

## Projekt Goals

### Main goal

- provide opportunities and support for higher education teachers with limited resources and time to develop their ability to successfully integrate ICT in their teaching to support learning.

### Sub-goals

- Avoid techno-centrism and standard solutions.
- Provide support catered to individual needs.
- Provide time-efficient support.
- Create an arena for teachers to exchange and discuss ideas and experiences of pedagogical ICT-use.
- Build an awareness of the reciprocal relationship between technology, pedagogy and content in ICT-supported teacher practice.

## Context

### Setting

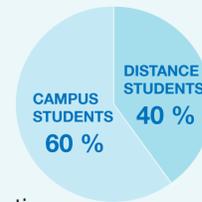
- The University College of Gävle has about 14 500 students. Around 40% of these are distance students.

### Target group

- Around 300 teachers at three different faculties. Teachers were included irrespective of whether they primarily taught online or on campus courses.

### Time frame

- May 2011 to December 2011



## Implementation



### Individual support in the use of LMS and web conference

- Participating teachers filled out a self-assessment survey indicating functionalities of the LMS where they needed support.
- Support personnel and individual teachers scheduled 1-3 meetings in the individual teacher's office and focused on the needs expressed in the self-assessment survey.



### Lunch seminars for examples and discussions about pedagogical ICT-use

- Teachers indicated their interest in a number of suggested lunch seminar themes illustrating different aspects and considerations of pedagogical ICT-use.
- They were also encouraged to suggest themes and actively contribute as opening speakers.
- 15 lunch seminars were organized, 60-90 minutes including a free light lunch.
- Mostly one teacher led off by sharing experiences and thoughts about pedagogical ICT-use or certain features of the LMS.

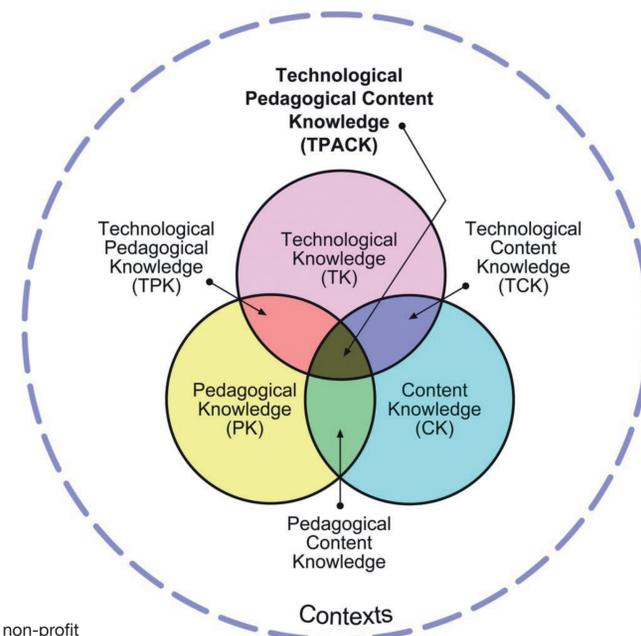
# Planning and implementing in-service ICT-training to support development of higher education teachers' TPACK

Jörgen Holmberg, [jorgen.holmberg@hig.se](mailto:jorgen.holmberg@hig.se) • Mats Brenner, [mbr@hig.se](mailto:mbr@hig.se) • University College of Gävle, Sweden

## Theoretical Underpinnings

Successful teaching with ICT is not about adding ICT to existing practices. It's a matter of becoming aware of how the choice and use of different ICT-tools depends on and has consequences for pedagogical practice and the understanding, choice and representation of content.

A teacher who understands the complex relationship and interplay between technological knowledge (TK), pedagogical knowledge (PK) and content knowledge (CK), AND learns how to successfully integrate them to support learning in different contexts represents a new unique form of expertise which can be labeled TPACK.



Using the image in your own works. Others are free to use the image in non-profit and for-profit works under the following conditions. The source of the image is attributed as <http://tpack.org>. The image is captioned or credited as "Reproduced by permission of the publisher, © 2012 by tpack.org" (or something equivalent)

## Lessons learned

### Individual support in the use of LMS and web conference

- Almost 50% of the teachers scheduled individual support sessions.
- Learning in a familiar "safe" surrounding was appreciated.
- Individual support was much appreciated.

### Lunch seminars for examples and discussions about pedagogical ICT-use

- About 17% of the teachers attended at least one lunch seminar.
- The lunch seminar discussions were considered relevant for teachers' everyday practice.
- Being able to receive in-service training during lunch time was appreciated and often a prerequisite for participation.

### Theoretical framework

- Most suggested lunch seminar themes and desired support concerned technology and technological skills.
- Limited interest in the web 2.0 features of the LMS and how to use these to support learning.
- Some interest in the integration of ICT and how this affected pedagogical practice and vice versa (TPK in the TPACK-framework).
- Almost no interest or discussions about the relationship and interplay between technological knowledge and content knowledge (TCK in the TPACK-framework).

## Concluding Remarks and Recommendations

- Teachers tended to focus on developing their technological knowledge when thinking about how to develop their ability to successfully use ICT to support learning.
- Time and support to think and learn about how to integrate ICT into ones teaching practice was considered imperative
- An arena to exchange and discuss pedagogical ICT-practices is important.
- Despite the opportunity of flexible individual support and the chance to exchange experiences with colleagues over a free lunch, 50% of the teachers did not prioritize developing their pedagogical use of ICT (i.e. their TPACK)
- Strategic discussions with faculty leaders about conditions for in-service ICT-training and course development are necessary.
- Expectations on pedagogical ICT-proficiency for teachers who teach online courses should be formulated.
- The possibility to benchmark online courses against defined quality indicators should be further explored

## REFERENCES

- BARAN, E.; CORREIA, A.P.; THOMPSON, A. (2011). *Transforming online teaching practice: critical analysis of the literature on the roles and competencies of online teachers*. Distance Education, 32(3), pp. 421-439.
- FRANSSON, G. & HOLMBERG, G. (2012) *Understanding the Theoretical Framework of Technological Pedagogical Content Knowledge: A collaborative self-study to understand teaching practice and aspects of knowledge*. Studying Teacher Education, 8(2), 193-204.
- MISHRA, P., & KOEHLER, M. (2006). *Technological pedagogical content knowledge: A framework for teacher knowledge*. Teachers College Record, 108(6), 1017-1054.
- SHULMAN, L.S. (1986). *Those who understand: Knowledge growth in teaching*. Educational Researcher, 15(2), 4-14.



Scan QR-Code for abstract