Exploring digital didactics
A case study on learning to teach online

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Introduction

- ICT enabled an increase of online and blended courses (OBL) (Redmond, 2011)
- More teachers are required to teach (partially) online (Salmon, 2011)
- Lack of experience in OBL environments affects teaching (Kelz, 2011)
- Teaching face-to-face ≠ online teaching

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

DIGITAL DIDACTICS
Digital Didactics program

- Online professional development programme targeting **TEACHING** online → Strong focus on **DIDACTICS**

- Completely online trajectory with two meeting moments: **kick-off** and **kick-down**

- Very small groups (maximum 10) with all one coach
Digital Didactics program

- Modular trajectory in Dutch, English and French

- Seven modules: Basis, Design, Development, Implementation and follow-up, Cooperative learning, E-coaching and Concerns

- Two participation options: own initiative – guided by a coach (only the Dutch version)
Research Questions

- RQ1: What are the participants’ reasons to participate in the DD programme?

- RQ2: What are the immediate experiences of the participants and the coaches on the guidance level, content level and practical level?
Methodology

Online structured interviews for the participants and two focus group interviews with the coaches

→ Thematic analysis of the transcribed data
Participants

Paper reports on a first pilot test of the programme:

20 participants completed the trajectory (40 started)
Ages: 24 - 72 years old
Occupations: Lecturers and Didactical experts
4 coaches
Start: March 2015       End: June 2015

www.digitaledicatiek.be
Results

RQ1

- All participants participated out of their own free will

- Three main motivational reasons to participate: 
  *Personal – Professional – Relational*

“I enrolled due to professional motives and personal interest: I always experiment with new digital tools and I always try to help others with it. Yet, I still have a lot to learn on how you offer an entire course digitally. There was also an extra motive why I enrolled and this was due to the fact that I enrolled together with a colleague.” (Female, age 34)
Results

RQ2

Experiences on the guidance level

- General support provided
- Amount of feedback given
- Quality of feedback given
- Availability of the coach

- All generally evaluated very good
- Alignment between coaches and participants
- Motivation as key function of the coach

“One of the strong points of the programme is that you are being coached. You are being motivated to complete your tasks and you actually work on something that you could use in your own practice.” (Female, age 41)
Results

RQ2

Experiences on the content level

- New knowledge presented
- Relevance of content
- Implementation possibilities of content

- Good alignment with current needs
- Provided new perspectives on teaching
- Implementation possibilities

“I think it certainly can be integrated, if it will be simple, that I do not know. There is a lot to take into account. Specifically, the time investment for the development and the dissemination is very intense. There are some limitations as to the tools and the type of platform.” (Female, age 41)
Experiences on the practical level

- Duration of the trajectory
  - Tasks for each module were found to be online in time
  - Very intense trajectory for participants and coaches
- Planning
  - Tasks
- Date of the trajectory

“It takes a lot of time to create something new. I preferred to develop an entire course, but I had to restrict myself to two chapters. It was a very challenging trajectory that I chose, and I did not have much time available.” (Male, age 52)
Conclusions

- Alignment with teachers’ needs can add relevance to the program (Borko, H., Jacobs, J. and Koellner, K., 2010)

- Previous research shows that teachers indicate a lack of time to professionalise themselves and/or to implement e-learning. Preference of participants towards a longer trajectory

- Institutional context remains to be a possible barrier to implement online teaching practices


Q & A
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Welcome [to Digital Didactics]!

This website aims to immerse you in the possibilities offered by digital didactics. The focus is on teaching rather than on technology. This provides a stepping stone for trainers, instructors and teachers to familiarise themselves with digital didactics.

The practice will be strengthened based on the theory.

If this is your first visit to this website, it is best you start by clicking on 'introduction'.

You can independently go through the website or via an organised guided training program. Currently it is only available for internal partners, but this fall, you will have the opportunity to take part in the training program. One of the benefits of the training is that you take your own practice situation into the training, allowing you to experience a fast transition from the content of this website to your everyday situation.

Have a lot of digital didactical fun!
Design · Overview

In Module 1 (Basic / TPACK), you came across a number of teaching methods. Based on your objectives (acquiring, increasing or creating knowledge) and your context, you learned to select one or more methods.

The design of your course is more than the choice of a particular method. What content do you want to insert? In what order? And what is the connection between the different parts of the learning content?

In order to learn how to make these choices, we focus on “learning objects” and “learning content” and learn how to properly structure the learning content.

No course on ‘Digital didactics’ should be without Mayer’s design principles for multimedia learning (Mayer).

Finally, this module also addresses the various (digital) tools, with the aim of increasing your technological knowledge (TK) in this matter. We discuss the advantages and disadvantages, (educational) value, practical and technical implications (organic and infrastructure requirements) of the most common tools.
Learning content and learning objects

A **learning content** is a set of **learning objects** which, in turn, explain one topic in one way. They can be text, images, hyperlinks, but also audio, video or animation with or without interaction.

**Learning objects are ideally reusable** (RLO – Reusable Learning Objects). They contain as little as possible explicit references to each other, so that on the basis of these small learning objects larger **assemblages of learning paths** for different purposes can be made.

You can **develop learning objects yourself or use existing material**. You can **track learning objects in a CMS** (Content Management System) and include metadata (relevant characteristics) in order to find and select them. All this is discussed in Module 3, Development.

**Theory**
- Learning content and learning objects
- Structure and scenario
- Multimedia learning (Mayer)
- Mayer’s design principles for multimedia learning
- Overview
- Digital tools
- Information tools
  - TEXT
  - ILLUSTRATION
  - AUDIO

**Links**
- Modules
- Voorbeeld leerobject
- Oefeningen
- Leerinhoud en leerobject
Design principles for multimedia learning (Mayer)

According to Mayer you need to consider the following three basic assumptions when providing information:

1. The dual channel assumption which states that people learn through an auditory / verbal channel (information provided to us via the spoken word, and so we hear) and a pictorial / visual channel (information that reaches us through images and we therefore see). Both channels interact during the acquisition of information.