Digital Open Badge-Driven Learning

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Digital Open Badges

electronic *microcredentials* to identify and promote excellence and mastery

- Digital open badges offer novel possibilities in identifying and recognising different **competences independent of how they were acquired**.

- **Competence-based approach** requires detailed **criteria** to assess evidence.

- Badges (e.g., Mozilla Open Badges) also may refer to the student's (the earner's) participation in training or certificate completion (Rughiniş & Matei, 2013).

- Digital badges are used in learning to encourage students, to pinpoint progress and to support credentialing (McDaniel & Fanfarelli, 2016). The **attached metadata** explain the learning experience to those outside the social context (Gamrat, Bixler, & Raish, 2016) in which the competence was acquired.

- **Effective badge design is complex** by nature with different mechanics and psychological factors affecting the identification and recognition of competences and eventual earning of badges (McDaniel & Fanfarelli, 2016).

OppiminenOnline.com

From participation awards to addictive learning and competence-based assessment

"Learning Online" is a national competence development program designed for vocational teachers. 21000 competence-based badges since 2014.

• Identification and recognition of teachers' ICT competences (UNESCO's ICT-CFT) through 50 different badges and three levels of requisite skill sets: Level I – SoMe-Novice equals 10 badges/2 ECTS; Level II – SoMe-Expert 25 badges/2 ECTS; and Level III – SoMe-Developer 45 badges/5 ECTS.

• **Badges are assessed based on an application.** Requirements vary from practical skills demonstrating to demanding strategic planning. The metadata describes the principles of judgement and explain how the competence in question should be demonstrated.

• Digital open badge-driven learning process encourages students to assess their recent performance as well as achieved competences, including prior learning and competences.

"The competition between teams was nice, but the most important thing was playing. I used to play Mafia Wars for four hours a day until my husband banned it. This is how I satisfy the craving when going to bed but not feeling sleepy yet. One more. I got one more badge. It seemed to me the best quality (of education), the most addictive and interesting learning experience of my life, although not an easy achievement."

In-service teacher on skills set developer-level III
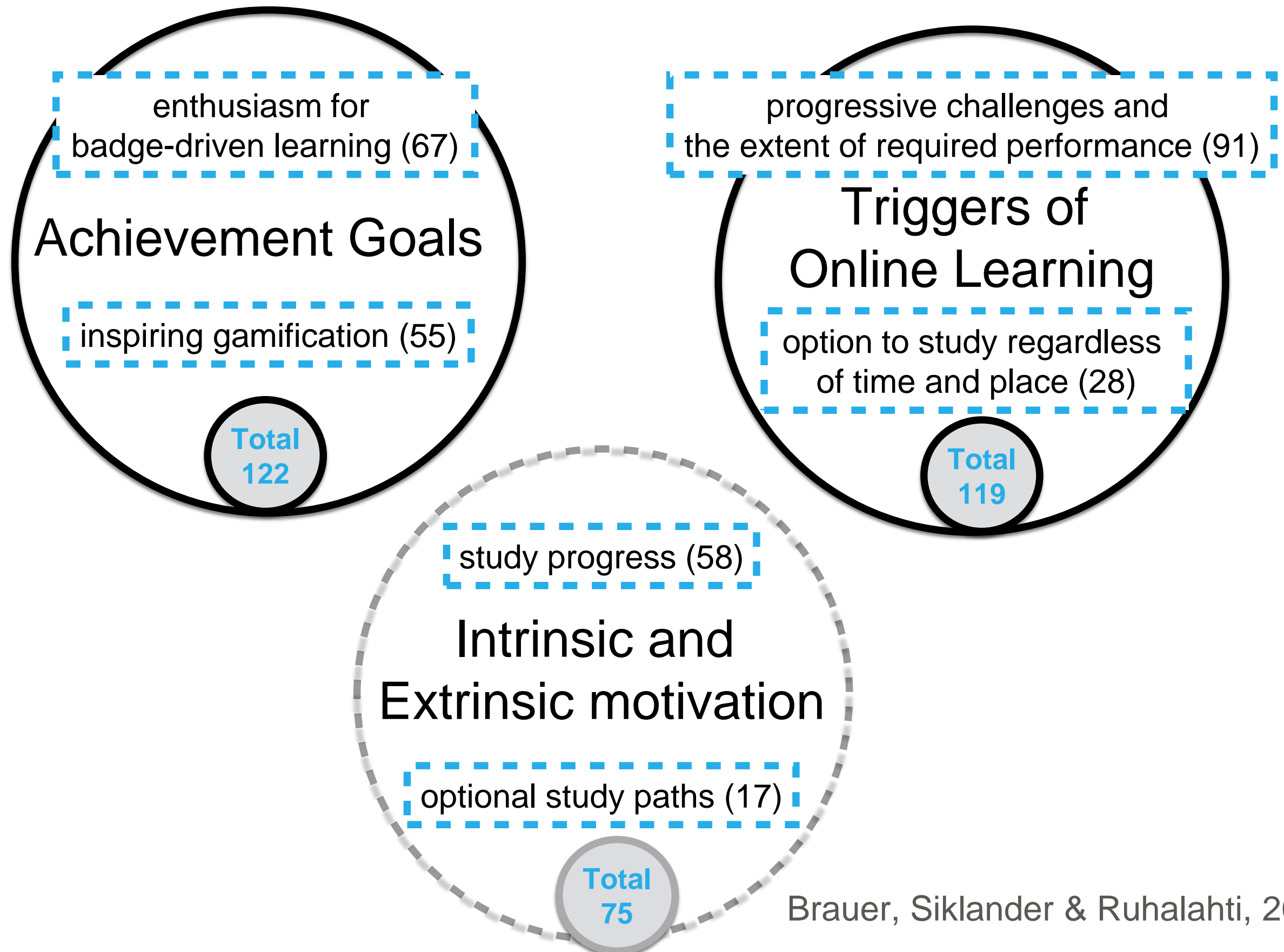
Share the Attitude!

#openrecognition

EVEN IF COMPETENCES ARE ACQUIRED DIFFERENTLY, THEY SHOULD BE ASSESSED EQUALLY

This study is the first European doctoral dissertation to address digital open badges and **digital open badge-driven learning**.

1. **What motivates students in the digital open badge-driven learning process?**

2. How do students experience **scaffolding** in badge-driven learning?

3. **What triggers learning** in the badge-driven process?

4. How do learners experience **the competence-based approach** in the badge-driven learning process of professional development?
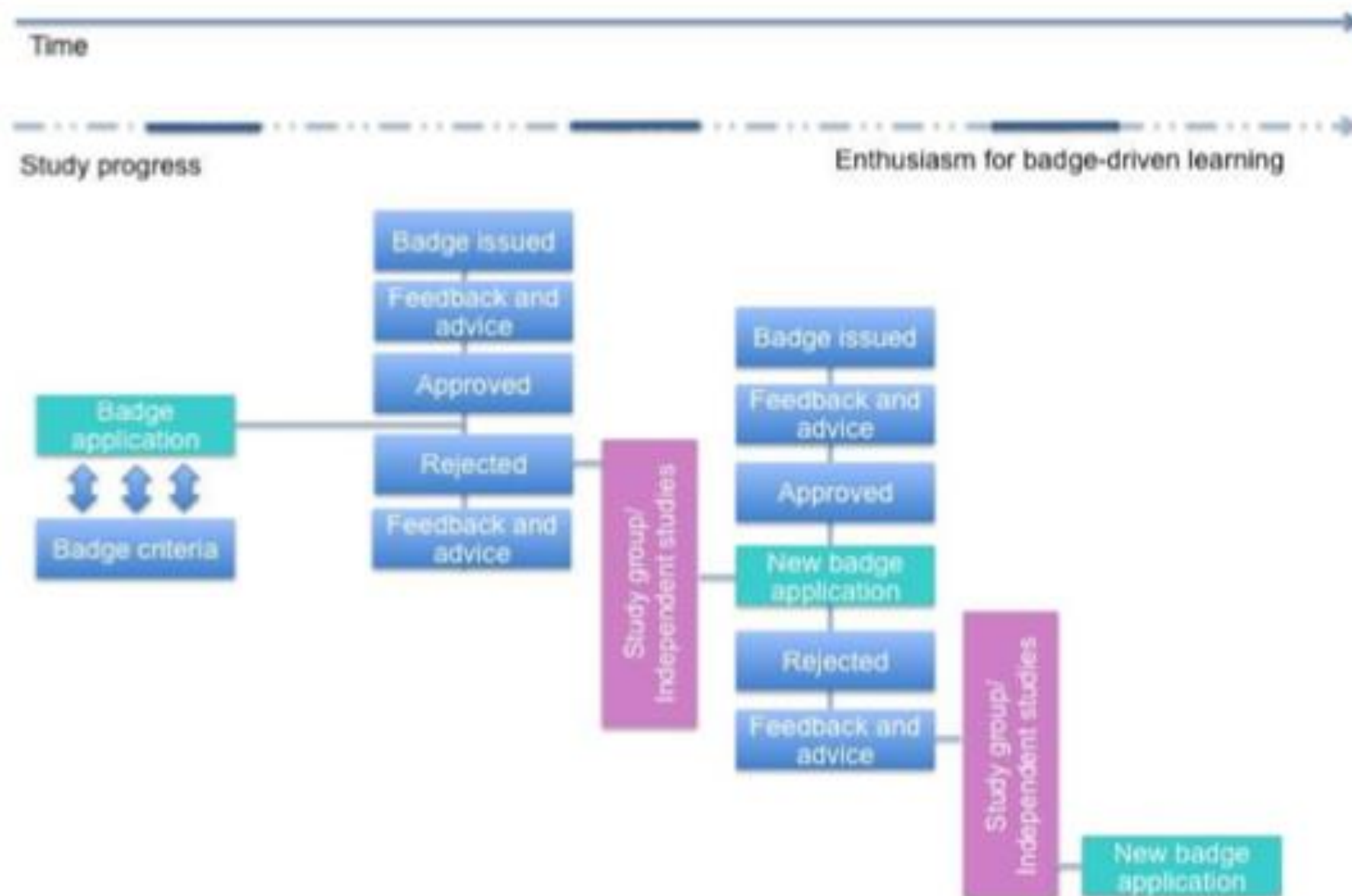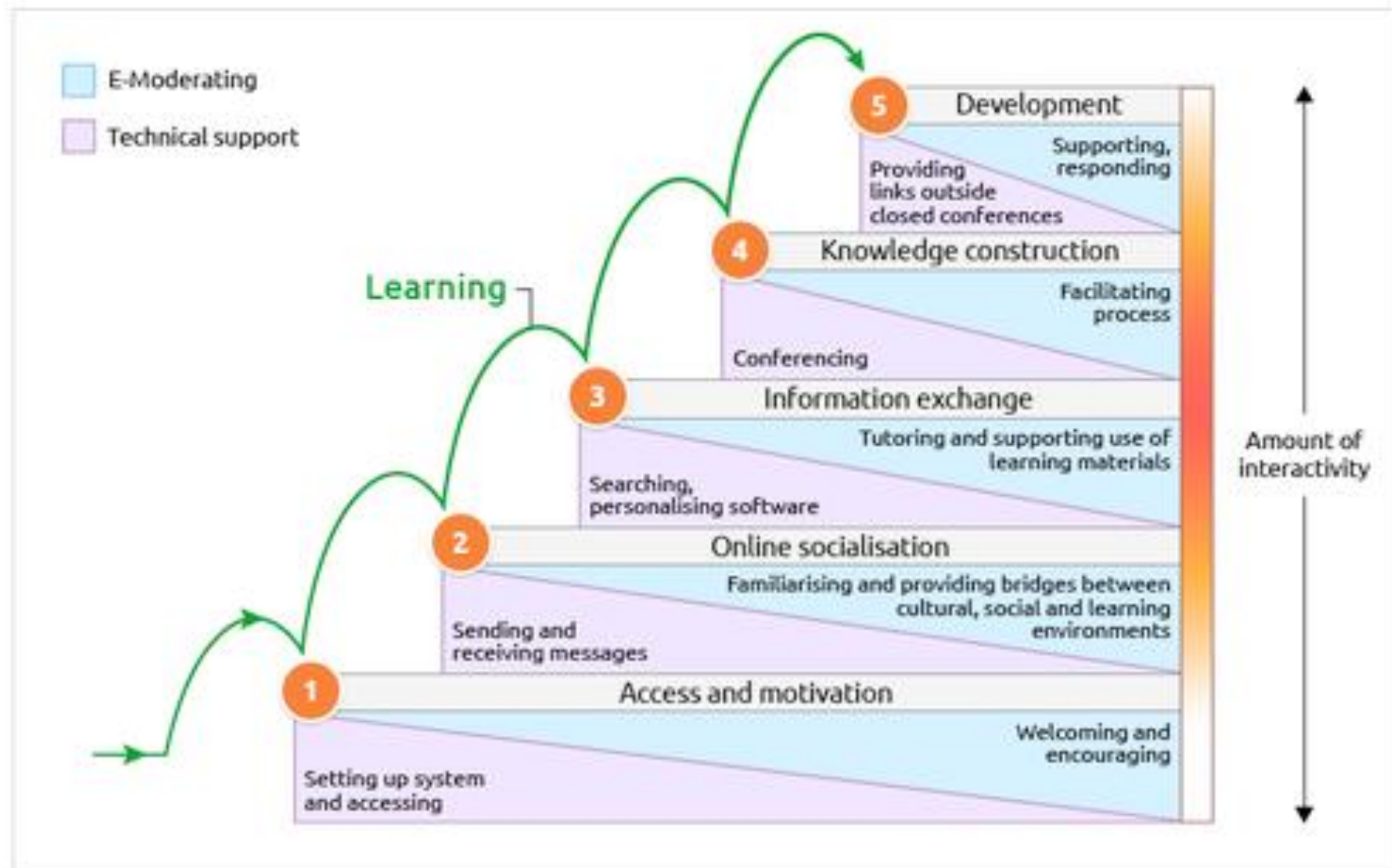
Competence-based Approach to Motivation, Gamification and Triggers of Digital Open Badge-Driven Learning

Achievement Goals

enthusiasm for badge-driven learning (67)

inspiring gamification (55)

Total 122

Triggers of Online Learning

progressive challenges and the extent of required performance (91)

option to study regardless of time and place (28)

Total 119

Intrinsic and Extrinsic motivation

study progress (58)

optional study paths (17)

Total 75

Brauer, Siklander & Ruhalahti, 2017

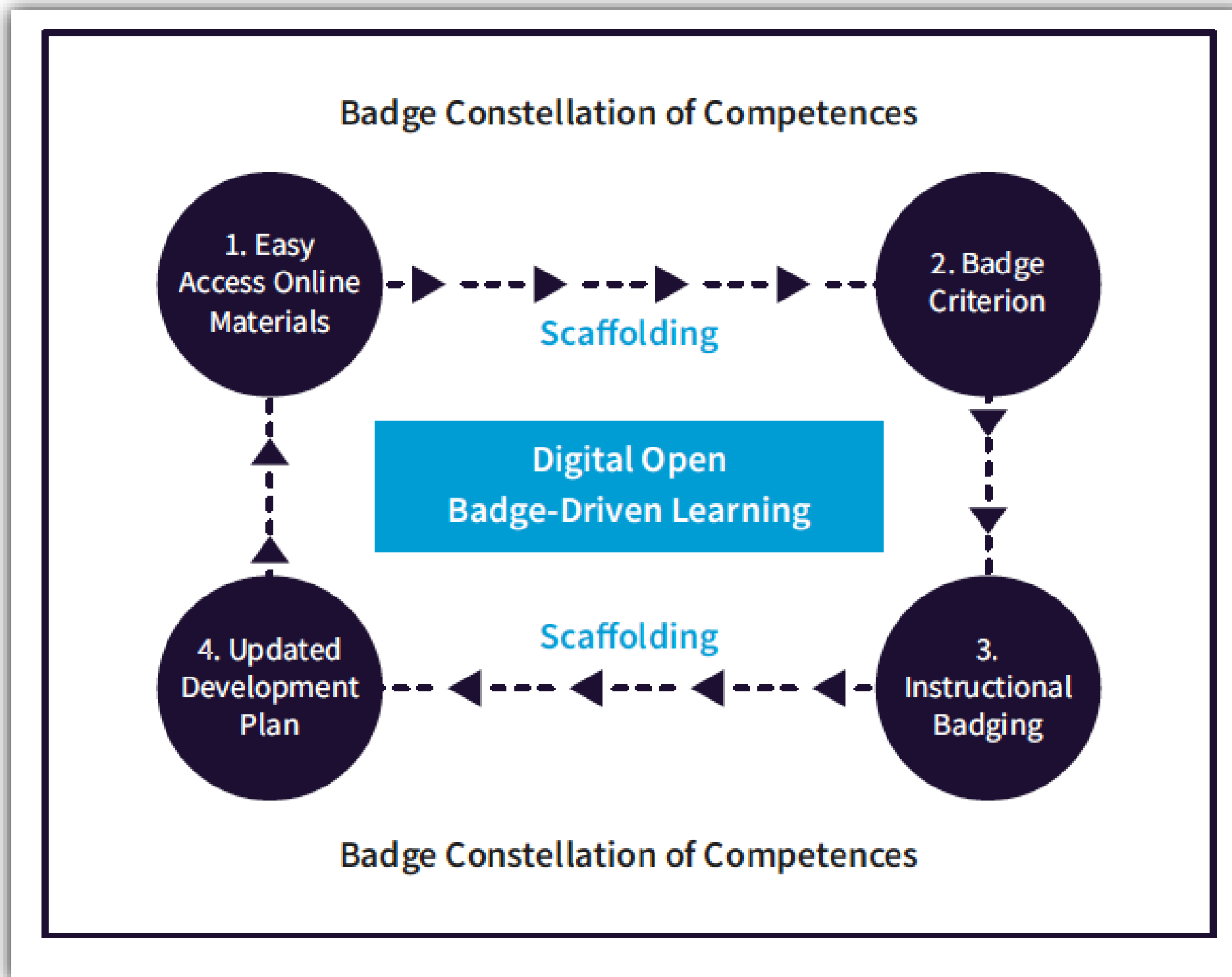# Conceptualising Digital Open Badge-Driven Learning

Structure and components of a digital open badge-driven learning process: competence-based assessment and badge management related to guidance

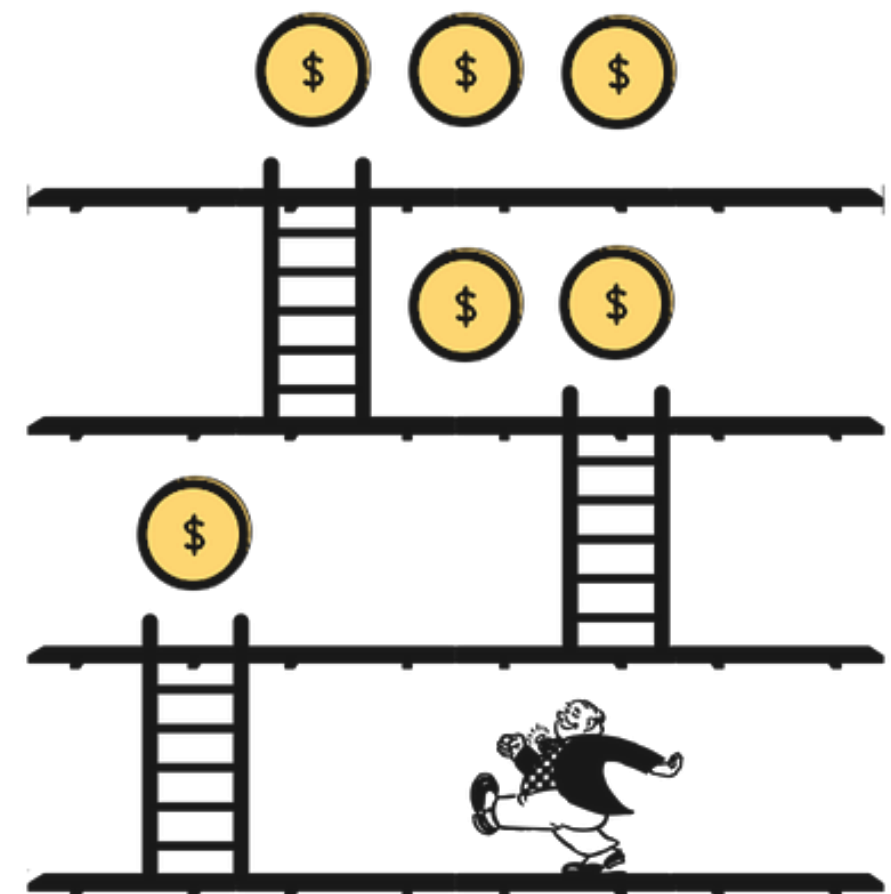Five-stage model from Salmon 2018 / cf Brauer, Korhonen, Siklander, 2018

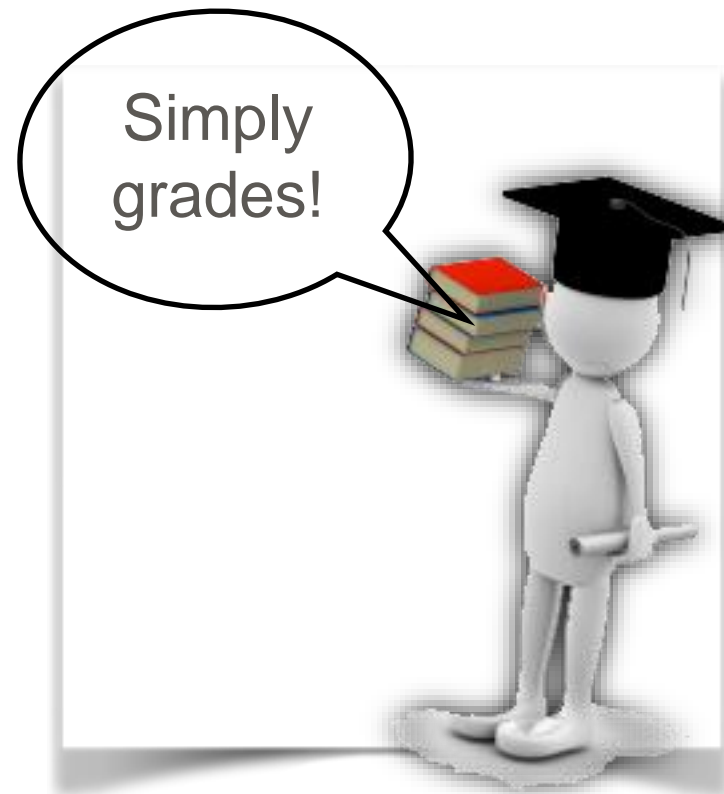# Stages of the badge-driven learning process

Badge Constellation of Competences

1. Easy Access Online Materials

Scaffolding

2. Badge Criterion

Digital Open Badge-Driven Learning

4. Updated Development Plan

Scaffolding

3. Instructional Badging

Badge Constellation of Competences

Brauer, 2019; cf. Salmon, 2018

Badges explain

- Triggers offer to affect learning **arousing and maintaining interest** (Hidi & Renninger, 2006; Järvelä & Renninger, 2014; Renninger & Bachrach, 2015) until **final completion of the desired learning action** (Dichev et al., 2014).

- Triggers allow students to **continue studying** after completing the initial task (Dichev et al., 2014; Werbach, 2014).

- The prompting trigger of learning might help students **visualise their learning** as a reward badge (Brauer, Siklander, & Ruhalahti, 2017, Fitz-Walter et al., 2011; Gamrat et al., 2016; Hamari, 2017; Montola et al., 2009; Reid et al., 2015).

- Students also gain a **sense of excitement** similar to that of playing games (Deterding, 2012; 2015). They benefit from **facilitators' interaction, collaboration and feedback** during the learning process (Siklander et al., 2017).

Brauer, 2019

Profiling Badge Earners

**In-Service and Pre-Service Teachers' Ways of Experiencing
the Competence-Based Approach in Digital Open Badge-Driven Learning**

Brauer, 2018

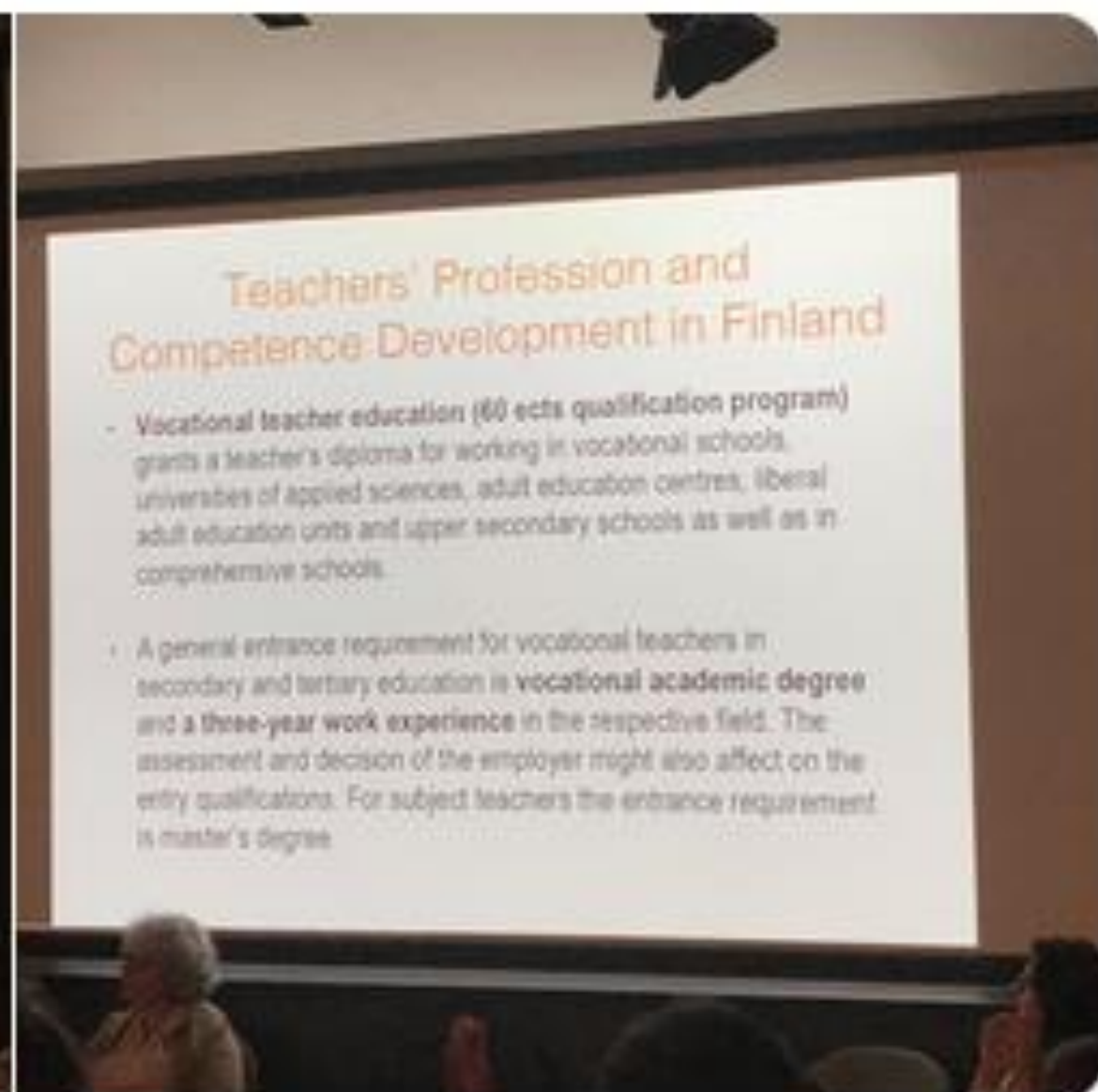**juliekeane** @juliekeane · 25. lokak. ⌄

Of course Finland is developing a national #openbadges ecosystem for teachers #openepic #openepic2018
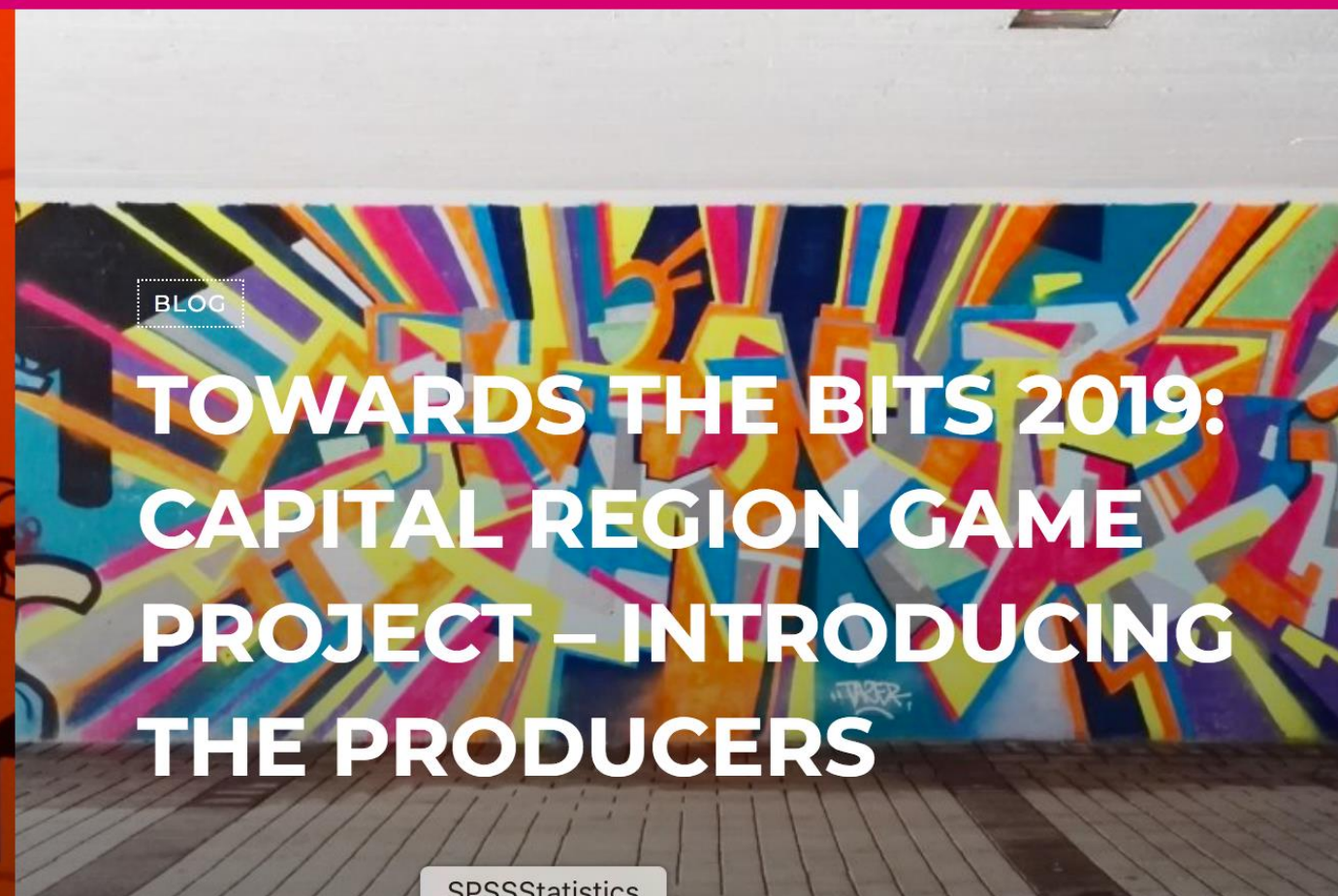
🌐 Käännä twiitti

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Chips For Game Skills -project focuses on identifying the **needs of the game industry** and develop the education on the basis of them. The goal is to create a common evaluation criteria – a digital open badge system – which clarifies the definition and understanding of the learning objectives in the games industry.
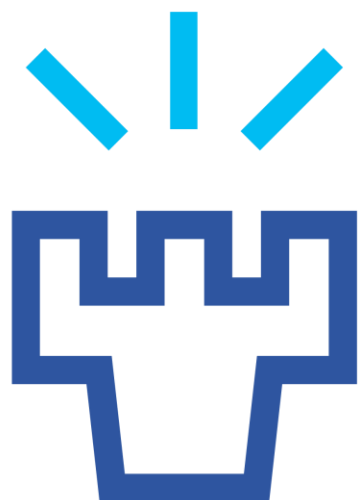
Chips For Game Skills

Osaamisen pelimerkit

NORDIC REBELS

BLOG

STORIES

CRGP – "A GOOD GAME SOUNDS GOOD, LOOKS GOOD AND PLAYS GOOD!"

TOWARDS THE BITS 2019: CAPITAL REGION GAME PROJECT – INTRODUCING THE PRODUCERS

SPSSStatistics

'Work-Integrated Pedagogy in Higher Education' (WORKPEDA)

Identification and Recognition of *Desired* Competences

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Competitive Skills - National Open Badge -constellation of problem solving in technology-rich environments (PSTRE)
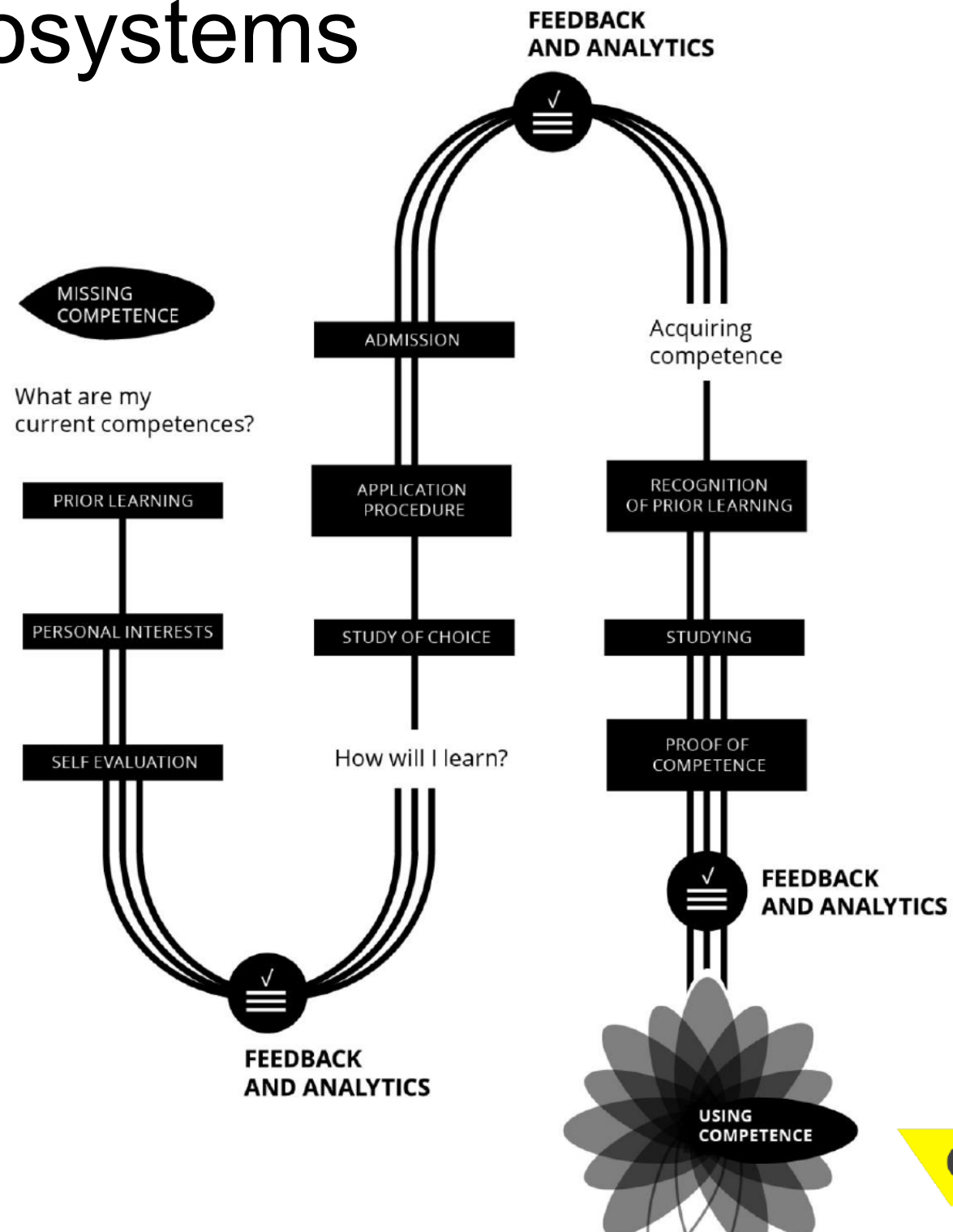

The ESCO Skills/Competences classification

The aim of the project is to develop a nationwide open badge constellation, which enables the verification of adults' problem solving skills in technology-rich environments (PIAAC) by identifying and recognising competences acquired outside the formal education system, at different levels of education, and in transition phases of the education structure. In addition, the project provides a requirement framework of competence (determining the composition of objectives, core contents and assessment criteria) for securing IT-related problem-solving skills in formal and non-formal education.

Networking

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https://www.researchgate.net/profile/Sanna_Brauer

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