

Tutorial | 16 August

Learner Focused Design: xAPI Enabled Adaptivity and Complex Skills Development

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RISC, Inc.

 **iFEST**
#ADLiFEST



Learner-Focused Design

xAPI-Enabled Adaptivity and
Complex Skills Development

Duncan Welder – RISC Inc
16 August 2022 - 1615 - 1700
Plaza I

iFEST



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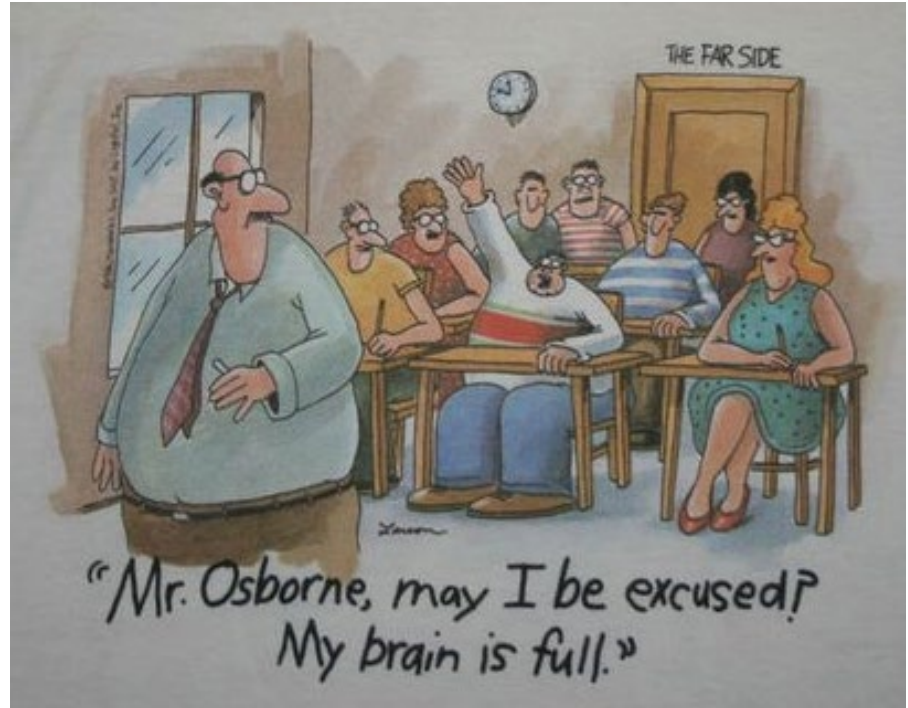


WHY ARE WE HERE?

“People are generally going about learning in the wrong ways.”

Make It Stick

2014 - Brown, Roediger, McDaniel



THINK ABOUT A TIME YOU
LEARNED A SKILL...

...at work, in school, or as a
hobby

... at any age, in any domain



SPORTS





MUSIC

iFEST



THINGS THAT CAN KILL YOU



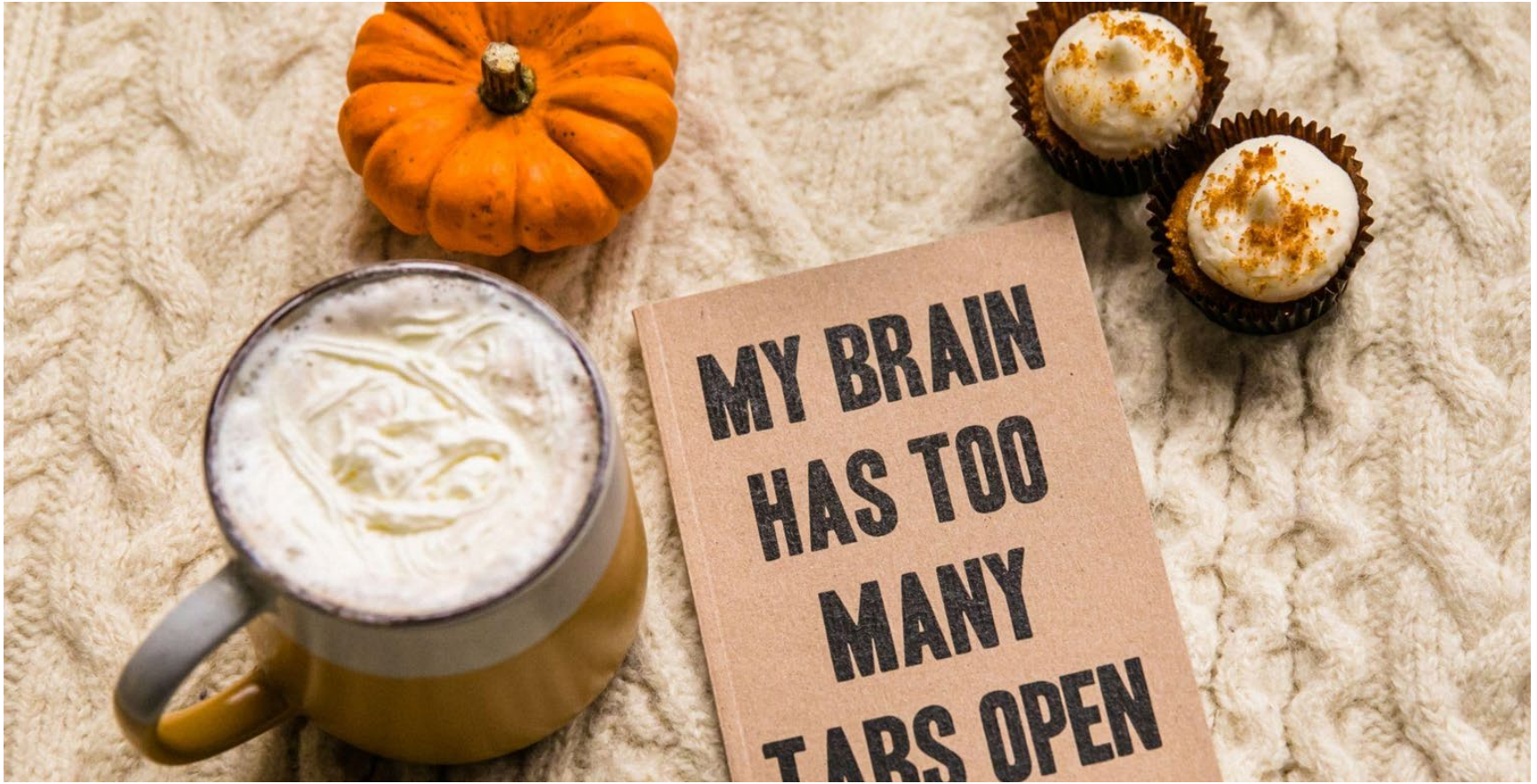
HOBBIES



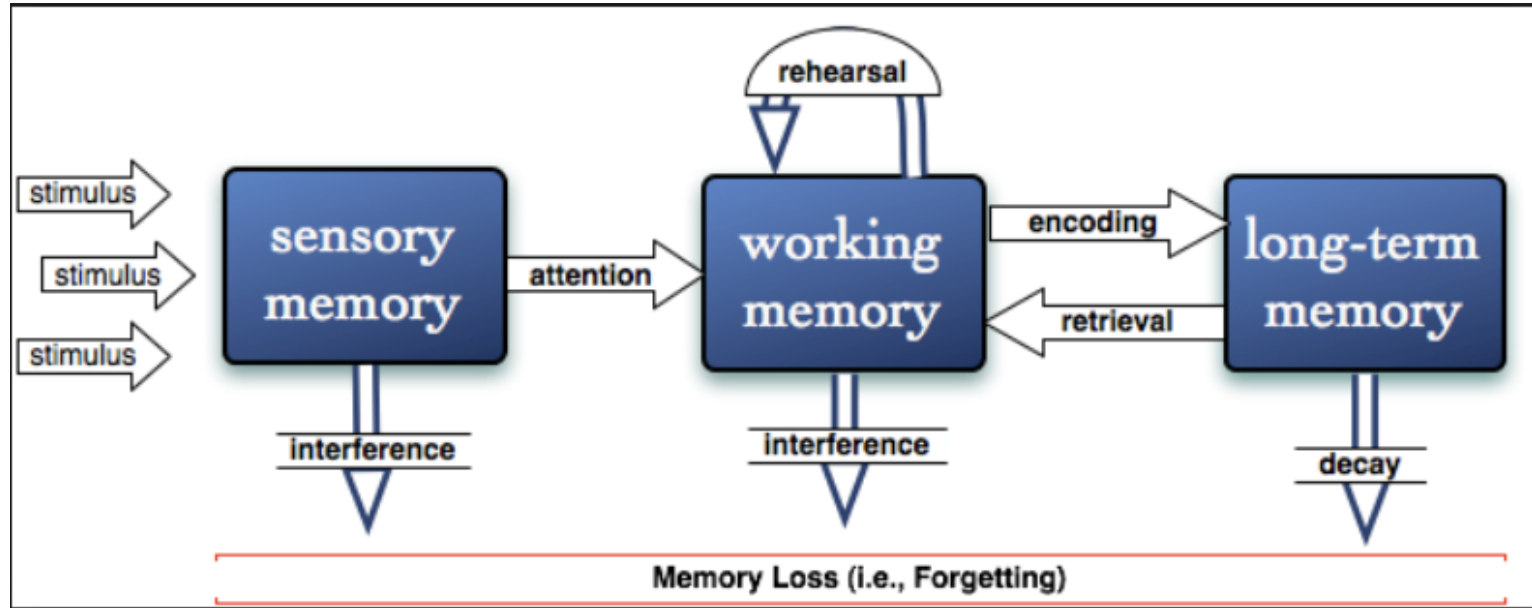


LOOK FAMILIAR?

iFEST



WHAT DOES THE BRAIN NEED TO SUPPORT RETENTION?



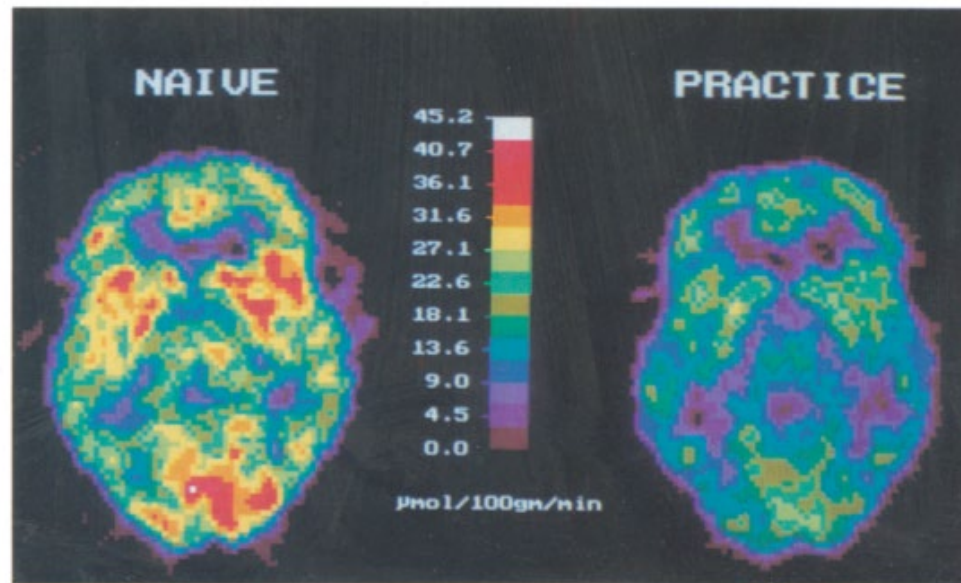


Fig. 6. PET images (41% atlas slice) of a subject in naive and practiced conditions, showing decreases in GMR.

A photograph of a natural rock archway over the ocean. The arch is made of layered, brownish rock. Two callout boxes with white backgrounds and black borders are overlaid on the image. Each box contains text in black and green. A green arrow points from the left box to the lower part of the arch, and another green arrow points from the right box to the top of the arch. The background shows a blue sea, brown hills, and a cloudy sky.

**YOUR LEARNERS'
SKILL LEVEL**

**THE DESIRED
SKILL LEVEL**



**YOUR LEARNERS'
SKILL LEVEL**

**THE DESIRED
SKILL LEVEL**

**YOUR LEARNERS'
SKILL LEVEL**

**THE DESIRED
SKILL LEVEL**

**BARRIERS IN
RESOURCING,
GEOGRAPHY, TIME,
& TECH**

So, what is xAPI?

The Experience API is a standard way of talking about our experiences, using data.

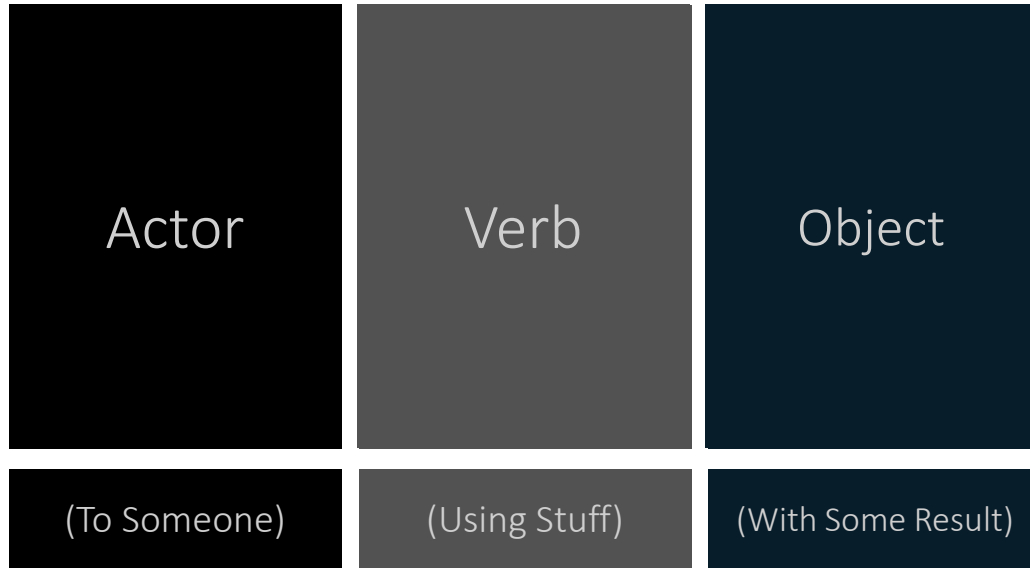
Moves beyond a web-based, single-direction model

Promotes better design and technology practices

Makes integration with other systems easier

Provides a way to gather information

So, what is an xAPI statement?



Activity Statements are "Observations"

What does xAPI push us to ask?



How do we inform better business decisions?



How do I avoid locking us into a solution?



How can I make investments more future-proof?



How can I connect a learner's activities across multiple applications?

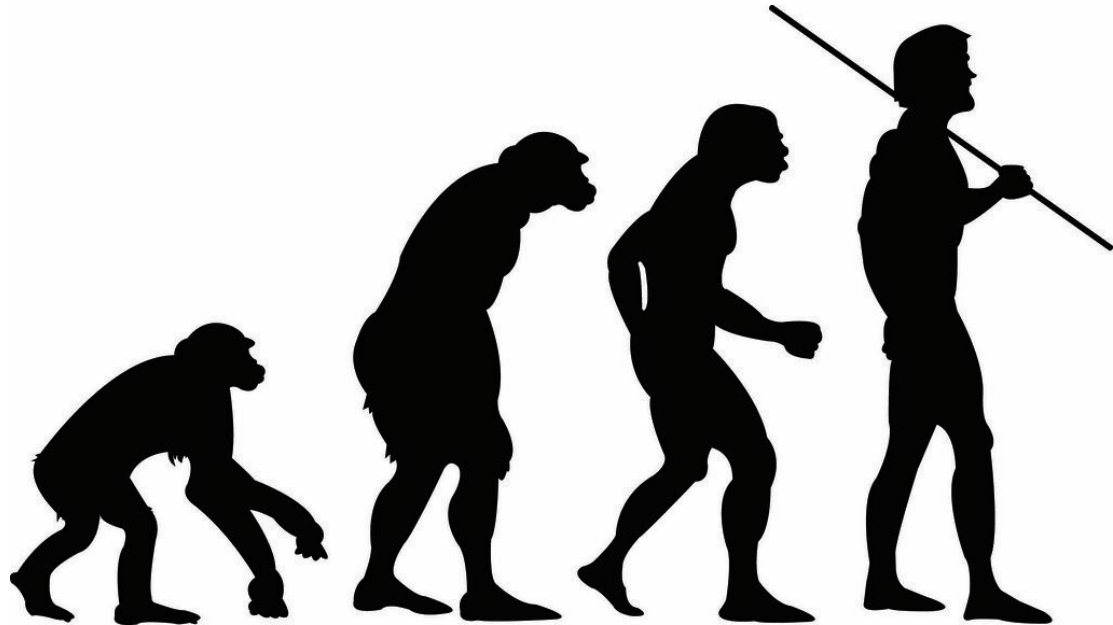


How will I know what I evaluate today is useful in the future?

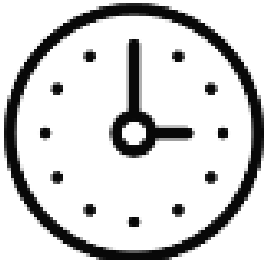
WHAT IS ADAPTIVE CONTENT?

Content that changes based on the learner's needs & preferences

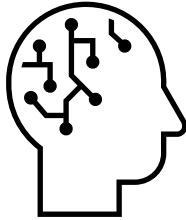
- ❖ Previous performance
- ❖ Actor demographics
- ❖ User Preferences



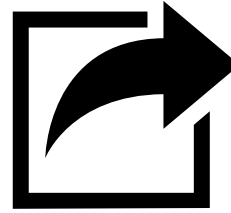
How does xAPI Help?



Eliminate irrelevant/redundant content.



Actor Profile



Sharing Data



Tracking Competence



Guided Evaluation

&

Evidence of Competence

Guided Evaluation

&

Evidence of Competence



NOW IT'S YOUR TURN

The scene

You have an employee who has missed several important deadlines in the past three months.

The assignment

Prepare for your conversation with the employee, then record a video of how you open the conversation using the guidelines you've just learned.

Participate

View All Responses

When you're ready, upload your video opening the conversation here.



Drag and drop files here or [browse](#) your files.

Share



HOW DID YOU DO?

Now that you've gotten some practice, review your work using the checklist.

Here is the video you uploaded. Review it and check the boxes for the items you did well.



- I maintained a neutral tone throughout.
- I stated the specific performance expectation.
- I stated the specific times the performance expectation was not met.
- I invited the employee to give their input.

Submit

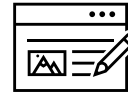
How does xAPI help?



Upload of File



Sharing feedback

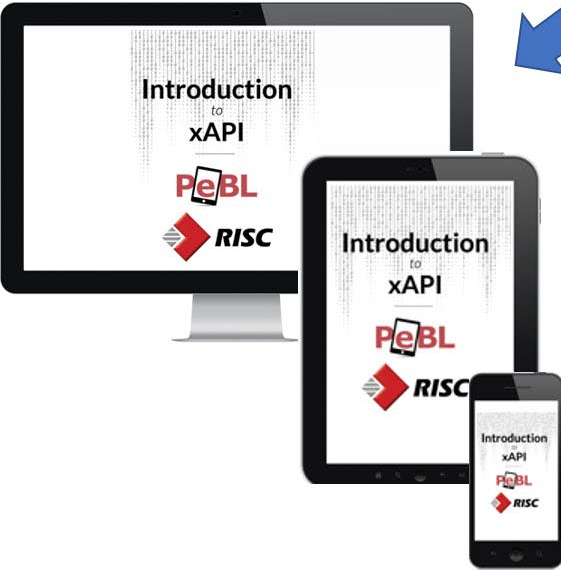
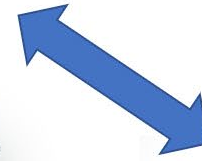
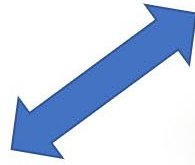


Documenting competence

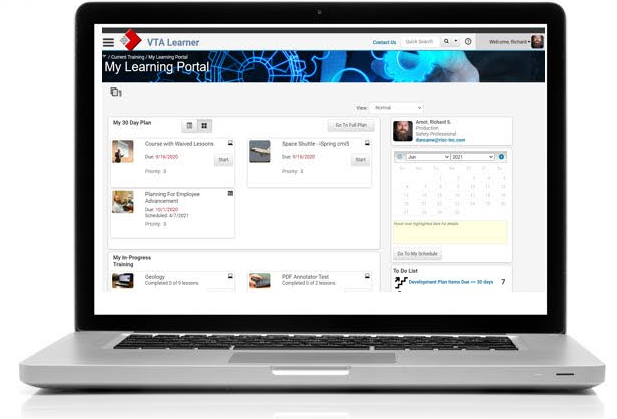


Maintaining Engagement

RISC Inc Learning Record Store



PeBLPro Authoring Tool
& Delivery Platform



RISC Inc Learning
Management System

Spaced Learning

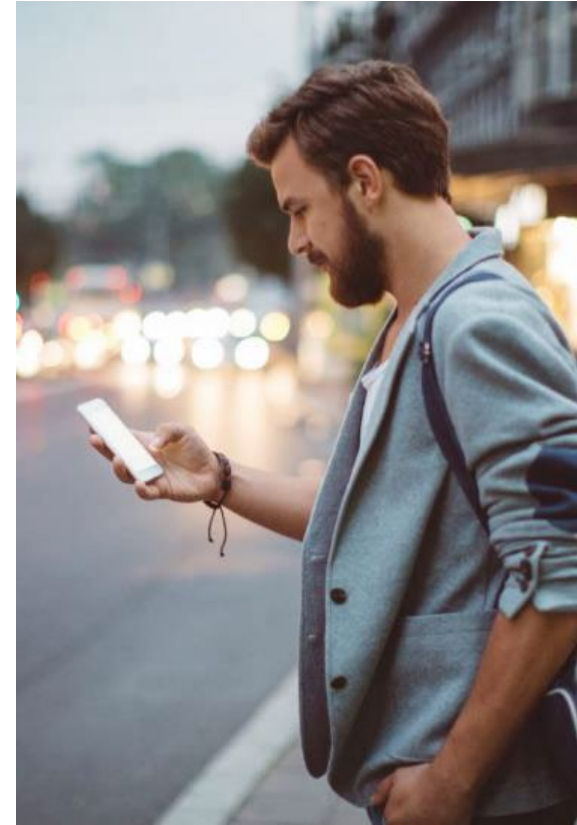
Repetitive learning experiences

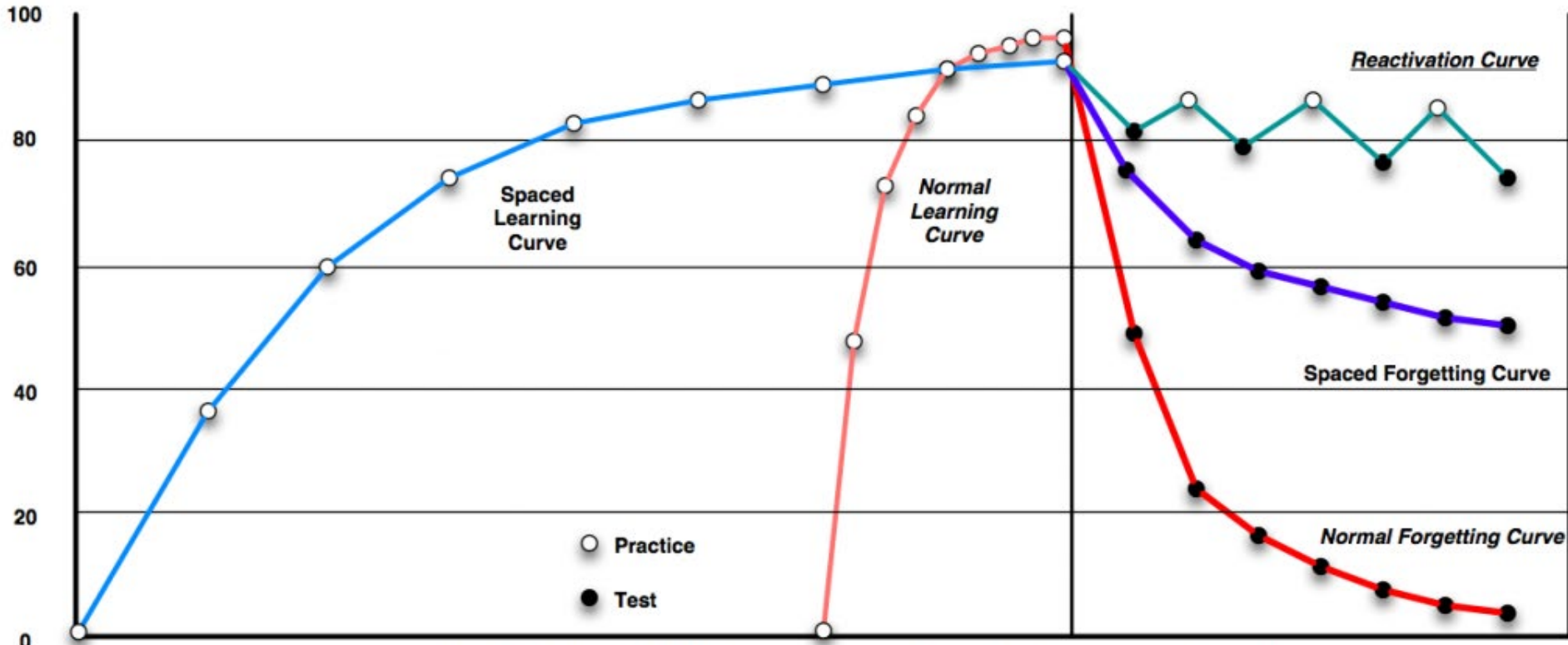
Delivery separated over time

Reinforce previous learning

Build new information

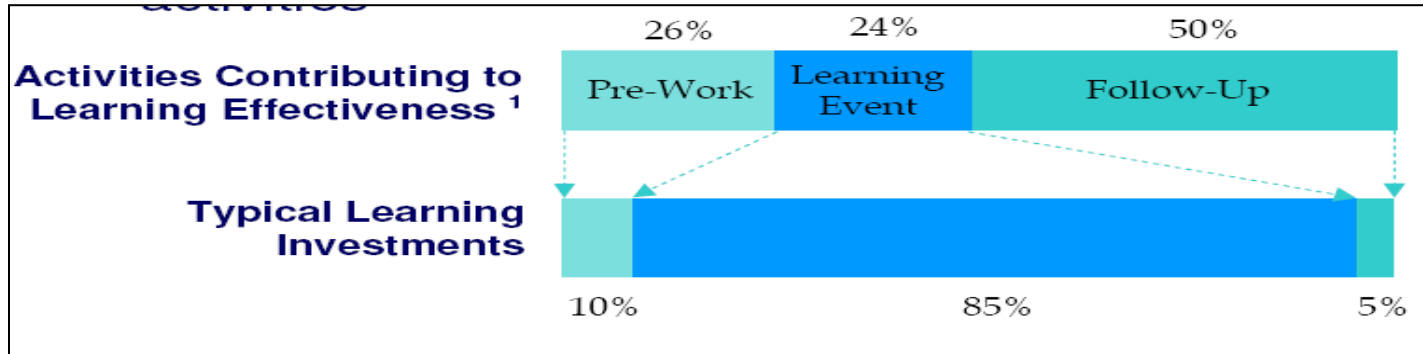
Proven to improve retention





Adapted from Thalheimer, W. (2006). *Spacing Learning Events Over Time: What the Research Says*. Work-Learning Research, Inc.

ACTIVITIES CONTRIBUTING TO LEARNING

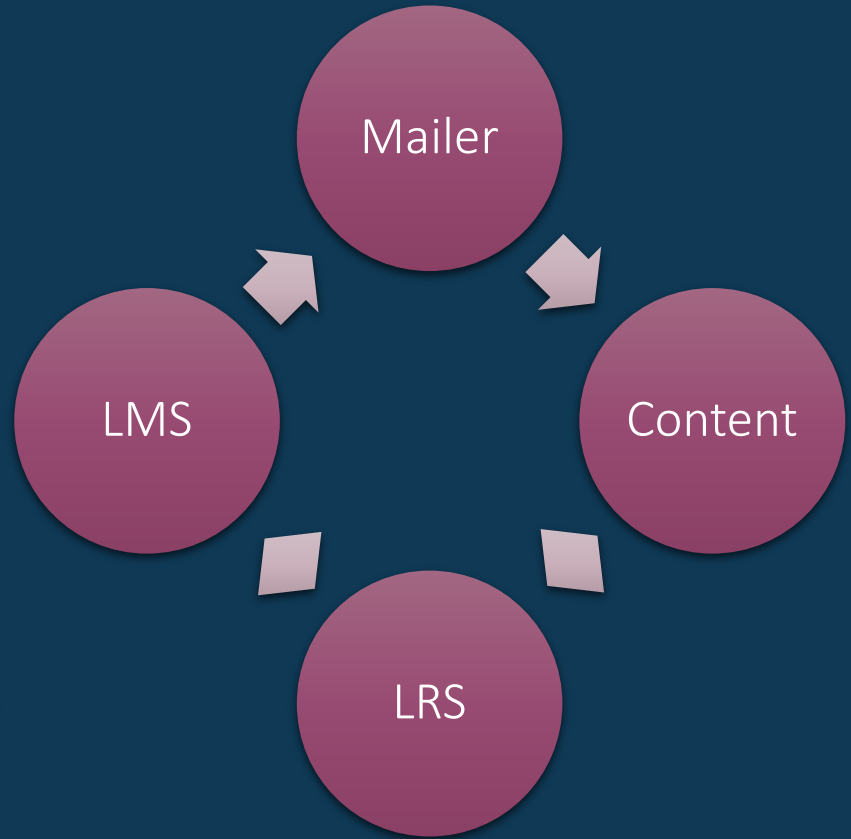
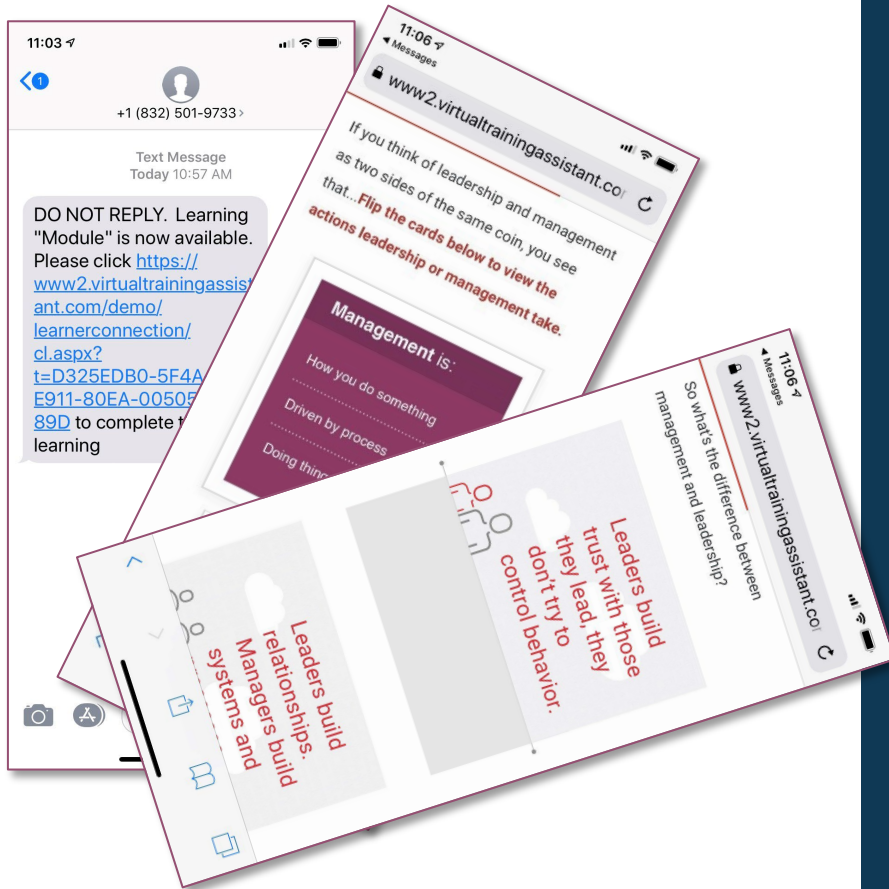


WHY AREN'T WE DOING IT?

- Tracking
- Management
- Development Effort
- Interoperability



How does xAPI help?



Other ways to build over time

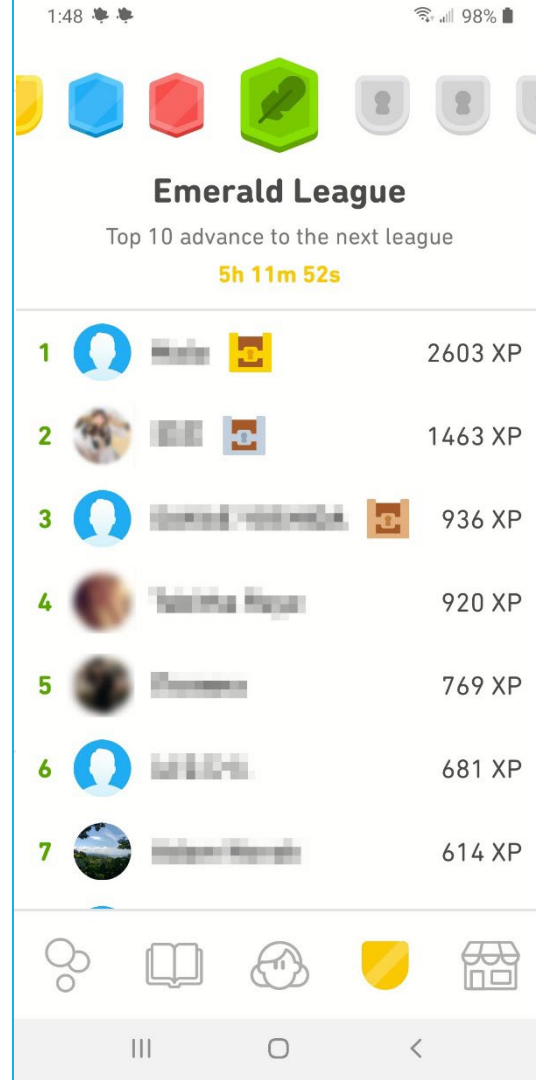
- Homework
- Email
- Threaded Discussion Groups
- Webinars
- Mobile Apps
- Surveys
- Microlearning
- Videos
- Research Request
- Peer-to-Peer Teaching
- Supervisor and/or Peer Review
- Personal development plan



DUOLINGO

- Spaced Learning
 - Recommends 2-3 lessons per day
 - “Breaks” previous completions
- Active Recall
- **Retention breaker**
Leaderboard based on completions

2600 pts is about 215 lessons in
less than 7 days



Next Steps?

- Take inventory of your tools.
- Identify opportunities & impact
- Assess culture & infrastructure
- Develop a data strategy & governance
- Evaluate & update



Never forget your learners

REFERENCES

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THANK YOU!



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