# Teaching HCI: Looking at Other Disciplines

## Workshop of IFIP WG 13.1 on Education in HCI and HCI Curriculum

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## 1  Theme

Subject disciplines often have distinguishable educational methods depending on the nature of the subject and the target audience. Some of these methods are seen as unique or unconventional, but can also add value to other disciplines when applied. The main theme of this workshop is on a critical comparison of educational methods of a variety of disciplines related or adjacent to human-computer interaction (HCI) and how these can inform the teaching of various aspects of HCI and user-centred design (UCD).

## 2  Scope and Purpose

The workshop will start with an introduction on previous papers [Kotzé and Oestreicher, 2002] and workshops organised by the group (during the INTERACT '99 [Cox et al., 1999; Oestreicher, 2000], NordiCHI 2000 [Kotzé et al, 2000; Oestreicher and Kotzé, 2000], INTERACT '01 [Kotzé et al., 2001], and WCC 2002 [Seffah et al., 2002] Conferences), and the suggested educational methods from those.

The disciplines HCI and UCD have been established years ago as a part of technical (mostly computer-related) and psychology curricula. More recently the basics of HCI and UCD were also introduced in the curricula for new disciplines such as interaction design, industrial design, information design, and media design.

The first part of the workshop aims to take the general teaching methods used for HCI and UCD, with a special focus on the requirements that arise in the context of a design curriculum, as a starting point. This will be followed by a discussion and critical comparison of teaching methods used in other design disciplines such as architecture and town planning, product design, graphic design, graphical art, human factors, engineering, psychology, creative writing, et cetera. The main goal is to establish if synergies can be found between these disciplines and how these can be utilised in HCI and UCD education. Some of the anticipated topics for discussion include:

- What general teaching methods are used in the various disciplines?
- Is a practical or a theoretical approach preferred?
- What links exist between the various disciplines?
- What role does creativity play in the discipline?
- How are the students evaluated?
- Is a design process highlighted in the discipline?
- What role (if any) can/do key individuals (gurus) play in teaching the discipline?

The second part of the workshop will look at some of the identified methods in more detail, for

example problem-based learning (PBL). PBL has been developed in Canada in the 1960s [Barrows, 1980] as a new education method for medical related subjects. In the intervening years it has also found application in subjects such as economics and business administration. Some of the anticipated topics for this part of the workshop include:

- Which elements of PBL, and other identified educational methods, are applicable to HCI and UCD teaching, and why?
- What are the characteristic similarities and differences between an information design curriculum when compared to an engineering discipline?
- What is the ideal group size for different kinds of student projects?
- How to effectively teach, organise and moderate focus groups and usability tests using real examples?
- Can the use of inter-disciplinary projects in seminars be successful?
- Are there differences in teaching HCI and UCD at universities in contrast to technical colleges (polytechnics)?

The anticipated outcomes from the workshop are a set of best practice examples, as well as a list of statements that can be the starting point for further research on the issues involved.

# References

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