
- Dictated Pace
- Time/Scheduling commitments
- Lack of follow-up post event
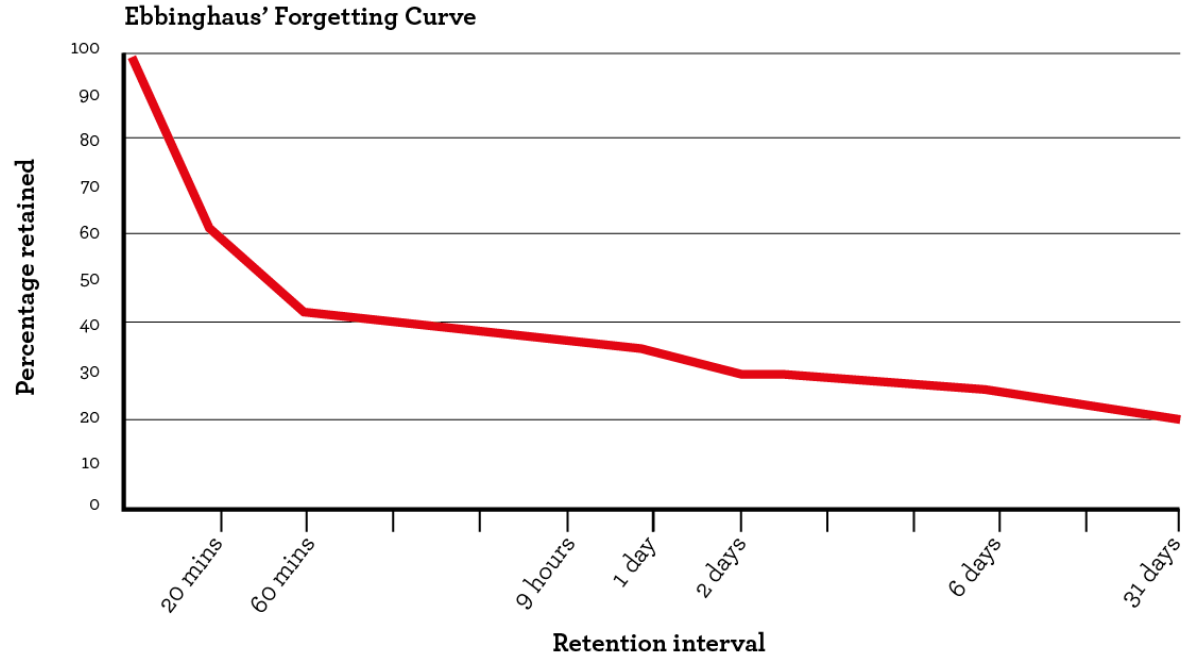- Low SME Interactivity*
- "Check the box" perception*

Massed Learning

Instructor-Led
E-Learning
= Cramming

Copyright Gary Larson

Learning Decay

Recalled content from learning is rapidly lost due to non-use.

Ebbinghaus' Forgetting Curve

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Strategies to promote transfer

- Context
- Informed Instruction
- Problem-Solution
- Experience Foundation
- Reinforcement

Strategies to promote retention

- Spaced Learning
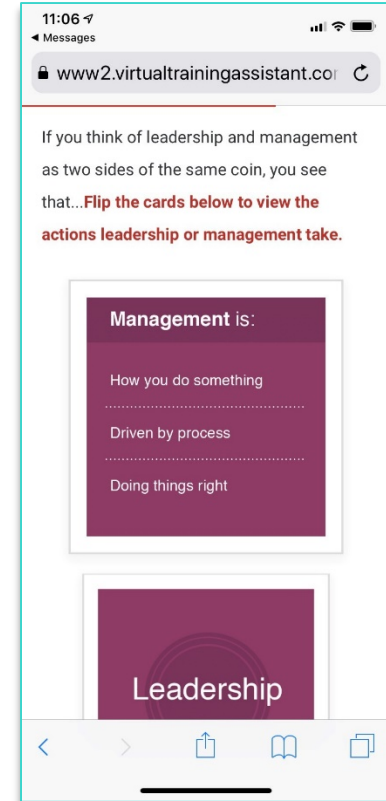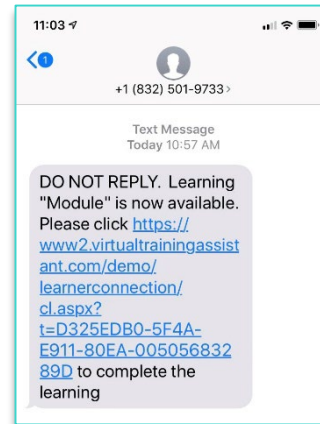- Active Recall
- Interleaving

What is Spaced Learning?

- Delivery of small, repetitive learning experiences
- Delivery separated over time
- Reinforce previous learning
- Build new information
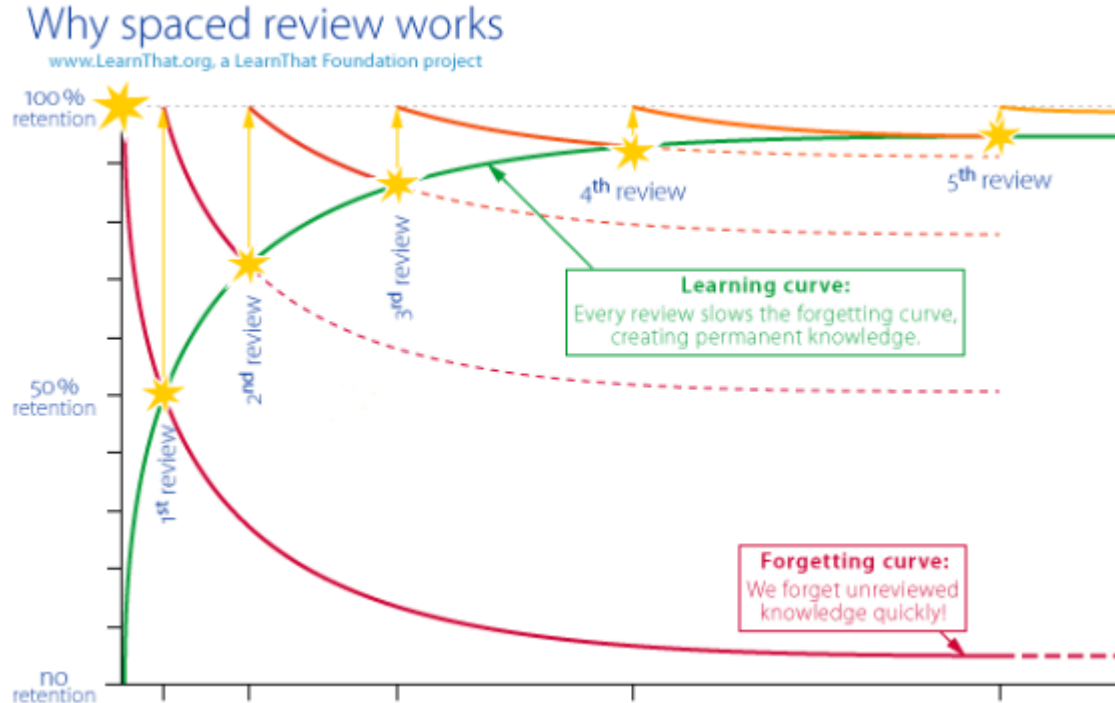- Proven to improve retention

Spaced Learning

- Spaced learning is a form of micro-learning.

- All micro-learning is not spaced learning.

Build Over Time

Repeating over time builds retainable knowledge

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Why aren't we doing it?

- Tracking

- Management

- Development Effort

- Interoperability

How can xAPI help?

- Tracking learning outside the LMS
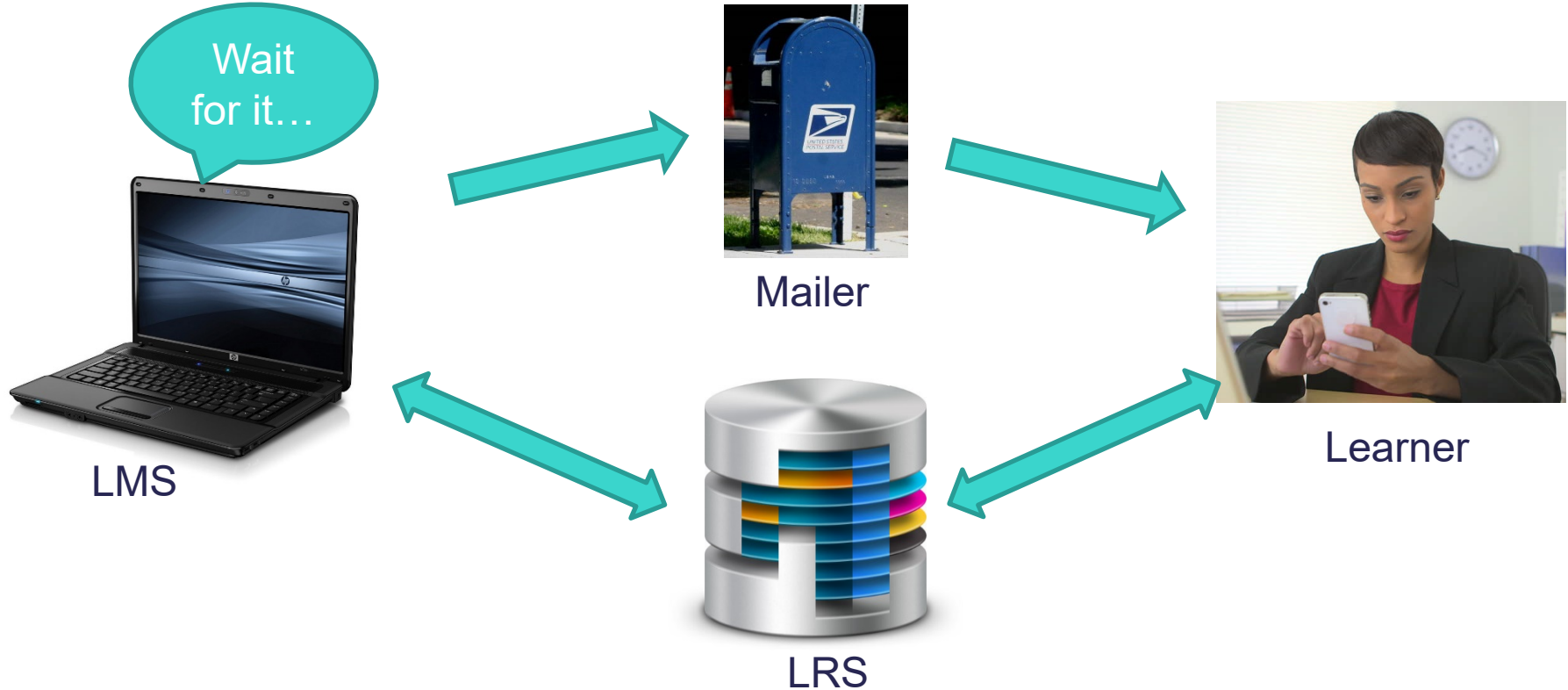- Ability to analyze learner behavior
- Adapt learning to the user

The Process

Credentialing, Delivery & Management

- What is our content? cmi5 or xAPI "package"

- How do we get our actor? embedded token

- How do we schedule frequency? LMS/LXP

- How is learning notification delivered? SMS or email

- How do we follow up? SMS/email/reporting

Delivery
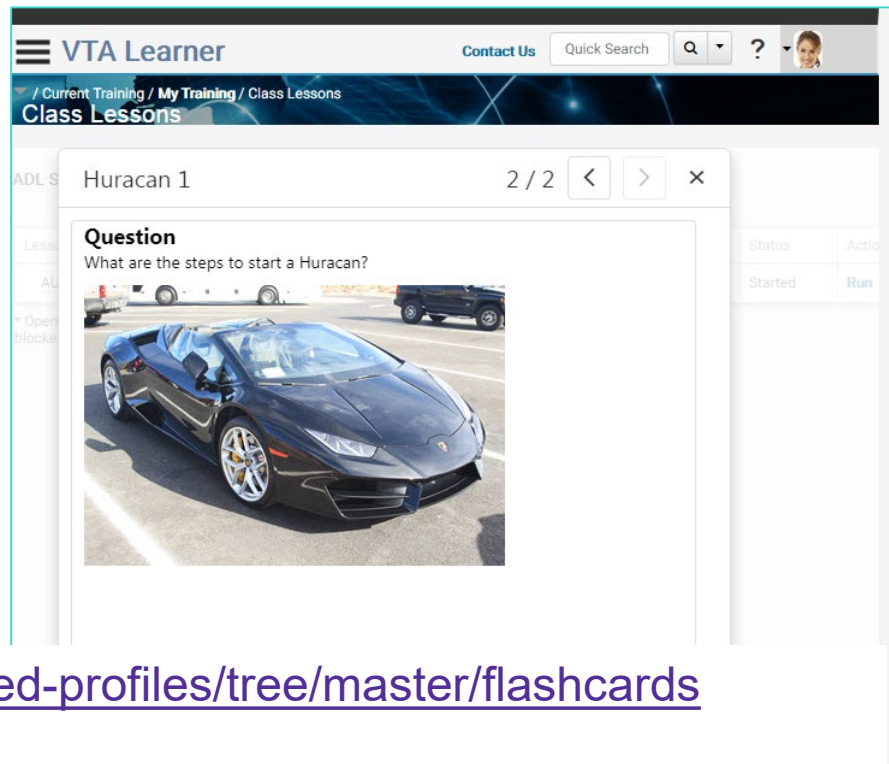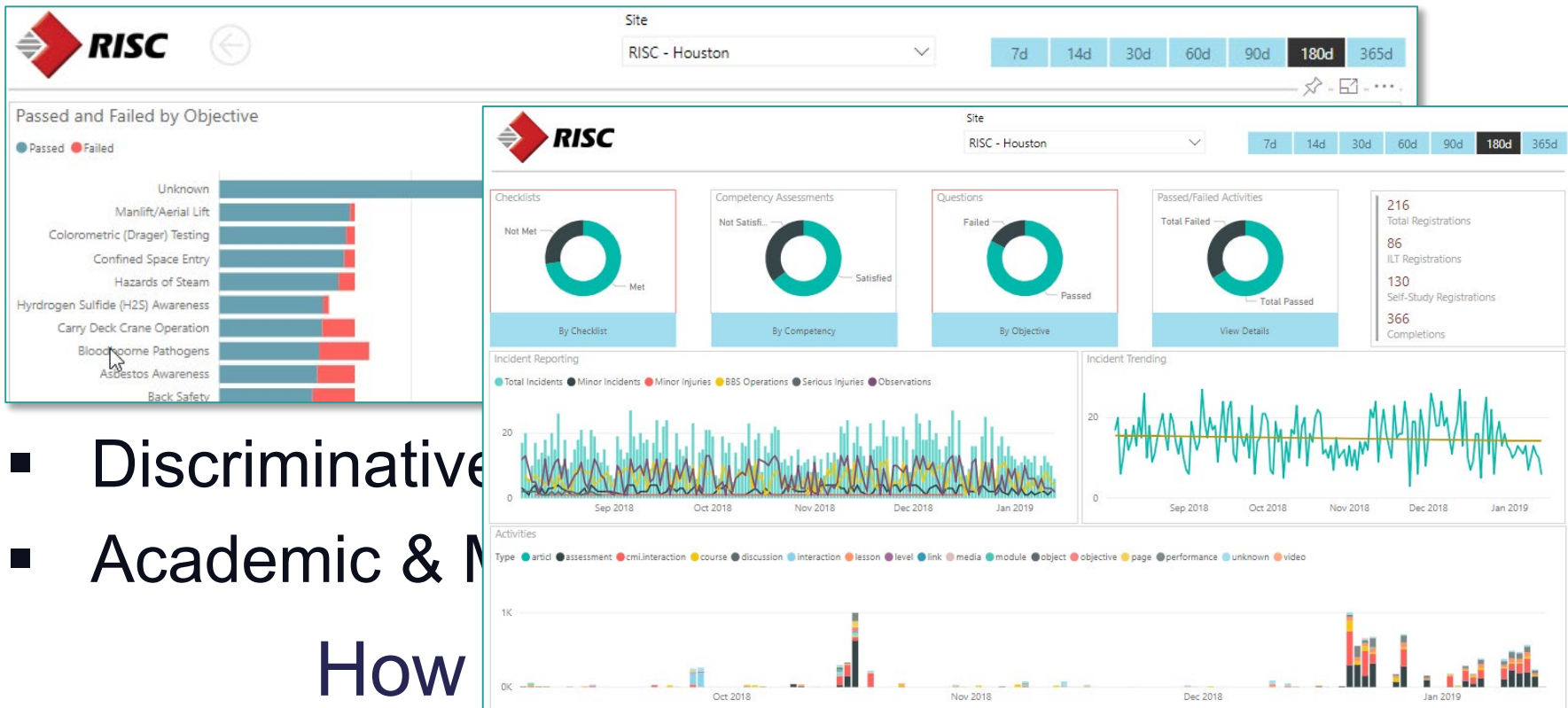

Wait for it…

LMS

Mailer

Learner

LRS

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What is Active Recall?

- Stimulate memory

- Testing effect

- Flash Cards

- xAPI Profile

https://github.com/adlnet/xapi-authored-profiles/tree/master/flashcards

What is Interleaving?

- Discriminative
- Academic & M

How

References

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- https://learningsolutionsmag.com/articles/using-xapi-to-evaluate-successful-completion-of-elearning

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Thank You!

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