

Designing workplace learning and knowledge exchange - a postgraduate training program for professionals in SME

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Introduction

The postgraduate training program “Designing workplace learning and knowledge exchange” (aquwa) was developed to respond to special requirements that have small- and medium-sized enterprises (SME) in knowledge intensive industries. Access to individual workplace-related specific knowledge and exchanging this knowledge are important factors for being innovative, and hence, for sustaining competitive.

Thus, through aquwa, professionals are taught how to initialize and foster knowledge exchange between co-workers and how to initiate, implement and evaluate internal company training (e.g., Desouza, 2003, Kyndt, Dochy, & Nijs, 2009; Jäckel, Kerlen, Pfeiffer, & Wessels, 2006).

Organisation

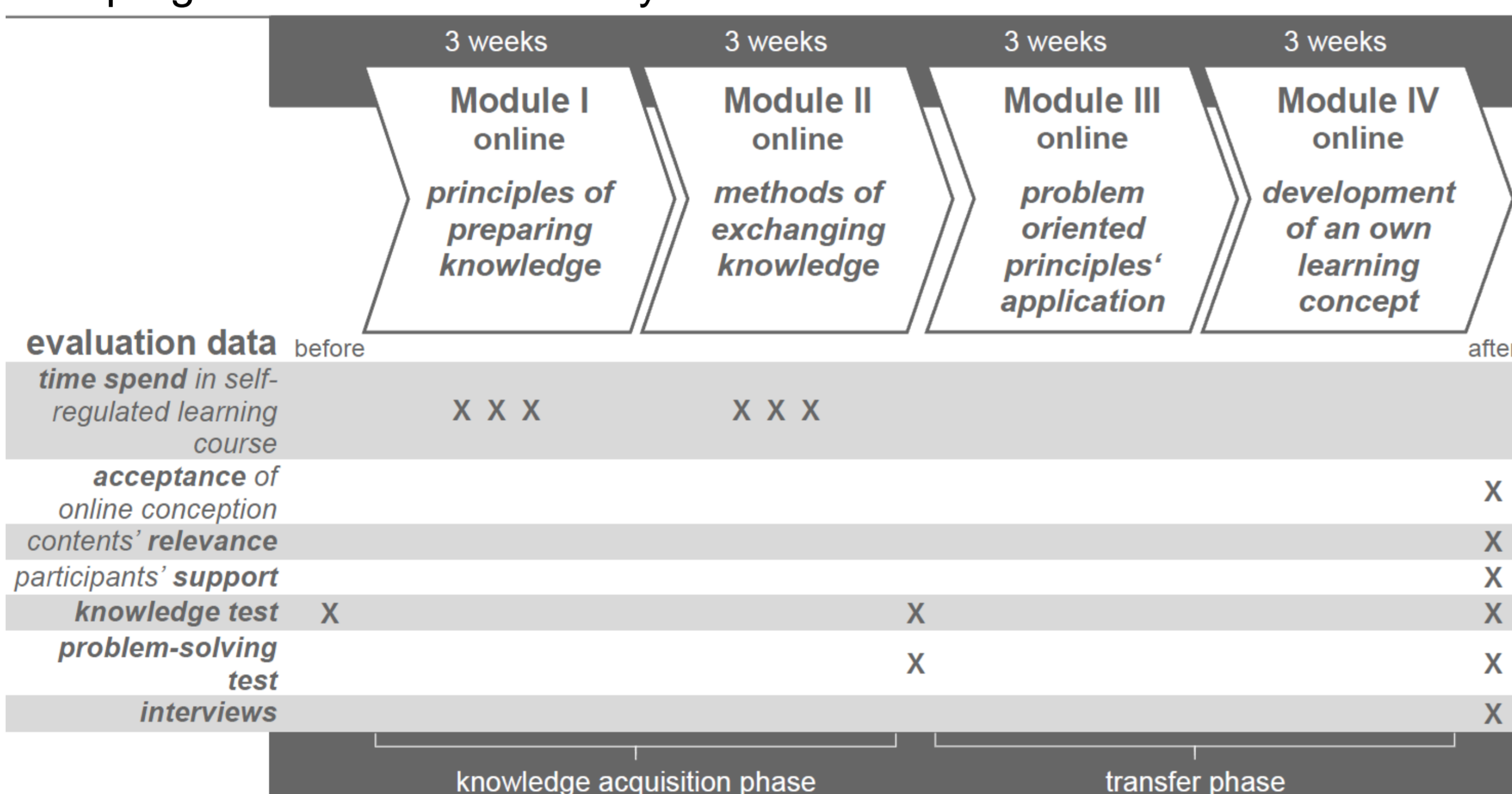
- **online blended learning format** with weekly new **online self-regulated learning courses** and accompanying **virtual classroom sessions**:

Self-regulated learning courses	Virtual classroom sessions
<ul style="list-style-type: none"> • Preparation for the virtual classroom sessions • <i>Materials</i>: texts, illustrations, worked out examples, interactive exercises, videos • Via the learning platform OPAL (version OLAT-CE-PRE 5.1) 	<ul style="list-style-type: none"> • Content from the self-regulated learning courses are discussed and deepened • <i>Methods</i>: live-presentations, exercises in groups, case management, role play, discussions, coaching • Via the iLinc Real-time Collaboration Suite

- duration: **12 weeks**
- time investment **3 hours each week** → participants are able to attend the training program while working fulltime

Modules

The programs' content is conveyed in four modules:



- **themes**: e.g., expert-lay communication, instructional design principles, designing learning tasks, communicating effectively in written form, providing constructive feedback, etc.
- first two modules serve for participants' **knowledge acquisition** by the alteration of self-study materials and deepening online presence sessions
- module 3 and 4 prepare and ensure **transfer** by applying acquired knowledge to work-related scenarios and designing tasks; it is expected that this will lead to a successful transfer to the workplace (e.g., Eraut, 2004; Merrill, 2002)

Evaluation methods

Eleven participants from different SME completed the program. The programs' effectiveness is evaluated in accordance with the evaluation model by Kirkpatrick (1994). Three of the four distinguished evaluation levels will be assessed: reactions, learning and behaviour (see illustration above).

With regard to **level 1 (reactions)**, we evaluated:

- the **time spend** in the self-regulated learning course (log-files)
- the **acceptance** of the online-conception (questionnaires) and
- the **relevance** of the program's content (questionnaires)

Concerning **level 2 (learning)**, we assessed:

- knowledge acquisition via a **knowledge test** and
- knowledge application via a **problem-solving test**

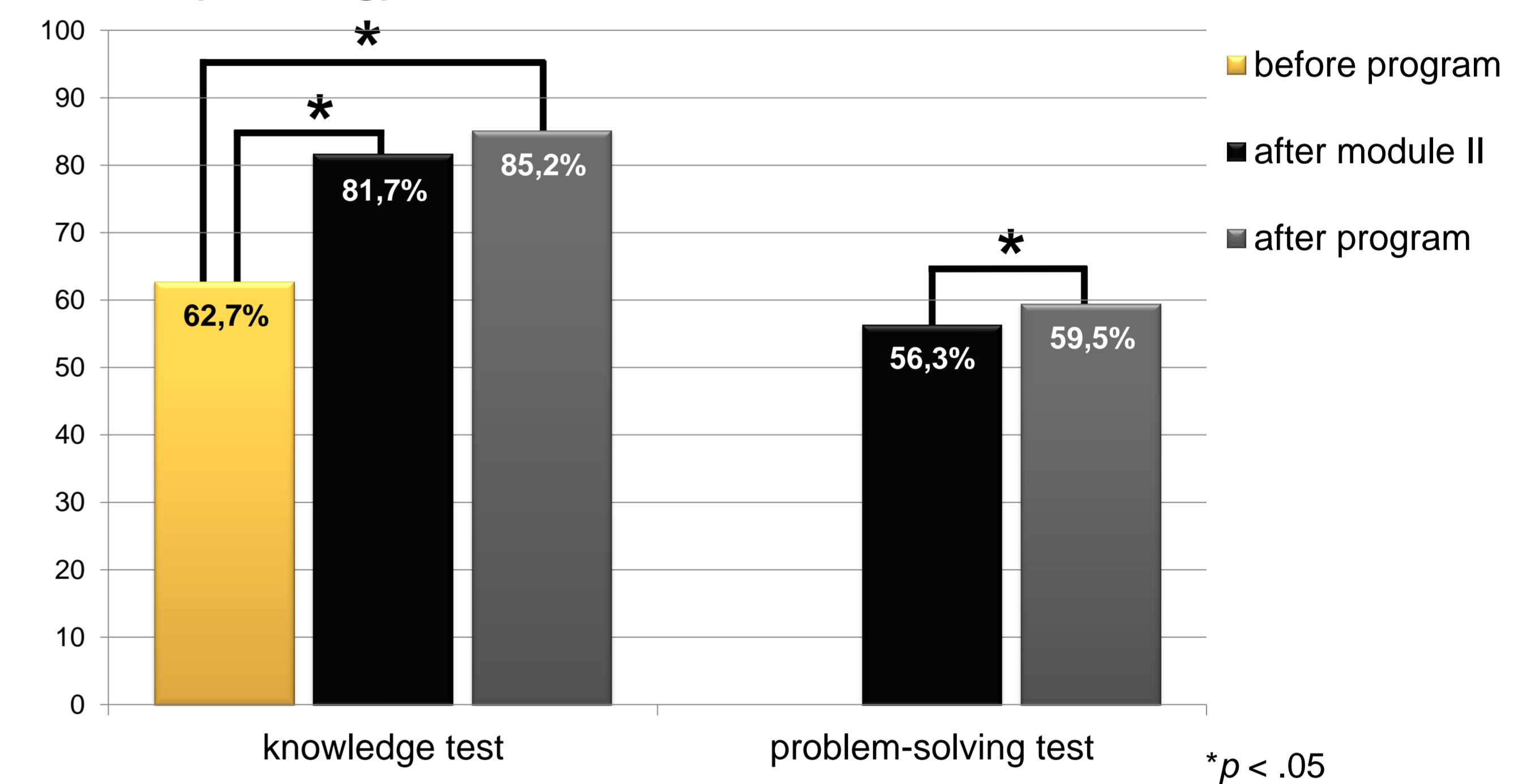
With regard to **level 3 (behaviours)**, interviews were conducted within the participating enterprises 8 weeks after the training. The interviews addressed the transfer of program contents to the workplace.

Results

Level 1 (reactions):

- Log-files:
 - participants spend on average 75 minutes per week in the self-regulated learning course
- Questionnaires (scale from 1 (strongly disagree) to 5 (strongly agree)):
 - participants appreciated the location-independent online-conception ($M = 4.45$; $SD = 0.69$)
 - participants found the contents relevant for their work ($M = 3.8$; $SD = 0.93$)
 - participants felt well supported by the instructors during the process of designing exemplary internal company training ($M = 4.36$; $SD = 0.78$)

Level 2 (learning):



Level 3 (behaviours):

The interviews lasted from 10 to 20 minutes, 9 of 11 remaining participants could be included.

- 8 respondents (89%) reported positive changes in their daily work
- 5 interviewees (56%) realized an internal company training at their workplace (4 of them were implemented very successfully; one professional did not complete the implementation so far)
- 4 participants (44%) stated that there was not enough time in addition to their normal work volume to initialize internal company training

Discussion

- very successful e-learning program with regard to the **online-conception**, the **relevance of the contents**, the **increase of knowledge** and the **application of knowledge to new problems**
- almost every participant reported changes in his or her behaviour and/or the implementation of an internal company training
- even by using several technical systems, it is possible to provide broad guidance and support to transfer and apply gained knowledge
- based on the participants' feedback, the well rated training program will be further optimized, e.g.
 - less relevant training lessons from module III are shortened substitutional for more guidance for the conceptualization of internal company training by means of two classroom sessions
 - certain topics will be emphasised by extra texts or special attention in a classroom session, e.g. evaluating learning environments

The revised program already started in November 2012, the data analysis is still in progress.

References

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