BLENDED LEARNING IN ADULT EDUCATION

Adult learners Online

SITE 2016

ALO!

Theme 1

TOWARDS DESIGN GUIDELINES FOR BLENDED LEARNING ENVIRONMENT THAT SUPPORT SELF-REGULATION

Stijn Van Laer and Jan Elen, KU Leuven

Aim of the project
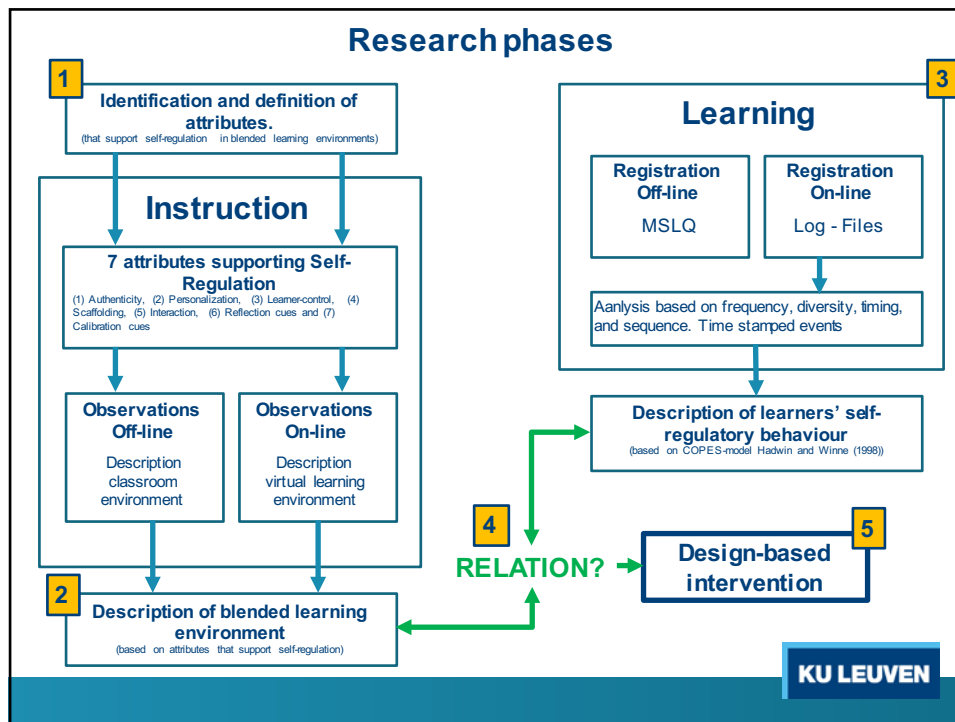
"Vulnerable learners in blended learning environments."

How to support learners' self-regulatory behaviour in these learning environments?

KU LEUVEN

Questions to be answered…

1. What *attributes* support self-regulation?

2. How are blended learning environments *designed*?

3. Which *behaviour profiles* can be identified?

4. How does the design *relates* to these profiles?

5. Does targeting the attributes *changes behaviour*?

KU LEUVEN

Research phases

| 1 | Identification and definition of attributes. (that support self-regulation in blended learning environments) | | | 3 | Learning | |

Instruction

7 attributes supporting Self-Regulation
(1) Authenticity, (2) Personalization, (3) Learner-control, (4) Scaffolding, (5) Interaction, (6) Reflection cues and (7) Calibration cues

Registration Off-line
MSLQ

Registration On-line
Log - Files

Aanlysis based on frequency, diversity, timing, and sequence. Time stamped events

Observations Off-line
Description classroom environment

Observations On-line
Description virtual learning environment

Description of learners' self-regulatory behaviour
(based on COPES-model Hadwin and Winne (1998))

4 **RELATION?** → 5 **Design-based intervention**

2 **Description of blended learning environment**
(based on attributes that support self-regulation)

KU LEUVEN

Research phases

1. Literature review

2. Descriptive framework

3. Learners' self-regulatory behaviour

"How are blended learning environments designed based on the self-regulatory supporting attributes?"

4. Se...

5. Design-based redesign

KU LEUVEN

Literature review

- **Methodology**
  - ○ Systematic literature review (n=95)
  - ○ Inclusion and exclusion criteria (Hart, 2009; Joy, 2007)
  - ○ Twofold (peer-reviewed) and double check (manual versus bibliometric)

- **Results**
  - ○ authenticity (n=29),
  - ○ personalization (n=24),
  - ○ learner control (n=18),
  - ○ scaffolding (n=24),
  - ○ interaction (n=70),
  - ○ reflection cues (n=19) and calibration cues (n=15)

KU LEUVEN

Descriptive framework

- **Methodology**
  - ○ Literature review per attribute
  - ○ Observation criteria and unit of analysis (De Wever, Schellens, Valcke, & Van Keer (2006) and Jorgensen (1989))
    - • **Face-to-Face** (Classroom observations (video recording))
    - • **Online** (Moodle learning environment (back-up))
  - ○ Pilot (interrater reliability)
  - ○ Actual description

- **Results**
  - ○ Capturing the design of blended learning environments based on the 7 attributes. (2 institutions, 6 courses, 140 learners – 1 example will be elaborated upon)

KU LEUVEN

Descriptions: Data collection

Example

KU LEUVEN

Results - Attributes supporting self-regulation

Overall

Score on Likert scale

Attributes that support self-regulation

Aythenticity · Personalization · Learner control · Scaffolding · Interaction · Reflection · Calibration

School 1

KU LEUVEN

Research phases

1. Literature review
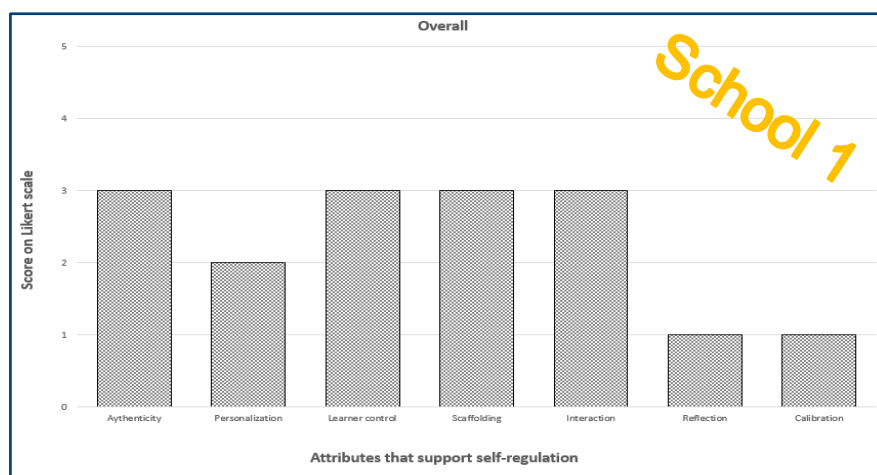
   "Which learners' self-regulatory behaviour profiles can be identified in blended learning environments and how do they relate to the design of these environments?"

2. Descriptive framework

3. Learners' self-regulatory behaviour

4. Selecting focus

5. Design-based redesign

KU LEUVEN

Learner behaviour

- **Methodology**
  - Trace (log) file analysis (n=120).
  - Cluster analysis:
    - Frequency and diversity
    - Timing and sequence (Gabadinho, Ritschard, Mueller and Studer, 2011)

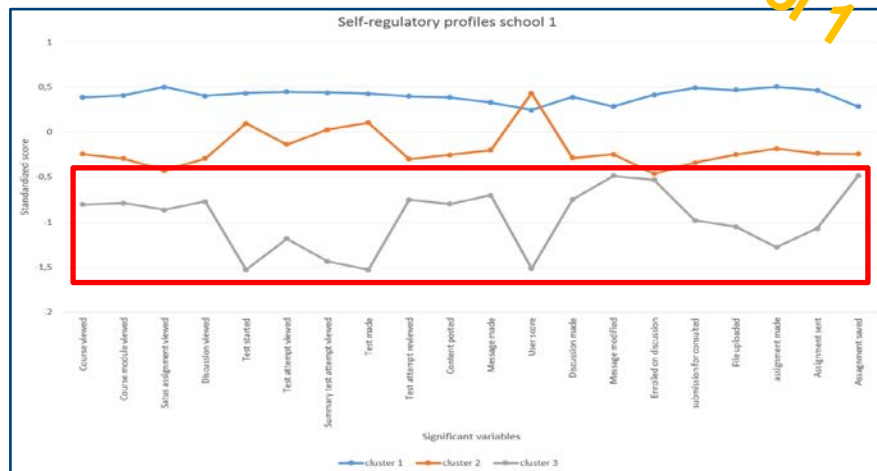- **Results**
  - Three self-regulatory behaviour profiles. Internal, external, end miss-regulator. Each of them conceptualized using Hadwin and Winne (1998).

KU LEUVEN

Results - Learner behaviour

School 1

Next step
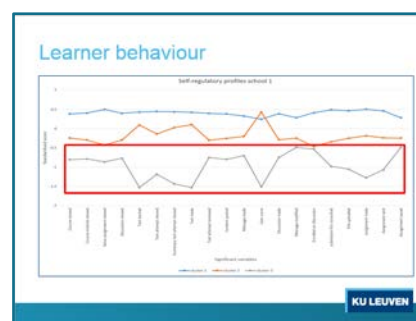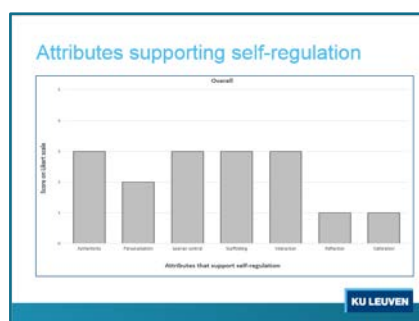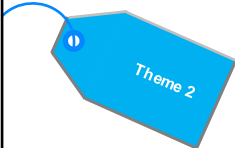
Higher score for self-regulation => less miss-regulators

Further research

- Investigating these findings through a design-based intervention:
  - ○ Cues for reflection and calibration;
  - ○ Content and self-regulation.
- This to determine if profiles shift when :
  - ○ Cues for reflection and calibration are given;
  - ○ Cues specifically target self-regulation.

KU LEUVEN

Theme 2

TEACHER PROFESSIONAL DEVELOPMENT FOR ONLINE AND BLENDED LEARNING

Brent Philipsen , Jo Tondeur, Natalie Pareja Roblin, Silke Vanslambrouck and Chang Zhu, VUB / uGent

Introduction

ICT enabled an increase of online and blended courses (OBL) (Redmond, 2011)

Lack of experience in OBL environments affects teaching (Kelz, 2011)

HELLO
my name is

Teacher professional development needed to prepare teachers to teach online (Stavredes, 2011)

Introduction

No comprehensive overview of important components for TPD for OBL, nor much attention to *why* they are important

HELLO
my name is

__Need for an overview on important components and why they are important__

Methodology

Meta-aggregation

Convene findings of separate studies	Compare findings on similarity in meaning
Construct different categories	Compare categories on similarity
Construct synthesized findings	Concrete action recommendations

Finding A   Finding B   Finding C   Finding D

Category 1   Category 2

Synthesized finding
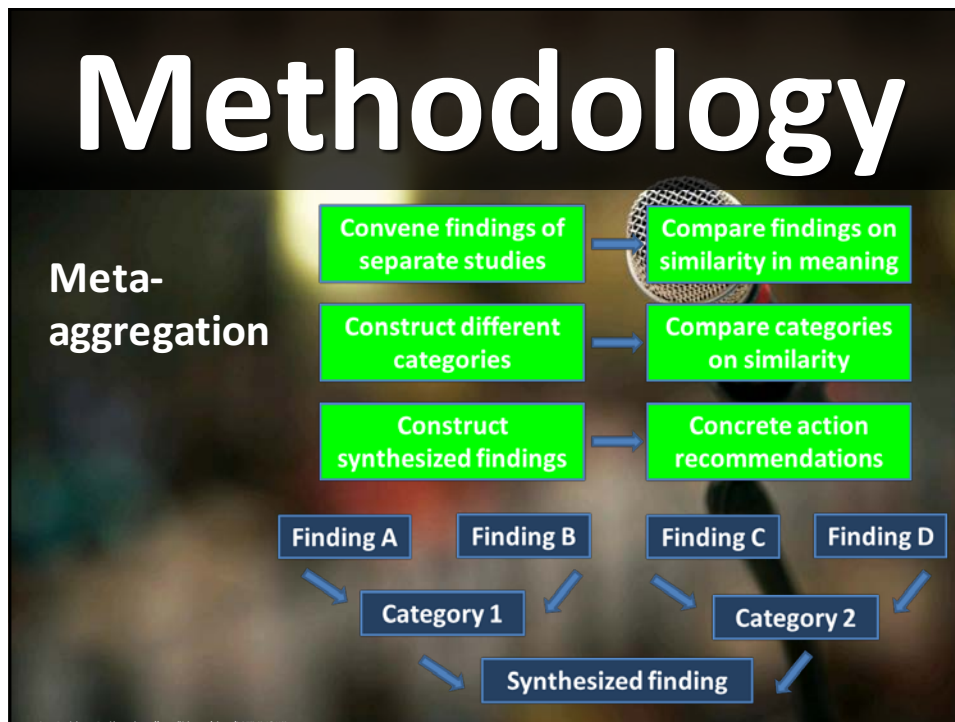
Methodology

Exclusion criteria	Number of studies identified
Key terms	1377
Scanning title & abstract	80 (with full text)
Methodology	29
Fit for research	15

Results
Analysis of 15 articles
6 Different synthesized findings

Design	Context	Goals
Teachers	Strategies	Dissemination Evaluation

---

design components
to teachers' practice

Authentic – Cyclic and Systematic- Continuation possibility

"Our main concern... methodological design was the need to create activities based on the development ... tasks, which are relevant both for the teachers and for the educational vision ... subscribes to" (Guasch, Alvarez, & Espasa, 2009, p. 204).

2) Acknowledge the existing context

Time & Duration – Institutional characteristics – Consider existing strategies – Financial component

"We recognized that a course contextualized to Swineburne, to Australia, and where appropriate, to a discipline or profession, would likely be the most well received by staff and would enable immediate application to practice." (Gregory & Salmon, 2013, p. 260).

3) Address teacher change

Rethinking roles – professional identity and educational beliefs

"This process is not only about trainees' knowledge and skill development but also about their attitude and identity change, a psychological change that has been neglected by many other studies." (Wang, Chen, & Levy, 2010, p. 290).

6) Disseminate knowledge, skills & attitudes and evaluate the TPD

Conclusion

Importance of context and local needs

What makes TPD for OBL different?
→**Great resemblance with more general TPD**
→**Strong emphasis on addressing teacher change, due to great changes of educational form**
→**Experiencing OBL 'hands-on'**

References

Glava, C. S., & Glava, A. E. (2010). Teaching skills training trough e-learning. *Procedia Social and Behavioral Sciences, 2*, 1752–1756.

Gregory, J., & Salmon, G. (2013). Professional development for online university teaching. *Distance Education, 34*(3), 256-270.

Guasch, T., Alvarez, I., & Espasa, A. (2009). University teacher competencies in a virtual teaching/learning environment: Analysis of a teacher training experience. *Teaching and Teacher Education, 26*, 199-206.

Kelz, A. (2011). Bridging the gap - From teacher toe Teacher. *10th European Conference on E-Learning,* (pp. 363-369). Brighton, England

Redmond, P. (2011). From face-to-face teaching to online teaching: Pedagogical transitions. In G. Williams, P. Statham, N. Brown, & B. Cleland (Ed.), *Changing Demands, Changing Directions. Proceedings ascilite 2011 Hobart,* (pp. 1050-1060). Hobart Tasmania, Australia.

Salmon, G. (2011). *E-moderating: The key to teaching and learning online.* New York: Routledge.

Stavredes, T. (2011). *Effective Online Teaching: Foundations and Strategies for Student Success.* San Francisco: Jossey-Bass

Stein, S. J., Shephard, K., & Harris, I. (2011). Conceptions of e-learning and professional development for e-learning held by tertiary educators in New-Zealand. British Journal of Educational Technology, 42(1), 145-165.

The Joanna Briggs Institute. (2014). *Joanna Briggs Institute Reviewers' Manual: 2014 edition.* Australia, Adelaide: The Joanna Briggs Institute

Wang, Y., Chen, N.-S., & Levy, M. (2010). Teacher training in a synchronous cyber face-to-face classroom: Characterizing and supporting the online teachers' learning process. *Computer Assisted Language Learning, 23*(4), 277-293.

Wilson, A. (2012). Effective professional development for e-learning: What do the managers think? *British Journal of Educational Technology, 43*(6), 829-900.

Theme 3

TOWARDS A METHODOLOGY FOR STRENGHTENING THE INSTITUTIONAL CULTURE OF ONLINE AND BLENDED LEARNING PROGRAMS

Hilde Van Laer, Koen De Pryck and Chang Zhu, VUB

Aim of the project

"**Managing quality** and ensuring **continuous quality improvement** (**CQI**) of **existing** and **new** online and blended learning (**OBL**) programs at the **institutional level.**"

⇨ meso level: internal quality assurance (IQA)
⇨ interference with
  ⇨ micro level (program & courses)
  ⇨ macro level (external quality assurance & accrediation)

ALO!

Internal quality improvement

⇨ Quality management and/or quality culture?

EUA. (2006). Quality Culture in European universities: a bottom-up approach.

Ehlers, U.-D. (2009). E-Learning Quality in Higher Education in Europe.

⇨ Quality culture in literature :

- quality culture is part of an overall organizational culture
- quality culture cannot be imposed from the outside and is contextual
- quality culture is related to shared values, beliefs and visions of all committed stakeholders
- all authors link quality culture to (self)-reflection

ALO!

"The proposal here is to start with an assessment phase, since tackling specific problems and finding solutions for them is more likely to attract people's attention and stimulate their engagement"
(CEDEFOP, 2015)

Slide 1

	Objectives	
	Develop new OBL programs	Evaluate existing OBL programs
What is our vision on OBL?		
How do we implement & improve OBL?		

Self-assessements with the E-learning Maturity Model (eMM)

- Context = institutions with different levels of adoption & implementation of blended learning

- eMM = a quality improvement framework for institutions to assess their OBL-capability in 35 processes in 5 process areas:
  - Learning: processes that directly impact on pedagogical aspects of OBL
  - Development: processes surrounding the creation and maintenance of e-learning resources
  - Support: processes surrounding the support of students and teaching staff & the operational management
  - Evaluation: processes surrounding the evaluation and quality control of the OBL provision through its entire lifecycle
  - Organization: processes associated with the institutional planning & management

- Each process is divided in 5 dimensions
  - Delivery: How is the process operational?
  - Planning: How is the process planned?
  - Definition: Has the institution defined and documented standards, guidelines, templates and policies?
  - Management: How does the institution manage the process?
  - Optimization: Uses the institution formal approaches to improve the activities of a the process?

- Assessment scores from 0 to 4

Figure 3: eMM Process Dimensions

(Marshall, 2010)
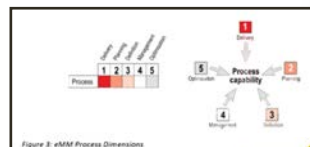
Not practised/not adequate
Partially adequate
Largely adequate
Fully adequate
Not assessed

ALO!

Slide 2

Adaptation of the e-learning maturity model (eMM) for the context of adult education (AE)

- Two pilots in centers with a different level of OBL adaption

- Assessment methodology
  - preparatory meeting with the management
  - management selects contexts and staff members to be involved
  - assessment of selected processes
  - develop a concrete improvement plan and follow-up-procedures

Variables	Context 1	Context 2
Experience with OBL	Institution with more than 10 years of experience organizing OBL	Institution planning to develop 1 program in 50% OBL
Amount of OBL	OBL in almost all the programs	OBL in 1 program
BL en OL?	Blended learning programs & Online learning programs	Only blended learning programs
Assessment eMM	All processes	Selection of processes
	All dimensions	Only assessment on the dimensions planning and definition
		Group assessment of selected processes
		- Principal
		- All teaching staff of the blended learning program
		- IT and development staff

Assessors		Process areas assessed				
		Learning	Development	Support	Evaluation	Organization
Principal					x	x
OBL Teachers	Foreign Languages	x		x	x	
	Second Chance Education	x		x	x	
	Second chance education	x		x	x	
Training managers	Entrepreneurship training	x	x	x	x	x
	Computer science (associate degree)	x	x		x	
	Accountancy (associate degree)	x	x	x		
Staff	IT support		x	x		
	media support		x	x		x

ALO!

Adaptation of the e-learning maturity model (eMM) for the context of adult education (AE)

- Two pilots in centers with a different level of OBL adaption

- Assessment methodology
  - ➢ preparatory meeting with the management
  - ➢ management selects contexts and staff members to be involved
  - ➢ assessment of selected processes
  - ➢ develop a concrete improvement plan and follow-up-procedures

Variables	Context 1	Context 2
Experience with OBL	Institution with more than 10 years of experience organizing OBL	Institution planning to develop 1 program in 50% OBL
Amount of OBL	OBL in almost all the programs	OBL in 1 program
BL en OL?	Blended learning programs & Online learning programs	Only blended learning programs
Assessment eMM	All processes	Selection of processes
		Only assessment on the dimensions planning and definition
	All dimensions	Group assessment of selected processes
		- Principal
		- All teaching staff of the blended learning program
		- IT and development staff

Adaptation of the e-learning maturity model (eMM) for the context of adult education (AE)

- Preliminary results

- The reflection on the 5 dimensions of eMM can reveal:
  - whether an institution is tending towards ad hoc attempts or
  - is mainly focused on procedures without implementation in daily practice or
  - is capable of implementing processes in a full quality cycle

- & sustains the quality competence building of assessors

Next step

- Further design, tweak and develop and implement the eMM
  self assessment methodology in the context of OBL in AE
  to strengthen the enabling factors commitment, negotiation and quality
  competences of Ehlers' model of Quality Culture (2009)

- The expected outcome:
  - a revised model for assessing the quality of OBL in AE
  - a supporting methodology for implementation

Questions?

Hilde Van Laer

E-mail: hilde.van.laer@vub.ac.be
Linkedin: https://be.linkedin.com/in/hildevanlaer

http://www.iwt-alo.be/

References

Butcher, N., & Wilson-Strydom, M. (2013). A Guide to Quality in Online Learning. (S. Uvalić-Trumbić & S. J. Daniel, Eds.). Academic Partnerships.

Ehlers, U.-D. (2004). Quality in e-learning from a learner's perspective. *European Journal for Distance and Open Learning*. Retrieved from http://www.eurodl.org/materials/contrib/2004/Online_Master_COPs.html

Ehlers, U.-D. (2007). Quality Literacy — Competencies for Quality Development in Education and e-Learning. *Educational Technology & Society*, *10*(2), 96–108.

Ehlers, U.-D. (2009a). E-Learning Quality in Higher Education in Europe. Retrieved March 9, 2016, from http://www.slideshare.net/uehlers/elearning-quality-in-higher-education-in-europe

Ehlers, U.-D. (2009b). Understanding Quality Culture. *Quality Assurance in Education*, *17*(4), 343–363.

Ehlers, U.-D., & Pawlowski, J. M. (2006a). *Handbook on Quality and Standardisation in E-Learning*. Berlin, Heidelberg: Springer Berlin Heidelberg.

Ehlers, U.-D., & Pawlowski, J. M. (2006b). Quality in European e-learning: An introduction. In *Handbook on Quality and Standardisation in E-Learning* (pp. 1–13). Springer Berlin Heidelberg.

EUA. (2006). Quality Culture in european universities: a Bottom-up approach. Retrieved September 9, 2015, from http://www.eua.be/eua/jsp/en/upload/quality_culture_2002_2003.1150459570109.pdf

European Centre for the Development of Vocational Training (CEDEFOP). (2015). *Handbook for VET providers. Supporting internal quality management and quality culture*. Retrieved from http://www.eqavet.nl/_images/user/Handbook%20for%20VET%20providers.p_20150710141027.pdf

Harvey, L. (2009). A critical analysis of quality culture. Presented at the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) Conference, New Approaches to Quality Assurance in the Changing World of Higher Education, Abu Dhabi, United Arab Emirates. Retrieved from http://www.inqaahe.org/admin/files/assets/subsites/1/documenten/1241773373_16-harvey-a-critical-analysis-of-quality-culture.pdf

Marshall, S. (2010). A quality framework for continuous improvement of e-Learning: The e-Learning Maturity Model. *International Journal of E-Learning & Distance Education, 24*(1), 143–166.

Ossiannilsson, E. (2012). Benchmarking e-learning in higher education : lessons learned from international projects.

Ossiannilsson, E., Williams, K., Camilleri, A. F., & Brown, M. (2015). *Quality models in online and open education around the globe. State of the art and recommendations*. Oslo: International Council for Open and Distance Education. Retrieved from http://icde.typepad.com/quality_models/

Shoesmith, K., & Walker, S. (2011). The role of practitioners in measuring what matters: What can further education learn from other nations and sectors? Retrieved January 26, 2015, from http://www.skillsdevelopment.org/pdf/ST00033028(4500072109)Practitioners%20Report_5_1web.pdf

Vettori, O. (2012). Examining Quality Culture Part III: From self-reflection to enhancement. EUA.

DISCUSSION

J. M. pector
Professor, Learning Technologies, University of North Texas

Q&A – Course level

- Any experiences with measuring self-regulation in blended learning environments? (aptitude or event?)

- What is important? The integration of the attribute itself or rather the integration of the attribute while focussing on self-regulation?

Q&A – Teacher Professional Development

Participate actively in TPD -> experiencing possibilities. Acknowledge institutional characteristics and context (Wilson, 2012)

→ Tension between what teachers want to implement and possible barriers inherent to local context (Guskey, 2000)

Addressing prof. identity and beliefs and reflection

Not so much in our study → Though very important (e.g. Korthagen 2004; Meijer et al., 2004)