

Thinking Outside the Learner Performance Box with xAPI Data

Jennifer Murphy, Ph.D.

Quantum Improvements Consulting



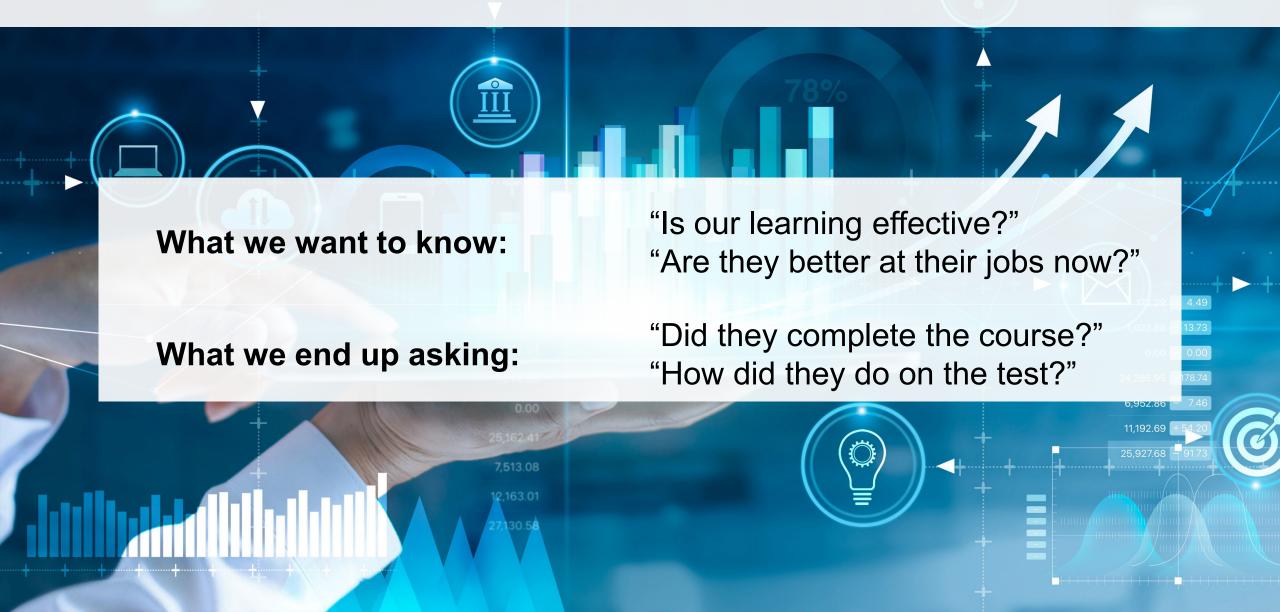


Thinking Outside the Learner Performance Box with xAPI Data

Dr. Jennifer Murphy

Quantum Improvements Consulting

What are we doing with our xAPI data?



When this doesn't work: Mobile learning

Traditional training:



I learned something



I practiced what I learned





I executed what I learned and practiced

Mobile learning:



I learned something



I forgot what I learned but that's OK because I always have my phone

"Just-in-time training"
"Performance support"
"Workflow learning"

Things we could know

Usability

"Can learners quickly and easily access the information they need?"

Relevance

"Is the content appropriate for the intended audience?"

Performance during task execution

"Can learners complete a task faster with an application than without it?"

"What is the path they take to find content?"

Performance over time

"Do learners continue to use the application?"

"How long is the average session?"



Use case: Financial literacy mobile app

Sen\$e mobile application

- Financial literacy microlearning content
- Tailored to military personnel and families
- Organized by major life stages
- Mini-games
- Financial tools
- Gamification elements
- Content reviews

What are your stakeholder's priorities?

Technical:

App uptime

User Experience:

- Usage of various features
- Usage of additional resources

Content applicability:

- Match of content to life stages
- User ratings of content
- Usage of related content

Learning:

- Responses to quiz questions
- Usage of financial tools



Constructing xAPI statements

"As part of IET, you know you'll want to learn about your Leave and Earning Statement. Locate and access information about your LES, specifically items you should look for and pay attention to."

```
"objectType":"Agent"
                                                                                                               Check Your LES
"homePage": "https://sensetest.usalearning.net/"
"name":"8f6f67f5-c307-4304-ae1f-5253264d974a"
                                                                    3. Lesson
"id":"http://adlnet.gov/expapi/verbs/experienced"
"display":{
"en-US":"experienced"
"objectType":"Activity"
id":"tag;adInet.gov,2013;expapi:0.9:activities:ofr-frpal://activity/7247ef2f-1e7e-403f-86bf-27d13bff1fab#/id/5a5e5g
"type": "http://adlnet.gov/expapi/activities/lesson"
"name":{
"en":"What to Look For"
"context":{
"contextActivities":{
"parent":[
"objectType":"Activity
id":"tag:adInet.gov,2013:expapi:0.9:activities:ofr-frpal://activity/7247ef2f-1e7e-403f-86bf-27d13bff1feb#/id/5e613
                                                                     2. Course
"type":"http://adlnet.gov/expapi/activities/module"
"name":{
"en":"What to Look for"
"grouping":[
"objectType":"Activity"
"id":"tag:adlnet.gov,2013:expapi:0.9:activities:ofr-frpal://activity/7247ef2f-1e7e-403f-86bf-27d13bff1fab"
"type": "http://adlnet.gov/expapi/activities/course"
"name":{
"en":"LES Phase III R"
"description":
"id":"tag:adlnet.gov,2013:expapi:0.9:activities:ofr-frpal://group/0447bd23-efd2-414c-b318-84bd12becf13"
"type":"http://activitystrea.ms/schema/1.0/group"
"en-US": "Initial Entry Training"
                                                         1. Topic Area
"timestamp":"2019-08-06T15:27:30.958Z"
"id":"51d9ecc5-1e9e-4c96-a675-148d60a8149c"
"version":"1.0.1"
"stored":"2019-08-06T15:47:45.951Z"
"authority":{
"objectType":"Agent"
"account":{
"homePage": "https://test.lrs.io/keys/test"
"name":"test"
```

Sen\$e Dashboard





- Executive
- √ Usage
- <> Developer
- ☼ Configuration

Sen\$e Executive Dashboard

Week Month Quarter Custom **T** Filter

Selected Date Range: 4/1/2022 to 6/30/2022

OBJECTIVE: MAKE FINANCIAL LITERACY CONTENT READILY AND EASILY AVAILABLE AND ACCESSIBLE TO SENSE APP USERS

Desired Outcome: End users can readily access basic answers to financial questions and/or find additional resources at each major life

stage Sen\$e app is available 99.95% with no unscheduled down time Satisfied Users are accessing content associated with major life events (15%) Not Satisfied ▶ 60% of app reviews are 4 (of 5) star or better Satisfied ▶ End users have accessed additional resources (at least 30% of users) ? Not Satisfied ? No Data Desired Outcome: End users utilize the app's learning material ▶ End users are completing the assessments (3%) Satisfied Satisfied ▶ App number of ~downloads greater than 15 (downloads are measured by the number of new users in the period)

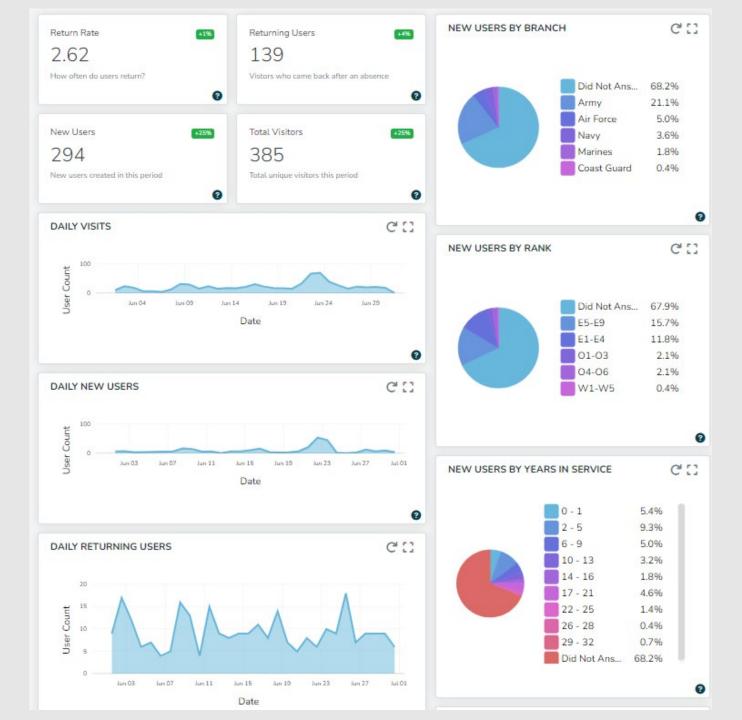
Example: Are the major life events relevant to users?

OBJECTIVE: MAKE FINANCIAL LITERACY CONTENT READILY AND EASILY AVAILABLE AND ACCESSIBLE TO SENSE APP USERS

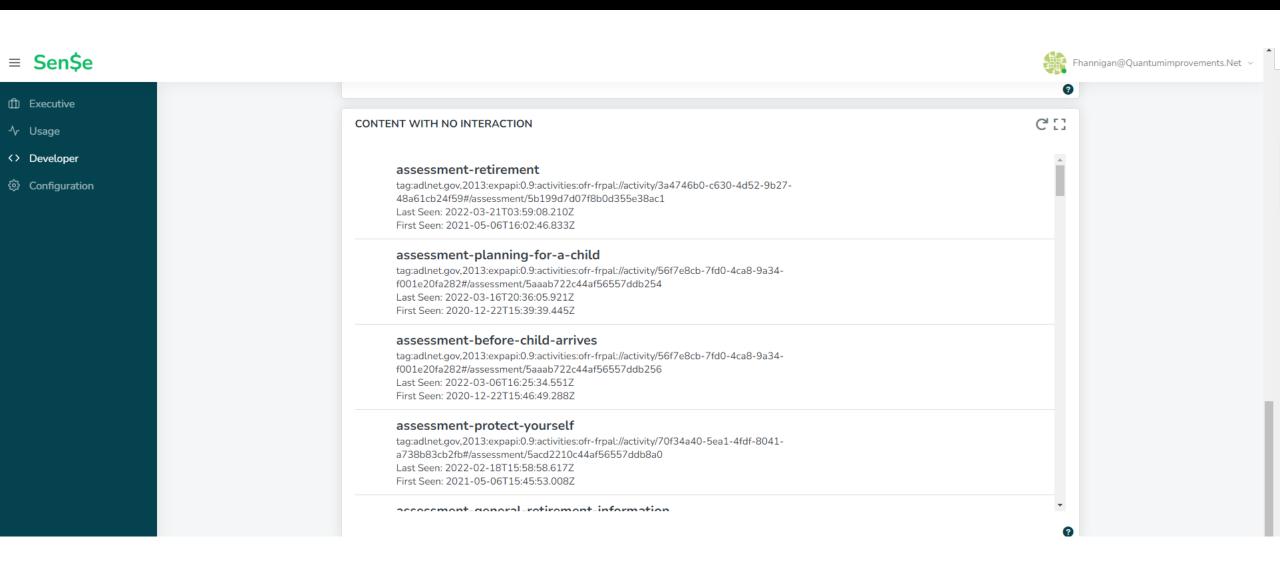
Desired Outcome: End users can readily access basic answers to financial questions and/or find additional resources at each major life stage



Usage and Demographics



Are users interacting with the content?



Contact information

Dr. Jennifer Murphy

jmurphy@quantumimprovements.net

www.quantumimprovements.net