Learner Focused Design: xAPI Enabled Adaptivity and Complex Skills Development

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Learner-Focused Design

xAPI-Enabled Adaptivity and Complex Skills Development

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Plaza I
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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

“Mr. Osborne, may I be excused? My brain is full.”
THINK ABOUT A TIME YOU LEARNED A SKILL...

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

... at any age, in any domain
MUSIC

iFEST
THINGS THAT CAN KILL YOU
HOBBIES
LOOK FAMILIAR?
MY BRAIN HAS TOO MANY TABS OPEN
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.
YOUR LEARNERS' SKILL LEVEL

THE DESIRED SKILL LEVEL
YOUR LEARNERS’ SKILL LEVEL

THE DESIRED SKILL LEVEL
YOUR LEARNERS’ SKILL LEVEL

BARRIERS IN RESOURCING, GEOGRAPHY, TIME, & TECH

THE DESIRED SKILL LEVEL
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
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.

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
XAPI AND GUIDED EVALUATION?

- Uploaded Images
- Long Answer
- Instructor Graded Lessons
Spaced Learning

- Repetitive learning experiences
- Delivery separated over time
- Reinforce previous learning
- Build new information
- Proven to improve retention
ACTIVITIES CONTRIBUTING TO LEARNING

In Training Magazine’s survey, 1,200 learners stated that the value from training has three segments: 26% for Pre-Learning Value, 24% for Learning Event Value, and 50% for Post-Learning Value.
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

https://www.td.org/insights/spaced-learning-an-approach-to-minimize-the-forgetting-curve
https://risc-inc.com/spaced-learning-cmi5-xapi/
THANK YOU!

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