

Assessing the quality of online and blended learning using the methodology of e-Maturity Model

A pilot study in adult education in Flanders

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Research questions

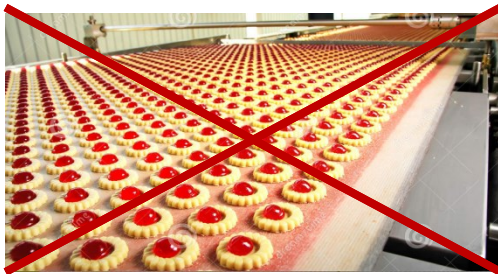
- Research is part of a the [Adult learners online \(Alo!\)](#) – project including:
 - 4 Flemish universities
 - 3 centres for adult education (AE)
 - consortium of relevant partners in AE and VET in Flanders
 - 5 research teams
- Focus of our research team = continuous quality improvement (CQI) of existing and new online and blended learning programs (OBL) at the institutional level
- Research question:
 - Which indicators and procedures should be included in instruments for an effective CQI approach of OBL?
 - How can AE providers effectively implement these elements in CQI instruments for OBL
 - What are the effects of the CQI approach on the quality improvement of OBL programs/courses offered in adult education?

Content

- Concepts
 - continuous quality improvement (CQI)
 - total quality management (TQM)
 - quality culture
- context of online and blended learning in adult education in Flanders + state of play quality assurance approach
- self-assessment instrument eMM
 - criteria for selection
 - characteristics
- pilot study in a center for adult education (CVO): CVO Antwerpen

Continuous Quality Improvement (CQI)

- CQI is strongly related to the Total Quality Management (TQM) movement



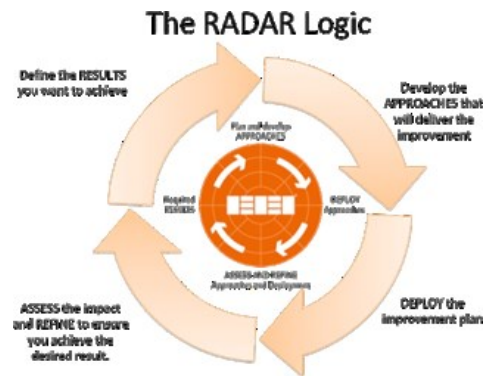
- TQM is orientation on:
 - customers
 - processes
 - quality instead of quantity

Continuous Quality Improvement (CQI)

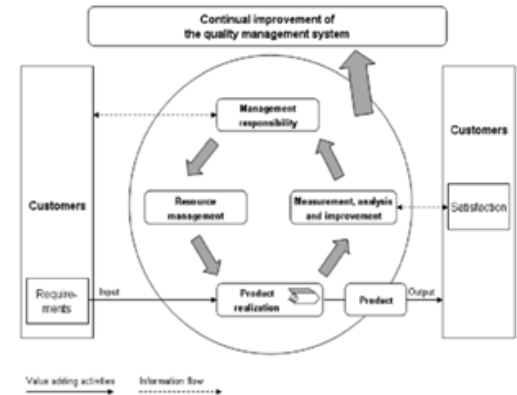
Quality cycles based on TQM



Deming's PDCA-circle



The Radar Circle of EFQM
(European Foundation for
Quality Management)



Model of a process-based
quality management system from
ISO 9001:2000
(International Organization for Standardization)

Quality culture

- The concepts of Total Quality Management are generally accepted in European education
 - But to some:
 - to bureaucratic
 - to technocratic
- ↓
- Vivid debate on quality culture with:
 - quality management approach &
 - quality commitment and engagement of all stakeholders?
 - How?: foster self-reflection
f.i. by using self-assessment

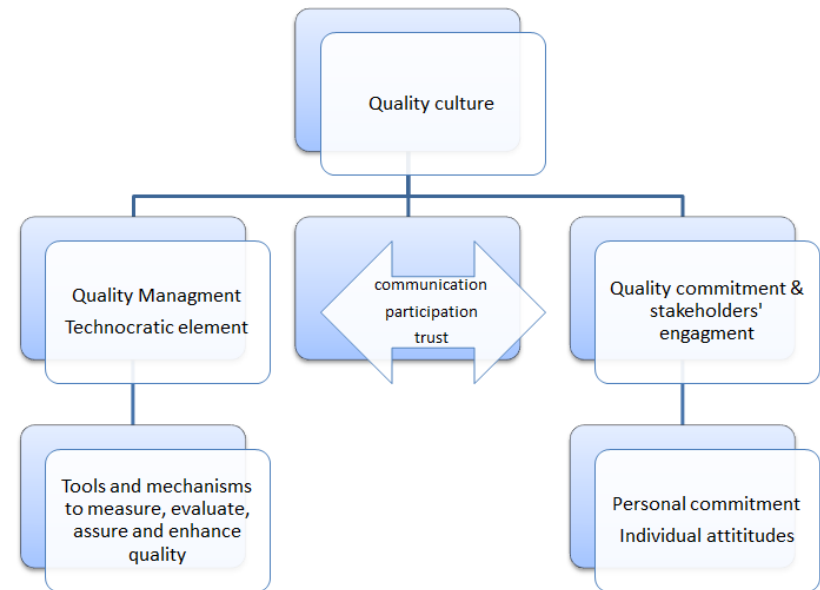
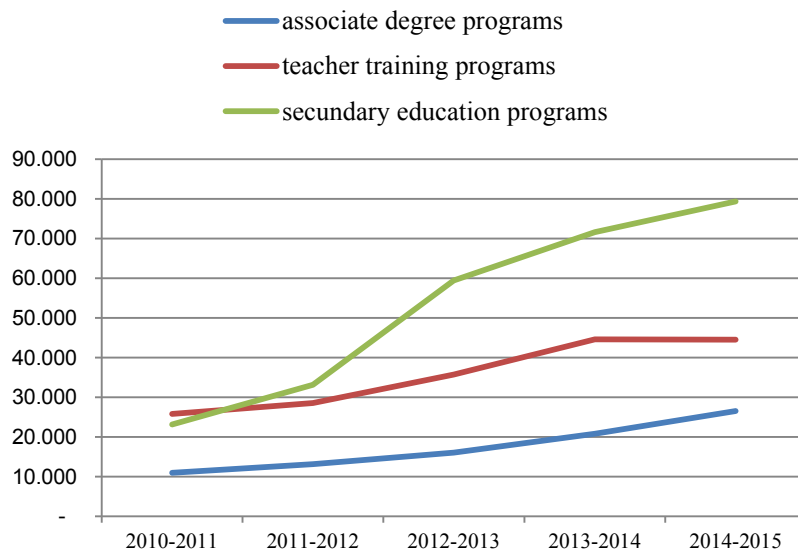


Figure: Quality Culture and Quality Management, Source European University Association

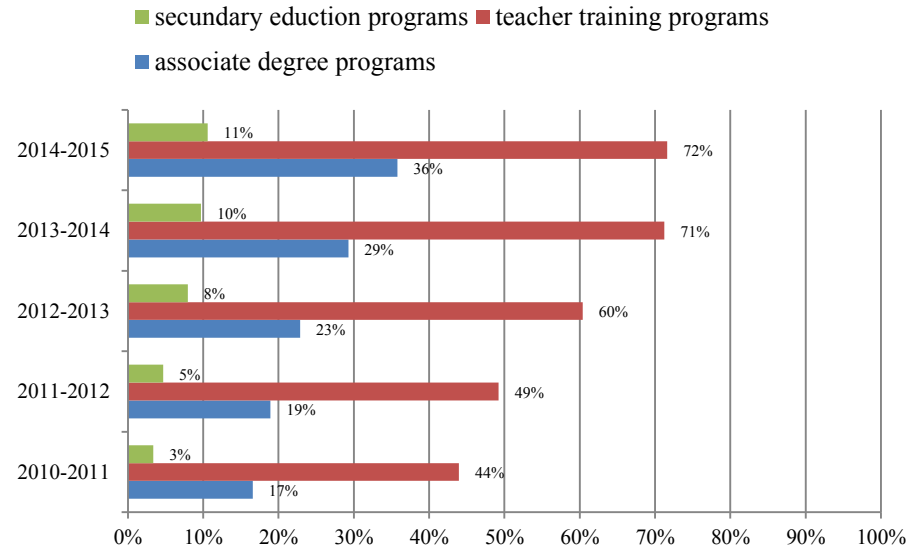
The context of adult education (AE)

- Formal education and vocational education training
- great diversity of learners
- growing popularity of online and blended learning (OBL)
 - ⇒ discussion on the quality of OBL

N enrolments in blended learning modular courses



% enrolments in blended learning modular courses



Current state of quality assurance in AE?






- Focus group interviews in 5 centers with:
 - policy makers and quality assurance coordinators
 - teachers in OBL programs
- Results:
 - no specific approach for OBL provision
 - limited alignment between institutional and program level
 - ⇒ need to foster/reinforce the internal quality culture
 - no need for a statistic framework with predefined standards but:
 - ⇒ centers prefer dynamic and developmental procedures and procedures

Why eMM has been selected?

- literature review on existing standards, guidelines, benchmarks and assessment instruments for OBL
- Criteria:
 - oriented towards adult education or adaptable for adult education
 - focused on the institutional level
 - aimed at CQI
 - learner centered
 - oriented at different stakeholders
- ⇒ selection of e-learn maturity model (eMM)

Characteristics of eMM

- assessment of the e-learning capability of institutions in 35 processes in 5 process areas:
 - learning
 - development
 - support
 - evaluation
 - organization
- division of each process in 5 dimensions
- assessments scores for 0 - 4

	Not practised/not adequate
	Partially adequate
	Largely adequate
	Fully adequate
	Not assessed

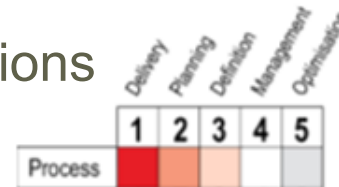


Figure 3: eMM Process Dimensions

Characteristics of eMM and RQ

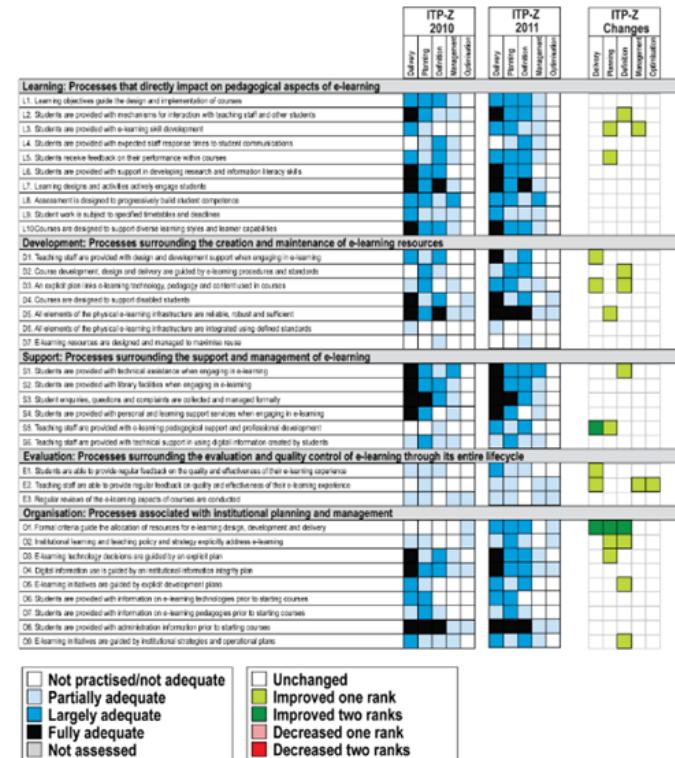
- assessment shows strengths and weaknesses

- ⇒ detect improvement areas
- ⇒ negotiate common accepted improvement plans

- Research questions:

- Is eMM appropriate for the context of OBL in AE ?
- Can eMM be used in its current format or are adaptations advisable?
- How can eMM be contextualized for institutions with a different level of maturity

- ⇒ pilot study in CVO Antwerpen



Pilot study eMM in CVO Antwerpen

- Preparatory meeting with the management:
 - selection of the most appropriate contexts
 - selection of staff members to be involved
- Individual assessments of 3 process areas

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	
Training managers	Second chance education	x		x	x	
	Entrepreneurship training	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

- Planned: groups assessment + improvement plan

Preliminary results of the pilot

- Assessors were positive, but:
 - translation = needed
 - full assessment = too long
 - a lot of practices \neq for OBL
 - some processes \neq AE (f.i. library services)
- Mean of assessments = first glimpse of institutions OBL-capability

Legend		Delivery	Learning	Definition	Management	Optimization
0	not assessed					
1	not partial not adequate					
2	partially adequate					
3	largely adequate					
4	fully adequate					
Learning: Processes that directly impact on pedagogical aspects of e-learning						
L1	Learning objectives guide the design and implementation of courses	3	3	2	2	1
L2	Students are provided with mechanisms for interaction with teaching staff and other students	3	2	2	2	1
L3	Students are provided with e-learning skill development	2	2	1	2	1
L4	Students are provided with expected staff response times to student communications	3	2	2	2	1
L5	Students receive feedback on their performance within courses	3	2	1	2	1
L6	Students are provided with support in developing research and information literacy skills	2	1	1	1	1
L7	Learning designs and activities actively engage students	3	1	2	1	1
L8	Assessment is designed to progressively build student competence	2	2	2	2	1
L9	Student work is subject to specified timetables and deadlines	3	2	1	2	2
L10	Courses are designed to support diverse learning styles and learner capabilities	2	1	1	0	1
Development: Processes surrounding the creation and maintenance of e-learning resources						
D1	Teaching staff are provided with design and development support when engaging in e-learning	2	1	2	1	1
D2	Course development, design and delivery are guided by e-learning procedures and standards	1	1	1	1	1
D3	An explicit plan links e-learning technology, pedagogy and content used in courses	0	2	1	1	1
D4	Courses are designed to support disabled students	1	1	1	1	1
D5	All elements of the physical e-learning infrastructure are reliable, robust and sufficient	2	2	1	1	1
D6	All elements of the physical e-learning infrastructure are integrated using defined standards	2	1	1	1	1
D7	E-learning resources are designed and managed to maximise reuse	2	1	1	1	1
Support: Processes surrounding the support and operational management of e-learning						
S1	Students are provided with technical assistance when engaging in e-learning	2	2	2	1	1
S2	Students are provided with library facilities when engaging in e-learning	2	1	2	1	1
S3	Student enquiries, questions and complaints are collected and managed formally	3	3	2	1	1
S4	Students are provided with personal and learning support services when engaging in e-learning	3	2	1	1	1
S5	Teaching staff are provided with e-learning pedagogical support and professional development	2	1	1	1	1
S6	Teaching staff are provided with technical support in using digital information created by students	2	3	2	1	1
Evaluation: Processes surrounding the evaluation and quality control of e-learning through its entire lifecycle						
E1	Students are able to provide regular feedback on the quality and effectiveness of their e-learning experience	2	1	2	1	2
E2	Teaching staff are able to provide regular feedback on quality and effectiveness of their e-learning experience	2	1	1	1	2
E3	Regular reviews of the e-learning aspects of courses are conducted	2	1	1	1	2
Organisation: Processes associated with institutional planning and management						
O1	Formal criteria guide the allocation of resources for e-learning design, development and delivery	2	3	3	2	2
O2	Institutional learning and teaching policy and strategy explicitly address e-learning	2	2	2	2	2
O3	E-learning technology decisions are guided by an explicit plan	2	2	3	2	2
O4	Digital information use is guided by an institutional information integrity plan	2	3	3	2	2
O5	E-learning initiatives are guided by explicit development plans	2	2	3	2	2
O6	Students are provided with information on e-learning technologies prior to starting courses	2	2	2	1	2
O7	Students are provided with information on e-learning pedagogies prior to starting courses	2	2	2	2	3
O8	Students are provided with administration information prior to starting courses	3	3	4	2	2
O9	E-learning initiatives are guided by institutional strategies and operational plans	2	2	3	1	2

Preliminary conclusions and next research steps

- eMM is suited to conduct self-assessments in AE but:
 - more contextualization is needed
 - necessity to carefully define the role of assessors
 - what about centers with different levels of maturity?
- thank you!

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