FROM AQP TO xAPI:
A new vision for learning

KRISTIANNA FALLOWS, SUPERVISOR LEARNING DESIGN
- Threat & Error Management Class
- Adult CPR MSV
- Security Class

- Evacuations LOE
- Fire eLearning
- Briefing Practice

- A321 Door Drills
- Customers with Disabilities eLearning

- Threat & Error Management Class
- Fire MSV
- Security Class

- Threat & Error Management Class
- Extended Envelope MSV
Traditional learning tech
LMS with SCORM modules

We decide what they need
What is xAPI?

An open source Application Programming Interface about learner experiences

Learning happens everywhere... so track it!

- **Who**
  - FO12567
  - FA09812

- **Did What**
  - LOE 3
  - Video 1

- **Result**
  - Satisfactory – 4
  - Satisfactory - Complete

- **Context**
  - First Attempt
  - Watched 3x

They decide what they need
We make meaning from it
How to move toward xAPI

The extremely simple version

- Identify learning sources
- Identify data sources
- Tell a story
Identifying learning resources

Baby steps:
- Open-access content library
- Manuals
- Schoolhouse videos

Moving forward:
- Tracked real-life events (& debriefs)
- Industry videos
- Coaching conversations
Identifying data resources

Baby steps:

- Training performance data
- Existing operational data points

Moving forward:

- Identify validity & feasibility of other data sources – start with need
  - How critical is the data?
  - Is there a proven link to performance?
  - How hard is the data to get?
How can AQP help?
What is AQP?

Advanced Qualification Program

Common Definitions
- Another acronym to learn
- Alternative to traditional training regulation
- Planned time instead of programmed time
- Customized airline training

What it REALLY is
- Instructional Design (JTA, objectives)
- A way to prove equivalent learning through data
Case study
QT Decompression

Clues:
- Very low performance on Decompression MSV
- Very low performance on Decompression portion of final evaluation (EME)
- Consistently low data over extended time

Analysis:
Data people consulted with College of Inflight and Learning Design

Solution:
New train-to-proficiency lab (TTP) that accounts for crew-based training with just-in-time feedback & repeated practice
Decompression MSV to TTP

Statistically significant positive change!

Decompression Pass Rates

- **Crew**
  - Pre TTP: 69%
  - Post TTP: 78%

- **Individual**
  - Pre TTP: 77%
  - Post TTP: 85%
Case study 2
QT Planned Evacuations

Clue:
Down-trending performance on Cabin Prep portion of final evaluation

Analysis:
- Task level data didn’t offer clues as to “why”
- High frequency of terms like “hot mess” in colloquial feedback
- e-Learning didn’t clarify the confusing

Solution:
Replaced e-Learning with interactive study guide and job aid
Case Study 2

Wee! Another statistically significant positive change!

Cabin Prep Pass Rates

<table>
<thead>
<tr>
<th></th>
<th>Pre-Change</th>
<th>Post-Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% first attempt</td>
<td>54% 146</td>
<td>66% 103</td>
</tr>
</tbody>
</table>

Errors due to Inflight Evacuation Procedures Handbook

<table>
<thead>
<tr>
<th></th>
<th>Pre-Change</th>
<th>Post-Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>% comments</td>
<td>52%</td>
<td>22%</td>
</tr>
</tbody>
</table>
What more could we do in the future with xAPI?
Problem: An increase in blown slides

Analysis:

- Training curriculum & performance hasn’t changed
- Safety reports identify few common variables
- A significant percentage of CMs involved completed training video too quickly

Solution: Set minimum required time on training video & validate with quiz
Telling the story

- Learning Records System (LRS)
- Data analysts
- Dashboards
Key takeaway: Learning tech follows lifestyle tech