

Professional development and teacher training at K.U.Leuven

Tempus Workshop of the EQIBELT project
Jef Van den Branden & Wim Van Petegem
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Overview

- **Backgrounds of the use of ICT for education and K.U.Leuven's position herein**
- **K.U.Leuven's strategy, starting with its 1990 Mission Statement and the resulting pedagogical concept "GIL"**
- **Implementation of the strategy at organisational and pedagogical level**
- **Professional Development at K.U.Leuven**
- **Conclusions**

ICT backgrounds

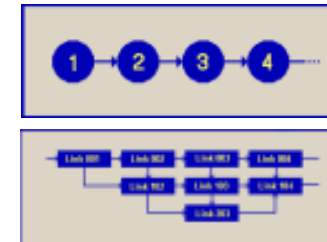


- **Bringing in “learning machines” for instruction**

- Pressey 1920: no feedback
- Skinner 1954: “reinforcement” to create operant conditioning

- **Programmed instruction**

- Skinner 1954 and 1958: linear PI =
- Crowder 1958: branched PI =
- Auto Tutor 1960
- PLATO system 1960-1980+: mainframe based CAI (and CAL)
- PCs / Macs / Ataris.....: 1980+



K.U.Leuven and ICT

- 1968: University Study Bureau, with educational research unit aimed at development of models for instruction in HE
- 1974: AV-Service for production and delivery of instructional materials
- 1978: “DUO” (University Education Support Office)
- 1980: forerunners start with CAI
- 1990: **new mission statement**, aimed at
 - Teaching that enhances *student's independent learning*
 - Adequate evaluation to ensure didactic qualities of teaching staff and *use of new teaching methods and technologies*

Implementation of innovation

- **Infrastructure**



- High speed fibre **network** (2 Gbit)
- ERP system (**SAP**)
- 3 **PC classes** (500 PCs) Leuven + 2 PC classes (50 PCs) Kortrijk
- **Kotnet**: connection of students' dormitories and rooms to the university's intranet (and Internet)
- **PC leasing** offer
- **TOLEDO platform** ("effectively support testing and learning")
 - » Blackboard TM
 - » Question Mark Perception TM
 - » ARIADNE
 - » Interconnection with ERP system



Implementation of innovation (cont'd)

- **Support**

- **LUDIT**

- » IT services, including IT helpdesk and training of “tools” (general tools, general production tools, Toledo)

- **DUO - ICTO**

- » Support for overall Educational Policy, teacher training, pedagogical support of teaching and learning materials and tools, implementation of innovation support

- **AV Net**

- » Support for multi-media production of educational materials and for distance education (international networking)

- **Communities** of practice

- **Faculty/School based support** units

- **Coordination:** Vice-Rector for Education

Incentives

- **Internal OI-grants**

- OI programme (Education Innovation projects programme), each year since 1997
- Competition for didactical teams (or groups) of teachers
- Conditions:
 - » Applying projects need to be supported by the Educational Board(s) of their Faculty(Faculties) / School(s)
 - » Projects must address innovative approach to a concrete element of education
 - » Last for max. 2 years and results need to be implemented
- Max. Of € 60.000 /year and project
- Per year ± 13 projects awarded (>130 projects financed so far)
- Effective dissemination of results

- **OOF (Education Development Fund - for the Association) since 2003 - 18 projects approved**

Guided Independent Learning

- **Proposed by University Educational Council as instantiation of university's Mission Statement**
- **Total (comprehensive) concept**
 - Pedagogical, technological, organisational
 - Emphasising on gradual *increase* of student's independent learning, supported by a *decreasing* teacher's guidance
- **Changing the roles of teachers and students**
- **Reaffirmation of necessity to build on scientific research, in which students need to participate**
- **Not forcing a specific pedagogical scenario**

GIL implications

- **At Faculty/School level**
 - Concept needed a faculty-specific, programme-specific and discipline-specific elaboration
- **At central level, 3 initiatives were taken**
 - **Structural regulations**, e.g.
 - » Empowerment of chairs of programme committees
 - » Evaluation of teaching achievements for career development
 - » Financial incentives
 - **Instruments development**, e.g.
 - » For quality assurance and monitoring
 - » For course description and curriculum revision
 - **Professional development**

Professional development

- **Aimed at different target groups:**
 - New faculty members
 - Teaching assistants
 - Members of educational innovation teams
 - Faculty members at large
- **Building on (adaptation and extension of) existing training in lecturing and testing for newly appointed teachers**
- **At the time of the Toledo implementation: a large training with a (quite) theoretical part as well as a practical component, supported by an extensive group of experts and tools, offered to all teaching teams and teaching staff**

Professional development (cont'd)

- **Original training too costly and labour intensive; replaced by:**
- **Digital chalk**
 - Originally 4 modules, aimed at *insights and competencies* needed for an optimal use of Toledo:
 - » **Introduction:** features of the Toledo platform
 - » **Design:** integrate the different functionalities of the platform components into each other and into the global learning environment, including sound decision making
 - » **Information delivery:** making instructional and learning materials in the GIL concept's perspective
 - » **Communication facilities:** learn to effectively use them
 - Each module 3 hours, as a mix of demos, reflection on the own teaching in relation to students' learning, and assignments that need the use of the Toledo platform

Professional development (cont'd)

- **Evaluation of original Digital Chalk**

- Participants have basic computer skills, and come with instrumental interests (“how to...”) that are instruction (not learning) oriented
- Complexity of Toledo needs more training than provided by the original version
- Systematic reflection on one’s own educational practice is essential, and includes a number of competencies that must be acquired, e.g.
 - » Having insight in the learning process
 - » Understanding the GIL concept
 - » Being able to design different educational learning environments, in relation to students’ characteristics, to the level and nature of education, to the potential of the platform tools, etc.

Professional development (cont'd)

- **Actual stage:**

- Name “Digital Chalk” dropped (training not only oriented towards exclusively to the use of e-learning)
- Series of modules (seminars and workshops), lasting at least half a day and focussing on a specific issue, e.g.
 - » Coaching assignments
 - » Using adobe software
 - » Embedding audio-visual materials in Toledo
 - » Communication tools
 - » Making students active in lectures
- Also shorter information sessions, e.g.
 - » Measuring study load
 - » E-portfolio
- Specific sessions for advanced users
- Online course AV and MM:
<http://www.avnet.kuleuven.be/toledo/index2.php>

Video en geluid in Toledo

http://www.avnet.kuleuven.be/toledo/index2.php?id=2

AVNet Weblog Google Scholar Wikiversity - Wikibooks http://www..../phprojekt/ KULnet Katholieke U...iteit Leuven Planet Inter...outeplanner

online cursus >>>

Het gebruik van bewegend beeld en geluid in Toledo

AVNet

Inhoud cursus

Inleiding
Cursus opbouw

1. Juiste media keuze

- 1.1 E-leren en Media
- 1.2 E-leren met Video
- 1.3 E-leren met Audio
- 1.4 E-leren met Animaties
- 1.5 E-leren met Multimedia

2. Opname

- 2.1 Beeldterminologie
- 2.2 Belichting
- 2.3 Geluid
- 2.4 Overzicht materiaal

3. Digitalisering

- 3.1 Video
- 3.2 Geluid

4. Montage

- 4.1 Voorbereiding
- 4.2 Project aanmaken
- 4.3 Materiaal inladen
- 4.4 Programmaopbouw
- 4.5 Montage
- 4.6 Montagesoftware

5. Compressie

- 5.1 Wat is compressie?
- 5.2 Aanbiedingswijze
- 5.3 Codecs
- 5.4 Beeldfrequentie
- 5.5 Beeldformaat
- 5.6 Filter
- 5.7 Conclusie

6. Implementatie

- 6.1 Richtlijnen
- 6.2 Aanbieden in Toledo
- 6.3 Special features

Zoeken op trefwoord

FAQ

Cursus in pdf

Cursus opbouw

<< Vorige | Volgende >>

Stap 1: Leerdoelen vertalen in de juiste media keuze.

Je wil zelf audiovisueel of multimediaal materiaal produceren.

Bepaal de leerinhouden en het leerdoel van je leermateriaal en lees in dit eerste deel over voor- en nadelen van de verschillende mediavormen binnen het onderwijs. Is het maken van een video wel nuttig voor het beoogde leerdoel, hoe moet je multimediaal leermateriaal eruit zien en welk effect kunnen ze hebben op het leren? Dit kom je allemaal te weten na het lezen van dit eerste hoofdstuk.

Stap 2: Opnametechniek

Je wil zelf video of geluid opnemen.

Je vergaart in dit hoofdstuk de basiskennis van cameragebruik, camerabeweging, filmtechnieken, belichting, geluid. We sommen op wat je allemaal nodig hebt wanneer je zelf op opname vertrekt.

Stap 3: Digitalisering

Je hebt audiovisueel materiaal en wil deze op je computer zetten.

In dit onderdeel lees je aan welke vereisten je computer moet voldoen om te kunnen werken met bewegend beeld of geluid op je computer en welke aansluitingen je nodig hebt om je materiaal op je computer te plaatsen, zowel voor analoge bronnen (VHS, analoge camera, cassette) als voor digitale bronnen (cd, mp3, digitale videocamera, DVD)

Je hebt natuurlijk niet alleen hardware nodig om je bestanden op je computer te plaatsen, je computer heeft ook software programma's nodig om je bestanden in te laden. Deze software is dezelfde als waarin je het programma kan bewerken en daarom hebben we dit opgenomen in het volgende hoofdstuk: montage, waar de te gebruiken montagesoftware zullen bespreken.

Stap 4: Montage

Je audiovisueel leermateriaal kan op je pc gezet worden en moet bewerkt worden.

Het ruwe materiaal moet geordend, ingekort en bewerkt worden tot een logisch geheel. Dit gebeurt aan de hand van een montage programma. We geven enkele tips in verband met monteren en we bespreken ook enkele software pakketten: het gratis pakket Windows Moviemaker, en het zeer goedkope Quicktime Pro, de professionele software Premiere en Final Cut Pro.

Stap 5: Compressie

Het gemonteerde materiaal moet gecomprimeerd worden om het gemakkelijker te kunnen verspreiden over het internet.

Compressie is de belangrijkste stap wanneer je audiovisueel materiaal op het internet wil verspreiden. De bandbreedte is immers beperkt en audiovisueel of multimedia materiaal vereist zeer veel bandbreedte. Daarom moet je compressietechnieken toepassen om het videomateriaal aan de beste kwaliteit te verkleinen.

Stap 6: Implementatie

Je video of geluidsfragment is klaar om op Toledo te plaatsen.

Hoe integreer je het audiovisuele materiaal het best in je online cursus? Hoe kan je een multimedia object maken? Hoe maak je videomateriaal interactief? Of hoe plak je multimediamateriaal in de folder structuur van Toledo?

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Making the move from learning objectives to media

Technologies for recording video or audio

Digitising

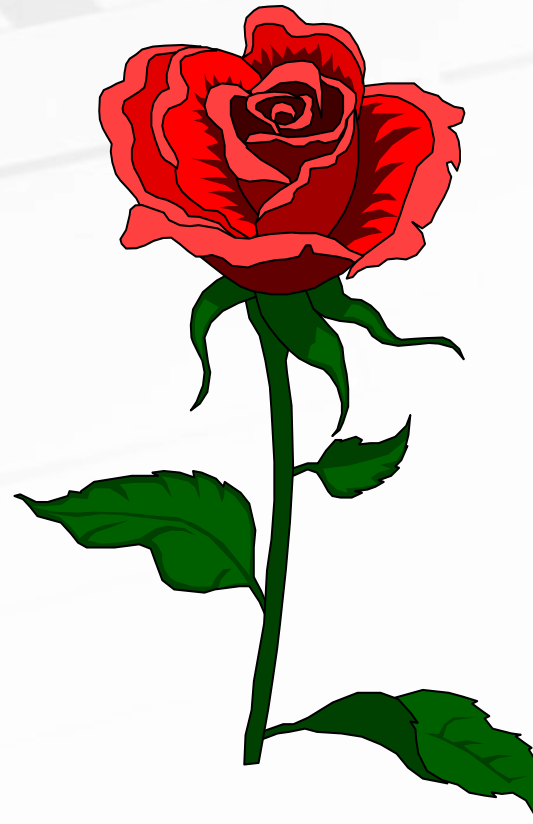
Editing

Compression

Implementation into Toledo

Conclusions

- **Professional development and teacher training is grafted on GIL**
- **Fits in a longterm, systemic and comprehensive approach of university education, integrating pedagogical, structural, technological and organisational elements**
- **Professional development of teachers, teaching assistants, technical (and administrative) staff and students**
- **More info (in Dutch only):**
 - <http://www.kuleuven.be/onderwijs/vormingsaanbod/index.htm>
 - (duo) <https://www.kuleuven.be/duo-icto/inschrijven/rooster.php>
 - (avnet) <http://www.avnet.kuleuven.be/seminaries/>
 - (ludit) <https://icts.kuleuven.be/cursus/>



Thank you