

e-Learning Maturity Model (eMMM) as a methodology to self-assess the quality of blended learning

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Outline

1. Introduction
2. e-learning Maturity Model (eMM)
3. Case studies

1. Introduction: IWT-ALO-project factsheet

Adult Learners Online! Blended and Online Learning in Adult Education and Training (www.iwt-alo.be)

Project funded by Flemish government

November 2014 - October 2018

Project coordinator: Prof. dr. Chang Zhu

Project partners:

- Scientific partners: Vrije Universiteit Brussel (VUB), Ghent University and KU Leuven
- Research & Valorization partners (Centers for Adult Education - CAE): CVO Antwerpen, PCVO Perspectief, CVO De Oranjerie
- Implementation partners: VOCVO, Toll-Net

Consortium consisting of CAE, higher education institutions, education providers, public service companies,...

Blended learning?

“learning that happens in an instructional context which is characterized by a deliberate combination of online and classroom-based interventions to instigate and support learning. Learning happening in purely online or purely classroom-based instructional settings is excluded”. (Boelens, et al., 2015)

Mission

- To **improve the quality of online and blended learning** in adult education at course, program and institutional level through the use of a continuous quality improvement framework;
- To analyse the current online and blended learning design and to **provide guidelines for a better (optimal) learning environment** for the specific learner groups both at the course level and programme level;
- To research the **individual and social background of adult learners** and their (non-) participation in online and blended learning and to analyse the key variables that affect their participation and learning and social outcomes in online and blended learning;
- To develop and validate **teacher professional development** models in order to improve the quality of online and blended learning.

Research & valorization of research results

Research

7 PhDs in 5 workpackages

WP1: Institutional quality assurance

WP2: Learning design at course level

WP3: Learning design at program level

WP4: Monitoring learner characteristics & outcomes

WP5: Teacher professional development

WP6: Valorization and coordination

Valorization

Started up in October 2016

Set-up of a competence center for Online and Blended Learning (OBL)

Expected deliverables:

- training models for teacher professional development
- OBL quality assurance framework and instruments
- guidelines for (re)designing blended learning environments
- Publications & policy recommendation reports
- ...

Research on (quality of) blended learning

Research on blended learning in past decade:

- mainly on course level & development of courses
- mainly in higher education; but non-traditional students are often taken into account
- only few studies on how to implement blended learning deliveries

e-learning Maturity Model (eMM)

A quality improvement framework (Marshall, 2007; 2010)

- Based on existing (business) quality frameworks
- Usage: Benchmarking purpose to describe the e-learning capability of institutions
- Developed for **higher education institution**
- Purposefully quite complex (colour codes / matrix of results) to acknowledge the rich complexity that influences the quality of e-learning (Marshall, 2013)

institutions / departments / programs

dimensions

- Process areas:**
- Learning
 - Development
 - Support
 - Evaluation
 - Organisation

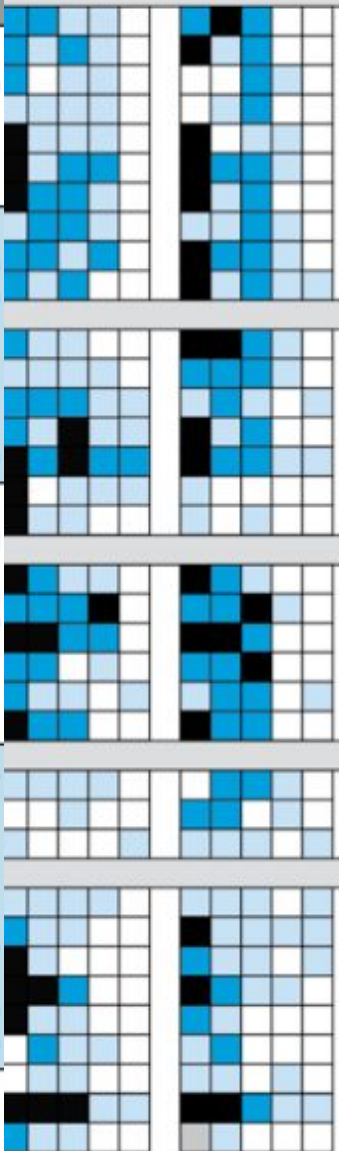
	1	2	3	4	5
Development: Processes surrounding the creation and maintenance of e-learning resources					
D1. Teaching staff are provided with design and development support when engaging in e-learning	■	■	■	■	■
D2. Students are provided with library facilities when engaging in e-learning	■	■	■	■	■
D3. Student enquiries, questions and complaints are collected and managed formally	■	■	■	■	■
D4. Students are provided with personal and learning support services when engaging in e-learning	■	■	■	■	■
D5. Teaching staff are provided with e-learning pedagogical support and professional development	■	■	■	■	■
D6. Teaching staff are provided with technical support in using digital information created by students	■	■	■	■	■
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	■	■	■	■	■
E2. Teaching staff are able to provide regular feedback on quality and effectiveness of their e-learning experience	■	■	■	■	■
E3. Regular reviews of the e-learning aspects of courses are conducted	■	■	■	■	■
Organisation: Processes associated with institutional planning and management					
O1. Formal criteria guide the allocation of resources for e-learning design, development and delivery	■	■	■	■	■
O2. Institutional learning and teaching policy and strategy explicitly address e-learning	■	■	■	■	■
O3. E-learning technology decisions are guided by an explicit plan	■	■	■	■	■
O4. Digital information use is guided by an institutional information integrity plan	■	■	■	■	■
O5. E-learning initiatives are guided by explicit development plans	■	■	■	■	■
O6. Students are provided with information on e-learning technologies prior to starting courses	■	■	■	■	■
O7. Students are provided with information on e-learning pedagogies prior to starting courses	■	■	■	■	■
O8. Students are provided with administration information prior to starting courses	■	■	■	■	■
O9. E-learning initiatives are guided by institutional strategies and operational plans	■	■	■	■	■

35 processes
=> multiple practices formulated per process on each dimension

institutions / departments / programs

L1 Learning objectives guide the design and implementation of courses

Assessment	Practices
1 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation includes a clear statement of learning objectives.</p> <p>Learning objectives are linked explicitly throughout learning and assessment activities using consistent language. <i>See also L8(1), D3(2) & O7(1)</i></p> <p>Learning objectives are linked explicitly to wider programme or institutional objectives.</p> <p>Learning objectives support student outcomes beyond the recall of information.</p> <p>Course workload expectations and assessment tasks are consistent with course learning objectives.</p>
2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Course documentation templates require the clear statement of learning objectives.</p> <p>Learning objectives guide e-learning design and (re)development decisions regarding content and activities. <i>See also D3(2), O6(2) & O7(2)</i></p> <p>Learning objectives guide e-learning design and (re)development decisions regarding technology and pedagogy. <i>See also D3(2), O6(2) & O7(2)</i></p> <p>Institutional reviews monitor the linkages between course learning objectives and wider programme or institutional objectives.</p> <p>Institutional reviews are guided by course learning objectives when assessing course structure, learning design and content.</p> <p>E-Learning design and (re)development is guided by a researched evidence base of effective learning objectives and associated e-learning activities.</p> <p>E-learning design and (re)development plans formally link learning objectives to institutional strategic and operational plans.</p> <p>Staff are provided with assistance when engaged in e-learning design and (re)development. <i>See also L7(2)</i></p>
3 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Institutional policies require that a formal statement of learning objectives is part of all course documentation provided to students.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on developing learning objectives that address the full range of cognitive outcomes appropriate to the discipline, pedagogical approach and students.</p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on using learning objectives to guide e-learning design and (re)development. <i>See also L6(3)</i></p> <p>Teaching staff are provided with support resources (including training, guidelines and examples) on assessing student achievement of learning objectives.</p> <p>Institutional e-learning policies are guided by institutional learning objectives for all students.</p> <p>Staff are provided with a researched evidence base of effective learning objectives and associated e-learning activities.</p>
4 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Compliance with policies, standards and guidelines governing the incorporation of learning objectives in e-learning design and development activities is regularly monitored.</p> <p>A variety of qualitative and quantitative metrics are used to assess student achievement of course learning objectives.</p> <p>Course learning objectives are regularly monitored to ensure that they address the full range of cognitive outcomes.</p> <p>Course learning objectives are regularly monitored to ensure that they are effective.</p> <p>E-learning design and (re)development activities are subject to formal quality assurance reviews at key milestones. <i>See also L7(4), L8(4), D1(4), D2(4), D4(4), D5(4), D6(4), S5(4), E1(4), E2(4), E3(4), O1(4), O2(4), O3(4), O4(4), O5(4) & O9(4)</i></p> <p>Financial costs and benefits of delivering course learning objectives are regularly monitored.</p> <p>Feedback collected regularly from students regarding the effectiveness of e-learning activities. <i>See also L7(4)</i></p> <p>Feedback collected regularly from staff regarding the effectiveness of e-learning activities. <i>See also L7(4)</i></p>
5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<p>Information on student achievement of learning objectives guides e-learning design and (re)development.</p> <p>Institutional learning objectives are guided by learning and teaching strategic plans.</p>

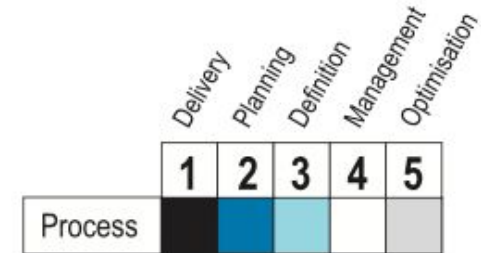


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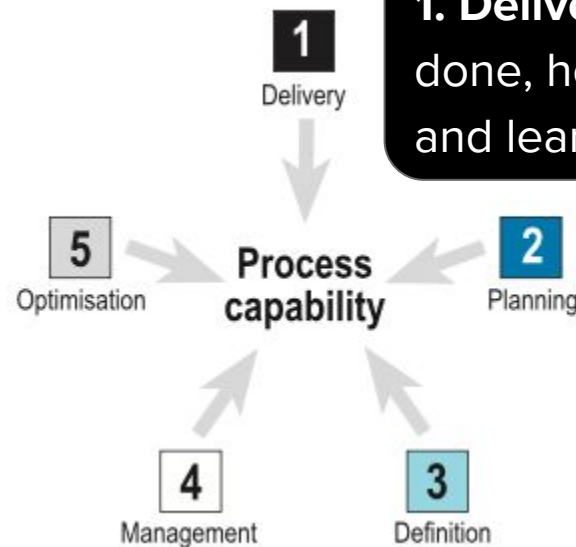
**Evaluation of capability
=> through talks, documents,
guidelines,...**

Capability



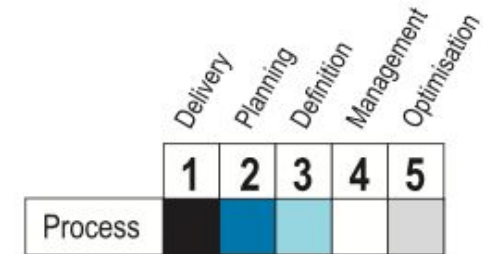
Capability refers to the ability of an institution to ensure that e-learning design, development and deployment is meeting the needs of the students, staff and institution. Capability includes the ability of an institution to sustain e-learning support of teaching as demand grows and staff change (Marshall, 2007).

Dimensions: NOT hierarchical but holistic capability



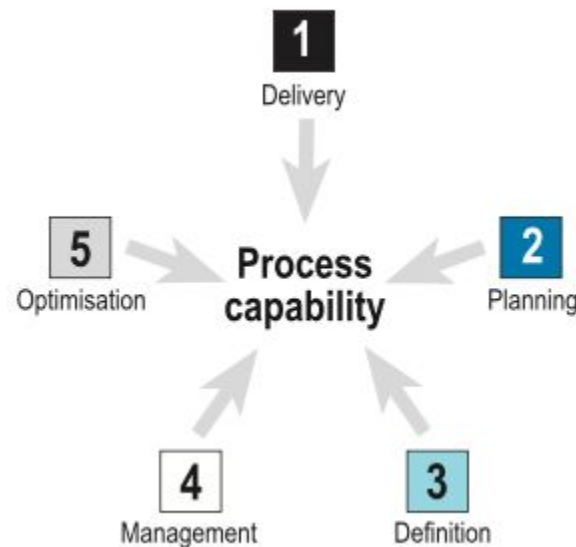
1. Delivery: how is the process done, how is it visible to the staff and learners?

Capability



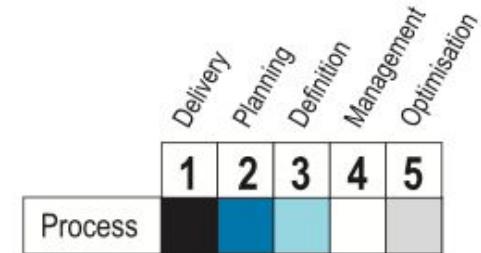
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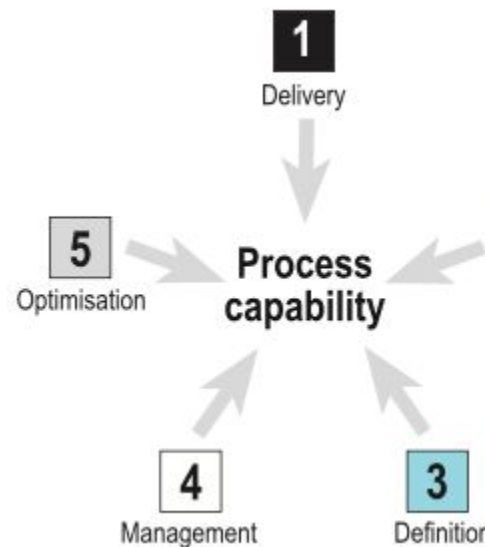
2. Planning: how is the process planned, how is the process translated in objectives?

Capability



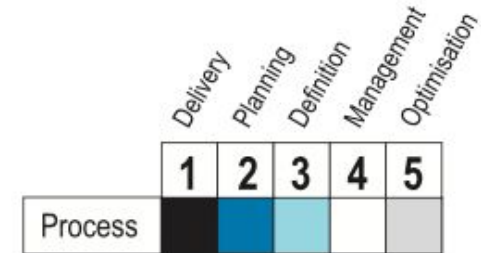
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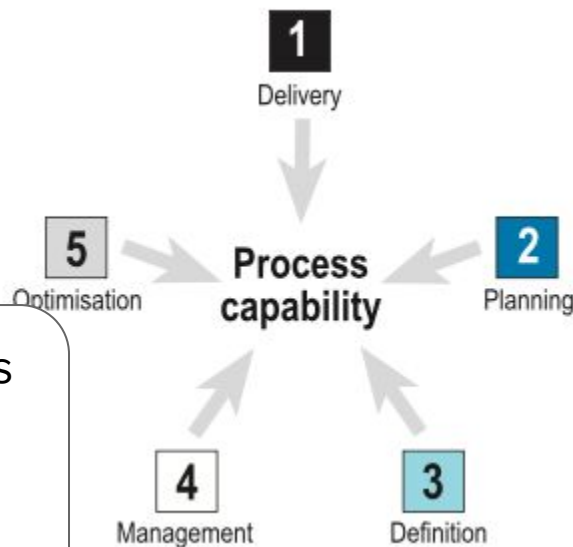
3. Definition: are there procedures, standards,... at institutional level and are the processes supported

Capability



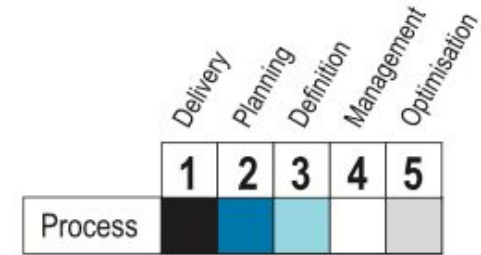
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Dimensions: NOT hierarchical but holistic capability



4. Management: how is the execution of the process managed and monitored

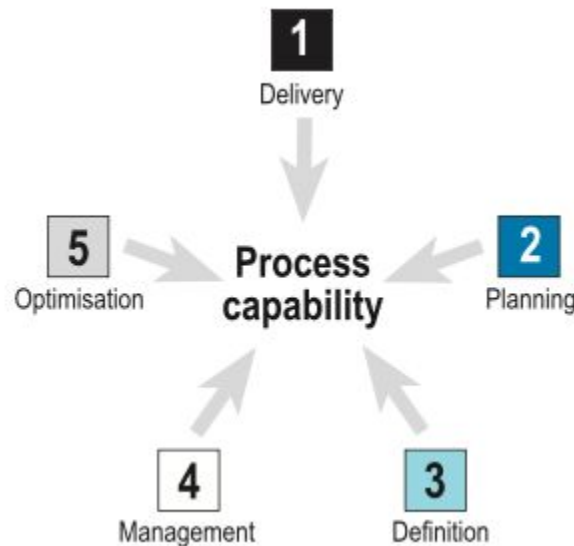
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Dimensions: NOT hierarchical but holistic capability

5. Optimization: how does the institution implements improvement strategies based upon the information from the other dimension



Capability

	Delivery	Planning	Definition	Management	Optimisation
Process	1	2	3	4	5

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Dimensions: NOT hierarchical but holistic capability

1
Delivery

⇒ An institution is capable in a process, if it is capable on all dimensions of that process;
⇒ an institution that has developed capability on all processes is more capable than one that has not

4
Management

3
Definition

Institutional quality assurance

Increasing awareness in higher education institutions that a quality culture needs to be developed through discussions with stakeholders

eMM may be a starting point or guide for this discussion

In Flanders, higher education institutions are required - as part of the visitation process - to hand in a self-assessment report that is expected to result from a discussion among and collaboration between staff members.

3. Application of eMM in Flemish Adult Education Centers

Centers for Adult Education not part of higher education institutions (=> different quality assessment procedure)

70% of all centers organize blended learning courses, with much variety.

Operational definition for blended learning, as defined by the Ministry of Education in Flanders, which is responsible for the funding of the AEC: **a combination of face-to-face and distance learning.**

Centers can receive additional funding if they organize with a distance component of between 25 and 95%.

Three cases are studied here

Case one

- One of the largest CAE in Flanders
- 10 year experience with blended learning

⇒ motivation (center): to assess the quality of the existing blended learning delivery and detect areas of improvement

Pilot study: Is eMM appropriate for the context of adult education?

Case one - Procedure

- Introductory meeting with the management of the center
- Management appoints seven participants
 - 2 OBL teachers,
 - 4 program managers from different departments
 - 2 IT staff members
 - principal
- Administration of the **original** instrument
 - in English
 - practices grouped per dimension
 - every participant rates three dimensions
 - participants are given three hours to complete the assessment

Case one - Findings

- Non response in teachers and one IT staff member was quite high
 - insufficient knowledge of Quality Assurance procedures in the center
- ⇒ Need for a group assessment to foster a quality dialogue
- English version is too difficult for the target population
- ⇒ Need for a Dutch version
- Full assessment due to different people filling out different dimensions of the instrument
- ⇒ More focus is needed when doing group assessments

Case two

- a merger between several centers
- limited experience with blended learning in the program Mentor of childcare
- program: mentor in childcare. Need for this program: only limited numbers of centers are entitled to provide this program, people from the wider region enroll. Moreover, most students work already in childcare and have to combine a job with education. Providing this program in a blended format is as such a great asset. The center requested and received extra funding to achieve this

What quality criteria must be considered when converting a F2F-program to a blended learning format?

Case two - Procedure

- Introductory meeting with the management of the center ⇒ two assessments
 - 15 processes from the process areas Learning, Development and Support for a group assessment with the teachers of the program
 - 10 processes of the process area Organization for a group assessment with a task group addressing blended learning issues on the institutional level.
- the manager and program coordinator were involved in both assessments; management was very supportive and engaged.
- Instrument:
 - the original eMM, translated to Dutch, including short descriptions of the practices.
 - The respondents filled out the instrument collaboratively on paper during three sessions

Case two - Findings

- Only dimensions **planning** and **definition** could be assessed as there were no practices on the dimension delivery for blended learning courses yet.
- Many processes of eMM are valid for F2F-delivery as well (e.g. process L1: “Learning objectives guide the design and implementation of courses”). For this kind of more generic educational processes, practices on the dimension **delivery** could be assessed on comparable F2F practices.
- The participants of the group assessment sessions were able to **formulate clear areas for special attention** for the conversion of the program into blended learning **and** to **prioritize** actions for improvement.

Case three

- medium-sized center of adult education, offering blended learning in some courses of the program since a few years
- program: mentor in childcare.
- the center considers converting the program to more than 50 percent of distance education expecting a growing intake of unqualified employees in nurseries and will apply for additional funding from the government for the next academic year.
- program coordinator and the person in charge for the support of the LMS took the initiative to do an assessment with the team in preparation to the conversion of the program to promote a quality awareness and shared understanding of the requirements of qualitative blended learning.
- the management approved the initiative, but couldn't join the assessment session.

Case three - Procedure

- Introductory meeting with the management of the center
- Team chooses 16 processes they are interested in
- Focus of the group assessment was mainly on the dimensions delivery and planning
- Instrument
 - Further simplified: assessment on dimension level (based upon the essence of the process)
 - More contextualized
- Assessment during a teamday

Case three - Findings

- Team members were not motivated: their program just received a positive evaluation by the inspectorate
- The participants had the feeling that the assessment was free of obligations because the conversion of the program did not start yet and because of a lack of participation and engagement of the management
- The process to formulate areas of improvement passed off less smoothly because the participants felt less concern and the lack of commitment of the management to confirm possible engagements.

Conclusion

To achieve a culture of continuous improvement through self-assessment – several conditions should be fulfilled:

1. Sense of urgency
2. Management commitment
3. Group assessments can foster a culture of continuous improvement and a greater commitment towards quality if the participants are convinced that their input is needed and valued. Otherwise, participants will experience the assessment as a waste of time and resistance can crop up.
4. Communication strategies are vital, both during the assessment (to create a climate of trust) and afterwards (to elucidate improvement plans and initiatives to gain as much as commitment as possible).

Conclusion - lessons learned

- no one size fits all approach: adjust instrument according to the characteristics of the center and the existing culture
- less is more: select a number of processes that is tailored to the group who is doing the assessment
- A quick win is not the path to a culture of continuous improvement: one assessment will not change the culture. A self-assessment with eMM helps participants to reflect on strengths and weaknesses, to detect areas of improvement and to plan actions of improvement.

More information?

Project website: www.iwt-alo.be

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Thank you!