

# PRoF Award abstract – Call 2015

## 1. Research Outline

Acronym	Workplace learning in healthcare education
Project name in English	Embo's Workplace Learning Model for healthcare education
Pitch (1 sentence)	An innovative and integrated workplace learning model to facilitate continuous or lifelong learning, assessment and supervision of competencies in healthcare education.
Executive summary (max. 10 lines)	
<p>In the 21<sup>st</sup> century, clinical workplaces continue to be important learning environments but they are featured by complexity and discontinuity. Health professions educators are faced with the challenge to conceptualize workplace learning as a continuous developmental process within this clinical reality. The research project that was set up to tackle this challenge resulted in the design of Embo's Workplace Learning Model. This model integrates learning (reflection and feedback on performances and competency development), assessment (self-, formative and summative) and supervision (roles) in a competency framework to support self-directed learning before graduation and to teach learners how to meet the expectations of continuous professional development also after graduation.</p>	

## 2. Cause and context of the research

Workplace learning plays a crucial role in the development of professional competency in health care education. It is generally accepted that competency development in the clinical workplace should be a continuous self-directed process of performance improvement and personal and professional development. Yet, developing and assessing competencies and guiding a continuous developmental process against a backdrop of discontinuous clinical workplaces turned out to be a complex undertaking.

Recent developments in learning sciences suggest that traditional models of education do not match the reality of today's clinical workplaces and consequently overlook many opportunities to support and enhance learning in clinical settings. There is a mismatch between traditional notions of workplace learning on the one hand, and modern clinical workplaces on the other, the latter building on short-term hospital attachments, short student-teacher relationships, short rotations between disciplines, and on collaborative learning in inter-professional groups rather than from a single senior professional. Furthermore, clinical learning environments are characterised by their heterogeneity, a high level of unpredictability, dynamics and by the dual role the learner performs: receiving professional training whilst at the same time providing medical care to real patients. Thus, clinical workplaces can be described as complex and discontinuous for learners and teachers alike.

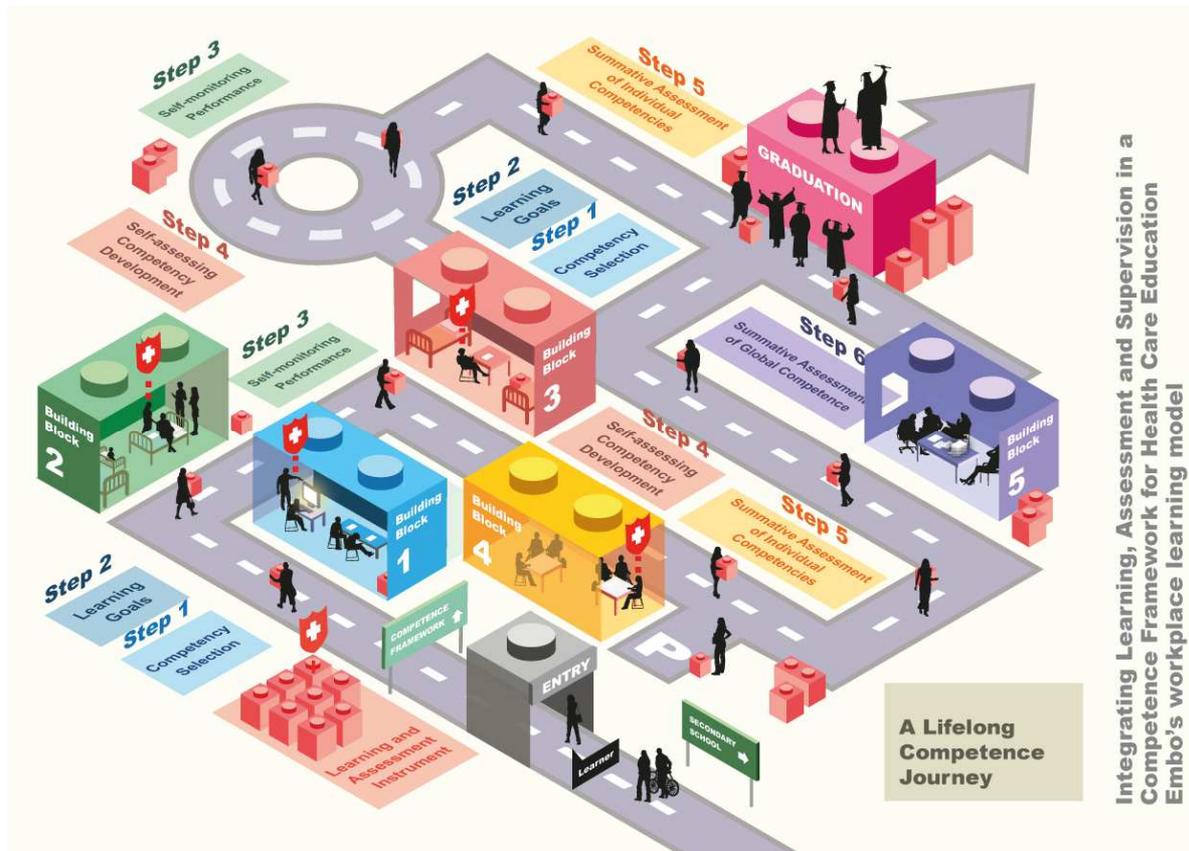
This challenges educators when it comes to conceptualising workplace learning as a continuous developmental learning process within a discontinuous community of clinical practice. In other words, the challenges of the clinical workplace relate to learning, to teaching and to the assessment processes. This research project aimed to advance understanding of workplace learning by exploring the potential of integrating learning, assessment and supervision in a continuous developmental process, and the effects of this integration on workplace learning in health care education. Different studies were conducted in the context of midwifery education at the University College Arteveldehogeschool Ghent (Belgium).

## 3. Innovation results achieved

This application for the award PRoF 2015 is an extension of a recently published dissertation at the Maastricht University (the Netherlands), in cooperation with the University College Arteveldehogeschool Ghent and the Ghent University (Belgium)<sup>1</sup>.

Review of the relevant workplace literature and four empirical studies that were conducted during this doctoral research project resulted in the design of an evidence-based and feasible learning model: the Integrated Workplace Learning Assessment and Supervision Competency Framework or Embo's Workplace Learning Model (Figure 1).<sup>2</sup> Two qualitative

studies used a content analysis approach to explore students' and supervisors' perceptions on how this framework facilitated learning, assessment and supervision.<sup>3-4</sup> A subsequent mixed-method study explored how two reflective writing activities stimulated reflection at different degrees of granularity during workplace learning.<sup>5</sup> A cross-sectional and retrospective-longitudinal correlation cohort study was used to investigate the relationship between reflection and performance and how reflection contributes to development.<sup>6</sup>



#### 4. Link to the PRoF values

**Innovation is created according to the 8 PRoF values:**

Competency-based workplace learning crosses two key domains: health care and education. The purpose of competency frameworks is to increase transparency of degrees, and to explicitly lay down professional competencies and training requirements. The 8 PRoF values refer to essential attitudes of health care professionals, they are part of key

competencies that are trained, assessed and guided according the principles of Embo's Workplace Learning Model.

An important feature of this innovative model is a twofold learning strategy as well as a twofold assessment strategy. Although formative learning and assessment is important, ultimately, patients and society place strong emphasis on summative assessment. Summative assessment provides assurance that graduates have met minimum standards.<sup>2</sup> Some of the PRoF values are explicitly formulated as a minimum criterion in the current implemented assessment list at the midwifery department at the University College Arteveldehogeschool Ghent (e.g. safety and privacy).

This innovative health care model is designed to stimulate continuous competency development of learners and professionals. It describes the workplace learning processes in six recurrent steps: 1) competency selection; 2) formulating learning goals; 3) self-monitoring performance; 4) self-assessing competency development; 5) summative assessment of individual competencies and 6) summative assessment of global professional competence. The designers suggest that a lifelong application of the different steps will stimulate professionals to critically reflect on the quality of their given care and to detect learning needs and formulate learning plans to improve their competency level after graduation. In this way, we believe that competent and lifelong learners will provide high quality care, including continuous monitoring of the 8 essential PRoF-values.

### **Innovation is created based upon:**

#### **Interdisciplinary collaboration**

The importance of interdisciplinary collaboration is reflected both in the development and the content of Embo's Workplace Learning Model.

First, the innovative model was developed through collaboration with student midwives, midwives, nurses, and education experts. Research was published in peer-reviewed journals in the midwifery, medical, and nursing domain.

Second, the model is based on socio-cultural learning theories that emphasize the importance of collaborative learning in a community of practice. The three key words of Embo's Workplace learning Model are 'integration, continuity en collaboration'. Integration of components of workplace learning and collaboration with all professionals (workplace and school) are necessary to promote optimal continuous development during a clinical programme. Within this model, a collaboration between learners, workplace and school is established by defining the following roles: learner, observer, learning guide, and school committee. Furthermore, this model underlines the importance of collaboration in which sharing, inquiry and co-construction are central activities. This will lead learners to become active agents of their learning, to enhance each other's learning and to share with one

another the responsibility for their own and the others' learning at the workplace. Thus, to achieve lifelong competency development, we should focus on both the 'individual competency' and the 'collective competency'.<sup>1</sup>

### Inter university/school collaboration

The design of this feasible and evidence-based health care model was the result of an optimal collaboration between two levels in higher education (University College and Universities) and between two countries (Belgium and the Netherlands). This collaboration is an example of the cross-fertilization between research and practice.

This project is also a good practice regarding optimal cooperation between higher education institutions and several partner hospitals where students learn effectively in the workplace. Workplace learning is a crucial part of health care education programmes, but it is often undervalued by policy makers in health care and education.

### Impact on healthcare system

#### = How this innovation has an effect on the future health care system?

The relevance of this research was described in a valorisation section in the doctoral thesis (p 139-143).<sup>1</sup> We describe some elements that needs improvement in order to optimise workplace learning in the health care system.

The designers hope that this integrated workplace learning model will inspire professionals who are involved in workplace learning in health care. In general, the workplace learning literature is complex and often discusses single components of workplace learning without making a bridge to the continuity of workplace learning. Although there is a general consensus among health care educators to build programmes on competency frameworks, evidence-based models supporting the translation from these theory-based competency frameworks into clinical practice are scarce. Competency-based education arose from the need to attune education more to the labour market. Nowadays, some decennia later, it still seems difficult to organise competency-based education in clinical practice. The designers hope that this health care model will contribute to the competency future in clinical health care and education. Nevertheless, sound management and sufficient resources are necessary to optimise the quality of education and health care, encourage exchanges of good practices, and warrant the achievement of policy objectives.

Second, the results of this research confirm the impact of an integrated model on the development of a continuous self-directed learning process and the importance of situating learning on a cognitive continuum. The strict distinction between undergraduate, postgraduate, and residency workplace learning might hinder continuous workplace learning. Also in international perspective, this distinction is somewhat artificial because of the differences in the length of educational programmes, the levels of diplomas, the

competencies of health care professionals, et cetera. Further research will demonstrate to what extent the views of an undergraduate (midwifery) training programme contribute to research in the field of postgraduate, residency, and lifelong learning (CPD, Continuous Professional Development).

In the third place, this research advocates the incorporation of an integrated learning and assessment continuum in the design. The results indicate that there's a tension between the continuous collection of written information for learning-purposes on the one hand, and the use of this information for assessment-purposes on the other. Educators in health care are responsible for ensuring that graduates have the competency to provide safe care. Therefore, it is important that the summative decision to declare the student 'professionally competent' is made by an expert jury that takes into account the student's continuous learning process. The results in this thesis underscore the complexity of summative assessment. The findings fit in closely with current tendencies to focus on longitudinal learning projects, remediation programmes, assessment by judgement, and programmatic assessment.

### **Sustainable societal and/or business aspects**

The design of Embo's Workplace Learning Model is just the start! The designers identified the following topics for future implementation and research to guarantee a sustainable societal and/or business impact.

- Nowadays, Embo's Workplace Learning Model is developed and implemented in one single midwifery department. Nevertheless, all midwifery departments from Flanders signed a commitment to further implement this model all over Flanders. This implementation process will be facilitated by the work done over the last two years. They designed as partners a new competency framework that was followed by a new professional profile and a new educational profile. The midwives from the workplaces are waiting for more uniform learning- and assessment instruments in Flanders.
- By presenting this model in different national and international conferences, the designers hope to find interested educators and health care professionals to implement this model in different settings and countries. The following presentations are planned: Ghent - Belgium (March 2015); Umea - Sweden (May 2015), Bournemouth - UK (July 2015); Glasgow - Scotland (August 2015); Rotterdam - the Netherlands (November 2015) – Ghent-Belgium (November 2015).
- This model is portfolio- based and offers a framework to integrate existing digital systems to enhance workplace learning in the future. Many digital tools are available to improve education in the workplace, but they are rarely used in health care education.

- This model is developed in a setting before graduation. Discontinuity before and after graduation is an important topic in health care education. Bridging both worlds will support continuous workplace learning. This workplace learning model uses a lifelong learning journey metaphor. Future research is necessary to investigate the effect of implementing this model on continuous learning after graduation.
- This model is developed in order to improve continuous and self-directed learning in health care education. Student-centred education is key in this model and supervisors have a role in supporting and facilitating the lifelong learning journey of the learner. Recently, a challenging project was started to translate this student-centered model for workplace learning into a patient-centered model for multidisciplinary primary care. A pilot will take place in a 'primary care house' in Deinze (Belgium).

## 5. Applicable IPR rules

This research project was not funded.

## 6. Information on the partners

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Mieke Embo is head of the Midwifery Department. She has a nursing and midwifery bachelor degree (Higher Institute of Paramedical professions, Ghent - B), a Master in Health Management degree (University of Brussels - B), and a doctoral degree at the University Maastricht, Faculty of Health, Medicine and Life Sciences (University Maastricht - NL).

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### **Prof. dr. Cees van der Vleuten - Maastricht University**

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Erik Driessen is Associate Professor and Chair of the department of Educational Development and Research at the Faculty of Health, Medicine and Life Sciences of Maastricht University. His area of expertise lies in evaluation and assessment. Erik Driessen was copromotor of the doctoral thesis of Mieke Embo.

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## **Addendum: Contact information**

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