

Improving workplace-based learning: an example of pre-service teacher education

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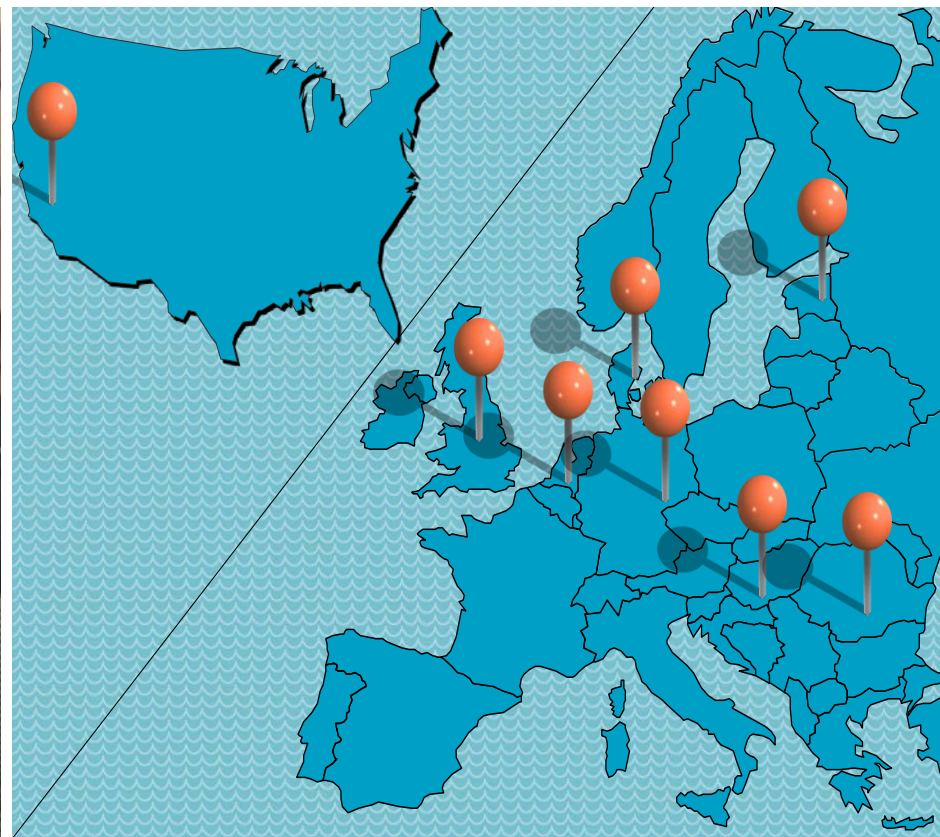
Workplace-based e-**A**ssessment
Technology for **C**ompetency-
based **H**igher **M**ulti-professional
Education

Teacher education
Medical education
Veterinary education

Learning Analytics



EU-Project Watchme



<http://www.project-watchme.eu/>

Partners

1. Utrecht University, NL (www.uu.nl)
 2. University Medical Centre Utrecht, NL (www.umcutrecht.nl)
 3. Szent Istvan University, Hungary (www.sziu.hu)
 4. University of Tartu, Estonia (www.ut.ee)
 5. Universitätsmedizin Charité Berlin, Germany (www.charite.de)
 6. University of California San Francisco, USA (www.ucsf.edu)
 7. Maastricht University, NL (www.maastrichtuniversity.nl)
 8. Mateum, NL (www.mateum.nl)
 9. University of Reading, UK (www.reading.ac.uk)
 10. Jayway, Denmark (www.jayway.com)
 11. NetRom, Rumania/NL (www.netrom.nl)
- GENERAL LEAD
- TECHNICAL LEAD



- Develop complex competences
- Integrated in context
- Demands long learning trajectories in workplace
- Deliberate practice: feedback and reflection



1. Identify the most **crucial professional activities** (also referred as entrusted professional activities, Ten Cate, 2005) and define **their assessment criteria** in different domains of the project (teacher training, medicine and veterinary).
1. Develop **LA applications** for assessing those professional activities and test the LA applications in different partner universities.

How to make **school practicum** and teacher education in general more **meaningful** and **beneficial** for prospective teachers?

- **Core practice** (Grossman et al, 2009) that directs teacher educators to identify and organize teacher education around the most **crucial professional activities** a teacher has to carry out to support students learning.
- **Entrusted professional activity** (EPA) (Ten Cate, 2005, 2007, 2011), concept that originates from medical education, also emphasizes **identification of crucial professional activities** in practice, but also points out that these activities need to be **practiced under supervision** until the student is entrusted to carry them out independently.

Development of the assessment model

- Design-based approach
- Dutch and Estonian researchers and Dutch teacher educators
- Cyclical process, several meetings

Teacher professional activities

1. **Sets learning goals** for the whole curriculum and specific lessons.
2. **Designs** learning activities (incl. materials and media) for the set learning goals.
3. **Plans** the execution and supervision of learning activities.
4. Supervises the **execution** of learning activities.
5. **Assesses** to which extent the set learning goals have been met.
6. Engages in **interpersonal** relationships with (groups of) students.
7. Directs the **communication** processes in the group.
8. Supervises the **development** of the student as a person.
9. Carries out tasks that go **beyond** the primary teaching duty.
10. **Collaborates** with colleagues and, if necessary, parents and other stakeholders.
11. Takes initiatives to improve his/her **personal development**.

Assessment rubric

11, activities, 4 levels, 44 cells

- **pre-scribed visions** and materials vs developing **own viewpoints** and materials
- adopting a **general approach** to teaching vs **individualized** teaching based on students' learning needs
- **random** vs **systematic** analysis of teaching events, student learning and own professional development.

6. Engages in interpersonal relationships with (groups of) students.

6.1. The teacher **shows little interest** in what moves and motivates students. He/she provides **little room** for the students to come with **own initiatives**. The teacher has **little regard for the social** relationships in a group and has difficulty to respond to this.

6.2. The teacher **regularly shows interest** in what moves and motivates students. The teacher **regularly offers students** the possibility to come with own initiatives. The teacher **sees how different** (groups of) students associate with each other and is able to respond to this.

6.3. The teacher knows the **relevant background information** of most students and knows, at a class level, what moves and motives students. Students can come with **their own initiatives** and the teacher makes use of this now and then. The teacher knows which place most students have in the **social structure of the group** and is able to respond to this.

6.4. The teacher is able to build **good relationships** with students due to having a permanent interest in the students, as individuals and as a group. He/she stimulates students to come with **own initiatives and decides**, in collaboration with the students, to make use of these. The teacher has a good insight into the **social relationships** in the group and is able to respond to this.



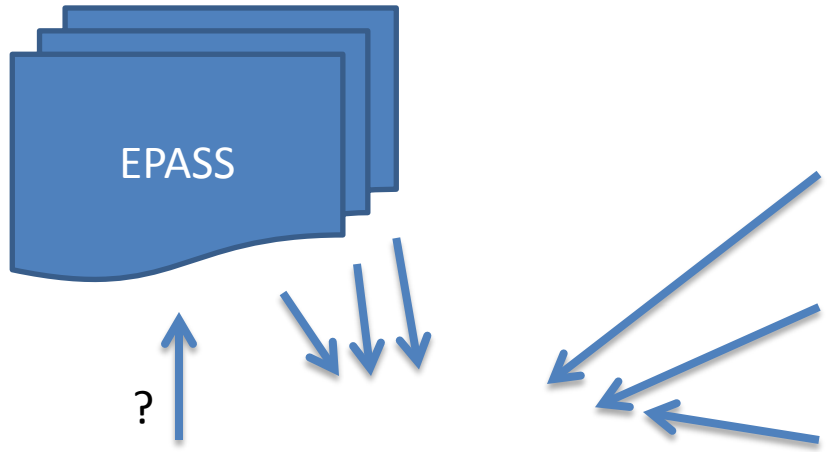
Assessment

- **How to assess?** The pre-service teacher is evaluated based on the **QTI-questionnaire, video material** and the student placement **evaluation form**.
- **By who?** Internal supervisor (video material), placement supervisor (student placement evaluation form), students (QTI) and pre-service teacher (self assessment).
- **How many times?** At least 2 per school practicum.

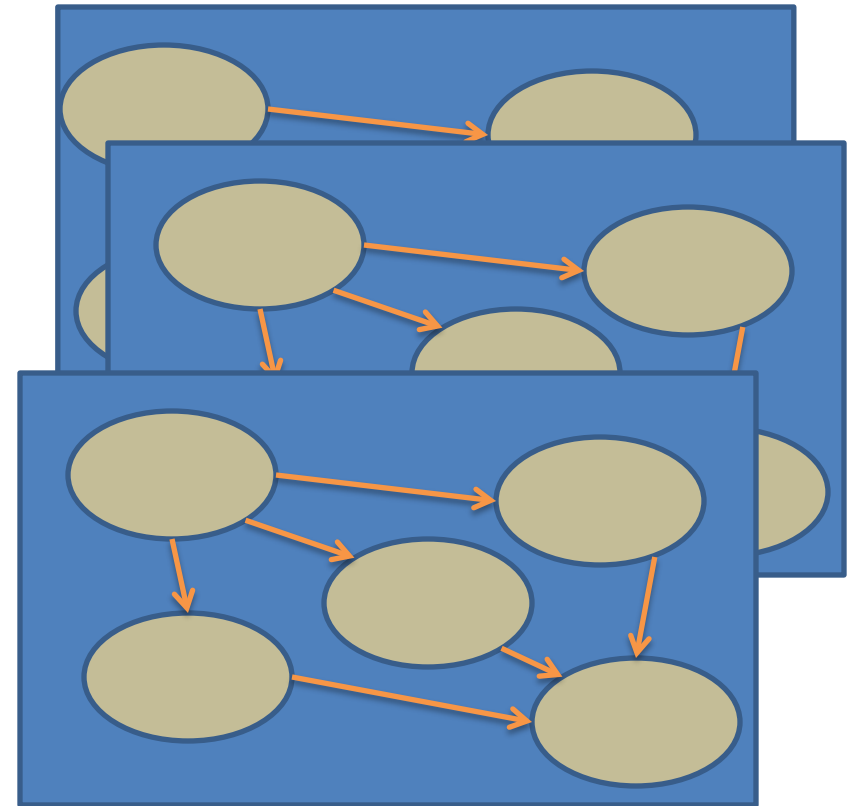
Current developments

- **Validation** of the development model in Estonia. Delphi approach, 3 rounds, 13 teacher educations.
- **Developing ePortfolio**. Focus group interviews with teacher educators.

Visualisation



Personal/General student model



Electronic portfolio



DASHBOARD



INSERT



PROGRESS



PROFILE

EPASS

Home / Progress / Workplace-based assessments

recent functions

PROGRESS

Competencies

Progress

Themes

FORMS

Workplace-based assessments

360-degree feedback

Activities

MEDICAL PROCEDURES

Medical procedures

Annual overview medical procedures

Overview competences

Workplace-based assessments

Display semester:

1-1

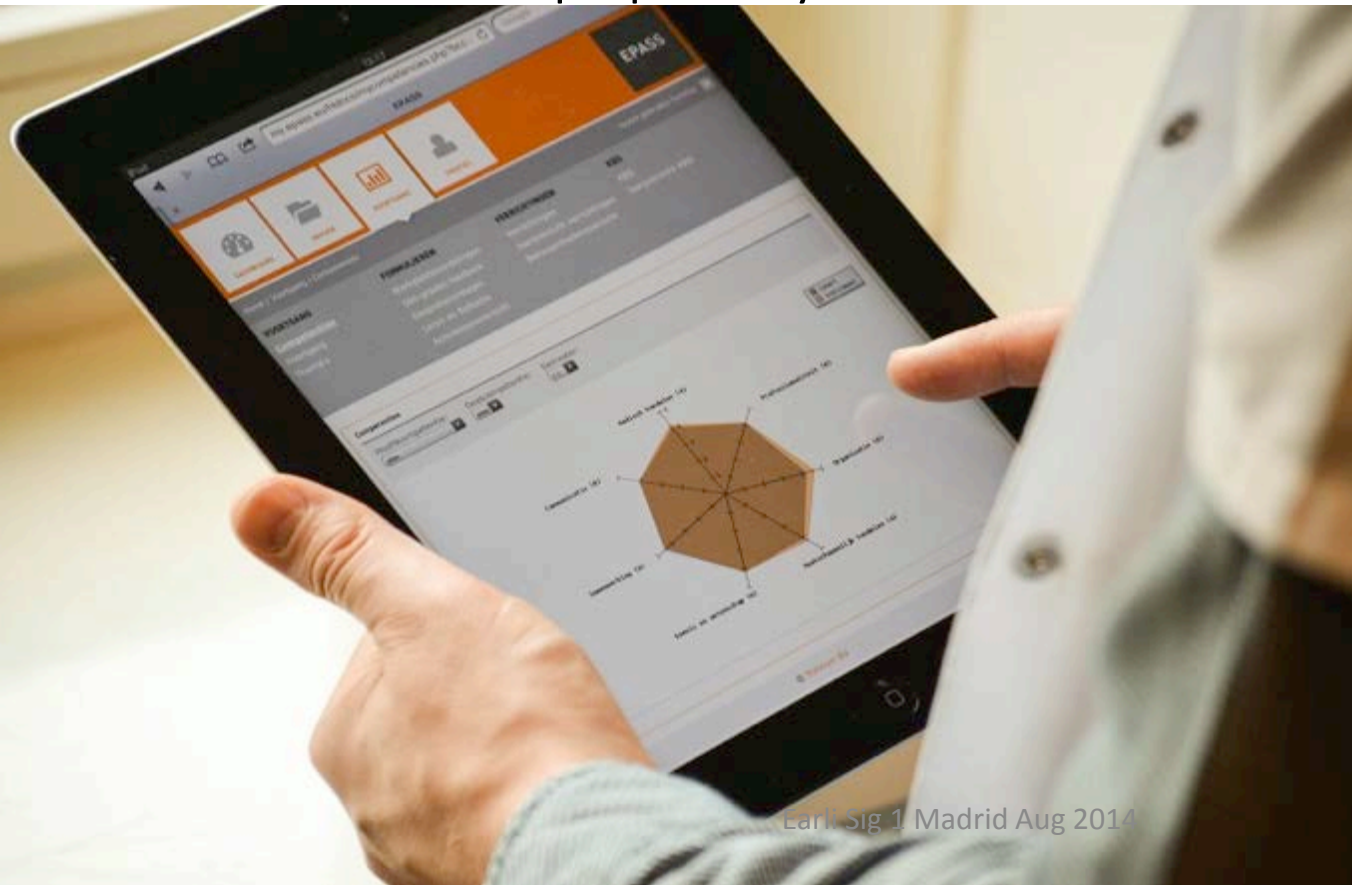
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Form	Date	Year /Sem	Department	Concerning	Level	Supervision
OSATS	09-01-2012	1-1	MUMC+ / Gyn / ver	caeserean section		

Student is owner

- Trainee's portfolio data remain personal property
- They control to whom they share information to
- Use for research purposes by means of informed consent





Thank you!
Questions?

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