Personal learning environments (PLE) and Micro-credentials

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Learners hold views of the world and meanings for words that make sense to them.

Tutors attempt to understand learners' conceptions and enclose them in a formal learning environment.

How this "e-frame" is constructed is crucial in improving the quality of learning.
Empowerment Model

CONTENT

Filtration Selection Communication

Tutor

Off Stage Facilitator Co-Learner

Learners

Review Reflect Repurpose

Active Participants

Text Interactive Graphics

Audio Resources Video

Active Participants

Text Interactive Graphics

Audio Resources Video

Active Participants
1. Fragmentation of Learning

- ROI from formal qualifications is diminishing while costs of earning qualification rise.

- Individuals constantly acquire skills, knowledge and capabilities in both formal and informal settings.

- How can all learning that has occurred be accurately measured, recognised, validated, acknowledged and rewarded?
MOZILLA OPEN BADGE INFRASTRUCTURE

ISSUERS
- WEBSITES
- ORGANIZATIONS
- EDUCATION PROVIDERS

AUTHENTICATION / CLAIM MAKING

BADGE BACKPACK

BADGES

DISPLAYERS

API
META DATA SPEC

BADGES

API
META DATA SPEC

(e.g., personal blog, profiles, social networking sites, resumes)

Mozilla Wiki: https://wiki.mozilla.org/Badges/Onboarding-Issuer
1.1. Micro-Credential / Badge

A Micro-Credential / Badge is a validated indicator of an accomplishment, skill, quality or interest that is linked to an individual.
1.2. Ecosystems

- An ecosystem provides the infrastructure for individuals to provide a pictorial display of their achievements through the display of a selected collection(s) of Micro-Credentials.

- These collections signal achievement to potential employers, peers, educational organisations, professional and social groups.
2. A case in language education in Japan

Challenges language teachers in Japan face:

- Growing need for students to use English in their future professions
- Limited exposure to English (EFL environment)
- Students’ different English levels

![Histogram of TOEIC Total Score for 1st-year medical students, N=102. Mean: TOEIC 559.5 ≈ IELTS 4.5-5.0, SD: 117.9]
2.1. Moodle Courses for teaching English for Medicine
2.2. Reflection on my courses

- Learners need to constantly review and practice their skills to improve their level of English language.
- This review is only effective if they engage with material at the right level (*news article than research article*)

I need to find new strategies and techniques

(1) that will *help* learners *identify* and *engage* with the *suitable* level of information and in *appropriate* level of activities.

(2) that will *encourage* learners to *engage* with the review materials identified and participate *autonomously* in practice activities.
3.1. Challenge (1)

(1) I need to find new strategies and techniques that will help learners identify and engage with the suitable level of information and in appropriate level of activities.

Course outline

- **Course name:** Medical Terminology (Level 1)
- **Targeted students:** first-year (freshmen) medical and nursing students
- **Course objectives:**
  - to help students build up (or review) basic terminology of medicine (prefix, suffix, body parts, symptoms)
  - **Course details:** This is a review course for basic medical terminology. This course consists of 10 modules. In each module you learn basic medical terms which are frequently used and are keys to better understanding of up-to-date information about health-related issues, medical conditions, diseases, symptoms and treatments. There are several types of quizzes in each module to check your vocabulary about a specific topic such as the cardiovascular system and the urinary system. You have to take all the short quizzes in each module and pass them. If you have successfully completed the tests, you will be awarded a module 'badge'. When you have received all the module badges in this course and passed the final test, you will be awarded a course 'badge' which means you have successfully completed this basic medical terminology course.
  - **Course level:**
    - lower-Intermediate - Intermediate (TOEIC450-650, IELTS 4.5-5.5)
  - **Self-reflection:** The following personal competency assessment tool (CAT) enables you to determine your current level of competency in medical terminology. The outcome of your self-assessment can be used to guide which module is suitable for your study.

Self-reflective framework
3.2. Challenge (2)

(2) I need to find new strategies and techniques that will encourage learners to engage with the review materials identified and participate autonomously in practice activities.
4. Motivation

- Ready to Learn Self-Assessment
  - Technology Confidence
    - Attitude to Study
      - Essential
        - I am willing to try new things: Agree
        - I am willing to learn in different ways: Agree
      - Proficient
        - I can see the benefits in using technology: Disagree
        - I have used technologies in my social experiences: Partially agree

- Example for MEEPLE
  - Group Guru
  - Complete ALL of:
    - "Quiz - Short test for Unit 1: Spell Out"
    - "Quiz - Short test for Unit 1: Dictation"
    - "Quiz - Short test for Unit 1: Matching"
    - "Assignment - Assignment for Unit 1"

- Units: Basics for Health Care Professionals
  - Watching Task: What a video clip titled "An introduction to Maslow's Hierarchy of needs"
5. Personal learning environment

Learning is happening everywhere. People learn in many places, doing many things.

The Learner

Collect the experiences that matter. This API records activities and delivers data that is:
- Quantifiable
- Sharable
- Trackable

The Tools

The Activities

http://tincanapi.com/overview/
7. ERD model

- Earn
  - Formal Unit of Learning
  - Industry Workshop
  - Regulation A Training
  - Requirement B Attendance

- Record
  - Record of Learning
    - Where
    - What
    - How
    - When
    - Value
    - Expiry
  - Record of Competence

- Display
  - Award of Credit
    - Certificate of Attendance
    - Badge Issued
    - Certificate of Compliance

- Learning Management System
- Learning Record Store (LRS)
- Display / E-Portfolio System
EXABIS COMPETENCIES

- module configuration
- subjects & topics
- assign Moodle activities
- overview of competencies
- detailed view of competencies
- examples and tasks

EXABIS E-PORTFOLIO

- My Portfolio
- Shared Portfolios
- Export SCORM-File