



EDITA

Mikä on xAPI ja miten se hyödyttää eri osapuolia?

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“To make sure that all just works”

ADL Director Sae Schatz



<https://nordicadl.com/archive/adl-conference-2017/gallery/>



The Advanced Distributed Learning Initiative



Building the Future Learning Ecosystem

R&D for Distributed
Learning Modernization

informs

Distributed Learning Policy
and Technical Guidelines

guides

Implementation Support
and Cross-Coordination

TLA, xAPI ja LRS – avaimet analytiikan onnelaan?





Total Learning Architecture

[Home](#) / Total Learning Architecture



Total Learning Architecture (TLA)

The Total Learning Architecture (TLA) is an evolving set of standardized Web service specifications to responsibly share essential learning data between applications using common API specifications and data models. Just as it is vital that our health records be responsibly shared between providers of healthcare to improve health outcomes, it is important to enable the responsible sharing of learning data between providers of education and training to improve learning outcomes.

The Experience API (xAPI) is the first of these standardized Web services focused on sharing data about learning experiences. Future services will focus on other data about competencies, learner profiles, and learning content.



Experience
Tracking



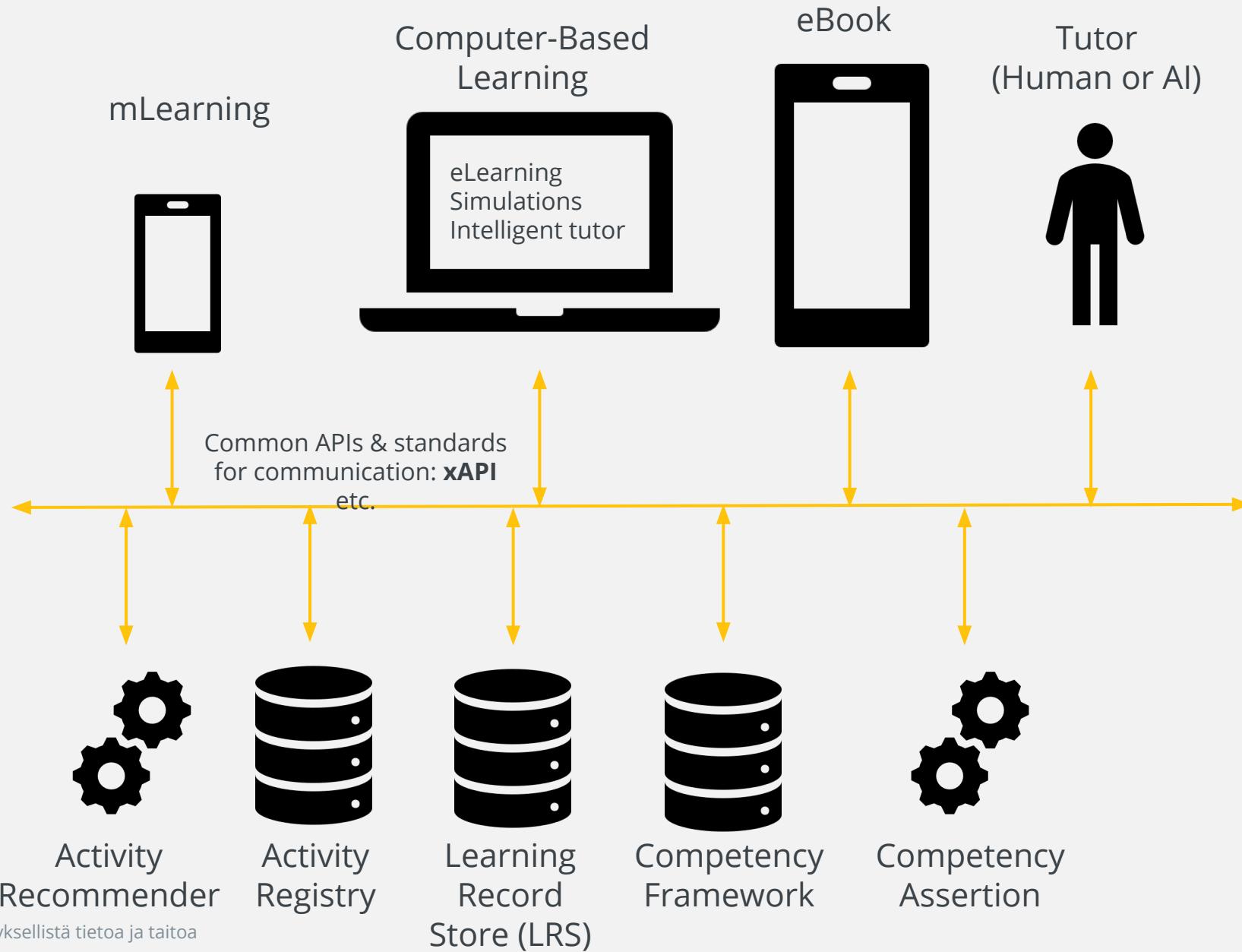
Competencies



Learner
Profiles



Learning
Content



```
{  
  "actor": {  
    "name": "Sally Glider",  
    "mbox": "mailto:sally@example.com"  
  },  
  "verb": {  
    "id": "http://adlnet.gov/expapi/verbs/experienced",  
    "display": {"en-US": "experienced"}  
  },  
  "object": {  
    "id": "http://example.com/activities/solo-hang-gliding",  
    "definition": {  
      "type": "http://adlnet.gov/expapi/activities/course",  
      "name": {"en-US": "Solo Hang Gliding"}  
    }  
  },  
  "context": {  
    "instructor": {  
      "name": "Irene Instructor",  
      "mbox": "mailto:irene@example.com"  
    },  
    "contextActivities": {  
      "parent": {"id": "http://example.com/activities/hang-gliding-class-a"},  
      "grouping": {"id": "http://example.com/activities/hang-gliding-school"}  
    }  
  }  
}
```

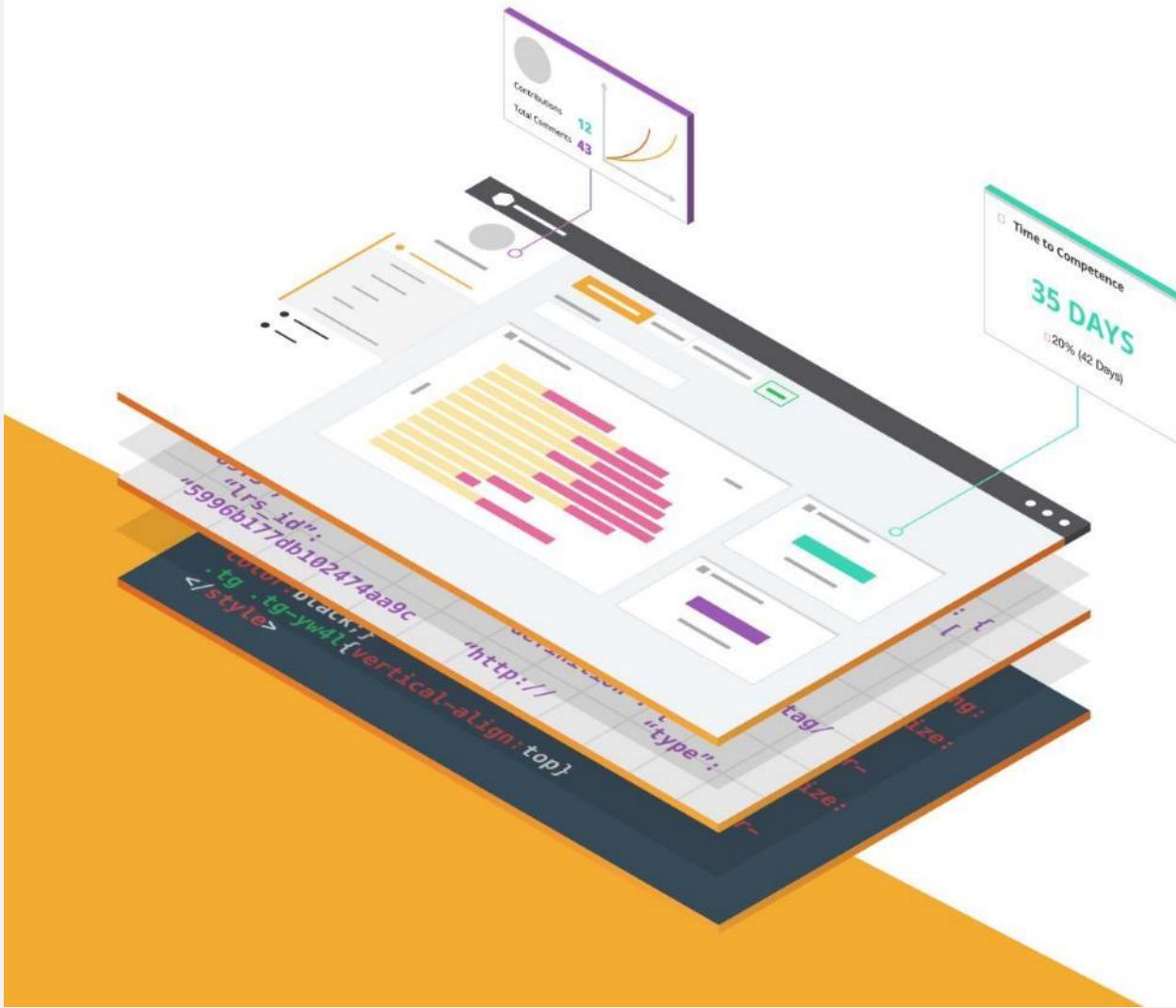
Esimerkki xAPI-viestistä

Sally suoritti riippuliitokurssin,
jonka opettajana oli Irene.
Kurssi oli osa riippuliidon
oppimiskokonaisuutta
Riippuliitokoulussa.

Completions	•	•
Timings	•	•
Pass / Fails	•	•
Single Scores	•	•
Serious Games		•
Simulations		•
Informal Learning		•
Interactive Learning		•
Adaptive Learning		•
Blended Learning		•
Long-Term Learning		•
Team-Based Learning		•

The Key Elements of a Complete xAPI solution

- A set of learning interventions or activities, which may or may not be bundled partially or completely into an LMS
- A set of goals and learning outcomes associated with them, such as [Competencies and Learning Plans](#) provided by Moodle and other LMS
- A layer of xAPI statements.
- A Learning Record Store, LRS. An Open Source LRS available is [Learning Locker](#).
- A Learning Analytics System, Platform, or Dashboard. Most LMS, including Moodle, offer several Analytics solutions. There are also external Analytics tools that plug to LRS via xAPI.
- Finally, an xAPI bridge that turns behavioral outcomes from the learning intervention into LRS records using outcome (or Competency) benchmarks for the Analytics. Some LMS handle this internally, as Moodle does with the [Logstore xAPI plugin \(Moodle 2.8, 2.9, 3.0\)](#).
- Make sure they all work with a compatible xAPI specification. The latest version is [xAPI 1.0.3](#).



Make Learning Measurable with Learning Locker®

5.0 ★★★★★ [Read Reviews](#)

Learning happens everywhere. Learning Locker® helps organizations to reconcile experience data from many systems into one, presenting a seamless source of analysis to make learning measurable.

Dashboard

[Home](#) > [Reports](#) > [Dashboard](#)

Actions ▾

 30 Day Summary

SEPTEMBER 10, 2018 - OCTOBER 9, 2018 ▾

**2149**
Agents[MORE](#)**17520**
All Activities[MORE](#)**186708**
Statements[MORE](#)**122**
Verbs[MORE](#)**794**
Group Level Activities[MORE](#)**892**
Parent Level Activities[MORE](#)**8**
Users[MORE](#)**16**
Triggers[MORE](#)

Activity Stream

▼ T⁻¹ 🖨️ ⤓ ⤔ Columns ▾
Search this page:

▲	S.No.	Timestamp	User	Verb	Activity	Result	Score	Time Spent	Response
[+]	1	October 9, 05:31:07	 Demo Admin	answered	When another player is attempting a shot, it is best to stand:	🚫 Wrong			On top of his ball
[+]	2	October 9, 05:31:07	 Demo Admin	answered	Generally sand trap rakes should be left outside of the hazard	🚫 Wrong			false
[+]	3	October 9, 05:31:07	 Demo Admin	answered	The player with the best score on previous hole tees off:	🏆 Correct			First
[+]	4	October 9, 05:31:07	 Demo Admin	answered	Which formula is used to calculate the 'course handicap'?	🚫 Wrong			Course Handicap = Handicap index number of holes * number of lost balls in last round
[+]	5	October 9, 05:31:07	 Demo Admin	answered	Golfer A has a course handicap of 6. Golfer B has a course handicap of 10. Golfer A shoots an 81. Golfer B shoots an 84. Golfer B wins the match by how many strokes?	🚫 Wrong			

Content Types

[View all](#) Games Multimedia Questions Social media



Accordion

Create vertically stacked expandable items



Agamotto

Create a sequence of images that gradually



Arithmetic Quiz

Create time-based arithmetic quizzes



Audio Recorder

Create an audio recording



Chart

Quickly generate bar and pie charts



Image Juxtaposition

Create interactive images



Image Sequencing

Place images in the correct order



Image Slider

Easily create an Image Slider



Impressive Present...

Create a slideshow with parallax effects



Interactive Video

Create videos enriched with interactions



Collage

Create a collage of multiple images



Column

Column layout for H5P Content



Course Presentation

Create a presentation with interactive slides



Dialog Cards

Create text-based turning cards



Documentation Tool

Create a form wizard with text export



Mark the Words

Create a task where users highlight words



Memory Game

Create the classic image pairing game



Multiple Choice

Create flexible multiple choice questions



Personality Quiz

Create personality quizzes



Questionnaire

Create a questionnaire to receive feedback



Drag and Drop

Create drag and drop tasks with images



Drag the Words

Create text-based drag and drop tasks



Essay

Create essay with instant feedback



Fill in the Blanks

Create a task with missing words in a text



Find Multiple Hotspots

Create many hotspots for users to find



Quiz (Question Set)

Create a sequence of various question types



Single Choice Set

Create questions with one correct answer



Speak the Words

Answer a question using your voice



Speak the Words Set

A series of questions answered by speech



Summary

Create tasks with a list of statements



Find the Hotspot

Create image hotspot for users to find



Flashcards

Create stylish and modern flashcards



Guess the Answer

Create an image with a question and answer



Iframe Embedder

Embed from a url or a set of files



Image Hotspots

Create an image with multiple info hotspots



Timeline

Create a timeline of events with multimedia



True/False Question

Create True/False questions



Twitter User Feed

Show your Twitter feed with HSP

Content Types

[View all](#)

Game



Accordion

Create vertically stacked expandable items



Agamotto

Create a sequence of images that gradually



Collage

Create a collage of multiple images



Column

Column layout for H5P Content



Drag and Drop

Create drag and drop tasks with images



Drag the Words

Create text-based drag and drop tasks



Find the Hotspot

Create image hotspot for users to find



Flashcards

Create stylish and modern flashcards

The screenshot shows the H5P website homepage. At the top, there's a navigation bar with links for 'Examples & downloads', 'Documentation', 'Goals & roadmap', 'Forum', 'Log in', and 'Create free account'. A search bar is also present. Below the navigation, a banner promotes the 'H5P Conference 2020' in Madison, Wisconsin, USA, from May 18th - 20th. A large red button labeled 'REGISTER' is visible. The main content area features a section titled 'Learn how teachers uses H5P in their teaching' with a small illustration of people at a desk.

Interactive Video xAPI Coverage

View [xAPI coverage](#)

The xAPI coverage for this content type is documented here. Click on the statement titles to see what data the xAPI statement holds.

Answered drag and drop

This statements is triggered when the user presses the "Check" button in drag and drop questions

Answered drag the words

This statements is triggered when the user presses the "Check" button in Drag the words questions

Answered fill in the blanks

This statements is triggered when the user presses the check button in fill in the blanks

Answered image hotspot question

This statements is triggered when the user clicks anything in image hotspot question

Answered mark the words

This statements is triggered when the user presses the "Check" button in mark the words questions

Answered Multichoice Question

This statements is triggered when the user presses the check button in multichoice

Answered summary

This statements is triggered when the user finds the correct statement in the last statement set

Completed interactive video

This statements is triggered when the user reaches the end of an interactive video or answers the summary task at the end of an interactive video

Completed single choice set

This statements is triggered when the user answers the last question in a single choice set



Impressive Present...

Create a slideshow with parallax effects



Interactive Video

Create videos enriched with interactions



Personality Quiz

Create personality quizzes



Questionnaire

Create a questionnaire to receive feedback



Speak the Words Set

A series of questions answered by speech



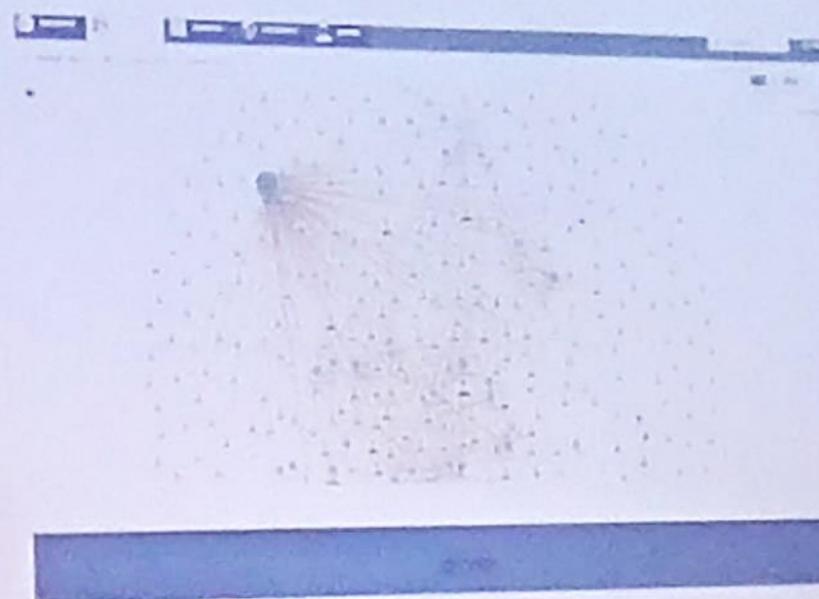
Summary

Create tasks with a list of statements

User demand

Jefferson
EDUCATION

Nevertheless, we saw high demand among exercise participants for e-learning resources, and high demand among both exercise stakeholders and learners for easy access to intuitive data based results/insight.



Editan xAPI/LRS-pilotti 2019 ->

Kriisit kärjistyvät usein yllättäen, vaikka niiden syyt olisivat ollut nähtävissä jo pitkään. Ukrainan sisäiset jännitteet puhekesivalta 2014 vakavimaksi sodan päättymisen. Jotkut kansainvälisen poliittikan tarkkailijat olivat jo valmista nimämään Ukrainan kriisin uudeksi kylmäksi sodaksi. Rinnastus on kuitenkin ongelmallinen.

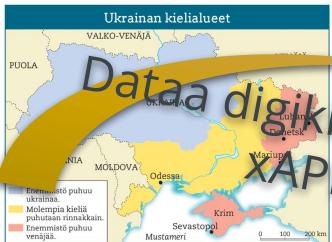
Ukrainassa ei ole kyse sellaisesta maailmanjärjestelmien välisestä konfliktista, jossa kansainvälisesti selvästi kaksi osapuolta. Maailma on nykyään moninapainen, eivätkä kaikki kriisit ole palautettavissa yhteen hallitsevaan perustavakohaan. Toisin sanoen yhden kriisin osapuolet voivat olla toisessa kriisissä liittolaisia.

Ukrainan tilanteen kiristyminen noudatti melko tavaramoista kriisimallia. Sisäisten vastakohtien kriisityminen houkuttelee kolmatta osapuolta, tässä tapauksessa Venäjää, käytämään tilaisuutta

Ukrainan kielialueet

PUOLA
VALKO-VENÄJÄ
LITTAVIA
ESTONIA
MOLDOVA
KRISSI
Krim
Sebastopol
Mustameri

Erityisen vahvan merkityksen Ukrainan kriisissä on informaatiotaso. Huomiota on herättänyt käytettyjen keinojen häikäilemättömyys. Venäjän valtaapitavilla on lähes täydellinen viestintämonopoli, ja kriisitien tiedon mahdollisuudet päästää julkisuuteen ovat minimaaliset. Venäjä on käynyt aktiivista informaatiotointaa myös lännen suuntaan. Yksi uusi keino on niin sanottujen trollien käyttö. Trollit levittävät tietoverkkoon kautta tahallisesti väärää tietoa saadakseen aikaan vastapuolella



Raportteja

Learning Locker

EASYGENERATOR DIGIKIRJAT EDITA MOODLE T DASHBOARD

Enter title Add widget

Edita Publishing Oy

Data Dashboards Visualise Statement Forwarding People Settings Help centre Powered by Learning Locker Cloud

Test 002 / Axes visualization / statement totals per person

Person	Statement
Kalle Huhtala	~550
Mari	~180
Juha	~150
Sanna	~120
Tuomas	~100
Leena	~80
Markku	~60
Liisa	~40
Ilona	~20
Elina	~10

Dataa Moodlen xAPI-plugininin kautta

Log storage: Logstore xAPI

logstore_xapi

Maintained by Ryan Smith, jerrett f., David Pescce

Logstore_xapi is a logstore plugin which emits xAPI statements (https://github.com/xAPI-vie/moodle-logstore_xapi).

292 sites 1k downloads 26 fans

Mitä halutaan tietää?

Yhteisen xAPI-kehitystyön hyötyjä ja haasteita esim. kustantajalle

- Kehityksen kärryillä!
- Markkinamahdollisuudet
- Asiakastyytyväisyys
- Yhdistetyt resurssit
- Jaettua tuotekehitystä
- Digi-infrastruktuurin hyödyt
- Mahdollisuus vaikuttaa
- Omien tuotteiden kehitystä
- Analytiikkaosaamista



- Kilpailuedut vaarassa?
- Tietosuoja-ja haasteet
- Käytännön kehityskustannukset
- Osaamis- ja resurssivaje
- "Johan meillä on raportointi"
- "Turhaa säättämistä", NIH
- Toimiiko varmasti, bugaako?
- Onko riittävästi hyötyä?
- Menee aikaa



Mitä iloa tästä voisi olla meille kaikille?

1. **Oppijalle** enemmän, nopeammin ja helpommin tietoa ja tukea
2. **Oppimisen järjestäjän** työ helpottuu ja tehostuu
3. **Sisällöntuottajalle** kansallisen digioppimisen infrastruktuurin edut
4. **Suomesta** digioppimisen “PISA-voittaja”?

Hattu kouraan:

Mietitään, mitä tietoja voidaan ja halutaan kerätä

Varmistetaan tietosuoja ja sopimusasiat

Haetaan ”pienin yhteinen jaettava”

xAPI ei ole rakettitiedettä ja osaamista on jo olemassa

Ylimääräistä työtä yhteiseksi hyväksi

Hiljaa parempi tulee



**Pieni askel organisaatiolle,
suuri harppaus
yhteiskunnalle!**



Kuva: Juhani Kyrrö 2020

Linkkejä

- <https://adlnet.gov/>
 - The ADL Initiative bridges across Defense and other Federal agencies to encourage collaboration, facilitate interoperability, and promote best practices for using distributed learning to provide the highest-quality education, training, informal learning, and just-in-time support; tailored to individual needs and delivered cost-effectively, anytime and anywhere, to increase readiness, save resources, and facilitate interorganizational collaboration.
- <https://www.tagxapi.org/>
 - TAGxAPI is an open forum for participating stakeholders to discuss all issues affecting the successful adoption of xAPI as well as an archive of the work of the xAPI community.
- <https://xapi.com/>
 - xAPI.com is dedicated to helping you understand and implement the Experience API (xAPI). Whether you want to strategize how to use xAPI in your organization or add xAPI support to your eLearning solution, this website will help you move from education to experimentation, to putting xAPI into practice.
- EduCloud Alliance –podcast Editan SoundCloudissa
 - <https://soundcloud.com/editasmartradio/educloud-alliance>