Experiences with a course on collaborative design on distance.
Outline presentation:

• Design.
• Collaborative design.
• Collaborative design on distance.
• Competences to design in a team and on distance.
• Course “Collaborative Design TU/e”.
• Evaluation.
• Conclusions.
Design process and session

- Organise
- Coaching

- Design task

- DESIGNING
- Design result

- Designer
- Design team

- Design tools
Collaborative Design

Collab ore = to work along site one another

DESIGNING

Designer A

Designer B

Co-operation

Co-ordination

Concurrent

$2 + 2 = 5$
PROBLEM
Competences to design on distance in a team:

- To play an organisational role in a team.
- To play a professional role in a team.
- To work together in a design team.
- To be able to use, assess, and select relevant ICT tools.
- To reflect on the work of the team and its own contribution.
Course “Collaborative Design” (1)

Objectives:
To gain insight in the problem domain of collaborative design and to know the possibilities of methods and techniques to approach this problem domain.

Educational approach:
Experiential learning: this means that students act as active learners while the teacher’s coaching role is focused on observing students activities.

Three components: activity, reflection and then knowledge.
Course “Collaborative Design” (2)

Thematic lectures:

1. Organisational and social aspects of designing in teams.
2. The use of ICT tools for collaborative design.
3. Organisation and managing the design process.
4. Collaborative design in practice.
Course “Collaborative Design” (3)

Tasks:
1. Individual literature review and presentation.
2. Designing in collocated team.
3. Designing in distributed team.
4. Designing in a distributed organisation.
5. Individual final reflection report.
Collocated design team
Distributed team
Distributed organisation
ICT tools

• E-mail
• Instant messaging tools
• Net meeting
• Architectural Studio
• Automanager Meridian
Evaluation results (1)

- Most students were aware of having experienced different organisation of design processes as well as using different organisational instruments and ICT tools to be effective.

- Students were effectively aware of the roles they played in the team; this concerned both the role as a team member and the professional role.

- It appeared difficult to be aware of, or even to play, both types of role at the same time.
Evaluation results (2)

- Organisation of the collaboration is crucial for the success of the process.
- Reflection is the most difficult part of the experiential learning format that was applied in this course. A reason might be that students don’t have much experiences with this instrument.
- Teamwork on the assignments was largely untutored. 60% of the students agree with this approach and have no need for intense guidance during the design tasks.
Evaluation results (3)

• Students appreciate the combination of social and technical aspects of the course:
  • 50% of the students appreciate the balance between technical and social/organisational issues in the course. 25% find the course too social, 25% find it too technical.
  • Around 50% of the students find the combination of these issues the most interesting aspect of the course.
Conclusion

• Students are traditionally trained in cooperation and coordination. To switch to collaboration is difficult and need much explanation.

• Experiential learning is a good way for the students to learn the need for, e.g., organising effective collaboration processes.